

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

Continuous pagination.

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

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science,
Criticism and News

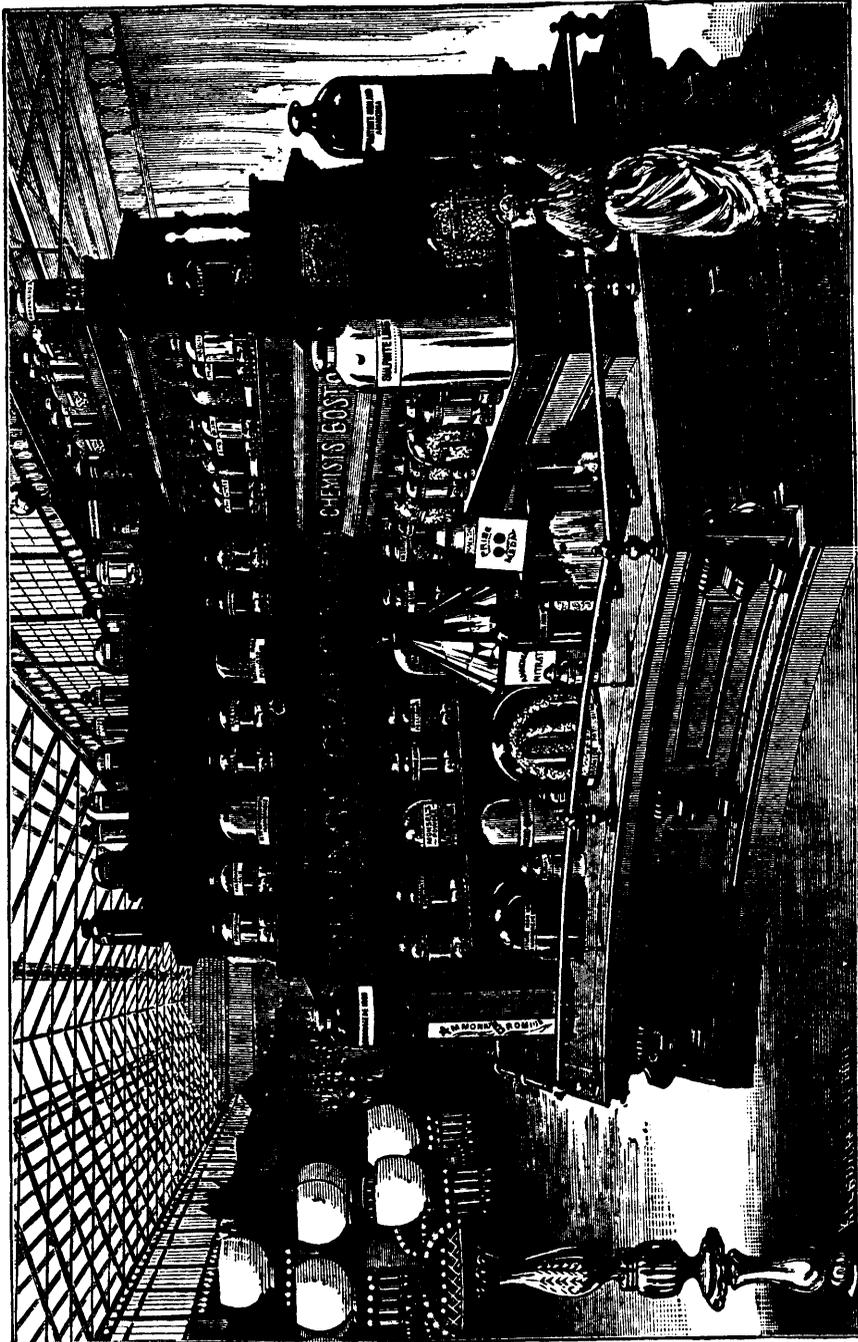
Vol. IX
No. 9.

TORONTO, MAY 1, 1877.

Price 30 Cents
\$3 per Annum

CONTENTS.—(Index next page.)

BILLINGS, CLAPP & CO.,



CENTENNIAL EXHIBIT AT PHILADELPHIA, 1876.

MANUFACTURING CHEMISTS, BOSTON, MASS.

INDEX TO CONTENTS.

Original Communications.

Uraemia—By T. R. Buckham, M.A., M.D., Flint, Michigan	255
Dislocation of the Hip in a Boy eight years old, Reduction on 32nd day—By N. A. Powell, M.D., Edgar, Ont	257
Abscess in the Gastro-Hepatic Omentum—By James Cattermole, M.D., L.S.A., London, Ont	258

Correspondence.

Complimentary Dinner to Dr. Dickson, Paris	260
The London Hospitals	263
Æsculapius	264

Selected Articles.

Empyema and Pyo-Pneumothorax—Janeway	264
Manmary Cancer, when to operate—Gangee	266
Jaborandi in Bright's Disease	267
Ovarian Cyst—Hodge	268
Excision of Knee-Joint—Ashurst	269
Uterine Supporters	269
Endometritis, Dilatation of Cervix in	270
Cheyne-Stokes Respiration	270
Forced Enemata in Intususception	271

Bravais' Dialized Iron	271
Uterine Fibrous Tumor, Spontaneous Expulsion of	272
Vaso-Motor Theories	273
Ferchloride of Iron in Ringworm—Best time to Dress Fractures—Local Treatment of Puerperal Fever—Salicylates in Rheumatism—Administration of Sylyclic Acid—Danger of Opium in Bright's Disease—Post-partum Hæmorrhage, new Treatment—Carbon Disulphide as an Antiseptic	274 276
Medical News and Items	276

Editorial.

Vaccine Lymph	277
Bethesda Mineral Water	279
Illiberal Interpretation of the Ontario Medical Act	280
Veterinary Colleges	280
Medical College Commencements	283
Complimentary Dinner—Appointments—Vital Statistics and public Health	283
Reports of Societies	283
New Instruments	284
Book Notices	284
Births, Marriages and Deaths	284

MÖLLER'S PUREST NORWEGIAN COD-LIVER OIL.



DR. BESCHE, Physician in ordinary to H. M. the King of Sweden and Norway, says: "the very best ever prepared for medicinal purposes."

ABBOTTS SMITH, M.D., M.R.C.P., North London Consumption Hospital, says: "It is more easily assimilated and is productive of more immediate benefit than the other kinds of oil are."

DR. RUDDOCKS, M.D., L.R.C.P., M.R.C.S., says: "We are glad to be able to give our emphatic recommendation to so pure a preparation."

J. MARION SIMS, M.D., New York, says: "I have prescribed it almost daily, and have every reason to be perfectly satisfied with it."

DR. L. A. SAYRE, New York, says: "Möller, of Christiania, prepares an Oil which is perfectly pure, and in every respect all that can be wished."

N. B. SARDS, M.D., New York, says: "It is remarkably free from impurities."

W. H. Schieffelin & Co., NEW YORK.

Sole Agents for United States and Canada.

FIRST PRIZE FOR ARTIFICIAL LIMBS

AND

SURGICAL APPLIANCES.



APPARATUS of every description made to order, for Paralysis, Hip-joint Disease, Weak Ankles, Club Feet, &c.

JAMES AUTHORS,
16 King Street East, Toronto.

TORONTO, Sept. 17, 1874.

I have much pleasure in being able to testify to the skill, ingenuity, and excellence of workmanship shown in Mr. Authors' surgical appliances. They will bear comparison with those manufactured in any part of the world.

JAMES H. RICHARDSON, M.D., University of Toronto, M.R.C.S. England.

DR. REEVE

CAN BE CONSULTED IN REGARD TO

DISEASES OF THE EYE AND EAR.

At the Tecumseh House, London,

On the First Saturday of every month.

Residence and Office, 22 Shuter, St., Toronto.

BELMONT RETREAT, QUEBEC.

This Institution opened in 1864 as a Private Hospital for the Insane has recently been considerably enlarged, and now furnishes excellent accommodation for this class of patients. A separate department is also furnished for Inebriates.

Patients are admitted on the certificates of two medical men.—Terms from \$6.00 to \$10.00 per week quarterly in advance. For further information apply to

G. WAKEHAM, or W. WAKEHAM,
Proprietor. Resident Physician.
P.O. box 1041, Quebec, P.Q.

Willing & Williamson's New Medical Books.

- ATTFIELD, JOHN.—Chemistry, General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia ; 7th American, from the 6th English edition. 12mo., pp. 668, Cloth \$2.75.
- BARTHOLOW, ROBERTS.—Practical Treatise on Materia Medica and Therapeutics. 8vo., pp. 535. Cloth \$5.00.
- BRISTOWE, JOHN SYER.—Treatise on the Practice and Theory of Medicine ; Edited with Notes and Additions, by James H. Hutchinson, M.D. ; 8vo., pp. 1100. Cloth \$5.50.
- BROWN, J. H. BALFOUR.—The Medical Jurisprudence of Insanity ; 2nd edition, with References to Scotch and American Decisions, 8vo., pp. 713 : Cloth, \$5.00.
- CARPENTER, WM. B.—Principles of Human Physiology ; a new American, from the Eighth Revised and Enlarged English edition, with Notes and Additions by Francis G. Smith, M.D., 8vo., pp. 1083 ; Cloth \$5.50.
- DOBELL, HORACE.—On Coughs, Consumption, and Diet, in Disease. Edited by D. G. Brinton, M.D., 8vo., pp. 222 ; Cloth \$2.25.
- FOX, TILBURY.—Epitome of Skin Diseases, with Formulæ for Students and Practitioners ; 12mo., pp. 120. Cloth \$1.00.
- FREY, HEINRICH.—Compendium of Histology. Twenty-four Lectures, translated from the German by George R. Cutter, M.D. Illustrated by 208 Engravings on Wood. 8vo., pp. 224 ; \$3.25.
- GROSS, SAMUEL D.—A Practical Treatise on the Diseases, Injuries and Malformations of the Urinary Bladder, the Prostate Gland, and the Urethra, by S. D. Gross, M.D. Third edition thoroughly revised by S. W. Gross, M.D., with 170 Illustrations ; 8vo., pp. 574. Cloth \$4.50.
- HUXLEY, T. H. AND MARTIN, H. N.—A Course of Practical Instruction in Elementary Biology. 12mo., pp. 244. \$1.80.
- FOSTER, M. AND LANGLEY, J. N.—A course of Elementary Practical Physiology ; 12mo. pp. 244, \$1.80.
- MEADOWS, ALFRED.—A Manual of Obstetrics, from the third London Edition, revised and enlarged ; 8vo., pp. 484, Cloth \$3.25.
- NAPHEYS, GEO. H.—Modern Therapeutics. A compendium of recent Formulæ, Approved Treatment, and Specific Methods in Medicine and Surgery, with an Appendix on Hypodermic Medication, Inhalation, Æration, and other Remedial Agents and Therapeutic Methods of Recent Introduction ; 4th edition, 8vo., pp. 609, Cloth \$4.00.
- ROSENBERG, EMIL.—The Use of the Spectroscope in its application to Scientific and Practical Medicine. Illustrated, 8vo., Cloth \$1.25.
- RICHARDSON, B. W.—The Diseases of Modern Life, and the Science of their Prevention, cr. 8vo. pp. 520. \$2.00.
- HAMMOND, WM. A.—Spiritualism, and Allied Causes and Conditions of Nervous Derangement. Illustrated, cr. 8vo., pp. 366, \$2.25.
- BEARD, G. M. AND ROCKWELL, A. D.—Practical Treatise on the Medical and Surgical Uses of Electricity, including Localized and General Faradization ; Localized and Central Galvanization ; Electrolysis and Galvano Cautey. New edition, revised, enlarged, and mostly re-written, with nearly 200 Illustrations ; 8vo., pp. 794 ; Cloth \$6.25, Sheep \$7.25.
- BIDDLE, JOHN B.—Materia Medica, for the Use of Students ; 6th edition, revised and enlarged, with Illustrations ; 8vo., pp. 435, Cloth \$4.00.
- DACOSTA, J. M.—Medical Diagnosis, with special reference to Practical Medicine, Illustrated ; 4th edition, 8vo., pp. 835, Cloth \$6.00.
- DALTON, J. C.—Treatise on Human Physiology ; 6th edition, 8vo., pp. 825 ; Cloth \$5.50, Sheep \$6.50.
- FLINT, AUSTIN, JR.—Text Book of Human Physiology ; 8vo., Cloth \$6.00, Sheep \$7.00.
- KUSS.—Course of Lectures on Physiology ; Illustrated, 12mo., pp. 520 ; \$2.70.
- ROBERT'S Student's Guide to the Practice of Midwifery ; Cloth \$2.25.
- TANNER, THOMAS HAWKES.—Memoranda of Poisons ; 32mo., pp. 155, Cloth 75cts.
- TYNDALL, JOHN.—Fragments of Science ; 5th edition, revised and greatly enlarged ; Cr. 8vo., pp. 589 ; \$2.50.

MAILED POSTAGE FREE TO ALL PARTS OF CANADA.

WILLING & WILLIAMSON,

Medical and General Booksellers,

12 King St. East Toronto.

PNEUMATIC ASPIRATION,

After the Manner of Dieulafoy.

"It is always possible, owing to Aspiration, to search for a fluid collection without any danger, whatever may be its seat or its nature."
 "I have thrust these Needles into almost every part of the body, into the Joints, the Liver, the Spleen, the Bladder, the Intestines, the Lungs and the Meninges, and I can affirm, and a great number of observers affirm with me, that we have never seen consecutive accidents."
Dieulafoy on Pneumatic Aspiration, pp. 21, 24.

WE invite the attention of the Medical Profession to this New Apparatus for Aspiration, constructed upon the general plan of Potain's modification of Dieulafoy's Aspirator, but containing the following improvements and inventions of our own:—

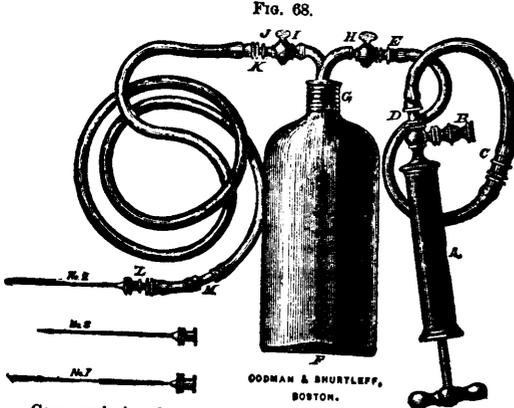


FIG. 68.

GODMAN & SHURTLEFF,
BOSTON.

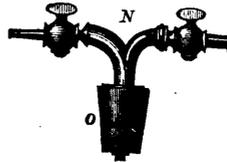


FIG. 69. The Stopper and Cocks supplied with Apparatus No. 2.

1st. Means of changing the pump from an exhaust to a force-pump, and vice versa, thereby enabling the operator not only to withdraw an abnormal fluid, but to inject the cavity through the tube and needle of the apparatus with one adapted to induce healthy action.—See *Dieulafoy on Aspiration, pp. 276, 278.*

2nd. The employment in our apparatus No. 1, of a metal Screw Cap, fitting the neck of the receiver supplied with this apparatus so securely that it cannot be forced from its place by condensed air while injecting, or accidentally removed while the receiver is in a state of vacuum for aspiration.

3rd. The substitution, for the ordinary oiled silk valves of other apparatuses, of a kind indestructible both in form and material.

4th. A simple and comparatively inexpensive attachment for evacuating the contents of the stomach, equal, if not superior, to any in use hitherto.

Commendations bestowed upon our Aspirators, by physicians familiar with the latest European and American ones, lead us to believe that in some important particulars at least, they are superior to any.

In his work on Pneumatic Aspirations, Dieulafoy shows the harmlessness of the Aspiratory Puncture and its great superiority to the Exploring Trocar as a means of accurate diagnosis in all collections of Pathological Fluids. It has been used with unprecedented success in Retention of Urine, Reduction of Strangulated Hernia, in Ascites, Hydrothorax, Empyema, Pneumothorax, Effusions into the Pericardium, Serous Purulent and Hematic Effusions of the Knee, Hydrocele, Hydatid Cysts, Abscesses of the Liver, and in various other Pathological Lesions.

APPARATUS.

- No. 1. Air Pump—exhaust or condensing as described; 16 in. receiver, of strong glass, with screw cap; three steel, gold-plated Aspiratory Needles, together with the necessary tubes, stop-cocks &c., as shown in Fig. 68, fitted in a neat case, accompanied with printed directions..... \$18 00
- No. 2. The same, without receiver and with rubber stopper See (Fig. 69) to fit almost any bottle of quart capacity, or less, instead of screw-cap arrangement, also with printed directions..... 16 00

- No. 3. Dieulafoy's Notched Aspirator, Nickel-plated, with two Needles, tubes, &c., in case..... 14 00
 - No. 4. Stomach Attachment, as described, adapted to pump accompanying Nos. 1 and 2, additional..... 8 00
- The foregoing are the product of our own factory, and are warranted in every respect.*
- Also, *Dieulafoy on Pneumatic Aspiration*, post-paid, by mail, on receipt of..... 8 40

An Illustrated Catalogue of Surgical and Atomizing Instruments sent by mail, postpaid, on application.

CODMAN & SHURTLEFF,

Makers of Surgical Instruments, 13 and 15 Tremont Street, BOSTON.

See our other advertisement in alternate numbers of this journal.

Mrs. Pearson's Abdominal Supporter.

(Patented Oct. 1870.)

The attention of the Medical Profession is called to the great value of MRS. PEARSON'S Abdominal Supporter in the treatment of Uterine complaints. It is especially adapted to the treatment of partial procidentia uteri, ante or retroverted, and in Leucorrhœa, depending on these defects; by removing the cause it quickly cures the discharge. It is also of great service in a lax or pendulous state of the abdomen and during pregnancy, by giving the much needed support. A perineal pad can be attached to the supporter when required.

The undersigned, having tested its value in their practice, kindly allow reference to them as to its excellence and efficiency.—

- E. M. Hodder, M.D., F.R.C.S. E.; Toronto.
- N. Bethune, M.D., F.R.C.S., Ed.; Toronto.
- Augustus Jukes, M.B., St. Catharines.
- Dr. Rowand (M.D., Edin.); Quebec.
- W. W. Ogden, M.B., Toronto.
- J. Mackelcan, M.R.C.S. E.; Hamilton.
- Dr. Henry J. Ridley, Hamilton.
- M. Lavell, M.D., Kingston.

- H. Blackstock, M.D., Hillsdale.
- J. Wilkinson, M.D., Woodbridge.
- Edwin Henwood, M.D., Hamilton.
- Uzziel Ogden, M.D., Toronto.
- H. H. Wright, M.D., Toronto.
- Dr. G. L. Mackelcan, Hamilton.
- Dr. McDonald, Hamilton.
- Edwin Goodman, M.B., St. Catharines.

Price \$7 to \$10. Please send measurement around largest part of hips.
 Mrs PEARSON also manufactures an UMBILICAL PAD or support of the greatest value in the treatment of cases of Umbilical Hernia; also SHOULDER BRACES of the most modern and approved styles.

MRS. J. E. PEARSON, 316, Adelaide St. West, Toronto.

* * * * Sugar-Coated Pills are more soluble than Gelatine or Compressed Pills.—Prof. Remington's paper read before American Pharmaceutical Association, Boston, 1875.

WARNER & CO'S PHOSPHORUS PILLS.

PHOSPHORUS is an important constituent of the animal economy, particularly of the brain and nervous system, and is regarded as a valuable remedy for the following diseases :

LAPSE OF MEMORY, IMPOTENCY, SOFTENING OF THE BRAIN, LOSS OF NERVE POWER, PHTHISIS, PARALYSIS AND NEURALGIA.

The Pilular form has been deemed the most desirable for the administration of Phosphorus. It is in a perfect state of subdivision, as it is incorporated with the material while in solution, and is not extinguished by oxidation.

This method of preparing Phosphorus has been discovered and brought to perfection by us, and is thus presented in its elementary state, free from repulsive qualities, which have so long militated against the use of this potent and valuable remedy. This is a matter requiring the notice of the physician, and under all circumstances the administration of Phosphorus should be guarded with the greatest care, and a perfect preparation only used.

*Its use in the above named complaints is supported by no less authority than Prof. Delpech, Prof. Fisher, of Berlin, Dr. Eames (in the *Dublin Journal*), Dr. Burgess and Dr. Hammond, of New York. The special treatment indicated in these cases is—1st. Complete rest of the mind, especially abatement from all occupations resembling that upon which the mind has been overworked. 2nd. The encouragement of any new hobby or study not in itself painful, which the patient might select; 3rd. Tranquility to the senses, which expressly give in these cases incorrect impressions, putting only those objects before them calculated to soothe the mind; 4th. A very nourishing diet, especially of shell-fish. 5th. The internal administration of Phosphorus in Pilular form, prepared by WILLIAM R. WARNER & CO.*

PILLS SENT BY MAIL ON RECEIPT OF LIST OF PRICES.

	Price per 100.
Pil Phosphori, 1-100 gr, in each	\$1 00
Pil Phosphori, 1-50 " "	1 00
Pil Phosphori, 1-25 " "	1 00
Pil Phosphori, Comp.	2 00
Phosphorus, 1-100 gr. Ext. Nuc. Vomicae, ½ gr.	
Pil Phosphori, et Nucis Vomicae,	2 00
Phosphorus, 1-50 gr. Ext. Nuc. Vomicae, ½ gr.	
Pil Phosphori, et Ferri, et Nuc. Vom.	2 00
Phosphorus, 1-100 gr. Ferri Carb. (Vallet) 1 gr. Ext. Nuc. Vom., ½ gr.	
Pil Phosphori, et Ferri et Quiniae,	2 90
Phosphorus, 1-100 gr. Ferri Carb. (Vallet) 1 gr. Quinia Sulph., 2 gr.	
Pil Phosphori et Ferri et Nuc. Vom. et Quinae,	2 90
Phosphorus, 1-100 gr. Ferri Carb. (Vallet) 1 gr.	
Ext. Nuc. Vom., 1-8 gr. Quinia Sulph., 1 gr.	

Treatise on "PHOSPHORUS; Its claims as a Therapeutic Agent,"

Furnished on application. Address,

WILLIAM R. WARNER & CO., Manufacturing Chemists,

No. 1228 Market Street, Philadelphia.

Warner & Co's Standard Preparations for sale by

ELLIOT & CO., Wholesale Druggists,

TORONTO, CANADA.

Elixir Ferri et Calcis Phosphatis Co.

LACTO-PHOSPHATES.

FORMULA OF DR. DUSART, OF PARIS.

Compound Elixir of Phosphates and Calisaya,
A Chemical Food and Nutritive Tonic.

THIS elegant preparation combines with a sound Sherry Wine and Aromatics, in the form of an agreeable cordial, 2 grs. Lacto-Phosphate of Lime 1 gr. Lacto-Phosphate of Iron, 1 gr. of Alkaloids of Calisaya Bark, Quinine, Quinine, Chinchonine, and fifteen drops of free Phosphoric Acid to each half ounce.

In cases convalescing from adynamic fevers, in all conditions of depraved nutrition from indigestion and mal-assimilation of food, in nervous prostration from mental and physical exertion, dissipation or bad habits, in chlorotic or anæmic women, and in the strumous diathesis in adults and children, —it is a combination of great reliability and efficacy, and it may be taken for a protracted period without becoming repugnant to the patient.

When Strychnine is indicated the officinal solution of the Pharmacopœia may be added, each fluid drachm making the 64th of a grain to a half fluid ounce of the Elixir,—a valuable combination in dyspepsia with constipation and headaches. This compound is prepared with great care, and will be maintained of standard purity and strength. Prepared by

T. B. WHEELER, MONTREAL, D. C.

SOLD BY ALL DRUGGISTS.

Electro-Medical Instruments and Batteries.

FLEMMING & TALBOT,

No. 814 FILBERT STREET, PHILADELPHIA.

HAVING largely increased our manufacturing facilities, we are now prepared to furnish the finest work, with the latest improvements, on reasonable terms.

Portable Galvanic, Faradic, and Caustic Batteries, with complete applying apparatus, and Electrodes and Conductors, in all their varieties, constantly on hand.

Contracts made for the erection of permanent batteries in hospitals, colleges, and private offices.

A full supply of Electro-Medical Books always in store. communications by mail promptly attended to. *Send for catalogue.*

OPENING FOR A PHYSICIAN

A Physician who has a well established practice in a thriving Village in western Ontario, wishes to dispose of his residence and good will of practice. Splendid Country surrounding. This is a good opening for a thoroughly reliable man. For the address apply to the Editor of the CANADA LANCET, TORONTO.

\$3000 A YEAR.

A Medical Man wishes to dispose of his property and good will of practice, worth \$3000 a year. The property consists of a good dwelling-house, outbuildings, &c., and will be sold at a reasonable price. The Village is surrounded by an excellent farming district. No opposition. For address apply to "Lancet Office," Toronto.

HORATIO G. KERN,

MANUFACTURER OF

SURGICAL AND DENTAL INSTRUMENTS, &C.,

Established 1837.

THE subscriber would again remind the Medical and Dental Profession that he still continues to manufacture his celebrated Instruments in all the various branches.

Assiduous attention to the details of the business, which an experience of thirty-five years has afforded, has enabled him to make many improvements in his

Unrivalled Extracting Forceps,

Both as regards their quality and adaption to the purposes for which they are intended, a desideratum which will be appreciated by all wishing to purchase Instruments, that are reliable and of long and well established reputation.

PRIZE MEDAL AWARDED TO

HORATIO G. KERN

INTERNATIONAL EXHIBITION 1876.

All the Latest Improvements and Novelties.

All orders entrusted to his care will be promptly attended to.

Catalogues furnished on application.

HORATIO G. KERN,

No. 21 North Sixth St., Philadelphia.

Oct. 1873.

GEORGE TIEMANN & CO.,

F. A. STOHLMANN. ESTABLISHED 1826. ED. PEARCE

67 CHATHAM STREET, NEW YORK.

MANUFACTURERS AND IMPORTERS OF

Surgical Instruments,

RECEIVED

- 2 Awards at Centennial Exhibition, 1876.
- 2 First Medals and 1 Honorable Mention at International Exhibition, Santiago, Chili. 1875.
- 2 Silver Medals and 1 Bronze Medal at International Exhibition, Paris, 1876.

Our Catalogue, numbering 462 pages and containing 1575 engravings, handsomely bound in cloth, can be obtained for cost of binding, 75 cents; postage 22 cents.

HARVARD UNIVERSITY.

MEDICAL DEPARTMENT—BOSTON MASS.

Ninety-Fourth Annual Announcement, 1877-78.

FACULTY OF MEDICINE:

CHARLES W. ELIOT, LL.D., President.
 CALVIN ELLIS M.D., Prof. of Clinical Medicine, Dean.
 JOHN B. S. JACKSON, M.D., Prof. of Pathol. Anatomy.
 OLIVER W. HOLMES, M.D., Prof. of Anatomy.
 HENRY J. BIGELOW, M.D., Professor of Surgery.
 JOHN E. TYLER, M.D., Professor of Mental Diseases.
 FRANCIS MINOT, M.D., Hersey Professor of the Theory and Practice of Medicine,
 JOHN P. REYNOLDS, M.D., Instructor in Obstetrics.
 HENRY W. WILLIAMS, M.D., Prof. of Ophthalmology.
 DAVID W. CHEEVER, M.D., Prof. of Clinical Surgery.
 JAMES C. WHITE, M.D., Professor of Dermatology.
 ROBERT T. EDES, M.D., Prof. of Materia Medica.
 HENRY P. BOWDITCH, M.D., Assis't. Prof. of Physiology.

CHARLES B. PORTER, M.D., Demonstrator of Anatomy and Instructor in Surgery.
 FREDERIC I. KNIGHT, M.D., Instructor in Percussion, Auscultation and Laryngoscopy.
 J. COLLINS WARREN, M.D., Instructor in Surgery.
 REGINALD H. FITZ, M.D., Assistant Professor of Pathological Anatomy.
 WILLIAM L. RICHARDSON, M.D., Instructor in Clinical Obstetrics.
 THOMAS DWIGHT, Jr., M.D., Instructor in Histology.
 EDWARD S. WOOD, M.D., Assistant Professor of Chemistry.
 HENRY H. A. BEACH, M.D., Assistant Demonstrator of Anatomy.
 WILLIAM B. HILLS, M.D., Instructor in Chemistry.

Other Instructors:

GEORGE H. F. MARKOE, Instructor in Materia Medica.
 FRANK W. DRAPER, M.D., Lecturer on Hygiene.

THE FOLLOWING GENTLEMEN GIVE SPECIAL CLINICAL INSTRUCTION:

FRANCIS B. GREENOUGH, MD., and EDWARD WIGGLESWORTH, JR., M.D., in Syphilis.
 JOHN O. GREEN, M.D., and CLARENCE J. BLAKE, M.D., in Otology.
 WILLIAM H. BAKER, M.D., in Diseases of Women.
 CHARLES P. PUTNAM, M.D., and JOSEPH P. OLIVER, M.D., in Diseases of Children
 SAMUEL G. WEBBER, M.D., and JAMES J. PUTNAM, MD., in Diseases of the Nervous System.

PERSONS who hold no degree in arts or science must hereafter pass an *examination for admission* to this School in Latin in the elements of Physics, and in English. French or German will be accepted instead of Latin. The admission examination will be held in June both at Boston and Cincinnati; in Sept. at Boston only. Instruction is given by lectures, recitations, clinical teaching and practical exercises, distributed throughout the academic year. The year begins Sept. 27, 1877, and ends on the last Wednesday in June, 1878; it is divided into two equal terms, either of which is more than equivalent to the former "Winter Session," as regards the amount and character of the instruction. The course of instruction has been greatly enlarged, so as to extend over three years, and has been so arranged as to carry the student progressively and systematically from one subject to another in a just and natural order. In the subjects of anatomy, histology, chemistry, and pathological anatomy, laboratory work is largely substituted for, or added to, the usual methods of instruction.

Instead of the customary hasty oral examination for the degree of Doctor of Medicine, held at the end of the three years' period of study; a series of examinations on all the main subjects of medical instruction has been distributed through the whole three years; and every candidate for the degree must pass a satisfactory examination in every one of the principal departments of medical instruction during his period of study.

DIVISION OF STUDIES.

For the First Year—Anatomy, Physiology and General Chemistry.

For the Second Year—Medical Chemistry, Materia Medica, Pathological Anatomy, Clinical Medicine, Surgery and Clinical Surgery.

For the Third Year—Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery.

Students are divided into three classes, according to their time of study and proficiency. Students who began their professional studies elsewhere, may be admitted to advanced standing; but all persons who apply for admission to the second or third year's class, must pass an examination in the branches already pursued by the class to which they seek admission. Examinations are held in the following order:—

At the end of the first year—Anatomy, Physiology and General Chemistry.

" " second year—Medical Chemistry, Materia Medica, and Pathological Anatomy.

" " third year—Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, and Surgery.

Examinations are also held before the opening of the School, beginning September 24th.

REQUIREMENTS FOR A DEGREE.—Every candidate must be twenty-one years of age; must have studied medicine three full years, have spent at least one continuous year at this School, have passed the required examinations, and have presented a thesis.

COURSE FOR GRADUATES.—For the purpose of affording to those already Graduates of Medicine, additional facilities for pursuing clinical, laboratory and other studies, in such subjects as may specially interest them, the Faculty has established a course which comprises the following branches:—Physiology, Medical Chemistry, Pathological Anatomy, Surgery, Auscultation, Percussion and Laryngoscopy, Ophthalmology, Otology, Hygiene, Dermatology, Syphilis, Psychological Medicine, Electro-therapeutics, Gynecology and Obstetrics. Single branches may be pursued, and on payment of the full fee, also the privilege of attending any of the other exercises of the Medical School, the use of its laboratories and library, and all other rights accorded by the University will be granted. Graduates of other Medical Schools who may desire to obtain the degree of M.D. at this University, will be admitted to examination for this degree after a year's study in the Graduates' Course. Examination on entrance not required.

FEES.—For Matriculation, \$5; for the Year, \$200; for one Term alone, \$120; for Graduation, \$30; for Graduates, Course, the fee for one year is \$200, for one Term, \$120; and for single courses such fees as are specified in the Catalogue. Payments in advance.

Members of any one department of Harvard University have a right to attend lectures and recitations in any other department without paying additional fees.

For further information, or Catalogue, address

DR. R. H. FITZ, Secretary, 108 Boylston Street, Boston, Mass.

SAVORY & MOORE, 143, New Bond Street, London, beg to call the attention of the Profession generally, to some of the later preparations brought out in England, the purity, and uniform strength of which can be guaranteed.

GENUINE PANCREATIC EMULSION and PANCREATINE.

The reputation of these preparations is now so thoroughly established, that they may be said to be the only remedies of the description recognized and prescribed by the leading members of the Medical Profession. No small portion of their popularity is to be ascribed to the fact, that they are palatable to the most fastidious, keep good in all climates, and are readily miscible in water, milk, &c. In all cases where Cod Liver Oil fails to afford relief, or cannot be retained by the stomach, Pancreatic Emulsion and Pancreatine are the only remedies to supply its place, increasing weight, and ensuring strength and appetite; whilst in many cases they prove a most valuable adjunct to the Oil, which they assist in digesting.



PANCREATINE WINE.

A most pleasant vehicle for administering Cod Liver Oil, with which if shaken, it readily forms an Emulsion. This preparation when prescribed by itself will be found to be a powerful assistant to digestion, and as a remedy for this purpose is largely used in England.

PANCREATISED COD LIVER OIL: A reliable combination of Pancreatine with the Oil, rendering its digestion easy and rapid.

PEPTODYN, the New Digestive Digests all kinds of Food—the FARINACEOUS, FIBRINOUS, and OLEAGINOUS, (being a combination of the several active principles of the digestive secretions, Peptic, Pancreatic, &c.)

Five grains of the Powder digests—100 grains of Coagulated Albumen, 100 grains of Fat, 100 grains of Starch. As Supplied to the Royal Families of England and Russia. Feeding Infants on the best, i. e. the most nourishing and easily digested Food, has recently occupied much of the attention of the Profession, and the fallacy and danger of employing Starch, in the form of Corn Flour and other high-sounding titles, has been repeatedly pointed out.

This Food resembles Mother's Milk more closely than any other kind, containing the highest amount of nourishment in the most digestible and convenient form.

DATURA TATULA, for Asthma and Chronic Bronchitis. Recommended by the Profession as a remedy of great power and usefulness in cases of short and difficult breathing, spasmodic coughing, &c. Grown only by Savory and Moore, and prepared in all forms for smoking and inhalation.

Wholesale of Messrs LYMAN, CLARE & Co., and Retail of the Principal Druggists in the Dominion and America.

WHITTIER, SON & CO.,
WHOLESALE
Manufacturing Chemists and Druggists,
102 Front St., West, Toronto.

TO THE MEDICAL PROFESSION.

We have inaugurated in extensive premises running through from street to street the manufacture of

SUGAR-COATED PILLS AND GRANULES.

137 kinds of labels now in use, sufficient to say the usual formulas used in practice and such as have been made by the different makers in the United States, and will make 3000 pills of any desired formula.

FLUID EXTRACTS. Tinctures, Syrups, active principles, nearly every thing which might be asked for; we have in use over 150 labels and will make four pounds of any extract ordered. We have reliable agents in the great European centres and New York, Cincinnati, and St. Louis, to select for us the best roots, barks, herbs, &c., a few we get in Canada, which number we will increase.

SOLID EXTRACTS. Some twenty of the more commonly used sorts we make, the rest we import from England.

Standard Pharmaceutical Preparations.

Elixir Cinchona Calisaya, (Yellow Peruvian Bark), **Elixir Calisaya,** Ferrated, **Elixir Calisaya,** Iron and Bismuth, **Elixir Calisaya,** Iron and Strychnia, **Elixir Brom. of Potassium,** **Elixir Pyrophosp. of Iron,** **Elixir Taraxacum Comp.** Syrup of Hypophosphites, Lime, Soda and Potassa, Syrup Lacto-Phos. of Iron, Syrup Lacto-Phosphate of Lime with Pepsin. Syrup of Phosphates—Compound (Professor Fowler's Chem. Food). **Elixir of Phos. Quinine—Iron and Strychnia.**

We have every facility, best fresh material, skilled labor, and invite the profession to call when visiting the city, and assure themselves. To introduce our manufactures we will be glad to receive your orders for any of our manufactures, which embrace over 400 articles. Send for price Lists or trial orders, our preparations have the medical properties, usual doses, printed on each article and can be depended on to fulfil the intention designed.

We ask Canadians to support home manufactures, as by differential duties we cannot ship anything to our neighbours.—Call and see us

John Reynders & Co.,

(Late of Otto & Reynders,)

No. 309 Fourth Avenue, New York,

(UNDER THE COLLEGE OF PHYSICIANS AND SURGEONS,
Manufacturers and Importers of

SURGICAL

AND

Orthopaedical Instruments,

SKELETONS,

AND

ANATOMICAL

PREPARATIONS.



The Manufacture and Importation of every article used by Physicians and Surgeons our Specialties.

Our Illustrated Catalogue and Price List mailed on application, enclosing twelve cents for Postage.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. IX. TORONTO, MAY 1ST, 1877. No. 9.

Original Communications.

URÆMIA.

BY T. R. BUCKHAM, A. M., M. D., FLINT, MICH.

(Read before the American Medical Association.)

In presenting my views on the toxæmic effects of urea in the system, I do so with considerable hesitancy, not because I doubt the correctness of my conclusions, but because the facts, as I have observed them, and the conclusions therefrom deduced differ from, and to some extent are antagonistic to, the teaching of those whom we delight to honor as authorities—those whose dicta we have been in the habit of receiving unquestioningly, and whose admirable treatises appeared to have left nothing more to be discovered in the premises.

On the toxæmic effects of uræmia in morbus Brightii or uræmic eclampsia I have nothing to add to the exhaustive writings of Bright, Braun, Duncan, Simpson, Churchill, Golding Bird, et alia, nor do I at present intend to offer any remarks on the etiology or *modus operandi* of uræmia, whether its morbid effects are produced by it as urea or as carbonate of ammonia, generated by the decomposition of urea, as taught by Freirichs, Duncan, Benard, Tyler Smith, et al., but I do take issue with the teaching of any authority, however celebrated, when such authority states directly or by implication that uræmia is an effect, a product or sequela of albuminuria, as I am quite convinced, and hope to indicate a course of investigation which will demonstrate that uræmia can exist, and does exist, independently of albuminuria, without the destruction of a single tubulus uriniferus; without a trace of albumen in the urine, and without any evidence of disease of the kidney whatever, and that consequently when the two conditions are found together they simply co-exist, and that a much greater number suffer from uræmia who have

neither Bright's disease nor uræmic eclampsia than are to be found who have either or both of these diseases.

My attention was first called to the subject while attending a patient suffering from albuminuria, (of which he died about four weeks afterward), and while my mind was more actively directed to that disease while making daily observation of it, I was called some distance to see a very dear personal friend, and found the symptoms of his case to correspond so exactly with those of my albuminuria patient that I told my friend I feared he had Bright's disease of the kidney, in which opinion his attending physician concurred, but I declined to give a pronounced opinion until after making an analysis of his urine, which had not been done, but which I promised I would make immediately on my return home and report the result to his physician. Much to my astonishment, on examination not a trace of albumen nor a tube cast was to be found, nor any pus or anything else to indicate organic lesion of the kidneys. I had commenced the quantitative analysis for urea before testing for albumen, and completed the investigation, I believe, simply because I had commenced it, otherwise I would probably have done as I had often done before, and as many have done before, and as many have done since, *id est*—concluded according to authority, that as there was neither tube casts nor albumen, *ergo*, there could be no uræmia, but much to my surprise I found less urea in my friend's urine than in that of my albuminuria patient, of which I made an analysis at the same time. Both my diagnosis from the symptoms, and the abnormally small quantity of urea, (three and seven-tenths grains to the ounce), without albuminuria, or indications of any disease of the kidneys, were so contrary to my expectations from the examination, that I repeated the analysis in different ways to guard against the possibility of error, and always with the same result. I then determined to pursue the investigation of the subject as I should have opportunity afforded, and since that time, some six years ago, I have made between seven hundred and eight hundred quantitative analyses for urea, fully demonstrating to me that uræmia exists, not alone in the comparatively few cases of Bright's disease and eclampsia, but in many of our every day diseases, exerting its baneful influence, and *that*, where there is no disease of

the kidneys whatever; and if any gentleman doubts the correctness of my conclusions, I have only to ask him to make analysis in every case where he finds the patient exhibiting symptoms similar to those described, as indicating albuminuria or eclampsia, and I venture to say, that long before he shall have expended half the time, or taken half the trouble that I have, he will arrive at the same conclusion.

Whether albuminuria can exist for any considerable length of time without inducing uræmia, I am not prepared on my own observation to say, because I have had comparatively few cases under my care, but I should think not, as when the kidney is diseased, *pari passu*, its power as an eliminator must be decreased in proportion to the extent of the disease, hence a relative proportion of morbid material that ought to be eliminated will remain in the system, except the compensation by increased activity of the remaining healthy tissue in those organs. Granting that uræmia is always present in the advanced, or indeed in any stage of albuminuria, it does not follow that it must be a sequela or effect of that disease; by a parity of reasoning, the inverse would be the more probable, as while uræmia is always believed to be present when albuminuria exists, I have demonstrated (to my own satisfaction at least) that uræmia is often found without albuminuria, and hence, unless on the supposition that the conclusion may be greater than the premises, a logical absurdity, uræmia cannot be the product of albuminuria.

While, however, they co-exist in albuminuria may not uræmia exist in every case prior to albuminuria, may not uræmia exerting its baneful influence on the nervous, and through the nervous, on the sanguineous and digestive systems, loading the blood unduly with morbid matter, lessening the quantity of pure blood, and consequently decreasing or impeding the reparative process of disorganizing tissue, and still further loading the circulation with *effete* material, requiring a super-exalted activity of the kidneys—may not the exhaustion from the long continued, largely increased labor with the decreased reparative power, be the inducing cause of the ultimate diseased kidneys—albuminuria? I simply call attention to the subject as worthy the careful observation of those who have cases of that *opprobria medicamenta* in their charge, and if the anæmia should be found to be considerable and

the albumen little, I would recommend to reverse the recognized order of treatment, directing remedies for uræmia, with the hope that by correcting that morbid condition, the disease of the kidney might be arrested and ultimately cured.

* * * * *

Would it, *a priori*, be considered strange that with a full, bounding, rapid pulse, increased temperature, skin dry, urine often very scanty, as is common in our fevers, would it, I repeat, be thought strange that uræmia in some degree should be present, and that the fever should be modified by its presence? I have no doubt that often the low muttering delirium of such fevers is due directly to that agent, and that many cases of so-called muscular rheumatism and neuralgia ought properly to be designated uræmia, and I have on that theory treated and relieved both the last named maladies which had resisted appropriate remedies for rheumatism and neuralgia prescribed by eminent physicians. I have also found many cases of epilepsy, and some forms of spinal disorders, due entirely to or much aggravated by the same cause, and in that terrible disease, cerebro-spinal meningitis, of which I fear we *know* little, excepting its fatality. I believe it will be yet found that uræmia exerts a very marked influence, if it is not directly the cause. I made careful examination in that direction in a few cases, but they were too few in number to justify the expression of any opinion from my own limited personal observation. I had intended to treat this part of the subject more fully and minutely; also to have devoted some space to treatment, and to the report of cases of which I have a number recorded, but find I have already occupied too much of your time, and will therefore only further say that I do not claim to be the only physician who believes that uræmia is not dependent upon albuminuria (although I so believed when I commenced the investigation and for some years afterwards), as I now know that Bedford and some others have expressed that opinion, but such views are not published, as far as I am aware, in any work that the general practitioner would be likely to have or to look to for information on the subject.

The theories advanced in this paper were discussed by Drs. Bennett, Hyatt, Ochterlony, and Farnsworth, after which it was referred to the Committee on Publication.

DISLOCATION OF THE HIP IN A BOY EIGHT YEARS OLD—REDUCTION ON THIRTY-SECOND DAY.

BY N. A. POWELL M.D., EDGAR, ONT.

L. G., age and sex *ut supra*, was brought to my office with an injured hip, on the 25th of March 1877. From his father I learned that 30 days previously, *i.e.*, on the twenty-third of February, he had when running and looking backwards, slipped and fallen with his right leg in a hole in some crusted snow. Being unable to raise himself from the ground, he was carried to the house, and his right hip was then noticed to be out of shape. No marked pain or swelling followed the accident. The limb was helpless, but in a week he began to lift himself round on crutches. His treatment was eminently expectant; his friends expecting that the hip would "come all right," contented themselves by rubbing it with "Pain Killer," &c.,

Examined standing, the right hip was found to be flattened while the right thigh was flexed slightly, rotated inwards and adducted, so that the knee of this side was in front of and slightly above the inner margin of the left patella. The thigh could be freely flexed, slightly adducted but abducted not at all. The right foot could be placed upon the ground with its great toe approximating that of the left foot, but no weight could be borne upon it. Shortening of the limb did not quite reach half an inch. Nelaton's line drawn from the ant. sup. process of the ilium to the most prominent part of the tuberosity of the ischium fell across the lower part of the great trochanter, leaving the major part of this process with the head and neck of the femur above it. The great trochanter approached the ant. sup. iliac spine and the gluteo-femoral crease was less sharp, while more elevated than that upon the left side. The head of the femur could be plainly felt to roll under the fingers when the thigh was rotated, and to move upwards and downwards when it was flexed and extended. With the patient on his back and the pelvis secured, the thigh could be rotated so far inwards that the popliteal space looked directly outwards, and the leg when flexed on the thigh pointed in the same direction. This point I have not seen mentioned, but I believe the position would be impossible to an ordinary mortal whose femoral heads were in their normal sockets.

So long as the right thigh was well flexed upon the pelvis, the patient's lumbar spine lay flat upon the table, but as soon as the thigh was extended this part of the back became arched.

Recognizing that I had to deal with an ancient sciatic dislocation, and meeting with marked muscular antagonism in the manipulations necessary for a diagnosis, I asked for a consultant to administer chloroform. Two days later my friend Dr. Wells met me, and agreeing with the diagnosis, took charge of the anæsthetic. The manipulations popularized by Dr. Reid, of Rochester, were then put in practice. The right hand grasping the ankle, and the left being placed under the knee, the leg was flexed to a right angle with the thigh and the knee carried upwards over the sound thigh toward the umbilicus and opposite side of the body. Next the thigh was abducted, and using the leg as a lever rotated outwards. In doing this the right ankle was carried over the left, and the right toes became everted instead of inverted. Lastly a slight rocking motion was given to the limb, (Nathan Smith's manœuvre), and the thigh was slowly brought downward toward the table. Mindful of the enormous power given by the disproportion between the long and short arms of the femoral lever and of the danger of epiphysal separation at this age these movements were made and repeated with the utmost gentleness. Nevertheless, a constant crackling and snapping was heard and felt each time the head of the bone was made to mount toward the rim of the acetabulum. Whether this was due to laceration of the capsule, or to the rupture of new adhesions, or both, could not be determined. The first attempt failing, it was repeated five times without bringing the limb completely down. On the sixth trial the head slipped into its socket with the well-known "click." Perfect mobility was at once restored. Up to this present time (April 16th) there has not been the least tenderness or pain in the limb since the reduction. Although, as a precaution necessary with an unruly youngster a long splint is still applied, he can bear the whole weight upon the right side, and the motion in one leg is as good as in the other.

This case has seemed worthy of record on account of the age of the patient and the duration of his dislocation. Occuring under 8 years Dr. Hamilton* has collated 11 cases of luxation at this

* Fractures & Dislocations, 5th Edition.

joint, tho' he himself has seen none under the tenth year. Dr. Gross * states that his youngest case was that of a boy æt. 14, Mr. J. C. Warren † and Mr. Bryant, ‡ each record a case at six years, while Sir Astley Cooper with his unrivaled experience in this department of surgery, has only to record one case § occurring as early as the seventh year. Mr. Powdrell in the *London Lancet* for May 1868, publishes the history of the youngest case yet reported. It was a dislocation into the foramen occurring in a child six months old, and was reduced by manipulation.

Dr. Brown, of Boston, has tabulated 24 cases of reduction of ancient hip luxation. His table which is accepted by Hamilton, embraces all the cases which he could find recorded in surgical literature, and in which the displacement had existed twenty-five days. No information is given as to the motion obtained in the limb after reduction. Regarding this point Sir Wm. Ferguson writes that "after three months the use of the limb is not, when reduced, greater than that which it would have acquired in its dislocated state."

Sir Astley Cooper states that "after eight weeks it is imprudent to attempt the reduction of a hip dislocation except in persons of extremely relaxed fibre or advanced age." Hamilton says, "that this rule will continue to govern experienced and discreet surgeons," and Gross, that "the exceptions to this law, only seem more fully to establish its validity." Still perhaps the words of Sir Henry Thompson are a point in the surgery of a region not far removed from the hip, will apply here. "The problem presented for solution in this, as in most other cases where surgical interference is imminent, is far too complex to be solved by one unvarying rule." Cases will occur which may be safely operated upon beyond the limit set by Sir Astley, while others will become absolutely irreducible far inside that limit. Other things being equal, we expect sciatic dislocations to be earliest rendered irreducible by adhesions, and the acetabulum to be most promptly filled up in young and robust subjects.

I find recorded but one case || where true morbus coxarius followed coxo-femoral luxation.

* System of Surgery, vol. 2.

† Boston Med. & Surg. Journal, vol. 24, pp. 220.

‡ Practice of Surgery, pp. 751.

§ A. Cooper on Dislocations Am. Ed. p. 83, case 27.

|| Dr. Markoe, N. Y. Med. Jour., Jan. 1855.

Perhaps this may be accounted for by the fact, that the accident is rare at the age when the disease is most easily lit up. Two-hundred and twenty-one out of three-hundred and sixty-five cases of hip joint disease recorded by Dr. Sayre * occurred under the age of fifteen; and we have seen how rare dislocation is before that age. Perhaps, also the fact that "we do not hear of the unsuccessful cases" has something to do with it. Certainly, when the caput femoris leaves its cavity, the round ligament must be ruptured, † and of this Sayre ‡ writes, "when such an accident occurs the vessels which supply the head of the femur are destroyed, and necrosis follows as a result of interference with its nutrition. Secondary changes soon occur in the cartilages, and the synovial membrane, and the case goes on, if not relieved, to the development of the disease in its worst form."

And yet not a shade of tenderness, or the first faint symptom of hip disease has followed the rupture of this ligament in the case just given. Is it not fair to suppose that this boy starting life with inherited health, and brought up on oat-meal and fresh air, lacked just those tendencies which we group under the name of struma, and which if present, would at his age, have determined the development of morbus coxarius.

ABCESS IN THE GASTRO-HEPATIC OMENTUM.

BY JAMES CATTERMOLE, M.D., L.S.A., LONDON.

Several years ago I was requested to visit an old patient, a man of strong and vigorous constitution, aged 62 years, who complained of severe and deep-seated pain in the epigastrium, aggravated by pressure or forced inspiration; pulse quick and full, tongue furred; he was thirsty and feverish; the urine high colored; fecal discharges free and natural. This condition I considered called for venesection; about a pint of blood was taken from the arm, which rendered him much easier for about thirty hours, when the pain again became more severe. The application of a dozen leeches, followed by hot fomentations, gave more lasting relief. Mercurials, with opium, were given until the gums

* Orthopædic Surgery, pp. 232.

† See case of Hip Disease, by Dr. Dwight, Boston Med. & Surg. Journal, Jan. 26th., '77.

‡ Op. Cit. pp. 230.

were sufficiently affected; this plan of treatment, with the addition of salines and the free application of leeches, was continued for twelve days; but still a dull, aching pain, with sensation of weight continued, deep in the epigastrium, and now a slight tumoid condition of the part, just below the ensiform cartilage was quite evident, and the skin over the whole body had become slightly jaundiced.

On the tenth day of the attack the patient experienced a slight chill, rather profuse nocturnal perspirations followed; with all this the patient retained a good amount of strength.

I now had the counsel and assistance of a very eminent practitioner, who considered the case to be a subacute form of hepatic inflammation, as yet unsubdued, but thought that by the application of blisters, etc., the occasional use of mercurials and the continuance of salines, a cure would be effected. This plan, conjoined with sufficient support, was carried out for the next seven or eight days with much apparent benefit, the pain gradually diminished and but little uneasiness was felt, excepting that of a sense of weight in the epigastrium. The patient felt himself in every way stronger and better, inasmuch as on the Sunday morning, he considered himself almost able to go to church. He requested his wife to have breakfast prepared for him down stairs. A few minutes afterwards, on getting out of bed rather hastily for the purpose of showing himself, he fell heavily on the floor, and whispered to his wife that something had burst inwardly and that the hand of death was upon him. He did not complain of pain; was covered by profuse cold sweat; syncope increased, and he expired in about ten minutes.

We obtained leave to make a post mortem examination, which revealed the cause of his sudden death. Our diagnosis led us to believe that an abscess of the liver had poured its contents into the peritoneal cavity; such however was not the case; the structure of that organ was sound and unbroken, very slight congestion only existing. The stomach, spleen and pancreas were all right, but there was purulent matter in the cavity of the abdomen; we had not yet discovered its source. After searching very carefully, we came upon a ruptured cyst or pyogenic membrane, situated in the gastro-hepatic omentum, which, after some

minute dissection, we were disposed to believe had its origin in the loose areolar tissue constituting Glisson's capsule. The cavity, as near as we could judge from its size, had contained some seven or eight ounces of the morbid fluid. This cyst rested upon the hepatic artery, plexus of nerves, ductus communis choledochus, etc., and although the pressure must have been considerable, yet these important structures continued to perform their functions properly, if we except the slight amount of jaundice, caused probably by the partial obstruction of the duct. The peritoneum was but slightly injected; no pain had been experienced below the epigastric region. The usual indications of the formation of matter had been almost absent, save and except the slight chill on the tenth day of the disease. The common and well known effect of the escape of fluid from visceral abscess, and intestinal perforations into the abdominal cavity, is acute and fatal peritonitis. In the above case death followed too soon for the establishment of such conditions. The fatal result, occurring so soon after the rupture of the cyst, must certainly be attributed to shock. The fluid probably for some time had, by being bound down, caused considerable pressure, not only on the contents of Glisson's capsule, but also on the great coeliac plexus, so that it may be fairly inferred the sudden removal of that compression really constituted the shock, by disturbing the circulation of the nervous fluid, if such a fluid there be. For whilst numerous cases of death have been recorded as the result of blows on the stomach, by transmitting their force upon, and causing sudden compression of the great epigastric plexus, thereby producing sufficient disturbance of nervous action to destroy the muscular contractility of the heart, we have tolerably conclusive evidence that a like result may be caused by opposite means, as the evacuation of fluid by paracentesis, or the tapping of an ovarian cyst.

The anxious friends of the patient gave him the first thing at hand, viz, a draught of water, and, as stated, he had almost a painless death. If, instead of water, active stimulants—brandy, ammonia, etc.—had been administered, it is just possible that the cardiac paralysis might have been averted, and life prolonged for a few hours, only to be terminated in agony by acute peritonitis.

Correspondence.

COMPLIMENTARY DINNER TO DR.
JAMES R. DICKSON.

To the Editor of the CANADA LANCET.

SIR,—I beg of you a space in your columns for a report of a complimentary dinner given to Dr. Dickson, in the Town Hall, Paris, on the 3rd ult. Dr. Dickson is the oldest practitioner of this town and vicinity, and from the fact that he has been confined to his office for the past two years, an amount of sympathy was awakened which manifested itself in a complimentary dinner, which I believe is without a parallel in this part of Canada. The doctor's confinement was due to rupture of the tendon of the recti muscles, just above the knee, and I hope a short account of his case which he has been kind enough to hand me, as well as the address which was presented to him, and a few other items relating to the dinner, will not be without interest to your readers. The following is Dr. Dickson's account of his case:—

"On the 4th of March, 1875, whilst descending a very steep staircase, and within two or three steps from the foot, I suddenly fell forward, and landed on my knee on the floor. On making an attempt to rise, I found myself utterly powerless, and had to call in the assistance of two men, who placed me in my cutter. I drove them to my residence, where they put me on a chair and carried me to my room. They put me into a large arm chair where I remained until morning, when a friend came in and helped to undress me. I remained in that position with my limbs stretched on a board placed horizontally for nearly five weeks. Both limbs were so enormously swollen that no examination of the knee joint could be made, and we were totally in the dark as to the precise nature of the injury. I did not feel the slightest pain during that period. One night I got a couple of friends to carry me to bed, where they left me very comfortable. I felt very easy until about 2 o'clock a.m., when I became so restless and uneasy that I managed to pull myself on to a chair which was at the bedside, and by slow degrees I got close to my old chair, when in attempting to lift myself into it, it rolled away, and I fell between the two with both legs closely bent. It seemed

as if I could hear the tissues tearing as if they had been cotton. Since that time, until within the last few months, I was unable to make even the slightest attempt at standing. Now I can raise myself without help and stand firmly on both legs, but if I make an attempt to walk, when I raise one foot the other limb gives way. I trust, however, by the aid of a very ingenious apparatus made for me by Mr. Cram, of Woodstock, to be enabled during the summer to make some satisfactory attempt at walking. It was a considerable time before I found out the real nature of the injury, until one day, whilst looking for the details of another case, in the *British American Journal*, for October, 1861, I found the report of a similar case by Dr. Adams, of the London Hospital. I may add that I was on the verge of 60, 5 feet 6 inches in height, and my weight was 274lbs."

The success of the dinner was largely due to the active co-operation of the lady friends of the doctor. After partaking of a splendid repast, an appropriate programme was gone through. Among many prominent gentlemen present from a distance were Drs. Digby, Brown, Philip, and Griffin, of Brantford. Dr. Turquand, of Woodstock; Dr. Lovett, of Ayr, and Dr. Caw, of Parkhill. Letters expressive of regret at not being able to be present were received from the Hon. D. Christie, Judge O'Reilly, Judge McQueen, Dr. Covernton, of Simcoe, Dr. Henwood, of Brantford, and a couple of the clergymen of the town. All the doctors' medical associates, as well as several of the clergymen of Paris, were present. Dr. Digby, Mayor of Brantford, occupied the chair, and after excellent and appropriate addresses by the chairman, Canon Townley, and Dr. Turquand, and instrumental music by Miss McKinnon, of Paris, and vocal by Dr. Filgiano and Mr. Lamb, of Hamilton, Dr. Burt addressed the meeting. At the conclusion of his remarks, on behalf of Dr. Dickson's many friends, he read an address, beautifully engrossed on parchment, which he presented along with a very handsome purse to the doctor. In doing so, Dr. Burt remarked as follows:—

"Mr. Chairman, ladies and gentlemen, I have been confided with the responsible task of reading an address to our honored associate, in behalf of his many friends assembled here this evening. When appointed by your committee to take part in the programme for this evening, and to accompany my

remarks with the reading of an address, I felt my inability to do honor to the profession to which I belong, and to speak in adequate terms of one of its oldest and most esteemed members. However short therefore my remarks may fall of what such an address as is expected of me by your committee to-night should be, and of what our esteemed friend too well deserves, you may rest assured the fault is all my own, and that too great a burden has been heaped on too small shoulders. It is only my love for the profession of my calling that has induced me to present myself before you to-night, and I feel that the whole profession looks upon the honor conferred by such gatherings as this upon one of its members, as an honor to itself as well as a most fitting reward to the person upon whom it is conferred. These gatherings, aside from their real purpose, generate a more kindly feeling, not only between members of this profession, but also between its members and the great world outside of us. To cherish this good feeling, and prove ourselves worthy of it, is the tendency of the times, and we one and all—to make a general statement—are struggling hard to root out all seditious from a profession which is fast pushing its work for the benefit of the whole human race. The old saying that “doctor’s disagree,” I hope it will be needless to tell you, is no longer a maxim, and that it is fast passing away into oblivion. We were once wont to hear little else. A pleasant change has taken place. Now we hear that all well-informed men agree. We have the same anatomy, the same physiology, the same chemistry, the same botany, and so on, throughout the whole domain of physic, and, I believe, to all educated members of the profession their subjects do not present greater difference than do the different walks of people. We all use the same material to arrive at the same goal, and although we differ as much as several people do in walking, and although we may have different gaits, still we have learned to walk so well that it is very easy for us to walk or keep step together. Many of the disagreements of old, were due greatly to the difference in the amount of education, and personal consideration and false aggrandizement among the lesser informed which naturally flowed from it. But now as the regular profession is becoming more uniformly educated, and more sensitive of professional dignity and honor, we do not

meet with the unpleasantnesses that were so rife in years gone by; and all now unite for the welfare of suffering humanity—which is their common aim—to do good that good may flow from it. It is well, however, in the extension of knowledge that we should oftentimes take sides. It is pleasant to indulge in a friendly warfare. And it is pleasant to know too, that it is quite possible for medical men, and we should hope for all others, to disagree and yet not despise each other; nay, indeed, to disagree and yet admire each other. The fear of ridicule ought never to prevent any one from owning himself in the wrong. I do not believe in the man who never made a mistake, and there is no cause for reflection and no dishonor to own that what we once thought was right, further observation and experiment has proved to be wrong. These differences, too, disappear as the non-medical world becomes more acquainted with our professional lore, or, at least, become so far pregnant with the natural sciences and cognate subjects, that they will be brought into sympathy with the labors of the physician. When this sympathy is more generally developed, the superstitious antagonism which every now and then formed a bulwark here and there to be broken down, will no longer retard the work which has for its aim the alleviation of the sufferings of the people. Not only is medicine coping against local sedition and strifes—expending not a little of its powers to bring individuals both inside and outside of the profession more and more into harmony with each other—but it also stands aloof from national contentions and political strifes. We may go to war about religion—I mean actual hostile warfare—we may war about creeds, and about politics, but I hope we will never hear of cruel war caused by the disturbances of the medicine man. Medicine has a different function to perform. It seeks the privilege to use its remedies—its soothing syrups (I do not mean Mrs. Winslow’s) to lessen the miseries of all people, the poor as well as the rich, foes as well as our friends.

“The sympathies of medicine are world-wide. No better evidence of this could be given you than the meeting of the International Medical Congress, held in the city of Philadelphia, in September last, ‘when representative men from nearly every country in the world assembled to interchange cordial salutations, to deliberate upon the

best means of promoting the holiest and dearest interests of our profession, and to lay their contributions, the accumulation of years of study and observation, upon a common altar for the common good.' To turn more especially to our honored friend. As for myself, I have spent many a pleasant half-hour in listening to his refreshing stories of the medical celebrities of Edinburgh. Their names had been dear to me. And you know how we all love to have some one talk to us of those whom he has seen and we have not seen, of those whose memories were ever dear to us through their writings, and which made us feel as if we knew them personally. I can recall some whose names were so dear to me through their writings, and who, when passing away, left such an impression on me, and caused such a thrill to pass over me, as if it had been a loved relative or a dear friend. I was going to say something about our friend being a bachelor, but I believe I shall refrain, suffice it to say that the well-known sympathies of Dr. Dickson are sufficient to exonerate him and all other bachelor members of our profession from what Mr. Herbert Spencer would have us believe to be a rule, namely, 'That old bachelors are commonly selfish.' And before reading you the address, to relieve many minds of a hollow belief, I shall say in the language of an eminent writer, 'That physicians are apt to be sceptics in religion is the vague belief of a careless world; it would be difficult for them as men of science to be superstitious; but one of the profession who faithfully and cheerfully does his duty, must have a belief as fixed and practical as that of any pastor, in a reward of duty beyond the grave.'

"I could not let the present opportunity pass without thus endeavoring to promote that good feeling and that social intercourse which our friend Dr. Dickson has so well exemplified in his every-day life; and I feel that I can assure him for us all that all the compliments he receives this evening are but the expression of a good feeling that has long existed towards him, and we all regret that while in the enjoyment of good health he has not been permitted to engage in the active duties of his profession."

The following address was then read:

To DR. JAMES R. DICKSON, L.R.C.S., *Edinburgh, Paris, Ontario.*

* DEAR SIR,—Your many friends have for some

time past wished to make known in a tangible way, their sympathy for you in your lingering confinement, and have thought the present occasion to be most opportune for expressing their sympathy and their appreciation of your worth as a professional man and a public benefactor. Your abilities as a physician and surgeon, your kind disposition and sympathetic nature, your self-sacrifice, and your liberality, have gained you the esteem of your fellow-citizens in all the walks of life. But more especially for the great interest you have manifested in the welfare and happiness of the homes of destitute ones, do your many friends wish you to accept at their hands a small memento of their gratitude. Feeling encouraged by your partial recovery, we are not without hope that the goodness of a kind Providence may yet restore you to the active duties of a professional life, and thereby impart happiness to the suffering sick and give relief to the agonies of body and mind.

Your professional brethren have missed you at the bedside of the afflicted in times of distress and anxiety. Your ripe experience, your freedom from bias and dogmatism, your intelligible statements on all subjects pertaining to the interests of those stricken down with accident or disease, and your unostentatious bearing, have ever been a source of comfort and edification to your professional associates. By many an occupant of the sick room, you have been missed. Many have been deprived of the benefits of your mature judgment, and of those personal qualities for which you have been so much admired, and which oftentimes are sufficient to inspire confidence and rally the sinking soul of many a distressed one. Gentle, sympathetic, and kind, you will long be remembered both by your brother practitioners and your numerous friends; and our prayer is that you may yet be spared many years to add to the laurels with which you have already been crowned. And now, Sir, we beg of you to accept of the accompanying purse, and this expression of our good wishes.

Signed on behalf of the Committee,

W. BURT,

WM. CLARKE,

JOHN McMILLAN.

April 3rd, 1877.

Dr. Dickson responded in a brief speech, expressing his inability to put words together to reciprocate the warm manifestations of the evening. His remarks were most cordially received.

Several interesting speeches then followed, by the Rev. Father Dowling, of Paris, Dr. Bown, of Brantford, and A. H. Baird, Esq., Mayor of Paris; and instrumental music by Miss Griffin, of Brantford, and Miss Clark, of Paris, and songs by Messrs. Filgiano and Lambe. The entertainment, which for its medico-social character has had few equals, then closed with singing the National Anthem.

I am, dear Sir,
Yours truly.

WM. CLARKE.

Paris, April 20th, 1877.

THE LONDON HOSPITALS.

To the Editor of the CANADA LANCET

SIR,—In your number for January, I noticed a letter from K. N. F., upon which, with your kind permission, I would like to make a few remarks.

At the outset I would like it to be understood that my object is not to seek to raise one institution by lowering another; but rather to point out where your correspondent is at fault, and to put a really good hospital in its proper light.

I was led, by the comprehensive title of the letter referred to, "The London Hospitals," to find a fair and judicious summary of the leading features of the great Metropolitan Hospitals. I must say I was greatly disappointed. I found *Guys'* only mentioned to be dismissed, a few meagre remarks on the London; and, as it seemed to me, an unnecessarily detailed account of *St. Thomas'*. Altogether, the inference that I drew was that your correspondent had observed pretty carefully the routine at the latter hospital, but practically knew little of the others. With reference to *St. Thomas' Hospital*, I would particularly remark on the exaggerated statements indulged in, especially regarding the advantages of dressing and midwifery. I know as a fact, that it is exceptional, for Canadian students to become in-patient dressers, and that the number of men who get 50 cases in their two weeks term of duty, is small.

I must also demur to the title of "brilliant" being applied to Mr. Sidney Jones. He is a good, but decidedly showy operator.

Those who are best fitted to judge in ophthalmic matters, inform me that Mr. Liebreich is not in particularly good odor with that branch of the profession.

I think also that your correspondent is mistaken as to the capacity of *St. Thomas' Hospital*. That 572 is its maximum number of beds may be true, but, owing to the immense cost of the buildings, and consequent crippled finances, the number *actually* in use is very much less.

Having briefly noticed a few of the errors into which your correspondent has fallen, let me beg your attention to the secondary object of this letter.

The London Hospital, coming recently under the notice of the Canadian profession, is by no means, as many would suppose, a new institution, having been founded as long ago as 1740. The reason it is not better known is that it is only within the last two years that it has opened its doors to Canadians, at the reduced fee of ten guineas.

As your correspondent justly remarked, it is situated in a "densely populated neighbourhood," and in close proximity to the docks. I am aware that there is an idea abroad that the London is principally a surgical hospital, but I shall presently show that this is quite erroneous, the two classes of cases being very evenly balanced, and naturally so, in the sort of neighborhood mentioned. It is not difficult to imagine that there are many hundreds of persons not "above" seeking gratuitous medical aid.

In support of my assertions, I will briefly give the following statistics:

The London Hospital contains 800 beds, the allotment of which is as follows, varying slightly of course, with circumstances:

For Accidents and Surgical Cases.....	334
" Medical Cases	300
" Diseases of Women.....	26
" Children under 7 years.....	68
" Ophthalmic Cases.....	12
" Out-Door Wards (Erysipelas, &c.).....	60
Total.....	800

During the year 1875, the number of patients treated (not counting renewals, therefore new cases) was:

Medical In-patients	2,358
" Out "	12,827
Surgical In "	3,446
" Out " Diseases.....	5085
" " Accidents... ..	7,660
	} ..12,145

Special Cases :

Skin, out-patients	1,944
Ear, "	650
Eye, "	1,617
Dental "	2,064
Minor Casualties, not requiring further treatment.....	8,740
Medical Renewals	3,060
Surgical "	1,088

The above figures speak for themselves, and therefore further comment is unnecessary.

The teaching is excellent ; I have only to mention the names of Drs. Sutton, Hughlings Jackson, and Mr. Jonathan Hutchinson, to gain credence for my assertion. There are from two to three *post mortems* held daily, demonstrations being given thereon.

In conclusion I would bring to your notice the very significant fact that some of the most intelligent students at St. Thomas' have expressed to me their regret at not having visited the London Hospital before taking out their tickets elsewhere, and have even contemplated investing another fifty dollars in it.

Trusting that I have not trespassed too much on your valuable space and your reader's patience,

I remain, yours truly,

ONE WHO KNOWS.

London, March 1877.

To the Editor of the CANADA LANCET.

SIR,—I beg to enclose you a copy of a "puff" which recently appeared in the columns of one of our local papers. The article speaks for itself, consequently I shall not make any remarks thereon.

Yours, etc.,

ÆSCULAPIUS.

April 15, 1877.

"Dr. — has the honor of holding the following qualifications:—Licentiate of the Faculty of Physicians and Surgeons, Glasgow, 1838 ; Licentiate of Medicine, Surgery and Midwifery, Province of Canada, 1842 ; special Diploma for Midwifery, granted by the Faculty of Physicians and Surgeons, Glasgow, 1876 ; Member of the College of Physicians and Surgeons, of Canada, 1876. Dr. — has been long and favorably known in the western section of this Province, having been a resident practitioner in — for over thirty years, during which time he occupied not only a leading position in his profession, but held many offices of responsibility and trust, both educational and municipal ; as a proof of which, and as showing the faithful and upright manner in which he discharged the

duties of one and all, he was voluntarily presented with many testimonials by his professional brethren and fellow-citizens, prior to his departure for his native country.

"Dr. — has long devoted his attention to the treatment of the diseases of women and children, and has had a very extensive practice as an accoucheur, as an evidence of which he had the honor of being presented, when on a late visit to Glasgow, with a special Diploma for Midwifery, by the Medical Faculty of that city. Dr. —'s long residence in that section of the Province where intermittent and bilious remittent fevers are peculiarly prevalent (the country being low and but partially drained) has afforded him much experience of their causes, symptoms and treatment," etc., etc.

[We had hoped that we had seen the end of such disgraceful means of obtaining public notoriety. It is a confession of weakness in the fool or knave that adopts it.]—ED.

Selected Articles.

EMPYEMA AND PYO-PNEUMOTHORAX.

Dr. Janeway presented a specimen of empyema with pyo-pneumothorax, and read the following history (*N. Y. Pathological Society*).

Bridget Nolan, æt. 23, Ireland ; admitted January 4, 1877 ; family history unimportant ; denies drink and venereal ; had diseases of childhood ; had one child, which was delivered without instrumental interference four months ago ; since this time she has suffered from pelvic and lumbar pain, pain on defecation, and dysmenorrhœa. For the relief of these symptoms she entered the hospital. Examination revealed a retroverted and retroflexed uterus. The uterus is fixed ; patient's general health quite good.

Jan. 14.—Yesterday patient was in the amphitheatre. In the evening she had a severe chill, followed by pain in the right chest of a lancinating character. These symptoms were soon followed by febrile movement and cough, without at first expectoration. This a.m. the temperature is 103° ; p.m., pulse, 104 ; respiration, 30 ; temperature, 102½°. Ordered R—Quin. sulph. gr. x. t. i. d., and sufficient morphia to keep her free from pain.

Jan. 15.—The physical signs of consolidation are evident over the upper portion of the lower lobe of the right lung. Patient to-day expectorated a few rusty sputa.

Jan. 17.—The signs of consolidation have extended over the entire middle and lower lobes. Is having Quin. sulph. gr. x. t. i. d.

Jan. 23.—This morning a few subcrepitan rales are heard over the consolidated lobes. Patient is perspiring profusely. Is still taking the quinine.

Jan. 28.—Is apparently improving. The physical signs indicate nearly completed resolution in the affected lung. Quinine discontinued.

Feb. 9.—Still complains of feeling weak. Has some dyspnoea. Has very little appetite, and eats scarcely any food. Physical examination this evening reveals *flatness over the entire right chest*, and bronchial respiration over a small space at the summit. Elsewhere respiratory sound is absent. The hypodermic needle was introduced, and a *syringeful of pus withdrawn*.

Feb. 10, a.m., temp. $99\frac{3}{4}^{\circ}$; p.m., temp. 102° . To-day patient is suffering from dyspnoea to a considerable extent; complains of feeling very weak; ordered whiskey $\frac{3}{4}$ ss t. i. d. About 4.30 it was deemed advisable to aspirate the chest. This was accordingly done, and $\frac{3}{4}$ lx. of pus removed. Toward the last gas was withdrawn with the fluid. The needle was removed, and on auscultation the succussion sound was heard. Patient appeared to suffer no inconvenience from the operation.

Feb. 11, a.m., temp. 100° ; p.m., temp. $100\frac{1}{2}^{\circ}$. Patient feels considerably better than before operation. On auscultation, amphoric respiration and metallic tinkling are heard posteriorly. Stimulants and occasional doses of quinine are given.

Feb. 12, a.m., temp. $98\frac{1}{2}^{\circ}$; p.m., temp. $99\frac{1}{2}^{\circ}$.
March 2.—Since last note the temperature has ranged between 99° and 102° . The fluid in the cavity has considerably increased in quantity. Is quite weak and takes little food.

March 3 to March 8.—Temp. $99-101^{\circ}$.
March 9.—A free incision was made in the seventh intercostal space in the infra-axillary region, and about $\frac{3}{4}$ xxiv. of pus escaped. The operation was followed by no unpleasant symptoms. This evening the cavity was washed out with dilute solution of carbolic acid.

March 10, a.m., temp. 101° ; p.m., temp. 99° . Patient passed a good night, and this morning seems quite bright. The pleural cavity is washed out twice a day.

March 11, a.m., temp. 98° . This morning the patient appeared as well as she did yesterday. About 11 o'clock the pleural cavity was washed out. Just at the completion of the operation patient suddenly exclaimed, "Oh, doctor! my breath!" The heart's action ceased immediately. The pupils dilated widely, and with a few gasps the patient died. External and internal stimulation were resorted to, and artificial respiration employed for twenty minutes.

The above is the ante-mortem history as given by my acting house physician, Dr. Taylor. On entering on duty on the 1st of March, I found the patient with evidences of pyopneumothorax, the air having been found in the chest after aspiration, and at that time evidence by amphoric respiration, voice, and cough of a communication of the

pleural cavity with the bronchi. Of this part I had satisfied myself on the day after the aspiration. No evidence existed of such communication on the 1st of March, as there was absence of respiratory murmur of any kind and of the amphoric voice over the air in the chest. Dr. Peck, the house physician, assured me that no pus had been coughed up. I supposed that the cause of the entrance of air after the aspiration had been due to a small perforation of lung in some spot where perhaps the pleura was thinned by ulceration, or possibly at the site of some abscess which had caused the empyema. The doctor assured me that he had not felt anything like the lung impinging on the needle during the aspiration. There were no evidences of disease in the other lung, save occasional râles, and this I ascribed to a slight bronchial catarrh, though I heard them at the apex. I weighed the case in my mind and decided in favor of opening the thorax for the following reasons:

1st. The previous aspiration had not reduced the size of the pleural cavity.

2nd. The pus had re-accumulated.

3rd. The lung, owing to the air and pus, was collapsed and pressed inwards and backwards on its root, and no signs existed of present communication between lung and cavity.

4th. The results of the operation in other cases had been favorable, either curing or alleviating to a greater extent than repeated aspiration.

5th. I had seen a number of cases in which death had occurred where the operation was not performed, and I believed and believe that a greater number will recover of those operated on than of those not operated on.

6th. I did not see any good reason to hope for a diminution of the pus-producing cavity except by opening the chest and allowing the pus to escape, and then endeavoring to obtain a retraction of the affected side,

I stated at my clinic that I would have much preferred operating on the case had the upper lobe been adherent to the chest wall, as it so often is in empyema, thus reducing the size of the pus-producing cavity.

Autopsy twenty-seven hours after death.—Brain normal. On opening the pericardium I noticed that the right ventricle was distended, and hence percussed over it. It was tympanitic. I then punctured it with the point of a knife, and a quantity of odorless gas or air escaped with a "pffff" sound, and the walls fell together. There was also some air in the right auricle. I immediately examined the condition of the venæ cavæ, and found no lesion of them nor of the innominate veins, etc. The right ventricle contained, after the air escaped, only a few small clots not in the least different from ordinary black clots; the right auricle some black clots and fluid blood. The

left ventricle was nearly empty and contained no gas, the left auricle contained only blood.

I have to regret that in the examination I could not speak of the contents of the pulmonary artery with certainty, as the heart was cut out, and I think blood escaped. In the left lung the branches contained blood. In the right the branches, when I removed lung, were nearly empty.

The right pleural sac contained some of the remains of the fluid injected, and the rest was filled with air. The right lung was collapsed, carnified, pressed upwards and inwards on the root. The pleura covering it was thickened and opaque, and presented at the upper part of the lower lobe an irregularly oval loss of substance about an inch long and one-half an inch in depth leading into the lung tissue. In this I found a branch of the pulmonary artery of some size separated from the air-holding space of the pleura only by the thickness of its own walls. The costal pleura was markedly thickened. The other lung was normal. The liver and kidneys were somewhat congested, but otherwise normal.

There were evidences of old pelvic cellulitis and peritonitis, and of some thinning of uterine wall at point of flexure junction of neck and body.

The other viscera were normal. A careful examination showed absence of gas development in the blood; in other situations an absence of the least sign of decomposition about the body or its organs, and you see in the lungs and heart which I present, after two days, the absence of any evidence of decomposition at the present time, these organs having been preserved simply by exposure in the atmosphere wrapped in a damp cloth.

I had supposed that the evidence as to the cause of the sudden death would be negative, and that we should have to consider it as due to syncope; but finding the gas in the right side of the heart without evidence of decomposition as its cause, and finding it there exerting pressure on the containing wall, it seems to me that we shall have to consider it as the cause of the arrest of cardiac action. The question arises as to its origin. It could only come from the venæ cavæ, the venæ azygos, or the pulmonary artery on the right side, or else be developed from the venous blood. I looked at the venæ cavæ and the venæ azygos, and there was no point for its entrance in these, and in the azygos there was fluid blood without air bubbles, so that it did not pass from an intercostal vein into this. If the pulmonary artery alluded to had been its source, we should expect evidence of blood escape into the tissues if a lesion existed in its walls; and more, the air would, in case of no lesion, have made its way in opposition to blood current, and through the valves. I had at first thought of this as a possibility, but I must confess that more mature reflection makes me feel that it is a scarcely probable case.

The other supposition which I have mentioned, viz., the development of gas from the blood, I believe to have been the real condition and cause. This, as a cause of sudden death, is spoken of by Foerster, though he says he never saw a case under the head of pneumatosis of the heart, in his work on pathological anatomy. He also there gives some literature citations. Rokitansky and others, as far as I have had time to examine them since, pass the subject without mention, or as Wagner with the barest allusion.

Some years since I saw a case of gangrene of the leg due to a diffuse cellulitis, in which death was very sudden, and in which I supposed that gas had entered the circulation from the decomposed blood in the veins of the affected part, as I found it there in the right cardiac cavities: but as the weather was warm and the body commencing to decompose, I could not be positive.

This and the case I present to-night are the only cases of the kind in my experience. I record the case on account of its rarity, and also because I believe that we should report our unsuccessful as well as our successful cases.—*Med. Record.*

WHEN TO OPERATE FOR MAMMARY CANCER.

Mr. Sampson Gamgee, F. R. S. E., surgeon to the Queen's Hospital, Birmingham, has the following excellent remarks in a late number of the *British Medical Journal*:—

It is especially true of operations for cancer, that they should not be undertaken unless there is the utmost attainable certainty of the surgeon being able to complete them; to remove the whole disease, and leave the parts in a state favorable to speedy and solid union. If a scirrhus breast is to be interfered with at all, such interference cannot be too speedy or too thorough. From a woman above sixty, it is only under very exceptional circumstances that the removal of a scirrhus should be recommended. In old persons, such growths are often very slow in their course, give little pain, and are consistent with several year's life with comparatively little discomfort. The other conditions which are a bar to the operations are—*a.* Ulceration of the tumor and of the covering integument; *b.* Adhesions to the pectoral muscle; *c.* Infiltration of the mammary gland with cancerous matter as distinguished from the circumscribed tumor in its substance; *d.* A chain of indurated glands in the axilla; *e.* Any induration of the glands above the clavicle; *f.* Brawny infiltration of the skin over the affected breast; *g.* The existence of scirrhus in both breasts, or in any other organ besides one breast.

In an otherwise healthy person below fifty-five

years of age, I do not consider a retracted nipple, a pucker or dimple in the skin, or one enlarged movable gland in the axilla, severally, objections to the operation. Once operative interference is decided upon, which is the best plan? Clearly the knife, not the elastic ligature or caustics.

A few words as to the operation and its after-treatment. Commencing at the sternum, I direct the incisions straight across the chest, through the fascia covering the pectoral muscle, which I invariably dissect clean. The mamma, grasped in the hand, is forcibly raised, the handle of the knife being freely used to separate its loose connections; the point or edge of the instrument is only employed to give a light touch to any bond of union which resists a goodly amount of traction. By this means very little blood is lost. It is now many years since I tied or twisted a vessel in an operation of this kind. The surface of the wound is lightly brushed with styptic colloid, and narrow strips of lint soaked in the same agent are used to close the wound after the edges have been very accurately adjusted by points of metallic sutures, at a distance of about three-quarters of an inch from each other. A drainage tube is placed in the outer angle of the wound, and over it pads of picked oakum in common muslin bags. A nicely compressing bandage surrounds the chest, and binds the arm to the side, with the hand across the chest. The dressing is not troubled for a week, when, as a rule, the greater part of the wound is healed. The operation, thus simplified according to the first principles of plastic surgery, is attended with singularly little pain.—*Med. & Surg. Rep.*

JABORANDI IN BRIGHT'S DISEASE.

Case I.—Henry P., æt. 18, admitted September 4, 1876, I bring before your readers because he presents a most unique example of localized œdema in Bright's disease. He is a dwarf.

His urine was highly albuminous, scanty, epithelial and granular casts abundant, with a history of dropsy and other symptoms which made the diagnosis easy. The tumor itself, located in the cervical region, was elastic, shiny, and pitted upon pressure. It had appeared a year before, with only slight general anasarca, and had disappeared under treatment in the Episcopal Hospital.

R Jaborandi, ʒii;
Aquæ, ʒiii.—M.

was ordered as before, to be repeated the second day. Milk diet, and the preparation of iron in the well-known Basham's mixture.

At the end of a week there was no evidence from inspection that a tumor had ever existed: he sweated profusely after every dose of the drug, and expressed himself as feeling much more comfortable. At present date the tumor has never returned.

Case II.—Robert F., æt. 50, admitted October 9, 1876. In this man's case the dyspnoea from intense œdema of the lungs was as severe as I have ever seen it. There was some general anasarca, and the patient was nearly comatose. He took jaborandi, administered as in the previous cases, for three weeks every other day, with the carbonate of ammonium for about one week, as in prescription given. He sweated profusely after every dose; at the end of the time stated he was completely convalescent. He, as did most of the others, used to beg for his medicine, for he recognized the great benefit he derived from it.

In the following cases I also used jaborandi to relieve the suffering caused by dropsy when uræmia appeared inevitably about to come on, and recurred to its use whenever the symptoms appeared.

I give their names and dates of admission to show the length of time during which I had them under observation, and to demonstrate that the effect was more than temporary.

William Locker, æt. 40, admitted December 2, 1876. Not discharged.

James Dillon, admitted August 9, 1876. Discharged October 12, 1876.

Edward McFaut, admitted December 19, 1876. Discharged February 15, 1877.

James Williams, admitted December 12, 1876. Not discharged.

I know of no other agent which will afford so great relief as this drug. The use of steam baths cannot be substituted in its place, though these are valuable in a few cases where jaborandi is, for some reason, inactive; but some of my cases were relieved by the drug after steam baths had totally failed.

There is very little depression of the system from its use. In one instance a nurse gave a dose of it to a man suffering in the second stage of pneumonia with some symptoms of typhoid state; here there was considerable depression, but the free exhibition of stimulants in twenty-four hours relieved all bad effects. In one case of phthisis a profound sialagogue effect was produced: the patient said, 'The water seemed to leak into my mouth like a fountain:' she filled several receptacles during the night, but all inconvenience passed away during the day. After using jaborandi, my patients were placed, as I have stated, on milk diet, principally, and Basham's mixture.

I write in hope of inducing the profession to make use of the drug in private practice; for, after some years' experience in this house in the treatment of Bright's disease, I can truly say I have never had so favorable results from any other drug or plan of treatment in the management of the serious and protean symptoms of this grave disorder.—*Dr. Bruen, Philadelphia Hospital, in Medical Times.*

OVARIAN CYST.

By Dr. H. LENOX HODGE, [Pathological Society Philadelphia.]

The cyst was removed from a patient 60 years of age, by the operation of ovariectomy, seven days ago. She has thus far done perfectly well, and has had no bad symptom. The cyst weighed with its contents twenty-two pounds, one pound being the weight of the solid portions, the rest being that of the fluid. The fluid was of a light straw color, sp. gr. 1008, and did not contain albumen. It has been referred to the committee of this Society on the so-called ovarian cell, for examination. In October last I tapped this same patient, and the fluid then drawn from this cyst was clear and like water, almost colorless, sp. gr. 1007, and did not contain albumen. It was also handed to the committee for examination. The Society, therefore, has the advantage of comparing the results of the two examinations of the fluid with the cyst as obtained by the operation.

The tumor, as viewed from the exterior, appears like one large cyst, but through its walls one or two smaller cysts can be felt. The pedicle was long, thin, and narrow. The Fallopian tubes are greatly elongated and spread out upon the tumor. The remains of the ovary, much flattened, can plainly be seen in the outer wall of the tumor. Upon opening the cyst, on the interior wall the remains of smaller cysts could be seen, which apparently had broken into the larger cyst. One cyst as large as an apple remained, but communicated with the large cyst by an opening of the size of the finger, in its inner wall. Another cyst, of the size of a marble, remained perfectly distinct and filled with a reddish gelatinous substance. This cyst was situated about two inches distant from the ovary. On the inner side of the ovary, and projecting into the cavity of the large cyst, were several small cysts.

The examination shows that the case is one of true ovarian disease. The disorder may have begun in the ovary, or it may have originated in the broad ligament and extended to the ovary.

Dr. James Tyson had examined, at the request of Dr. Hodge, the fluid removed from the cyst, with the following results. It was quite transparent, but exhibited a slight yellowish tinge, being in this respect different from the product of the previous tapping, which was colorless. The fluid when examined for albumen by Dr. Tyson (this test was deferred until the fluid was eight days old) was found to contain a small but easily appreciable quantity, had a sp. gr. of 1008, reaction neutral, and on microscopic examination was found to contain a *very small number of the granular* (so-called "ovarian") cells and an occasional compound granular cell. Of the "ovarian cell," two, three,

and four were found in a single field of a one-fifth object-glass.

Dr. Hodge said he considered the changes in the fluid removed at successive tapplings to be of great interest. He recalled another case, that of a lady from New Jersey, from whom he had removed a fluid having all the characteristics of that from a cyst of that broad ligament, being clear like spring-water, and not at all albuminous. At the second tapping it presented a light straw color, and came back quickly. At the third tapping it had all the characteristics of a fluid from an ovarian cyst.

Dr. F. P. Henry said the changes in the fluid might be explained by the varying blood-pressure. After tapping, the pressure in the interior of blood-vessels is greater and the albumen more likely to exude than in the slow process of growth of the tumor.

Dr. Hodge said the specific gravity of the first tapping was 1007, that of the second 1008.

Dr. J. Ewing Mears said it is well known that in cysts of the broad ligament the fluid is a clear spring-water fluid, and in his experience with them he had never been able to find any solid elements nor any albumen present. With regard to the fluid of ovarian cysts he was of the opinion that the changes in appearance and constitution which are observed to take place after successive tapplings indicated changes in the cysts which attended their development. In simple unilocular cysts, in the early stages of development the fluid obtained at the first tapping usually presents the following characteristic features. In color it resembles somewhat ascitic fluid,—may be designated straw-colored,—of rather low specific gravity, not very albuminous, and slightly viscid. Microscopic examination does not reveal the presence of cellular elements in great quantity.

In multilocular cysts, on the contrary, the fluid is of a dark chocolate color; of high specific gravity; highly albuminous, and very viscid. The microscope shows the presence of a large number of granule-cells, blood-corpuscles, granular debris, and sometimes cholesterine plates. Fluid of this character is that commonly regarded as distinctive ovarian fluid. When, therefore, it is found that the fluid removed at successive tapplings presents marked changes in appearance and character, he thought it was correct to assume that there had occurred corresponding changes in the nature of the cyst. With regard to the presence of cells in the fluid of cysts of the broad ligament, he did not believe they were at any time found in large quantities. These cysts are lined by cylinder epithelium, and it is possible for some of them to appear in the fluid: he did not think they underwent the rapid fatty degeneration characteristic of the cells lining true ovarian cysts, and hence they would not be thrown off in such numbers, and when exfoliated would not be so altered in appearance.

Dr. Hodge desired to know of Dr. Mears whether he thought the fluid of a second tapping of a cyst of the broad ligament would lose its spring-water appearance.

Dr. Mears replied that he did not think it would. The admission of air within the sac at the time of tapping might produce some conditions which would change the appearance and character of the fluid. He did not think the changes could be similar to those which had been observed to take place in the fluid of ovarian cysts after repeated tapplings. In cysts of the broad ligament, tapping is thought by some ovariologists to be curative, as the cysts did not refill. He thought that Dr. Atlee recommended excision of a small portion of the cyst-wall, as sufficient to effect a cure.

Dr. Hodge said that Dr. Atlee formerly thought tapping was a cure for cysts of the broad ligament, but, finding that they returned, he devised the operation of removing a portion of the cyst-wall through a small abdominal incision. Now, however, Dr. Atlee believes that the whole tumor had better be removed, as in ovarian tumors; also that the tendency of ovariologists now was to remove cysts of the broad ligament if they refilled after repeated tapplings, as they sometimes do.

ARTICULATING SURFACES OF FEMUR AND TIBIA FROM A CASE OF EXCISION OF THE KNEE JOINT.

By Dr. JOHN ASHHURST, Jr. [Pathological Society, Philadelphia.]

The patient, a lady 30 years of age, sent to Dr. Ashhurst by Dr. Massey, of West Chester, had suffered from disease of the knee-joint for twenty-three years. The limb was bent almost to a right angle, frequently painful, and very sensitive to cold. The tibia was by measurement four inches shorter than that of the opposite side, and the whole leg and foot smaller than their fellows. Several depressed cicatrices marked the sight of former abscesses. The patient walked with difficulty with the aid of a crutch and of a shoe provided with a sole seven inches in thickness, and, finding her condition yearly becoming worse, was willing to submit even to amputation if that should be thought necessary.

As, however, her general health was unimpaired, and her limb showed rather the effects of past disease than the presence of any actively morbid condition, Dr. Ashhurst thought the case a suitable one for excision, and accordingly resorted to that operation on January 8, 1877. The intra-articular structures were found almost entirely destroyed, the inner condyle of the femur being firmly united by bony ankylosis to the tibia, while the latter bone presented a large spot of softened and carious

tissue. The soft structures in the popliteal space were so much contracted that, after the removal of as much bone as was thought proper, it was necessary to divide the external hamstring tendon in two places in order to bring the limb into a straight position. The progress of the case since the operation had been entirely satisfactory.—*Med. Times.*

UTERINE SUPPORTERS.

Dr. Clifton E. Wing presented a paper (*Medical Society, Norfolk, Mass.*) upon "The Use of Uterine Supporters," in which it was maintained that a certain proportion only of uterine troubles can be benefited by the employment of pessaries, but that in cases requiring these instruments they can do nothing but harm unless perfectly fitted to the given vagina. Dr. Wing admitted that uterine trouble involving congestion and enlargement generally precedes the displacement of the womb, and is its chief cause. But it should be borne in mind that in certain cases the reverse is true; and the physician who holds steadfastly to the one view or the other must sometimes err.

The circulatory system of the uterus is adapted for supplying that organ with the proper amount of blood, when in its usual position, but it may be accepted as a rule that any change in the position of the womb from the normal one tends to interfere with the circulation, and usually the greater the displacement the more the congestion. Congestion of an organ as richly supplied with blood vessels as is the womb involves a material increase in its weight, which of course tends to perpetuate and increase the displacement.

Certain varieties of uterine displacement take place suddenly, as the result of violence, such as the strain from lifting a heavy weight, or a fall; the natural result of such displacement is congestion, œdema, and increased sensibility, and, with the congestion of the mucous membrane, an abundant secretion of mucus. If, under such circumstances, the displaced part be restored to its normal position and retained there by means of a pessary until the natural supports regain their tone, it is reasonable to suppose that the congestion and sensibility will rapidly diminish, the organ decrease in size, the uterine discharge cease, constipation, painful defæcation, and trouble with the bladder disappear, dysmenorrhœa, due to the congested, hyperæsthetic state of the womb, or perhaps to obstruction caused by a flexion, give place to perfectly painless menstruation, and that recovery will take place without additional treatment. In the case of uterine displacement in any direction, the opposing ligaments and tissues are overcome and kept extended as long as the displacement continues, and our main hope of cure in such a case must lie in restoring the womb to its place before

its proper supports become permanently overstrained, and in retaining it in position until they regain their tone. The indications for treatment are here often met by a well-fitting supporter, though in other instances, owing to the condition of the parts, other measures, perhaps operative, are necessary before the womb can be restored to its normal position and retained there by the pessary. Dr. Wing denounced the employment of the elastic ring and globe pessaries, and also of those made of soft rubber and dilated within the vagina, asserting that they tend to leave the pelvic supports weaker than before they were used. He spoke of the tendency at the present day to undervalue the influence of the vagina in supporting the womb, and in keeping it in place, maintaining that the walls of the vagina, when in apposition and of normal tone, and supported by the surrounding tissues, must act as a strong column of support to the womb. Soft rubber, moreover, absorbs more or less of the secretions, and becomes in a short time very foul and irritating, giving rise often to excessive leucorrhœa. The softest inflated pessary may cause an astonishing amount of ulceration in a very short time. The supporters which have a stem attached to a belt, or other contrivance on the outside of the body, were characterized as probably the worst of all, being incapable of adapting themselves to the mobility of the womb, and tending to stretch the vagina and distort the parts. Of all the materials which have as yet been brought into use, hard rubber is by far the best, and the various modifications of the closed lever pessary of Hodge, made of this substance, will be found to supplant the other varieties of pessaries in proportion to the experience of the physician in their application. But the secret of success with pessaries lies not so much in the kind which is employed, for a variety which is proper for a given case may be improper for the next, but in accurately fitting the pessary to the patient.—*Boston Med. Journal.*

CHRONIC ENDOMETRITIS AND METRORRHAGIA RELIEVED BY FULL DILATATION OF CERVIX.

L. S. W., aged twenty-seven, married; catamenia at sixteen, always irregular; attributes her troubles to scarlet fever, which she had nine years ago, and which was followed by anasarca and general debility. A year since she had pain in the lower part of the abdomen, most severe on the left side, extending down the leg to the ankles. Has now constant lumbar pain. For eight months has not been free from metrorrhagia with the exception of two weeks in June, and the ten days previous to admission. Has always suffered from leucorrhœa;

married sixteen months ago, but was divorced at the end of three months. Never pregnant. Complains of facial neuralgia, headache, insomnia, obstinate constipation, and dysuria.

October 15th. Upon examination the uterus was found to be enlarged, the sound entering easily three and one half inches. The cervix was red, congested, and the os somewhat patulous. Nitric acid was applied to the cervical canal, and she was ordered large vaginal douches as hot as could be borne, and laxatives.

October 29th. Much improved. Cervix freely scarified, followed by glycerine tampon. The same general treatment was pursued at intervals of a week or ten days with marked relief to the leucorrhœa, pains, and uterine congestion. The metrorrhagia not ceasing, a month later (December 28th), the cervix was largely dilated by laminaria tents and the cavity thoroughly swept with curette forceps, bringing away only some small shreds of hypertrophied mucous membrane. This was followed immediately by tincture of iodine swabbed over the whole uterine surface.

January 7th. Hæmorrhage had ceased almost entirely since the dilatation. The sound now enters but two and five eighths inches. There being a slight show occasionally, the cervix was again thoroughly dilated by tents.

January 12th. No Hæmorrhage. Cervix natural, discharging for the first time a healthy transparent mucus. Patient was directed to take iron, and was discharged.—*Boston Med. Journal.*

CHEYNE-STOKES RESPIRATION.

In the case of M. Biot this type of respiration was well marked, and carefully observed for several weeks. The period of apnoea lasted on an average from seventeen to eighteen seconds, the period of dyspnœa from forty-two to forty-three seconds; the number of respirations during the period of dyspnœa was twenty-eight, the arrest of breathing always occurring in expiration.

The patient, aged fifty-seven, said he had never been sick before, and first noticed that he was not as well as usual fifteen days before entrance into the hospital. During the periods of apnoea he grew sleepy and somewhat cyanotic, both of which phenomena vanished during the period of dyspnœa; indeed, he begged earnestly for some remedy which would give him sleep. He had no headache, nor was any swelling to be seen about the neck which might suggest pressure on the pneumogastrics. The apex of the heart was outside the nipple and apparently in the fifth intercostal space, though its exact situation was difficult to define. A double murmur was heard all over the heart, the point of greatest intensity being over the third right cartilage. The hammer-pulse was ill marked on ac-

count of considerable atheroma of the arteries; a double murmur was heard over the femoral arteries and there was some pulsation of the jugulars. Aortic obstruction and regurgitation and slight mitral insufficiency were diagnosed.

Pneumographic and sphygmographic tracings were taken repeatedly during the time the patient was under observation, and always with the same results. The periods of apnoea and dyspnoea were strongly contrasted in the tracings. The cardiac beats were uniformly more rapid during the former than during the latter period,—thirty-six in the eighteen seconds of apnoea, eighty-two in the forty-nine seconds of dyspnoea. The notch in the tracings, the presence of which is so characteristic of aortic regurgitation, was also more marked during the period of apnoea than during that of dyspnoea; that is to say, the arterial tension was diminished during apnoea.

The patient was rendered decidedly more comfortable by three doses of chloral hydrate of one gramme each during the afternoon. It was several times omitted, but resumed again at his urgent request. Once digitaline was substituted for it, but had no appreciable effect. While under the influence of chloral hydrate the duration of the periods of apnoea was reduced from seventeen or eighteen to ten or twelve seconds.

After four weeks' sojourn in the hospital the patient died, but unfortunately an examination was not permitted by his friends.

M. Biot advances no theory of his own to explain this form of respiration, but inclines rather to the theory of Traube than to that of Filehne. The fact that in this case arterial tension was diminished during the period of apnoea, and the fact that chloral, which diminishes the excitability of the nervous centres, reduced the duration of the period of apnoea, are both considered by M. Biot opposed to the theory of Filehne. (These and other theories which have been offered in explanation of this phenomenon are discussed in the number of this journal which appeared October 7, 1875.)

Dr. Andrew reports a case of typhoid fever in the course of which this type of respiration was noted. The case was a pretty severe one, and on the twenty-second day of the fever, September 18th on casual examination of the chest, dullness and bronchial respiration were found in the right lateral region. The next day but one it was noticed that the respiration was irregular and sometimes ceased entirely. The 21st the respiration was still irregular, the patient passed his faeces in bed, and was in a condition of great prostration. The 22nd, the prostration had rather increased, percussion was impaired at both apices, and bronchial râles were heard all over the chest; the respiration varied between 24 and 40. The heart sounds were very faint, the first almost in-

audible. The 24th, Cheyne-Stokes breathing became fully developed, the period of dyspnoea lasting twenty five seconds, that of apnoea ten seconds. Brandy was administered in large quantities, and the next day the action of the heart was stronger and the respiration regular, 36. From this time the patient improved slowly, and was sent, November 3rd, to a convalescent home.

It will be seen that the form of respiration under consideration coincided in time with the period of greatest exhaustion; a period when the aerating surface of the lungs was much diminished and the action of the heart much enfeebled, from that condition of its muscular structure which is a concomitant of all the specific fevers to a greater or a less degree, cloudy swelling. It will also be observed that the patient recovered.—(*Boston Med. Journal.*)

TREATMENT OF INTUSSUSCEPTION BY FORCED ENEMATA:—Dr. Thomas Hawkins, Physician to Bellevue Dispensary, is reported by Dr. E. J. Garbit, in the *Medical and Surgical Reporter*, to have successfully treated three cases of intussusception, or invagination, by means of fluid injections *per rectum*. The patients were placed in the chest-and knee position, and the instrument used, an ordinary Davidson's syringe. Contrary to the injunction of Flint, "that the injections should not be pushed beyond the point at which they are borne without much suffering," Dr. Hawkins found it necessary to use all the force of which the instrument was capable. He is "convinced that success may be achieved in nine cases out of ten, and the strangulated intestine restored to its normal position, by the use of forced enemata; and, unless there be some well-grounded apprehensions of gangrene, in every case of intestinal obstruction, whether suspected, incipient, or developed, the injection of fluids, judiciously and properly directed, need be the only means of cure invoked, except the occasional administration of an anodyne." The three rules essential to success are: 1. The use of the utmost force possible, but with great care and caution; 2. Persistent and continuous repetition of the injection until the passage is effected; 3. The adoption of a suitable position for the patient.—*British Medical Journal.*

BRAVAIS' DIALYZED IRON.—This preparation is recommended by the *British Medical Journal*. It is said to be a neutral solution of the peroxide of iron in the colloid form, all acid having been extracted by dialysis, and may be considered as the nearest approach yet made to the form in which iron exists in the blood. It is almost tasteless, has the good effects of iron without producing constipation, and has also the further advantage that it does not blacken the teeth.—*Med. Record.*

SPONTANEOUS EXPULSION OF A LARGE INTRA-UTERINE FIBROUS TUMOR.

Dr. R. Osgood Mason (*N. Y. Pathological Society*), presented a tumor of the uterus which had been spontaneously expelled by a patient, with the following history:—

The patient, Miss B., æt. 43 years, American by birth, and a teacher by occupation, was a tall, well-formed woman, naturally of good health and great energy. For twelve years she has had profuse menstruation, and latterly she would have scarcely a week in a month without flow, and most of the time it was excessive. Abdominal enlargement did not attract her attention until six years ago, since which time it became conspicuous, and the last three years she has disliked to be seen in the street, her appearance being that of a woman well-advanced in pregnancy. Her chief symptoms were nausea, sleeplessness, hemorrhage, and increase in size. She also had more or less pain; anæmia was excessive, and her bowels never moved without injection.

She had never been examined until three months ago, when she was told that she might possibly have a small tumor, but that her abdominal enlargement was mostly the result of an enormously enlarged liver extending downwards.

Subsequently, in consultation with an eminent gynecologist of this city, she learned the true nature of her disease, but received little encouragement regarding ever being rid of it, the attending physician being advised that all he could do was to control hemorrhage.

She came under my observation February 6th, about five weeks ago, when I obtained the above history, and also learned that she had been taking pretty large doses of ergot for two or three weeks without any apparent benefit, and that now it had become so disgusting to her that she was unable to retain it.

Her appearance was most wretched, and her condition on account of hemorrhage was such that she refused an examination, saying she would send for me soon.

A few days later, February 13th, I saw her at her home, when she showed me some membranous shreds which she said she had been passing for two or three days, and also some distinct fragments of a fibrous tumor.

An examination now revealed a condition of things very similar to that of commencing labor. An enlarged uterus extended above the umbilicus, the neck of the womb was low down and soft, and the os dilated so that the finger passed through without difficulty: but within the uterus, instead of a foetal head, it encountered fragments of tumor, easily movable, but for the most part strongly attached to the main mass. Some small pieces,

however, became detached, and came away in my hand.

The patient was informed of the state of affairs, and encouraged to hope she would be rid of her tumor in a week or two without any serious operation. She was also told that it could be removed at any time by operation, if it became necessary.

After this fragments of considerable size were daily torn off, mostly by twisting them around and around with the finger, and removed. Forceps were of little use; one blade of a pair of placenta forceps passed into the uterus, and used after the manner of a curette, rendered the most assistance. After each operation the uterus was washed out with a weak lotion of Labarraque's solution.

On the eighth and ninth days from my first visit two large pieces, constituting the main bulk of the tumor, were removed, and on the 5th of March, twenty days from my first examination, the last fragment came away.

During all this time there had been no uterine contractions of any account, but only occasional spells of severe backache.

The hemorrhage ceased as soon as enough of the tumor had come away, so that the uterus began to be reduced in size about the fourth day of my visits.

The patient had no distinct chill, but a *chilliness*, followed by a moderate fever and sweating, on the evening before the first large portion came away.

The temperature never went above 101 degrees, and the pulse never above 112.

Within twenty-four hours after these large fragments were removed both pulse and temperature became normal, the appetite became good, and sleep refreshing; general improvement immediately took place, and continued even while the last portions of the tumor were being discharged.

An inoffensive purulent discharge continued for some days longer.

Yesterday, March 14th, I found the patient looking better than before her illness. She had been sitting up as usual for the three previous days, was employed in sewing, and was looking forward to resuming her usual occupation in a few days. The uterus at this time measured a trifle over three inches. The weight of that portion of the tumor which was preserved and constitutes the specimen here presented is fourteen ounces, and I should judge that at least one-fourth of the whole was lost.
—*Med. Record, N. Y.*

OVARIAN CYST.—Dr. R. Hesse, of New York, has successfully treated a case of this disease by means of electrolysis—probably the first success of the kind in the United States. The case will shortly appear in the *Obstetrical Journal*.

VASO-MOTOR THEORIES.

The current number of the *British and Foreign Medico-Chirurgical Review* contains an article of much more than ordinary interest and merit on the vaso-motor nervous system. It not only describes the rapid rise of this branch of nerve physiology, but also deals very fully with its present position, and points out most clearly how far the ordinarily-received theory is from being a complete grasp of the multiple phenomena, which we are now bound to consider. So long back as 1727, Pourfour du Petit clearly described the contraction of the pupil and the recession of the eye-ball after section of the cervical sympathetic, and attributed them to their true cause, but his observations were unheeded and barren in result until Claude Bernard repeated them in 1851, and pointed out the congestion and increase in temperature which were always present. As Henle had demonstrated the unstripped muscular fibre in the middle arterial coat, and, with Stilling, had surmised that this was supplied with nerves like ordinary muscle elsewhere, the ground was cleared for Brown-Sequard to determine that the phenomena which had been observed were immediately dependent on paralysis of such nerves, and to follow this up by showing that excitation of the distal extremity of the cut nerve-trunk produces diametrically opposed effects. Section of nerves in other parts of the body, which also contained sympathetic filaments, was always found to give rise to similar results, and the existence of a vaso-motor system was thus established. But the next step showed that similar experiments on the branches connecting the spinal cord with the sympathetic system induced the same results, and so physiologists were led to the hypothesis that the primary source of these vascular nerves was in the cerebro-spinal axis, whence they passed through the ganglia and branches of the sympathetic to their destination. Owsjannikow next showed that this deep origin was placed in the medulla oblongata. It consists in the rabbit of two bilaterally symmetrical portions situated "between a point 1 mm. behind the corpora quadrigemina and another point from 4 to 5 mm. in front of the apex of the calamus scriptorius." Any damage to this centre causes relaxation of the small arteries throughout the body generally, and a great fall of blood pressure, whilst electric excitation is followed by the reverse effects. Ludwig and Cyon now proved that their "depressor" nerve affected the blood-pressure, for irritation of its proximal end after section produced a fall of blood-pressure. Stimulation of the cerebral end of many sensory and mixed nerves was already known to cause an increase of the arterial tone and the blood-pressure. These two kinds of afferent fibres were supposed to act on the vaso-motor centre, and increase or diminish

its function. This clearly states the modern theory as most usually accepted, and as innumerable hypotheses concerning the nature of obscure and so-called functional diseases and the action of remedies have been built upon it, it is important to point out that this is quite inadequate to explain some other phenomena which have been observed, and that therefore it can only be considered as a partial expression of the truth. Bernard, whilst investigating the secreting function of the submaxillary glands, found that irritation of the distal end of a cut chorda tympani nerve always dilated the bloodvessels of the tongue and increased the secretion of saliva, and Eckhard demonstrated the presence of vaso-dilator nerves starting from the sacral plexus of the dog and going to the penis, to which he gave the name of *nervi erigentes*, as stimulation of them produced turgescence and erection of that organ. Claims for other vaso-dilator nerves have also been put forward, and we must at any rate allow that dilatation of bloodvessels is not necessarily a paralytic phenomenon of the vaso-motor system. Must we admit, then, that there is a vaso-dilator system as widely distributed as the vaso-motor or constrictor system? Goltz would explain all dilatation of bloodvessels as due to irritation of vaso-dilator fibres at the time of section, and appeals to the temporary nature of the dilatation as a proof of this, for the arterial tonus is always speedily re-established. In addition, he teaches that the calibre of the bloodvessels is regulated by local centres, which are in subordinate connection with the sympathetic and cerebro-spinal centres. The experiments on which he bases his inferences have been verified recently, but his explanation of local centres was forestalled by Lister in 1858, although it received very little attention at that time. These perivascular ganglia give off a branch (vaso-constrictor) to the muscular coat, and receive another branch (vaso-dilator, or, better, vaso-inhibitory) from the skin or tissues, whilst we must assume a similar set of double fibres connecting each centre with one higher in the nervous scale. That these higher centres are very numerous and are placed in harmonious order throughout the nervous system, is extremely probable. Vulpian and Bernard have both shown the functional independence of the reflex vaso-motor phenomena of the systematic centres in the case of the submaxillary ganglion, and Goltz has demonstrated that certain centrifugal vaso-dilator fibres have an independent origin from a centre in the lower part of the spinal cord, and other evidence supports the view that there are a series of similar centres at intervals along the whole spinal cord. That there is a most important vaso-motor centre (in the medulla oblongata) cannot be doubted, although it be deprived of its preeminence as the sole regulator of vascular contraction and dilatation. Rising a step still higher,

we find that numerous recent observers have shown that arterial relaxation, diminution of blood-pressure, and increase of temperature, follow destruction of certain limited portions of the cortex of the cerebrum, and that electrical stimulation of these areas by induced currents produces a transient fall of temperature. We are, therefore, driven to a much more complex hypothesis than that which is generally adopted. Local vasomotor centres are probably distributed universally in immediate juxtaposition with the bloodvessels, and each receives not only a peripheral set of nerve-fibres, which must contain both vaso-constrictor and vaso-inhibitory or dilator filaments, but also a central or commissural set from a nerve-centre higher in the scale. This is again connected with a centre higher up, and so on throughout the entire nervous system. Impulses may thus be communicated to any individual centre, either peripherally or centrally, but the ultimate contraction or relaxation of the blood-vessel depends on the perivascular ganglia. It is obvious that if such an elaborate hypothesis be necessary merely to hold together the well-ascertained results of modern experimental research in this direction, and that even this may not do so for long, more caution than is usually displayed must be taken before we invoke its aid in the explanation of our daily clinical and pathological observations and in describing the *modus operandi* of our therapeutic agents.—*London Lancet Rept.*

TREATMENT OF RINGWORM BY PERCHLORIDE OF IRON.—Some months ago, a paper by Mr. Hopgood, of Sunderland, was published in the *Student's Journal*, in which he advocated the use of solution of perchloride of iron for ringworm. Since that time, I have tried this agent in several cases, and with very excellent results. I generally paint the affected parts with a solution made of equal parts of water and the liquor ferri perchloridi fortior of the *Pharmacopœia* on three successive days, and then wait for a few days to observe the result. This is generally sufficient for a cure, but occasionally one or two further applications are necessary.—*George Brown, Brit. Med. Jour.*

BEST TIME TO DRESS FRACTURES.—Prof. Yandell, in a lecture to his class, answers the question as to the best time to dress a fracture, thus: "*The earliest possible moment after the bone is broken.*" This is common sense; and the idea that people, and often inexperienced doctors, have of removing the patient from the place of accident to his home or other point, before dressing the fracture, is fraught with great risk and injury to fractured limbs. Dress it on the very spot, even if you have to go miles in search of material to do it with.—*Southern Med. Record.*

LOCAL TREATMENT OF PUERPERAL FEVER.—Dr. Fritsch, of Halle strongly recommends the injection of large quantities of a carbolic acid solution (2 or 3 per cent.), so as to thoroughly wash out the uterus and vagina, and to completely distend the latter. To this end he throws in two, and sometimes three litres, *i. e.*, from four to six pints, the temperature of the water being at 25° R. (89° Fahr.). The uterus, after a thorough cleansing out, need not be injected oftener than three times in the twenty-four hours; and after three or four days this need not be continued, but the cleansing and distension of the vagina must be repeated much more frequently and persisted in for a much longer time. Under this treatment not only are the local lesions soon ameliorated, but the febrile action, as indicated by the temperature-curves, abates. Prof. Schroeder, on the reading of the paper, mentioned that Dr. Hildebrandt employed for injecting the vagina a glass tube, about as thick as a finger, each patient being provided with her own, which is broken on her recovery.—*Medical Times and Gaz.*, Nov. 18, from *Allg. Wien. Med. Zeitung*, Oct. 24, 1876. (*Ibid.*)

THE SALICYLATES IN RHEUMATISM.—The *Lancet* in a recent editorial says:—The very remarkable consensus of opinion as to the value of salicylates in rheumatic fever is the more important as it comes from those who have the reputation of being slow to adopt new things, on account of their novelty, and especially when such men as Sir Wm. Jenner concur in its praise. Those who know how multi-form a disease acute rheumatism is, and how variable is its course under any and every treatment, are the slowest to adopt with enthusiasm any new specific in its treatment; but there can now be little question that salicin and salicylates, especially the latter, do exert an influence in its cure which is quite peculiar to them. An interesting field of inquiry yet lies open as to their mode of action, and their value in other acute and chronic febrile diseases.—*Med. & Surg. Reporter.*

ADMINISTRATION OF SALICYLIC ACID.—Mr. Erskine, (*Edinburgh Medical Journal*, Nov. 1876), states that the inconvenience of giving this drug in powder is due to the evolution of carbonic acid and carbolic acid, thus causing an irritation and difficulty of swallowing. This effect can be avoided by the following mixture:—

R—Acidi salicylici
Sod bicarb - - - aa grs. xv. or i gramme.
Syr. simp.
Aquæ - - - - aa ʒ grs. or grammes.—*M.*

A decomposition in this mixture produces carbonic acid and salicylate of soda. If this view of the action be correct, it would seem advisable to prescribe *ab initio* salicylate of soda.—*Boston Med. Journal.*

OPIUM OR URÆMIC POISONING? A MEDICO-LEGAL QUESTION.

In the *Philadelphia Medical Times* for January there is a full report of a case which is very interesting in a medico-legal point of view, and what at the same time shows the danger attending the use of opium in Bright's disease.

A stout and apparently robust healthy man, about 45 years of age, after indulging in some drinking went about 1 a.m. to the house of a Mrs. Bella McClain, a woman of disreputable character. The next time he was seen, about 4 a.m., when he came to the bar apparently stupid but able to walk. He then found he had lost his watch, and soon afterwards, while trying to put on his shoes, he fell down in an unconscious state. When medical assistance arrived he was labouring under all the symptoms of opium-poisoning, and for a long time he could not be aroused by any means whatever. The history of the woman, who had drugged other men, both in Boston and Philadelphia, made it probable that she had administered a comparatively small dose of morphia for the purpose of drugging, and then robbing him. Small doses of atropia were exhibited hypodermically with some success, but he ultimately died without being restored to consciousness, and death was preceded by slight pitting under the malleolus, slight albuminous urine, and dilated pupils. On the trial of Mrs. McClain for murder, it was shown by the coroner's physician that his brain was congested and his kidneys granular, and that there existed chronic interstitial nephritis in an advanced degree. No morphia was found in the stomach, but undoubted traces of it were found in the urine which had been drawn off while he was alive. The result of the trial was, that Mrs. McClain was convicted of murder in the second degree, and was sentenced to six years' imprisonment.

Dr. W. W. Keen's remarks on the case are likewise worthy of notice. The possibly dangerous effect of even small doses of morphia in chronic Bright's disease is not so widely and thoroughly known as it should be by the profession. Intolerance of the drug, says Dickinson (on Albuminuria) is one of the peculiarities of this disease, and the comatose state often comes on before its time in consequence of the administration of opium. Roberts also gives an instructive case in which the administration of a few drops of laudanum was followed by coma and death, and two others in the uræmic coma were mistaken for narcotic poisoning.

With respect to the diagnosis in these cases, it is often difficult to decide how far the symptoms are due to the opium, and how far to the induced uræmia. In the above case the narcotic symptoms were so decidedly in excess as entirely to mask

those due to uræmia. The good effects of the atropia were very marked, and tend to confirm the belief that is entertained respecting the therapeutic antagonism of the two drugs. In this case observes Dr. Keen, the atropia was a peculiar fortunate choice, for its marked diuretic properties it was the best possible remedy to arouse the functions of the kidneys, and thus at once to eliminate the opium and mitigate the danger of uræmia.

It appears that, relying upon Taylor's disbelief in his mode of treatment, an attempt was made at the trial to show that the atropia was in part responsible for the patient's death, an objection which was met by the fact that only three doses of 1-30th of a grain of the alkaloid were given at long intervals, at 8 and 10 a.m. and 2 p.m.—*Med. Press and Circular*.

NEW TREATMENT IN POST-PARTUM HÆMORRHAGE.—Although not an obstetric practitioner, I have recently been consulted in two cases of *post-partum* hæmorrhage. In both cases every means had been adopted, but unavailingly. It flashed across my mind in the first case to try the effect of the ether-spray, and accordingly I directed a large spray over the abdominal walls, along the spine, and over the genitals; the uterus at once responded, and the cessation of the hæmorrhage was almost immediate. In the second case I lost no time in adopting a similar treatment, and with an equally successful result. I have consulted several eminent obstetric practitioners in Dublin, and am informed by them that they are not aware that this treatment had been heretofore proposed. The advantages of the ether-spray over the application of cold water and the other means usually adopted in these cases must be patent to every practitioner of midwifery.—*Dr. Griffiths in Practitioner, March 7.*

CARBON DISULPHIDE AS AN ANTISEPTIC.—The last number *Chemist and Druggist* tells us that Dr. Zoller, in a late number of the *Deutsche Industrie Zeitung*, states that carbon disulphide in a state of vapor is capable of acting as a powerful antiseptic. Two drops allowed to evaporate spontaneously in a closed vessel of the ordinary temperature were found to keep meat, fruit, vegetables, and bread in a perfectly fresh condition for several weeks. The articles submitted to the process acquire neither smell nor taste, the carbon disulphide evaporating entirely when they are exposed to the air at the ordinary temperature. The vapor of carbon disulphide being very inflammable, all experiments on its antiseptic properties should be performed during daylight. We have no doubt this is the secret of a process which has made some stir in this city lately.—*Ibid.*

Medical Items and News.

A SONNET.

(Written while attending a tedious labour.)

Hail, Patience, Queen of all the virtues ! thou
Upon me in mine hour of trial smile,
O goddess of the calm unruffled brow ;
For staid Lucerna mocketh me the while,
Nor comes responsive to my ardent vow.
O help me, thou the moments to beguile,
Aid me to hearken to the trivial chat
Of " Sarah Gamp " without impatient shrug,
Teach me to stroke the camly purring cat,
Complacent dozing on the old hearthrug,
While " Mistress Harris " pulls and tugs in pain,
Her lot lamenting with recurrent groan,
Vowing she never will be caught again ;
Hail ! Patience, come, and be thou all my own.

OIL OF TURPENTINE IN SCIATICA.—In the *Edinburgh Medical Journal* for March, there is an interesting paper by W. Allan Jamieson, M.B., M.R.C.P.E., on "The Treatment of Sciatica by Oil of Turpentine." He gives it in the morning, before breakfast, in the following formula :—R. Ol. Terebinth two drachms, Ol. Ricin. four drachms, Tinct. Card. Co. one drachm, Mucilag et Aq. ad oz. ii. This draught is given every third or fourth morning, if necessary, but one dose is generally enough. The beneficial effects are supposed to be due to some peculiar action on the intestinal mucous membrane, as pointed out several years ago, in a paper by the late Dr. Warburton Begbie, "On the Actions and Uses of Turpentine."

SULPHITE OF SODA AS A DRESSING.—Dr. Minnich, of the Venice Hospital, prefers the employment of the sulphite of soda to carbolic or salicylic acid, not only as a dressing for wounds, but also in erysipelas. It is much less inconvenient to use, and much cheaper. He applies it in the same way as Prof. Lister does the carbolic acid, and the solution employed consists of one part of the sulphite and one of glycerine to nine parts of water. Its beneficial effects have been proved in a great number of cases.—*Med. Times and Gaz.*, Sept. 23, from *Gaz. des Hop.*, Sept. 7.—(*Ibid.*)

TREATMENT OF EPILEPSY.—Dr. Allan McLean Hamilton, of New York, recommends the following :

R. Strychniæ Sulph.....gr. j.
Fl. Ext. Ergotæ..... $\frac{3}{4}$ iss.
Sol. Potass. Arsenit, $\frac{3}{4}$ ij.
Sodii Bromidi..... $\frac{3}{4}$ iss.
Tr. Digitalis..... $\frac{3}{4}$ iij.
Aquæ Ment. pip..... $\frac{3}{4}$ iv.

PROFESSOR LISTER AND KING'S COLLEGE HOSPITAL.—*The British Medical Journal* says :—"We understand that the arrangements which have, during the last three weeks, been in course at King's College Hospital, to induce Mr. Lister, of Edinburgh, to accept the office of Surgeon and Lecturer on Clinical Surgery at that institution, have so far progressed, that it is now considered certain that the Council of the College will be able to modify the invitation which they have already addressed to Mr. Lister in a manner to meet the views which he has expressed on the subject. Mr. Lister's expressed reluctance to accept the invitation to King's College was based, not only upon his attachment to the great school in which he holds so distinguished a place, but upon the strength of his conviction of the importance of carrying out clinical surgical teaching in a particular manner and with completeness. Under the proposed arrangements, these clinical and scientific facilities will be afforded to him, and his duties will be strictly those of practical surgery in the wards, and clinical teaching."

ROYAL COLLEGE OF PHYSICIANS, LONDON.—The following by-law was enacted for the first time :—

"Any candidate for the College Licence who shall have obtained a degree in medicine or surgery at either a British, Colonial, or Foreign University recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as the Censors' Board shall in each case consider unnecessary."

NITRIC ACID FOR HOARSENESS.—Dr. W. Hand- sell Griffiths says that a few drops of nitric acid in a glass of sweetened water, a couple of times daily, will be found an excellent remedy for the hoarseness of singers. One of the largest fees ever received by him—so he says—was for this prescription.—*Southern Medical Record.*

THE EXPENSE OF JOURNALISM.—Messrs Bradbury & Evans bought "Punch" for £150. It owed them £8,000 before it paid them a penny. Enterprising medical gentlemen proposing to embark in the journal business may take heart.

A verdict of \$10,000 damages has been rendered against the Rhode Island Hospital, at Providence, for malpractice in the treatment of a finger after amputation. The case is to be further contested.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—On Monday last Dr. Risdon Bennett was re-elected President of the Royal College of Physicians of London.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; J. M. BALDWIN, 805 Broadway, New York, and BALLIERE, TINDALL & COX, 20 King William street, Strand, London, England.

TORONTO, MAY 1, 1877.

VACCINE LYMPH.

The question recently raised in the House of Commons by Mr. Forsyth, with regard to the sources of Vaccine Lymph which is supplied by the National Vaccine Establishment in England, is one that at the present time interests the people largely. The reply of the President of the Local Government Board, although much to the purpose, was yet too brief to convey any information about matters of detail, and such information would, we believe, be acceptable. We therefore purpose, without entering at all into any discussion about the general value of vaccination, to describe the existing sources of lymph supply in England with sufficient fulness to show how great a degree of care is taken to guard against the distribution of any imperfect or objectionable material.

The protective influence of vaccination is not perfectly secured, according to the high authority of Mr. Marson, unless at least four vesicles of cow-pox are produced in the vaccinated subject, and it is further necessary that these vesicles should be regular, or in other words that they should pass through certain phases of development at known and uniform periods. A vaccination which is imperfect, either by reason of the number of vesicles being too small, or by reason of some irregularity in their character, not only affords at best an imperfect protection, the degree and duration of which can scarcely be estimated; but it also places a serious impediment in the way of successful vaccination until after a long and uncertain period of time has elapsed. In order to fulfil the requirements hence arising it is necessary to have recourse, as much as possible, to the practice of vaccinating directly from arm to arm, the fresh lymph being

inserted before it has time to dry, and being then much more certainly successful than when it has been preserved even by the best methods. The system of public vaccination, as now controlled by the Local Government Board, is based upon the arm to arm practice, but yet there are many circumstances which render the preservation of lymph essential. In some rural districts the infant population is not sufficiently numerous to afford the public vaccinator the means of vaccinating weekly throughout the year, so as to keep up his fresh supplies, especially when it is borne in mind that lymph cannot be taken from every vaccinated infant, but only from those infants who are in good health, who have, so far as the vaccinator can ascertain, a healthy family history, and in whom the vesicles are fully developed and have run a perfectly regular course. Hence, from time to time, the public vaccinators of such districts must have their supplies of lymph renewed from headquarters, unless they are to be dependent upon what they themselves have kept in stock for long periods. The sudden demands which arise in localities visited by small-pox form another source of requirement for preserved lymph, and hence the Local Government Board, in succession to the Privy Council and the National Vaccine Establishment, has assumed the duty of supplying trustworthy lymph to all medical practitioners, whether public vaccinators or not, who may apply for it. In order to do this, it is necessary to utilize the redundant lymph of certain seasons and localities, and the great abundance which is generally to be obtained at the larger public stations. The methods of preservation employed are two in number, the lymph being either sent out dry, upon little ivory points, or moist, in glass tubes of small diameter. For the reasons already stated, it is highly important that the preserved lymph should be active and of good quality; so that it may neither fail to produce the proper number of vesicles, nor may communicate to the vaccinated, in addition to, or instead of the vaccine disease, any constitutional malady derived from the subject it was taken. The latter occurrence, though of extreme rarity, is an admitted possibility; but it is thought to be far more likely to happen if the lymph should be accidentally mingled with the blood, than if it is withdrawn without such admixture; while it need hardly be said, a child who is

not the subject of constitutional taint cannot by any possibility communicate one. The safety lies, therefore, first in the right selection of the child from whom the lymph is taken; next in the careful avoidance of any puncture from which blood can be drawn. The presence of human blood, even in such minute quantity as to be undiscoverable by the human eye is readily detected by the microscope, hence the lymph contained in glass tubes admits of being examined with reference to its purity in this particular. That which is sent out on ivory points cannot be so examined, and its freedom from blood must be taken in trust. For certain purposes, however, points are preferable to tubes, and their use cannot be relinquished. In order to reduce the risk of blood contamination to a minimum, the Local Government Board receives points only from a very small number of selected public vaccinating stations, and only from the hands of two or three of the most experienced and trustworthy teachers of vaccination, whose skill and carefulness are beyond dispute. From stations in general, and from the great majority of vaccinators only tubes are received, and these before they are sent out, are subjected to a careful scrutiny under the microscope; and any which contain an admixture of blood, or which are imperfectly charged, or which have been sealed improperly, are at once rejected and returned to the persons from whom they came. Hence every tube or point that is sent out by the Local Government Board may be looked upon as having undergone a careful examination, and may be received with as much confidence as can attach to the results of any arrangements which depend upon human knowledge and foresight for their perfection. So much for the immediate sources of what may be called the Government supply. Its remote sources are less certain; but the great amount is known to be derived from Jenner's original virus, which was furnished by a case of cow-pox that occurred without known cause. In 1839, Mr. Ceely, of Aylesbury, commenced a new stock of lymph by inoculating two sturks with small-pox matter from a human subject, and performed a highly important series of experiments with the matter of the cow-pox which he had thus artificially produced. In his own hands this new stock was suffered to die out after a year or two, he having satisfied himself that it was identical in its properties with the Jennerian lymph; but

it is possible that some of it may have gone to the National Vaccine Establishment at that time, and that it may be surviving in the present day. Mr. Eselin, of Bristol, derived lymph from a fresh vaccine source in 1838, and this stock also, together with one or two others of the same kind, may possibly still be in existence. There has been sufficient experience to show that the lymph derived from spontaneous cow-pox is highly irritating, but that after having been a few times artificially reproduced in cows, and still more after having been similarly reproduced in the human subject, it loses its irritating properties without losing its protective powers. The practice which is commonly called animal vaccination, has for some years been pursued in Belgium, Holland and America, and it has the advantage of excluding the chance, whatever that may be, of infection from human constitutional diseases. It has, however, a compensating disadvantage of a very serious kind, in the fact that even when used fresh it is much less certain than human lymph. The complete failure of direct vaccination from a calf is, perhaps, only a little more common than complete failure when the lymph is taken directly from an infant; but partial failure is very much more common. This aspect of the question has been very carefully investigated by Dr. Seaton, whose results will be found in the 12th Report of the Medical Officer of the Privy Council. Counting not cases, but punctures, Dr. Seaton found that the failures to produce a vesicle were somewhere about 40 per cent., so that as a general result, a great deal of the vaccination done in this manner might be expected to be imperfectly protective by reason of the insufficient number of vesicles that would be produced." The foregoing brief summary of an able article in an English exchange should certainly have a tendency to make our medical confrères, members of the Ontario Assembly, employ their leisure time between now and the next meeting of the House, in serious consideration of the best means—suitable to the wants and ability of our people—for the amendment of our present insufficient and totally inoperative Act.

The Bills appropriating \$100,000 each to the University of Pennsylvania, and the Jefferson Medical College, were passed in the Pennsylvania State Legislature.

BETHESDA MINERAL WATER.

In the writings of the ancients we frequently find reference to the healing waters and medical fountains to which the sick and afflicted were in the habit of resorting. Such springs also formed a favorite site for the erection of temples. In Greece the temples of Æsculapius were frequently erected near springs reputed to possess healing powers. The Romans also held medicinal springs in high esteem, as may be seen from their writings. Pliny tells us "they are the gifts of the earth, the cold, the hot, or yet the warm and tepid, announcing relief to the sick, and flowing from the earth for man." He also names the diseases for which certain springs were applicable—the springs of Sineusa for sterility, those of Ænaria for calculous affections, &c., &c.

Many visit mineral springs and bathing resorts for recreation, or to obtain relief from business cares and anxieties, and to enjoy quietude in the cool, refreshing and invigorating atmosphere in the neighborhood of such waters. Others visit them with the view of improving their health, or to get rid of some malady which their medical advisers have tried in vain to cure, and who are only too happy to get the poor unfortunate off their hands, even for a short time. The proprietors of springs have in some instances adopted such a "cure all" style of advertisement as to bring odium upon the whole class of mineral waters, by surrounding them with such an atmosphere of quackery as is repulsive to the scientific physician. Invalids will however, in spite of all that may be said either for or against certain springs, occasionally break through all rules of professional confidence and go upon their own responsibility. Medical men should therefore be prepared to give the sick reliable information on such matters. Many are no doubt benefitted by these waters, but it must always be remembered that pure air, change of scenery, and cheerful society, play no unimportant part in the result.

A mineral water, in the medical acceptance of the term, is one which holds in solution different saline, gaseous or other substances in sufficient quantity to be possessed of medicinal properties. They may be classed under different heads, as alkaline waters, saline, sulphur, chalybeate, purgative, diuretic, antilithic, etc., according to their

qualities and their action on the animal economy. Such springs are more or less frequently to be met with, in almost all countries of the world, and are the resort of thousands of people every year. To these may be added the so-called acid or "sour" springs, containing free sulphuric acid, which are exceedingly rare, there being only three such springs on this continent,—two in the State of New York, at Oak Orchard and Byron; and one, the Tuscarora "sour spring," in the county of Wentworth, Canada.

There is a very good work on the mineral springs of the United States and Canada by Dr. Walton of Cincinnati, published by D. Appleton & Co., New York. In this work allusion is made to the Bethesda mineral springs, of Waukesha, Wis. The waters of this spring contain carbonate of soda and magnesia, iron, lime, chloride of sodium, sulphate of potassa and soda, phosphate of soda, alumina, etc. They belong therefore to the alkaline class, and are decidedly *diuretic*, and have been found of great value in the treatment of diabetes, gravel, calculus, Bright's disease and catarrh of the bladder, and from the diuretic action, of value also in dropsy. This spring was accidentally discovered by Col. Dunbar, of the United States, at that time a great sufferer from diabetes mellitus. He drank of the water and was cured, and has since brought it to the notice of the public in the United States and Canada. Many gentlemen in Toronto claim to have been benefitted by its use. Among those relieved, we may mention Bishop Fuller (of diabetes mellitus), Rev. Mr. Darling, Mr. J. D. Smith, Mr. Brewer (of calculi), Mr. Brimer (diabetes), Mr. Baldwin (Bright's disease). For those who are unable to visit the springs, the water has been imported in barrels, and may be had of Mr. Owen, chemist and druggist, Toronto. The quantity taken per day by patients is eight or ten glasses for the first three or four days, after which the quantity is reduced.

CHLORINE WATER.—H. R. Gray, of Montreal, gives the following as a handy form for Chlorine Water. It is not original with him, being Dr. Watson's formula. Take an 8 ounce vial and fit a good cork into it; put into the vial 10 grains of pulv. pot. chlor., and pour upon it M. xv by measure, of pure acid hydrochlor.; allow it to stand, well corked, for five minutes, then add water ounce by ounce, until the bottle is filled.

ILLIBERAL INTERPRETATION OF THE ONTARIO MEDICAL ACT.

We give below an extract from a letter received from Dr. Jenks, of Detroit, by a medical gentleman in this city, in reference to a personal matter alluded to in a previous issue.

"I went to Goderich by appointment with Dr. McLean to perform an operation, but not finding it admissible or warrantable started home, and as I was about to take the Detroit train at Stratford, I was accosted by Detective Smith, who informed me that I was the man he was in search of; that he had learned I was to perform an operation in Goderich and return home by this train, but he had just been informed by a gentleman who accompanied me, that I had not done it, but that if I had for a pecuniary compensation, he should feel obliged to arrest me. * * * It was not until after my return home that I learned by correspondence who had directed Smith to arrest me. I further learned that the gentleman (?) who gave him his instructions, was notified through a medical student whom I met in Goderich, that I was expected to be there at a fixed date, and spoke to the latter of my professional qualification in no flattering terms. I care nothing about the remarks made of me personally, for every public man becomes callous and indifferent to such things, as it is known that they rarely do harm, except to the one who utters them. * * * All the Canadian medical gentlemen with whom I have conversed upon the subject of your medical laws have construed them, as far as consultation and the ordinary professional courtesies between the physicians of the two countries were concerned, in a similar manner as expressed in your letter to me, and in the LANCET article bearing upon the matter in question. None have intimated that an American physician, or surgeon, visiting a patient in consultation, or performing an operation upon Canadian soil at the request of a legally qualified Canadian physician, violated in letter or spirit the Ontario Medical Act.

You are at liberty to make such use of this letter, or any portion of it, as you may deem best.

Sincerely yours,

E. W. JENKS.

Detroit, March 15th, 1877.

AMERICAN DIPLOMAS.—The following Canadians received the degree of M.D., at Arbor University, Michigan, in March:—William H. McKenzie, George N. Newton, Duncan Patterson, James H. Travis, and C. H. Dale.

VETERINARY COLLEGES.

The good work done by the Veterinary Colleges in Canada renders them worthy of more than a mere passing notice. The Ontario Veterinary College, presided over by Dr. Smith of Toronto, closed its session in March last. The following gentlemen received the diploma:—H. Hopkins, M. H. McKilip, G. W. Bates, H. Hamilton, M. L. High, R. W. Newton, E. Kenning, W. Langtry, M. Stalker, E. S. Rodgers, D. Stovel, and R. A. Harding. Three of the gentlemen were from the United States and one from Jamaica. Mr. A. Stephenson passed the primary examination.

During the afternoon of the closing of the school, Hon. Attorney-General Mowat and Hon. Mr. Wood paid a visit to the Institution and inspected the premises. The Hon. Mr. Mowat expressed himself as greatly pleased with the visit he had made, and to meet so many students and hard working young men intent on fitting themselves for a very useful occupation. The profession on which they were entering was one of great importance in this country, and he hoped they would make it as profitable to themselves as it would be beneficial to those among whom they were engaged.

The Hon. Mr. Wood also addressed the candidates, and observed that the want of veterinary skill had been a want long felt in this Province. At the present time, there were a great many wealthy farmers in this country who had invested millions of dollars in valuable stock. The veterinary students and graduates would recognize, therefore, that they had important duties and responsibilities before them. The name of Prof. Smith was well and favourably known and was a guarantee for the proficiency of the graduates who left the College, and it would depend upon them to maintain their principal's reputation. In the evening Prof. Smith entertained the graduates, students and a number of friends to supper; Attorney-General Mowat and Prof. Buckland were present.

During the evening the Hon. Mr. Mowat presented the various medals, &c. The gold medal for best general examination was gained by Mr. G. W. Bates, Wellington, Mo., U. S.

The MONTREAL VETERINARY COLLEGE, presided over by Prof. McEachran, also closed its labours of the winter session a few weeks ago.

The following are the names of those who received diplomas: J. R. McLaughlin, Watertown, Mass.; C. C. Lyford, Roscoe, Ill.; D. S. Brown, Genoa, Ill.; F. Ryan, Montreal; William B. Hall, Leeds, Q.; S. Hebert, Napierville, Q.; and W. Murphy, Boston, Mass. First prize (silver medal), the gift of the Council of Agriculture, won by James R. McLaughlin; second prize, won by C. C. Lyford; third prize won by D. S. Brown; honourable mention, John F. Ryan.

SECOND YEAR STUDENTS.—First prize won by C. Baker; second prize won by F. W. McLellan. Mr. Lyford obtained a special prize for anatomy and general proficiency.

This school is in affiliation with McGill University, and the students have the benefit of lectures delivered by members of this medical faculty. The examinations in Zoology, Chemistry and Physiology, were conducted by the Professors in McGill College, and it is satisfactory to notice that several of the veterinary students stood near the top in the percentage of marks, especially in Physiology.

Dr. Osler was the recipient of a complimentary address, accompanied by a purse of \$100, to aid him in scientific research, as a token of the high esteem in which he is held by his colleagues and the students of the college.

Mr. McEachran entertained the examiners, successful students and professors, at supper in the evening, when a very pleasant time was spent.

A large proportion of the students in both these colleges are from the United States, and their appreciation of Canadian colleges in preference to their own, is a convincing proof of the thoroughness of the teaching at these institutions.

COLLEGE OF PHYSICIANS & SURGEONS OF ONTARIO.

The following gentlemen have succeeded in passing the several examinations of this body:—

FINAL—Adams, A., Armour, J. P., Bentley, R., J., Barkwell, R. H., Burkart, J. L., Bowen, Geo. H., Bonnar, H., Brian, J., Carmichael, D. A., Carthew, C. E., Davidson, Alex., Dumble, T., Day, J., Esmund, J. J., Fraser, A. C., Field B., Fisher, D. M., Franks, W. H., Freeman, W. C., Gracey, W. J., Grant, A., Gordon, G., Grasett, F. W. L., Griffin, H. S., (B. A.), Graham, P. L.,

Holmes, F. S. L. R., Honeywell, W., Hourigan, A. B., Hill, A. J., Higgins, E. M., Kitchen, E., Langstaff, G., Macklin, M., Marlatt, G. A., Miller, T. M., Miller, A. H., Minshall, H., McKeough, G. T., Munro, W. A., McKinnon, A. H., McFayden, D., McDonald, D. F., Miller, C. F., McNicholl, E., Murray R., McDermid, W., Newell, J., Orr, R. B., Oakley, W. D., Park, W. T., Parker, W., Pringle, H. H., Phelan, D., Richards, N., Reeve, J. E., Ross, R. A., Routledge, G. A. Stuart, W. T., Sinclair, A. J., Stark, W. G., Stewart, D. A., Stephen, R. M., Sutton, M., Shaver, A., Smith, J. B., Snider, F. S., Scovill, S. S., Smellie, T. S. T., Teskey, L., Telgemon, —, Tisdale, W., Wilkinson, F. B., Winskell, W. E., Wilson, T. H., Wigle, H., Wood, A., Young, O., Youre, J.

Of the above, 28 were from Trinity School, 24 from Toronto, and the greater part of the remainder from Kingston and Montreal.

PRIMARY—Adair, J., Algee, J., Baines, A. M., Beeman, T. W., Bentley, W. H., Burt, F., Bowman, J. D., Bremner, W. W.; Brooke, D. B., Brent, F., Craig, H. A., Cornell, W., Cornell, S., Clinton, G., Cameron, J. D., Clark, Jno. G., Dafoe, W. A., De Lom, H. A., Doupe, W. H., Dryden, J. B., Evans, H. A., Forbes, J. M., Fraser, Jno. R., Geikie, A. J., Gilmour, J. T., Groves, J., Greenwood, F., Hooper, Thos. M., Howey, W. H., Jones, J. J., Judson, G. W., Kennedy, W. B., Kidd, P. E., Lewis, F. W., McKinley, J., Lynch, D. P., Neilson, W. J., Lehman, W., Leslie, Jos. Wm., Meek, H., Merri-son, J., Mills, R. P., Mills, F. W., McArthur, J., McCarthy, D., McCort, T. J., McCrimmon, J., McGrath, J. McIlhargey, J., McKay, W., McKel-vey, A., Pyne, B. A., Biddell, G., Riorden, B. L., Robinson, A., Ross, J. W., Rankin, J. P., Robson, W. T., Sheard, C., Smith, D. T., Stalker, M., Stanley, U., Vanderburg, J. F., Wilson, D. H., Wilson, A.

Twenty-seven from Trinity, fourteen from Toronto, and the remaining twenty-two from Kingston and Montreal.

FIRST YEAR'S EXAMINATION.—Ames, F. H.; Anderson, J.; Armstrong, —; Black, F. (B.A.); Bowman, G.; Buckner, D. C.; Bryce, W. W.; Clapp, R. E.; Clemens, G.; Cotton, J. M.; Cross, W. J.; Dickson, J. F.; Dickson, C. B.; Fisher, A.; Glendinning, J. J.; Greer, T.; Galbraith, J.; Hamilton, C. J.; Head, J. G.; Hoig, D.; Hunter,

J. B. ; Inksetter, D. G. ; Machell, A. G. ; Macklin, W. C. ; Montgomery, J. ; McFadden, J. J. ; McNamara, G. W. ; Nicholson, M. A. ; Odlum, J. ; Rath, F. ; Radford, J. H. ; Shaw, F. W. ; Sheppard, O. B. ; Shepherd, L. E. ; Smith, G. B. ; Stevenson, F. ; Sutherland, W. R. ; Spence, T. C. ; Spencer, B. ; Steffins, J. ; Todd, J. A. ; Wallace, M. ; White, J. ; Welford, A. B. ; Wilson, T.

TRINITY MEDICAL SCHOOL, TORONTO.—The following is the list of successful students in the primary and final examinations :

FINAL.—W. T. Stuart, D. A. Stewart, F. H. Wilson, G. T. McKeough, R. A. Ross, R. M. Stephen, L. Teskey, P. L. Graham, M. Sutton, J. L. Burkart, W. Tisdale, J. A. Sinclair, H. H. Pringle, A. H. Miller, K. Henderson, W. G. Stark, H. Minshall, W. E. Winskell, W. L. Davis, — Macklin, W. Honeywell, G. A. Marlatt, T. M. Miller, R. A. Barkwell, W. Parker, J. M. Sutherland.

PRIMARY.—C. Sheard, H. Meek, J. D. Bonnar, W. A. Dafoe, W. Cornell, U. M. Stanley, J. M. Groves, D. H. Wilson, W. McKay, W. Doupe, J. P. Rankin, J. Magrath, J. Henderson, J. Algie, A. M. Baines, — DeLom, C. O'Gorman, J. Morrison, J. J. McIlhargey, S. A. Cornell, A. Wilson, J. M. Forbes, D. A. Brooke, G. Riddell, J. T. Gilmour, R. P. Mills, T. G. McCord, A. J. Geikie, A. McKelvey, F. A. Howe, M. Stalker. T. F. Parke passed in anatomy, general chemistry, and botany.

PRIZEMEN.—The medals and scholarships are given by the Faculty of the school.

MEDALS.—1st gold medal, (the highest honor in the School) W. T. Stuart ; 1st silver medal, D. A. Stewart ; 2nd gold medal, G. T. McKeough ; 2nd silver medal, R. A. Ross.

SCHOLARSHIPS.—1st first-year scholarship, A. McDiarmid ; 2nd first-year scholarship, J. McC. Black. Second-year scholarship, C. Sheard.

CERTIFICATES OF HONOR.—In the final branches, L. Teskey, R. M. Stephen, P. L. Graham ; in the primary branches, C. Sheard, H. Meek, J. D. Bowman, W. A. Dafoe, W. Cornell, W. M. Stanley, D. M. Wilson, J. M. Groves, J. P. Rankin, W. Doupe, W. McKay, J. Henderson, J. McGrath, J. Algie, A. M. Baines.

MCGILL MEDICAL COLLEGE, MONTREAL.—The following gentlemen have passed the examination in this school :—

FINAL.—G. E. Armstrong, J. Bell, A. Boyle, J. Brodie, S. C. Burland, G. Cannon, D. H. Cameron, C. L. Cotton, J. F. Farley, A. C. Fraser, J. A. F. Gillis, H. C. Greaves, A. B. A. Jamieson, J. A. Lane, W. K. Law, F. L. Miner, W. D. Oakley, G. A. Park, T. S. T. Smellie, M.A.

PRIMARY.—M. Becksted, R. Bell, J. D. Cameron, A. Chisholm, J. R. Fraser, H. H. Gardiner, W. B. Gibson, F. S. Greenwood, J. F. Guerin, J. A. Hutchinson, W. H. Howey, J. L. Irwin, J. J. McCann, J. McCrimmon, J. K. McKinley, E. McNeill, T. Mills, M.A., W. J. Neilson, B. Pinsonneault, O. H. Riley, M. C. Rutherford, E. W. Setree, D. F. Smith, F. J. Stafford, H. N. Vineberg, A. D. Webster, J. W. Wright, B.A.

The following gentlemen passed in all but Physiology :—Kirk, G. W., McCrimmon, M., McDonald, M. C.

PRIZEMEN.—Holmes Gold Medalist, J. Bell. Best final examination, W. D. Oakley. Primary do. H. N. Vineberg. Honourable mention in final, Messrs. Cotton, Armstrong, Fraser, Gillis and Brodie. In primary, Messrs. Neilson, Gibson, Mills, Smith and Greenwood. In Botany, Messrs. Dibble and Mignault. In Practical Anatomy, J. O. McDonald and T. W. Mills. Hon. mention, Messrs. Brown, Hart, Lawford, McCrimmon, Stenson and Webster. Junior Class prize, T. Gray. Hon. mention, McArthur, Gurd, Inksetter, Small and Groves.

Dr. Smellie delivered the valedictory address and Prof. Gardner addressed the graduates upon the responsibilities and duties of their profession.

TORONTO UNIVERSITY MEDICAL EXAMINATIONS.—The examinations for the degree of Bachelor of Medicine in Toronto University have just been concluded ; the results are not yet known. In the various years the candidates numbered ninety-eight, forty-four of whom were from Trinity Medical School ; the remainder were chiefly from the Toronto School.

TORONTO SCHOOL OF MEDICINE.—The prizes won at the annual examination of the Toronto School of Medicine are as follows :

First Year.—Clapp, R. E. ; Macklin, W. C. ; Todd, J. A. Second Year.—Burt, F. ; Dryden, J. Third Year.—Griffin, H. S. ; Good, J. W. ; McKinnon, A. H. Fourth Year.—Grant, A. ; Field, B.

BISHOP'S COLLEGE MEDICAL SCHOOL, MONTREAL.—The following are the names of the successful candidates in this school:—

FINAL.—C. A. Wood, E. A. Gravely, R. H. Boyd, J. McLeod, H. N. Curtis.

PRIMARY.—H. E. Mitchell, W. Young, J. J. Canly, H. C. Fuller, R. H. Boyd, J. McLeod, J. M. D. McDonald, H. N. Curtis.

PRIZEMEN.—In final branches, C. A. Wood. Honourable mention, E. A. Gravely. In Primary, H. E. Mitchell and W. Young. Honourable mention, J. J. Canly. Special prize for anatomical preparation, H. E. Mitchell. Botany and junior dissectors prize, H. B. Chandler.

The *ad eundem* degree of M.D., was conferred upon Drs. D. Baynes, and A. Proudfoot, lately appointed lecturers in the above named Faculty, and the degree of M.D., *honoris causa*, was granted to Dr. R. L. McDonnell, of Montreal.

COMPLIMENTARY DINNER.—The medical profession in Ottawa, entertained the members of the profession in the House of Commons, at a public dinner on the 26th of March last. The entertainment was a most successful one—a large number of invitations having been accepted. Dr. Grant occupied the chair; Drs. Sweetland and St. John the vice-chairs, and Dr. Hill acted as Secretary. After doing justice to the "bill of fare," which was most complete, several toasts were proposed and responded to by members present, and the evening passed off very pleasantly. This is the first time in Canada that the members of the medical profession in Parliament have been thus entertained by their medical brethren.

APPOINTMENTS.—Mr. Claxton, M.D. of Verona, to be an Associate Coroner for the Co. of Frontenac; J. Godin, M. D., of Ottawa, to be an Associate Coroner for the Co. of Carlton; Angus McKinnon, M. D., of Caledon, to be Associate Coroner for the Co. of Peel; Dr. J. W. Montgomery of Queensville, has been appointed assistant Medical Superintendent of the Rockwood Asylum. F. L. Nesbitt, M.D., of Aurora, to be Associate-Coroner for the County of York.

FELO-DE-SE.—Dr. G. B. Shaw of Montreal, lately a professor in Bishop's College, poisoned himself by taking two ounces of chloral hydrate, two of laudanum, two of paregoric, and 16 grains of morphine. He had been very dissipated of late, and took the above method of terminating his career.

VITAL STATISTICS AND PUBLIC HEALTH.—We have been favored with a copy of the Report of the Select Committee of the House of Commons, to enquire into the expediency of legislating in the matter of sanitary Reform. We are glad to see that Dr. Brouse has not allowed this matter to drop. The Report sets forth the great necessity for legislation on sanitary matters, if we are to make any headway against the continual inroads of epidemics and preventable diseases. The Report also sets forth the benefits that have resulted in other countries by the enforcement of sanitary laws, and recommends that the Dominion and Provincial Governments should come to some arrangement regarding the matter of jurisdiction in reference to this subject. It concludes by wisely urging upon the Dominion Government, as soon as the public interest will allow, to legislate for the health of the people.

Reports of Societies.

NORTH BRUCE MEDICAL ASSOCIATION.

The Medical Association for the North Riding of Bruce met at Paisley on the 26th of March; Dr. W. S. Scott, President, in the chair.

Members present:—Drs. McLaren, Baird, McArton, Gillies, McKay and Sinclair, Secretary. After some preliminary business had been disposed of, it was moved by Dr. Sinclair and seconded by Dr. Gillies,—That whereas there exists in certain quarters, among the medical profession, an apparent want of good faith in carrying out the intent and spirit of the Medical Act of Ontario, by holding consultations with unlicensed medical practitioners. Be it therefore resolved,—That when a violation of such takes place, the same be reported to this Association, to be dealt with according to true medical etiquette and positive standing usages.—Carried.

Moved by Dr. McLaren and seconded by Dr. McArton,—That the Secretary of this Association be, and is hereby instructed, to communicate with the Chairman of the Executive Committee of the Medical Council, asking him to inform "Detective Smith" that one W. H. Franks, in Port Elgin, has not paid his fine, and is continuing to practise; and that the Detective be urged to proceed at once to put the law in force.—Carried.

Dr. Baird moved, seconded by Dr. McLaren,—That Dr. McArton prepare a paper on some medical subject, to be read at the next meeting of the Association.—Carried.

Dr. McKay moved, seconded by Dr. McLaren,—That the Secretary be instructed to communicate with Dr. Douglass, of Port Elgin, asking him to re-consider his resignation as member of this Association; and this Association entertains the hope that he will see fit to withdraw the same, and continue to aid us in our deliberations.—Carried.

At this stage the President submitted to the Association copious notes taken at the bedside of one of his patients, and asked the members of the Association their opinion as to what the disease was, and treatment. The members unanimously declared it a case of "Ulceration of the Cardiac End of the Stomach," which opinion Dr. Scott held, and had treated his patient accordingly throughout.

Dr. McKay also submitted an interesting history of a case of Puerperal Convulsions, as also did Dr. McLaren on the same subject. After spending the whole of the afternoon in medical conference of much interest, the meeting adjourned, to meet at Paisley on the call of the President

New Instruments.

TIEMANN'S NEW THERMOMETER.



The inventors and manufacturers of the thermometer claim for it:

1. The registering portion or index cannot be united with the main column of mercury in the bulb except by design. The device of the "bend" fulfils the object of guarding against accidental loss of index.

2. The scale is graduated in $\frac{1}{4}^{\circ}$, and is identical in every respect with that of a four-inch thermometer, whereas the bent thermometer is less than $3\frac{1}{4}$ inches in length.

3. The portion of the thermometer intervening between the bulb and the commencement of the scale lies in juxtaposition to the bulb, and the ascending mercury is therefore subjected to the warmth of the parts as well as the bulb, and is not exposed to external temperature.

4. It will not roll. The advantage of this latter feature will be readily recognized and appreciated.

The thermometer is safely carried in a neat morocco case (lancet case style), lined with velvet, and can be conveniently placed in the vest pocket, being but $3\frac{3}{8}$ inches in length, and but $\frac{3}{4}$ inch wide; price \$3.50. Tiemann & Co., 67 Chatham St., New York.

Books and Pamphlets.

ON THE COMPARATIVE MORTALITY OF SURGICAL OPERATIONS IN THE LAKE STATES, by E. Andrews, M.D., Chicago. (Reprinted from the *Chicago Med. Four.*)

This is a pamphlet of 123 pages, containing a condensation of the statistics of the entire world on the mortality of surgical operations. It contains a table of original statistics, gathered in the Lake States, and a brief *resumé* of the opinions of the greatest surgeons on the value of the operations and the cases requiring them. To the opinions of each author, remarks showing the contradiction of the principal authorities are given, and the writer's conclusions in view of the facts.

The results of some operations in the Lake States differ remarkably from those in other regions. Thus, for instance, the major amputations, and also herniotomy, are considerably more safe than elsewhere, while lithotomy is more dangerous than in other regions. In preparing this essay the author has, with immense labor, gathered material from the surgical literature of both continents, and in several languages.

It is the most thorough condensation of the subject in our language, and will be of great use to surgeons desiring to know the risk of each operation, and the opinions of authorities respecting it.

CONTRIBUTIONS TO OPERATIVE SURGERY AND SURGICAL PATHOLOGY; by J. M. Carnochan, M.D. New York: Harper & Bros.; Toronto: Hart & Rawlinson.

THE PRACTITIONER'S HAND-BOOK OF TREATMENT OR PRINCIPLES OF THERAPEUTICS.—By J. Milner Fothergill, M.A., M.D., M.R.C.P., London Hospital. Philadelphia: H. C. Lea. Toronto: Willing & Williamson.

ANNUAL REPORT OF THE ASYLUM FOR THE INSANE, TORONTO, by Dr. Clark.

Births, Marriages, and Deaths.

On Thursday, April 12, 1877, the wife of Dr. Thos. Armstrong, York Mills, of a daughter.

On the 28th of March, Dr. J. G. Wilson, of the city of London, Ontario, to Miss Maggie Laird, of the same place.

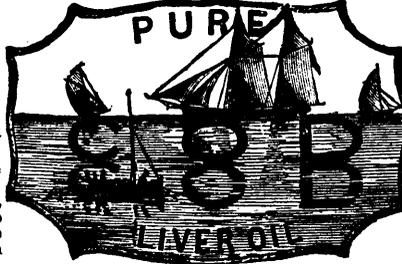
On the 24th ult., J. Rutherford, M.D., to Rose-line, eldest daughter of A. Gamsby, all of Orono.

PURE COD-LIVER OIL,

Manufactured on the Sea-Shore, by HAZARD & CASWELL, from Fresh and Selected Livers.

The universal demand for Cod-Liver Oil that can be depended upon as strictly pure and scientifically prepared, having been long felt by the Medical Profession we were induced to undertake its manufacture at the Fishing Stations, where the fish are brought to land every few hours, and the Livers consequently are in great perfection.

This Oil is manufactured by us on the sea-shore, with the greatest care, from fresh, healthy Livers, of the Cod only, without the aid of any chemicals, by the simplest process and lowest temperature by which the Oil can be separated from the cells of the Livers. It is nearly de-



void of color, odor, and flavor—having a bland, fish-like, and, to most persons, not unpleasant taste. It is so sweet and pure that it can be retained by the stomach when other kinds fail, and patients soon become fond of it.

The secret of making good Cod-Liver Oil lies in the proper application of the proper degree of heat; too much or too little will seriously injure the quality. Great attention to cleanliness is absolutely necessary to produce sweet Cod-Liver Oil. The rancid Oil found in the market is the make of manufacturers who are careless about these matters.

Prof. Parker, of New York, says: "I have tried almost every other manufacturer's Oil, and give yours the decided preference." Prof. Hays, State Assayer of Massachusetts, after a full analysis of it, says: "It is the best for foreign or domestic use."

After years of experimenting, the Medical Profession of Europe and America, who have studied the effects of different Cod Liver Oils, have unanimously decided the light straw-colored Cod-Liver Oil to be far superior to any of the brown Oils.

The Three Best Tonics of the Pharmacopœia: IRON—PHOSPHORUS—CALISAYA.

CASWELL, HAZARD & Co. also call the attention of the Profession to their preparation of the above estimable Tonics, as combined in their elegant and palatable **Ferro-Phosphorated Elixir of Calisaya Bark**, a combination of the Pyrophosphate of Iron and Calisaya never before attained, in which the nauseous inkiness of the Iron and astringency of the Calisaya are overcome, without any injury to their active tonic principles, and blended into a beautiful Amber-colored Cordial, delicious to the taste and acceptable to the most delicate stomach. This preparation is made directly from the **ROYAL CALISAYA BARK**, not from ITS ALKALOIDS OR THEIR SALTS—being unlike other preparations called "Elixir of Calisaya Bark with Iron," which are simply an Elixir of Quinine and Iron. Our Elixir can be depended upon as being a true Elixir of Calisaya Bark with Iron. Each dessert-spoonful contains seven and a half grains Royal Calisaya Bark, and two grains Pyrophosphate of Iron.

Ferro-Phosphorated Elixir of Calisaya Bark with Strychnia.—This preparation contains one grain of Strychnia added to each pint of our Ferro-Phosphorated Elixir of Calisaya Bark, greatly intensifying its tonic effect.

Ferro-Phosphorated Elixir of Calisaya with Bismuth, containing eight grains Ammonio-Citrate of Bismuth in each table-spoonful of the Ferro-Phosphorated Elixir of Calisaya Bark.

CASWELL, HAZARD & CO., CHEMISTS AND DRUGGISTS, New York.



CUTLER'S POCKET INHALER AND Carbodate of Iodine Inhalants

A REMEDY for all NASAL, THROAT and LUNG Diseases, affording relief in some cases in a few minutes.

This instrument is gotten up on an entirely new principle, and is well adapted to the treatment of all those diseases of the air passages requiring efficient inhalation. It is endorsed by many leading practitioners, and commends itself to all desiring an apparatus.

Dr. George Hadley, Professor of Chemistry and Pharmacy in the University of Buffalo, in a carefully considered report upon its merits, concludes in these words:

"On the whole, this Inhaler seems to me, to accomplish its purposes, by novel, yet by the most simple and effectual means; to be philosophical in conception, and well carried out in the execution."

Always ready, no danger of breaking or spilling, besides being as safe and efficient in the hands of the novice as the adept. Made of Hard Rubber, it may be carried about the person as handily as a pencil case, and used regardless of time or place. Patented in the United States, England and Canada. Over 50,000 now in use in this country.

Price \$2, including Inhalant for two months' use. Neatly put up and sent by mail free, on receipt of price. Extra bottles of Inhalant, 50c. Liberal discount to the trade. Kept by all druggists. Send your address and receive our descriptive circular, post-paid.

W. H. SMITH & CO.,

402 and 406 Michigan St., Buffalo, N. Y.

Samples to Physicians free by mail on receipt of \$1.

Awarded the only Medal and Special Diploma for Improved Pharmacopœia, Medicinal, and Mechanical Plasters, in Rubber Combination, over all Foreign and American Competitors, at Centennial Exhibition.

SEABURY & JOHNSTON,

MANUFACTURERS OF

Official, Medicinal, Spread, Porous, Silk, Mustard, Muslin Tracing Cloth, Kid, Corn, Bunion, and Court

PLASTERS.

Office, 30 Platt St., New York. Factory Brooklyn.

Direct producers of every conceivable Plaster used in Surgery and Pharmacy, of the most approved and improved character.

Special Formulee made to order.

Every article guaranteed to be of strict Pharmacopœia strength, and incorporated with the most reliable Extracts and Drugs.

Belladonna Plaster.—We incorporate the Official Alcoholic Extract only. Recent analysis, fairly conducted by competent chemists, emphatically condemns the inspissated Extract as a mild and unstable product, representing but one half or less than one half of the strength of the U. S. P. Alcoholic Extract of Belladonna. The following result, published in the *American Journal of Pharmacy*, in April, 1876, page 145, is furnished for your consideration, which indicates the following percentage of Atropia in the respective Extracts:—

Alcoholic Extract Belladonna, U. S. P.	2,571
Allen's English Extract	1,411
Herring's " "	1,179

The practitioner, as well as ourselves, has but one choice.

Rubber Adhesive Plaster is applied without heat or moisture Very flexible, conforms instantly to the skin, is perfectly water-proof contains no irritating property Has no equal in counter-extension. Can be had on twilled linen. Adhesion is greatly increased by having it in porous form.

Mustard Plaster. An improvement over best French makers. Is spread on flexible muslin instead of paper.

Blister Plaster. Always reliable. Is more active than the Cerate. Is not impaired by age.

Capsicum Plaster. The best rubefacient known—mild, continuous, and stimulating. We do not incorporate the oleo-resin. We use the crude drug in sufficient quantity. Does not blister.

JUDGE'S REPORT (Condensed); Originality: The successful application of Rubber as a base for all Medicinal and Mechanical Plasters. **Reliability:** And general excellence of Manufacture.

The trade supplied by all Wholesale Druggists in Canada.

THE IMPROVED TROMMER'S EXTRACT OF MALT.

This Extract is prepared from the best Canada Barley Malt, by an improved process which prevents injury to its properties by excess of heat. It is less than half as expensive as the foreign extract; it is also more palatable, convenient of administration, and will not ferment.

Attention is invited to the following analysis of this Extract as given by S. H. Douglas, Prof. of Chemistry, UNIVERSITY OF MICHIGAN, Ann Arbor:

"TROMMER EXTRACT OF MALT CO.:—I enclose herewith my analysis of your EXTRACT OF MALT: Malt Sugar (Glucose), 46.1; Dextrine, Hop-bitter, Extractive Matter, 23.6; Albuminous Matter (Diastase), 2.469; Ash—Phosphates, 1.7,12; Alkalies, .377; Water, 25.7. Total, 99.958.

"In comparing the above analysis with that of the Extract of Malt of the GERMAN PHARMACOPŒIA, as given by Hager, that has been so generally received by the profession, I find it to substantially agree with that article.

"Yours truly,
SILAS H. DOUGLAS,
Prof. of Analytical and Applied Chemistry."

This invaluable preparation is highly recommended by the medical profession as a most effective therapeutic agent for the restoration of delicate and exhausted constitutions. It is very nutritious, being rich in both muscle and fat-producing materials.

By many American physicians, and among others by such foreign authorities (German, French, and English) as N. Meyer, Trousseau, and Aitken, the Malt Extract is extolled in the treatment of impaired, difficult and "irritable" digestion, loss of appetite, sick headache, chronic diarrhoea, cough, bronchitis, asthma, consumption, the debility of females, and of the aged, in retarded convalescence from exhausting diseases, and indeed most all depressing maladies, in which it has been found very sustaining and strengthening, and admirably adapted for building up and invigorating the system. It is often well borne by the stomach when every kind of food is rejected, thus actually sustaining life.

The presence of a large proportion of *Diastase* renders it most effective in those forms of disease originating in *imperfect digestion of the starchy elements of food.*

A single dose of the Improved Trommer's Extract of Malt contains a larger quantity of the active properties of malt than a pint of the best ale or porter; and not having undergone fermentation, is absolutely free from alcohol and carbonic acid.

The dose for adults is from a dessert to a tablespoonful three times daily. It is best taken after meals, pure, or mixed with a glass of milk, or in water, wine, or any kind of spirituous liquor. Each bottle contains ONE AND ONE HALF POUNDS of the Extract. Price \$1 00.

In addition to the Extract of Malt with Hops, the attention of physicians is invited to the following combinations:

Improved

TROMMER'S EXTRACT OF MALT, FERRATED.

Each dose contains four grains of the Pyrophosphate of Iron. Particularly adapted to cases of anæmia. PRICE, \$1.00.

Improved

TROMMER'S EXTRACT OF MALT, WITH CITRATE OF IRON AND QUINIA.

Appropriate where Iron and Quinine are jointly indicated. Very beneficial in the anæmic state following autumnal fevers in chlorosis, enlarged spleen, carbuncles, boils, &c. It is a pleasant tonic, the bitter taste being very effectually disguised. Each dose contains four grains of the Citrate of Iron and Quinia. PRICE, \$1.50.

Improved

TROMMER'S EXTRACT OF MALT, with HYPOPHOSPHITES.

Far superior to any of the "Syrups" of Hypophosphites, and invaluable in anæmia, scrofulous, tuberculous, and other cachectic conditions. In the various affections to which scrofulous children are liable, as marasmus, rachitis, caries of the spine, &c., it is very efficacious. This combination is, in certain cases, even more efficient in exhaustion from undue lactation than the Extract of Malt with Hops. PRICE, \$1.50.

Improved

TROMMER'S EXTRACT OF MALT, with the IODIDES OF IRON and MANGANESE

The experience of the late Sir J. Y. Simpson and others in the use of this combination of salts has been fully confirmed by more recent experience. Particularly recommended in anæmia dependent upon scrofula, phthisis, cancer, the syphilitic cachexy, enlarged spleen, and in chlorosis where Iron alone has failed. Each dose contains one grain each of the Iodides of Iron and Manganese. PRICE, \$1.50.

Improved

TROMMER'S EXTRACT OF MALT, with ALTERATIVES.

Each dose contains the proper proportions of the Iodide of Calcium and Iron, and of the Chlorides and Bromides of Magnesium, Sodium, and Potassium. This combination of the most potent alteratives with tonics and restoratives has been successfully employed in the different forms of disease dependent upon the "modified scrofulous diathesis," as general perverted glandular action, disease of the bones and cartilages, catarrhal affections of the eye, ear, and nasopharyngeal mucous surfaces, eczematous, and other cutaneous eruptions, in rheumatic arthritis, scrofulous rheumatism, &c. PRICE, \$1.50.

PREPARED BY

TROMMER'S EXTRACT OF MALT CO., FREMONT, OHIO.

For Sale by Wholesale Druggists throughout the United States and Canada.

McGILL UNIVERSITY,

MONTREAL.

FACULTY OF MEDICINE.

SUMMER SESSION—MAY 1st to JULY 21st, 1877.

The Medical Faculty established last year the first regular summer session, in which practical and demonstrative courses, and systematic clinical instruction were given. Forty students availed themselves of the advantages offered, and the diligence with which the classes were followed showed how much such practical teaching is appreciated.

The Faculty feels that the time is come, when the intermittent system, at present in vogue, of six months' work and six months' vacation, so prejudicial to the steady and continuous progress of the student, should be abandoned, and that at least nine months of each year should be spent in regular organized study. It is with this view that the summer session has been established, and the hope is here expressed, that all students will endeavour to take one or more of these extra sessions, the fees for which have been purposely placed so low as to be almost nominal.

As is only natural, the advantages offered by the city of Montreal, for the practical study of Medicine and Surgery are unequalled in the Dominion. In the wards of the General Hospital there are always, and more particularly in the summer months when navigation is open, a large collection of interesting medical and surgical cases. In the out-door-department, there is a daily attendance of between 75 and 100 patients, which afford excellent instruction in minor surgery, routine medical practice, and diseases of children. The Eye and Ear department lately established, will afford an opportunity of studying practically, under skilled direction, these important branches.

The attendance of the Medical officers is systematic and punctual.

At the University Lying-in Hospital, Obstetrical cases are furnished to the students in rotation.

The Faculty has much pleasure in announcing the following courses for the summer session of this year.

CLINICAL INSTRUCTION at bedside, in the Montreal General Hospital. Daily } DRS. DRAKE and MacCALLUM.

A limited number of dresserships and clinical clerkships, may be obtained on application to the attending and out-door Physicians.

MINOR SURGERY.—Bandaging, application of splints, hæmostatics, catheterism, &c. } G. E. FENWICK, Professor of Surgery.

Six demonstrations of operative surgery on the cadaver. Wednesdays 10 a.m. } D. C. MacCALLUM, Professor of Obstetrics and Diseases of Women.

DISEASES OF WOMEN.—Methods of examining patient. Use of Speculum and uterine sound. Disorders of Menstruation. Leucorrhœa. It causes and treatment. Tumors of the Uterus. Displacements of the Uterus, &c. Mondays 11 a.m. } GEO. ROSS, Professor of Clinical Medicine.

CLINICAL MEDICINE.—Lectures founded upon cases in the wards. Physical Examination of Heart and Lungs, with demonstrations. The Urine in disease. Tuesdays 10 a.m. } WM. GARDNER, Professor of Medical Jurisprudence.

DISEASES OF CHILDREN.—Anatomical and physiological peculiarities of infancy and childhood. Infantile Hygienics. Peculiarities of symptoms. Therapeutics and Dosage. Consideration of the more common and important diseases of childhood. Thursdays, 10.30 a.m. } F. BULLER, Lecturer on Ophthalmic Medicine & Surgery.

OPHTHALMIC MEDICINE AND SURGERY.—Methods of diagnosis (with ophthalmoscopic work) Commoner forms of diseases of the Eye and their treatment. Wounds and injuries of the Eye. Practical instruction in operations. Mondays 9 a.m. } F. SHEPHERD, Demonstrator of Anatomy.

MEDICAL AND SURGICAL ANATOMY, demonstrations on Brain. Sympathetic system. Thorax and Abdomen. Hernia—inguinal and femoral. Surface markings. Triangles of neck. Bladder. Urethra. Perineum. Larynx, &c. Fridays 10 a.m. } WM. GARDNER, Professor of Medical Jurisprudence.

ELECTRO-THERAPEUTICS.—Electricity, varieties of Batteries. Animal Electricity and Electro-Physiology. Electro-Diagnosis. The induced and constant current. Modes of application. Medical Diseases in which Electricity is useful. Electrolysis and Galvanic cautery. Saturdays 10.30 a.m. } WM. OSLER, Professor of Physiology and Pathology.

PRACTICAL PATHOLOGY.—Consisting of 20 demonstrations in the Autopsy room of the Hospital. Students will make the post mortems in rotation and receive practical instruction in the manner of performing them and keeping records of their observations. Bi-weekly, 1 p.m. }

All students desirous of attending the above course will be expected to register their names with Prof. Craik, (Registrar of the Faculty,) on or before the 15th of May, 1877, and pay in advance a fee of \$10. The fees will be devoted to the improvement and extension of the Faculty's Library and Museum, to which students can always obtain access.

Certificates of attendance on the various courses will be given.

The following special courses will be conducted during the summer, and may be taken by enregistered students.

PRACTICAL CHEMISTRY—Including blow-pipe manipulations, qualitative analysis, toxicological investigations, &c. This course is the same as, and may be taken in lieu of, the sessional course during the winter. Fee \$12.00. Monday, Wednesday, Friday, 2-5 p.m. } G. P. GIRDWOOD, Professor of Practical Chemistry.

PRACTICAL HISTOLOGY—Normal and Pathological, a course of 24 lessons. Microscopes, reagents and material provided. Fee \$20. Tuesday, Thursday, and Saturday, 2.5 p.m. Extra hour for Laboratory work, Monday, Wednesday, and Friday, 5-6 p.m. } WM. OSLER, Professor of Physiology and Pathology.

For further information, or Catalogue, address,

ROBERT CRAIK, M.D., Registrar, 2 Phillips Square.



The attention of the medical profession is invited to this instrument as the most perfect ever invented for treating Prolapsus Uteri, or Falling of the Womb. It is an Abdominal and Uterine Supporter combined.

The Abdominal Support is a broad morocco leather belt with elastic straps to buckle around the hips, with concave front, so shaped as to hold up the abdomen.

The Uterine Supporter is a cup and stem made of very highly polished hard rubber, very light and durable, shaped to fit the mouth of the womb, with openings for the secretions to pass out, and which can be bent to any curve desired, by heating in very hot water.

The cup and stem is suspended to the belt by two soft elastic Rubber Tubes, which are fastened to the front of the belt by simple loops, pass down through the stem of the cup and up to the back of the belt. These soft rubber tubes being elastic adapt themselves to all the varying positions of the body and perform the service of the ligaments of the womb.

The Instrument is very comfortable to the patient, can be removed or replaced by her at will, can be worn at all times, will not interfere with nature's necessities, will not corrode, and is lighter than metal. It will answer for all cases of Anteversion, Retroversion, or any Flexion of the Womb, and is used by the leading Physicians with never failing success even in the most difficult cases.

Price—to Physicians, \$8.00; to Patients, \$12.00.

Instruments sent by mail, at our risk, on receipt of price, with 20 cents added for postage; or by express, C.O.D.

Dr. McINTOSH'S NATURAL UTERINE SUPPORTER CO.,
296 West Lake Street, Chicago, Ill.

Our valuable pamphlet, "Some Practical Facts about Displacement of the Womb," will be sent you free on application.

BETHESDA
MINERAL WATER,
OF
WAUKESHA, WISCONSIN,

This Mineral Water has been highly recommended in the treatment of all diseases of the Kidneys and Urinary Organs, such as Diabetes, Bright's Disease, Inflammation of the Kidney, Renal Calculi, Catarrh of the Bladder, Gravel, Stone in the Bladder, &c., &c.

It has been thoroughly tested in the treatment of Uremic diseases and has given almost universal satisfaction.

Professor W. Parker, M.D., of New York, says: "Having seen the happy results from the Bethesda Water, in Diabetes, and from reports which have reached me, I wish you would furnish a supply for the hospitals and profession of the city."

REFERENCES KINDLY PERMITTED:

Ven. Archdeacon Fuller, Toronto. | J. H. Richardson, M.D. Toronto.
Rev. M. S. Darling, Toronto. | J. D. Smith, Esq., Toronto.

RICHARD OWEN,
General Agent for the Dominion of Canada,
75 YONGE STREET,
Toronto, Ont.

TO THE MEDICAL PROFESSION.

For sale, the Homestead, library, and surgical instruments, &c., of the late Dr. Duncumb of Richmond Hill, Co. of York. The property consists of a frame dwelling, with necessary outbuildings, fine young orchard, and one or more acres of land to suit purchaser. The field for practice is good, the late Dr. having practised there for the last 30 years. For terms and further particulars, apply to

C. DUNCUMB,
Richmond Hill, Ont.

THE LONDON HOSPITAL
MEDICAL COLLEGE.

The London Hospital situated in the east end of London in the immediate vicinity of the Docks, contains 800 beds, and is the

LARGEST GENERAL HOSPITAL
in the United Kingdom,

Canadian and American graduates are admitted to Perpetual Practice, Medical and Surgical, including Dresserships for

TEN GUINEAS.

Apply to the Secretary, Medical College, London Hospital, Mile End, London, E.

BRIGHAM HALL,
CANANDAIGUA, NEW YORK.

AN ASYLUM FOR THE INSANE OF THE PRIVATE CLASS,
INCORPORATED BY SPECIAL ACT IN 1859.
Inquiries may be addressed to

DR. D. R. BURRELL,
Resident Physician.

GOTHIC HALL.

Established 1846.

B. A. MITCHELL & SON,
114 Dundas Street West, North Side,
LONDON, ONT.

We beg leave to draw the attention of the Physicians of Ontario to our preparations of

Tinctures, Elixirs, Fluid Extracts and Syrups,

Which we warrant as good, if not superior, to American preparations which flood our markets. Our laboratory is managed by a practical chemist, who is also a graduate of medicine, and knowing the wants of the profession, we ask for a share of their patronage, knowing that our goods will compare with any, not only in regard to quality but in price. Physicians will confer a favour by calling on us when in London. Correspondence promptly attended to; private formulas prepared. We also have in stock a full line of

TRUSSES, ELASTIC GOODS, SHOULDER-BRACES, SUPPORTERS, SURGICAL INSTRUMENTS,

a New York prices.

Send for quotations; price-list and catalogue sent to any address.

PETROLEUM

JELLY

VASELINE

The attention of physicians, druggists and hospitals, is called to this article, and to the fact that it is favourably regarded and extensively used both in the United States and England, by the profession, and by pharmacists for OINTMENTS, CERATES, &c.

As a dressing for WOUNDS, CUTS, BRUISES, BURNS, SPRAINS, PILES, RHEUMATISM, SKIN DISEASES, CATARRH, SORES or ERUPTIVE DISEASES, and all contused and inflamed surfaces, it is not equalled by any known substance.

In the treatment of COUGHS, COLDS, CROUP, DIPHTHERIA, and of THROAT and CHEST complaints, the best results are obtained. 25c., 50c. and pound bottles \$1.00.

VASELINE was awarded a Grand Medal and Diploma at the Centennial Exposition, Philadelphia, 1876. Report of Judges. "Novelty great value in pharmacy, unequalled purity, and superiority of manufacture." Professor Wm. Odling, F.R.S., Great Britain; Professor C. F. Chandler, New York; Prof. Rudolph Van Wagner, Germany; Prof. F. A. Genth, Pennsylvania; Prof. I. F. Kuhlman, France; J. W. Mallet, Virginia. Pomade Vaseline, Vaseline Cold Cream, Vaseline Camphor Ice, are all exquisite toilet articles made from pure Vaseline, and excel all similar ones. 25c., 50c. and \$1.00.

AGENTS—Lymans, Clare & Co., Montréal, and Lyman Bros., Toronto.**J. H. GEMRIG,**

MANUFACTURER OF

SURGICAL

AND

ORTHOPÆDICAL INSTRUMENTS,

109 SOUTH EIGHTH ST., PHILADELPHIA.

Aspirators, Axilla Thermometers, Hypodermic Syringes,
Nelatou's Catheters, Plaited Satin Sewing Silk for
Surgical purposes, Hawksley's Metallic
Stethoscopes, Elastic Stockings,
Apparatus for Club Foot,
Bow Legs, Spine
Diseases, &c.

Illustrated Catalogue and Price List sent on application.

AN INDISPENSABLE REQUISITE
For every Teacher, Advanced Student, Intelligent Family,
THE BEST ENGLISH DICTIONARY:

**Webster's Unabridged.**

The best practical English Dictionary extant."—*London Quarterly Review, Oct., 1873.*

From the Chief Justice of the United States:

Washington, D. C., Oct. 25, 1875.—The book has become indispensable to every student of the English language. A Law Library is not complete without it, and the Courts look to it as of the highest authority in all questions of definition.—MORRISON R. WAITE.

FOUR PAGES COLORED PLATES.

Published by G. & C. MERRIAM SPRINGFIELD, MASS.

SOLD BY ALL BOOKSELLERS

Electrical Instruments for Medical Use.

We respectfully refer to the following Eminent Physicians:

BOSTON.

Prof. Francis Minot, M.D.
H. H. A. Beach, M.D.

CHICAGO.

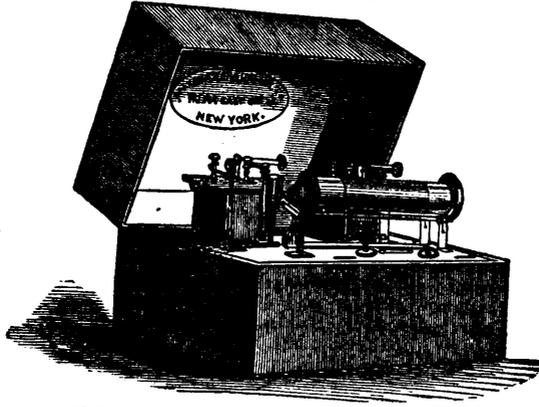
Prof. N. S. Davis, M.D.
Prof. James S. Jewell, M.D.

DETROIT.

Prof. Theo. A. McGraw, M.D.
Prof. James F. Noyes, M.D.
Prof. Albert B. Lyons, M.D.
Prof. Leartus Connor, M.D.

ST. LOUIS.

Prof. J. K. Bauday, M.D.
Prof. Jas. B. Johnson, M.D.



NEW YORK CITY.

Prof. W. A. Hammond, M.D.
Prof. Lewis A. Sayre, M.D.
Prof. James R. Wood, M.D.

PHILADELPHIA.

Prof. Robert E. Rogers, M.D.
Prof. B. Howard Rand, M.D.

CANADA.

Dr. Theo. Mack, M.D., St. Catharines.
Dr. Fife Fowler, M.D., Kingst'n
Dr. John R. Dickson, M.D., Kingst'n.
Dr. B. H. Lemon, M.D., Thorold.
Drs. Orton & Alexander, M.D., Fergus.
Dr. A. Wolverson, M.D., Hamilton.
Dr. J. Fulton, M.D., Toronto.

Galvano-Faradic Manufacturing Company,
167 EAST 34th STREET, NEW YORK.

FOR SALE BY LYMAN BROS., TORONTO.

Send for Catalogue, with a concise and practical Guide for their use

F. G. OTTO & SONS,

(Successors to OTTO & REYNDERS.)

MANUFACTURERS & IMPORTERS OF

Surgical Instruments and Orthopedical Appliances,

64 CHATHAM STREET, NEW YORK.

THE PATENT SPIRAL SPRING RING PESSARY.

The engraving below shows the manner of manufacturing the Ring Pessary. In a spiral spring of brass wire about eight coils of thin rounded whalebone are inserted, which is bound loosely by the spiral spring, thus allowing the coils of whalebone to revolve around themselves, giving, as will readily be seen, more elasticity than they would were they bound tightly by a soft wire of any material, the ends of the spring are then screwed together, and the whole covered with soft rubber of exceedingly smooth surface. We manufacture in the above manner the Bow Pessary, Albert Smith's and all other shapes. Manufactured only by

F. G. OTTO & SONS, 64 CHATHAM STREET, NEW YORK.

WARRANTED
NOT TO BREAK.

Cannot be surpassed
FOR
ELASTICITY
AND
DURABILITY.

For Sale by
DRUGGISTS
AND
INSTRUMENT
DEALERS.



PRICES:

	EACH.
Ring Pessary, . . .	\$0.75
Alb. Smith's Pessary, .	1.60
Bow Pessary,	1.00



F. G. Otto & Sons' Patent Truss Pad.

BELLEVUE HOSPITAL MEDICAL COLLEGE, CITY OF NEW YORK.

SESSIONS OF 1877-78.

THE COLLEGIATE YEAR in this Institution embraces a Preliminary Autumnal Term, the Regular Winter Session, and a Summer Session.

THE PRELIMINARY AUTUMNAL TERM for 1876-77 will commence on Wednesday, September 19, 1877, and continue until the opening of the Regular Session. During this term, instruction, consisting of didactic lectures on special subjects, and daily clinical lectures, will be given as heretofore, by the entire Faculty. Students designing to attend the Regular Session are strongly recommended to attend the Preliminary Term, but attendance during the latter is not required. *During the Preliminary Term, clinical and didactic lectures will be given in precisely the same number and order as in the Regular Session.*

THE REGULAR SESSION will commence on Wednesday, October 3, 1877, and end about the 1st of March 1878.

Faculty:

ISAAC E. TAYLOR, M.D., Emeritus Prof. of Obstetrics and Diseases of Women, and President of the Faculty.
JAMES R. WOOD, M.D., LL.D., Emeritus Prof. of Surgery.
FORDYCE BARKER, M.D., Prof. of Clinical Midwifery and Diseases of Women.

AUSTIN FLINT, M.D., Prof. of the Principles and Practice of Medicine, and Clinical Medicine.
W. H. VANBUREN, M.D., Prof. of Principles and Practice of Surgery with Diseases of the Genito-Urinary System and Clinical Surgery.
LEWIS A. SAYRE, M.D., Prof. of Orthopedic Surgery, Fractures and Dislocations, and Clinical Surgery.
ALEXANDER B. MOTT, M.D., Prof. of Clinical and Operative Surgery.
WILLIAM T. LUSK, M.D., Prof. of Obstetrics and Diseases of Women and Children, and Clinical Midwifery.
EDMUND R. PEASLEE, M.D., LL.D., Prof. of Gynecology.
WILLIAM M. POLK, M.D., Lecturer on Materia Medica and Therapeutics, and Clinical Medicine.
AUSTIN FLINT, JR., M.D., Prof. of Physiology and Physiological Anatomy, and Secretary of the Faculty.
APLPHEUS B. CROSBY, M.D., Prof. of General, Descriptive, and Surgical Anatomy.
R. OGDEN DOREMUS, M.D., LL.D., Professor of Chemistry and Toxicology.
EDWARD G. JANEWAY, M.D., Prof. of Pathological Anatomy and Histology, Diseases of the Nervous System and Clinical Medicine.

PROFESSORS OF SPECIAL DEPARTMENTS, ETC.

HENRY D. NOYES, M.D., Professor of Ophthalmology and Otolaryngology.
JOHN P. GRAY, M.D., LL.D., Professor of Psychological Medicine and Medical Jurisprudence.
EDWARD L. KEYES, M.D., Professor of Dermatology, and adjunct to the Chair of Principles of Surgery.
EDWARD G. JANEWAY, M.D., Professor of Practical Anatomy. (Demonstrator of Anatomy.)
LEROY MILTON YALE, M.D., Lecturer Adjunct upon Orthopedic Surgery.
A. A. SMITH M.D., Lecturer Adjunct upon Clinical Medicine.

A distinctive feature of the method of instruction in this College is the union of clinical and didactic teaching. All the lectures are given within the Hospital grounds. During the Regular Winter Session, in addition to four didactic lectures on every week-day, except Saturday, two or three hours are daily allotted to clinical instruction.

The Spring Session will consist chiefly of Recitations from Text Books. This term continues from the first of March to the first of June. During this Session there will be daily recitations in all the Departments, held by a corps of examiners appointed by the regular Faculty. Regular clinics are also given in the Hospital and College Building.

Fees for the Regular Session.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures.....	\$140 00
Matriculation Fee.....	5 00
Demonstrator's Ticket (including material for dissection).....	10 00
Graduation Fee.....	30 00

Fees for the Spring Session.

Matriculation (Ticket good for the following Winter).....	\$ 5 00
Recitations, Clinics, and Lectures.....	35 00
Dissecting (Ticket good for the following Winter).....	10 00

Students who have attended two full Winter courses of Lectures may be examined at the end of their second course upon Materia Medica, Physiology, Anatomy, and Chemistry, and, if successful, they will be examined at the end of their third course upon Practice of Medicine, Surgery, and Obstetrics only.

For the Annual Circular and Catalogue, giving regulations for graduation and other information, address

PROF. AUSTIN FLINT, JR.,

Secretary Bellevue Hospital Medical College.

Dr. J. Collis Browne's Chlorodyne

IS THE ORIGINAL AND ONLY GENUINE.

ADVICE TO INVALIDS.

If you wish to obtain quiet refreshing sleep, free from headache, relief from pain and anguish to calm and assuage the weary achings of protracted disease, invigorate the nervous media, and regulate the circulating systems of the body, you will provide yourself with a supply of that marvellous remedy discovered by DR. J. COLLIS BROWNE (late Medical Staff), to which he gave the name of

CHLORODYNE,

and which is admitted by the Profession to be the most wonderful and valuable remedy ever discovered.

CHLORODYNE is admitted by the Profession to be the most wonderful and valuable remedy ever discovered.

CHLORODYNE is the best remedy for Coughs, Consumption, Bronchitis, Asthma.

CHLORODYNE effectually checks and arrests those too often fatal diseases—Diphtheria, Fever, Croup, Ague.

CHLORODYNE acts like a charm in Diarrhoea, and is the only specific in Cholera and Dysentery.

CHLORODYNE effectually cuts short all attacks of Epilepsy, Hysteria, Palpitation, and Spasms.

CHLORODYNE is the only palliative in Neuralgia, Rheumatism, Gout, Cancer, Toothache, Meningitis, &c.

Extract from *Indian Economist*.

"We direct the attention of medical men to a fact observed some years since by ourselves, and corroborated by our subsequent experience, that Dr. J. Collis Browne's Chlorodyne is in many cases of Low Fever immensely superior to Quinine in curative power. We cannot persuade ourselves that the true value of Dr. J. Collis Browne's Chlorodyne is properly appraised in India. . . . It may be given with absolute safety even to a child three days old. Were medical men but to make a fair and exhaustive trial of it we are persuaded that it would work a revolution in the treatment of two-thirds of the diseases to which children are subject. Its curative power is simply amazing."

"Earl Russell communicated to the College of Physicians that he had received a despatch from Her Majesty's Consul at Manilla, to the effect that Cholera had been raging fearfully, and that the ONLY remedy of any service was CHLORODYNE."—See *Lancet*, Dec. 1, 1864.

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S., England.

Formerly Lecturer of Anatomy and Physiology at St. George's School of Medicine.

"I have no hesitation in stating, after a fair trial of Chlorodyne, that I have never met with any medicine so efficacious as an Anti-Spasmotic and Sedative. I have tried it in Consumption, Asthma, Diarrhoea, and other diseases, and am most perfectly satisfied with the results."

From Dr. THOMAS SANDIFORD, Passage West, Cork.

"I will thank you to send me a further supply of Chlorodyne. It was the most efficacious remedy I ever used, affording relief in violent attacks of Spasms within a minute after being taken. One patient in particular, who has suffered for years with periodical attacks of Spasms of a most painful nature, and unable to obtain relief from other remedies, such as opium, &c., finds nothing so prompt and efficacious as Chlorodyne."

From Dr. B. J. BOULTON & Co., Horncastle.

"We have made pretty extensive use of Chlorodyne in our practice lately, and look upon it as an excellent direct Sedative and Anti-Spasmotic. It seems to allay pain and irritation in whatever organ, and from whatever cause. It induces a feeling of comfort and quietude not obtainable by any other remedy, and seems to possess this great advantage over all other sedatives, that it leaves no unpleasant after effects."

From J. C. BAKER, Esq., M.D., Bideford.

"It is without doubt, the most valuable and certain Anodyne we have."

CAUTION.—BEWARE OF PIRACY AND IMITATIONS.

CAUTION.—The extraordinary medical reports on the efficacy of Chlorodyne render it of vital importance that the public should obtain the genuine, which bears the words "Dr. J. Collis Browne's Chlorodyne."

Vice-Chancellor Wood stated that Dr. J. COLLIS BROWNE was undoubtedly the Inventor of CHLORODYNE: that the whole story of the Defendant, FREEMAN, was deliberately untrue.

Lord Chancellor Selborne and Lord Justice James stated that the defendant had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.

Chemists throughout the land confirm this decision that Dr. J. C. BROWNE was the Inventor of CHLORODYNE.

Sold in Bottles at 1s 1½d., 2s 9d., 4s 6d., each. None genuine without the words "Dr. J. COLLIS BROWNE'S CHLORODYNE" on the Government Stamp. Overwhelming Medical Testimony accompanies each bottle.

SOLE MANUFACTURER—J T. DAVENPORT, 33 GREAT RUSSELL STREET, BLOOMSBURY, LONDON.

HENRY J. ROSE,

WHOLESALE AND RETAIL DRUGGIST—COR. QUEEN AND YONGE-STs.. TORONTO.

The following prices of a few of the leading requirements of the profession will serve as a guide to intending purchasers, subject to market fluctuations, quality being esteemed of the first importance. Tinctures, Syrups and Liquors are kept in 8 oz. bottles, and the price quoted includes the bottle. ~~For~~ Terms Cash less 5 per cent. discount. Corrected to Apl. 1st, 1877.

	oz.	lb.	8 oz. bot.	oz.	lb.	8 oz. bot.	oz.	lb.	8 oz. bot.
Acid, Carbolic.....	0 20			Iodine, resub.....	0 40		Rad. Rhei. pulv.....	lb.	2 00
" Sulph. Ar.....	0 07			Jalapin.....	1 75		Santonine.....	oz.	1 25
" Hydrocyan.....	0 23			Lin. Saponis.....	0 24	8 oz. bot.	Soda Bicarb.....	lb.	0 14
Ammon. Carb.....	0 25			Liq. Ammon.....	0 17		" Potass. Tart.....	"	0 32
Aether, Nit.....	0 22			" Arsenic.....	0 20		Spir. Camphor.....	8 oz. bot.	0 24
" Sulph.....	33			" Bismuth.....	0 40		" Ammon. Co.....	"	0 25
" Co.....	28			" Donovan.....	0 28		Syr. Aurant.....	"	0 20
Antim. Pot. Tart.....	0 08			" Opii Sed.....	1 30		" Codela.....	"	0 60
Argent Nit. fus.....	1 20			" Potass.....	0 17		" Ferri Iod.....	"	8 40
Balsam Copaib.....	0 55		8 oz. bot.	Mist. Ferri Co.....	0 20	8 oz. bot.	" Strych. Phos. Co.....	"	0 70
Bismuth, Car.....	0 20			Morph. Sul.....	4 00	oz.	" Hypophos.....	"	0 45
Cerri Oxalas.....	0 30			" Mur.....	4 00		" Phosph. Co.....	"	0 40
Chloral Hy rate.....	0 13			Ol. Crotonis.....	0 15		" Senega.....	"	0 38
Chlorodyne.....	0 15			" Jecoris Assell.....	0 25	lb.	" Scilla.....	"	0 20
Chloroform.....	1 20			" Olivæ Opt.....	0 30		Tinct. Aconit.....	"	0 24
Cinchon. Sul.....	0 60			Opium.....	0 65	oz.	" Arnica.....	"	0 24
Ergot, pulv.....	1 25			" Powd.....	0 75		" Calumb.....	"	0 29
Emp. Lytta.....	0 20			Pli. Aloes.....	0 30	gross.	" Camph. Co.....	"	0 20
Ext. Belladon.....	0 12			" " et Ferri.....	0 30		" Cardam. Co.....	"	0 24
" Colocynth Co.....	0 05			" " Myr.....	0 38		" Catechu.....	"	0 20
" Gentian.....	0 20			" Assafœtid.....	0 30		" Cinchon Co.....	"	0 20
" Hyosciam, Ang.....	0 20			" Cath. Co., U. S.....	0 45		" Colch. Sem.....	"	0 20
" Sarza Co., Ang.....	0 30			" Hydrarg., Mass.....	1 00	lb.	" Digital.....	"	0 30
" Nucis Vom.....	0 75			" Subchlor. Co.....	0 30	gross.	" Ergot.....	"	0 49
" Taraxacum.....	0 07			" Rhei. Co.....	0 35		" Ferri Perchlor.....	"	0 18
Fol. Buchu.....	0 50			" Podophyllin, Co.....	0 40		" Gentian Co.....	"	0 20
" Senna.....	0 30			Plumbi Acet.....	0 25	lb.	" Hyosciam.....	"	0 20
Gum, Aloes Soc.....	0 90			" Potass. Acet.....	0 60		" Iodine.....	"	0 45
" " pulv.....	1 10			" Bicarb.....	0 35		" Nucis Vom.....	"	0 24
" Acacia, pulv.....	0 60			" Bromid.....	0 85		" Opii.....	"	0 50
Glycerine, pure.....	0 30			" Iodid.....	5 00		" Rhei Co.....	"	0 30
Ferri, Am. Cit.....	0 12			Pulv. Creta Co.....	0 75		" Valer.....	"	0 20
" et Quin. Cit.....	0 65			" " C Opio.....	1 00		" Verat Vir.....	oz.	0 20
" Citro, phos.....	0 18			" Ipecac.....	2 60		Ung. Hyd. Nit.....	lb.	0 60
Ferrum Redact.....	0 15			" " Co.....	2 25		" Zinci.....	"	0 4
Hydrarg., Chlor.....	0 10			" Jalapa.....	1 50		Vin. Ipecac.....	8 oz. bot.	0 39
" C Creta.....	0 07			Quina Sul.....	3 90	oz.	" Antim.....	"	0 39

A full assortment of Trusses, Shoulder Braces, Supporters, &c., &c., at the lowest rates. Arrangements have been made for a constant supply of reliable Vaccine—Scabs, \$2; Half-Scabs, \$1. Enemas from 75c.

DR. MARTIN'S COW-POX VIRUS

Absolutely Pure Non-Humanized Vaccine Virus.

Obtained by the method of

TRUE ANIMAL VACCINATION,

Instituted by Prof. Depaul of Paris, in April, 1866, from the famous case of Spontaneous Cow-Pox at Beaugency, in France, and inaugurated in America in September, 1870, by Dr. Henry A. Martin, with virus and autograph instructions from the hand of Prof. Depaul. Our establishment is by far the largest and most perfect in the world.

LARGE IVORY "LANCET" POINTS, PACKAGES OF
 10\$2.00.
 5 1.00.

PRIMARY CRUSTS (SCABS), MOST CAREFULLY
 SELECTED.....\$5.00.

All Virus is fully warranted efficient. It will be packed to go with perfect safety by mail. Full directions for use accompany each package. Remittances must accompany order. Safe delivery of Virus insured.

DR. HENRY A. MARTIN & SON,

Boston Highlands, Mass.

ESTABLISHED 1836. NEW YORK.
 INTERNATIONAL EXHIBITION, PHIL., 1876.
 AWARD
 For "General Excellence in Manufacture."
H. PLANTEN & SON.
 224 William Street.
GELATINE CAPSULES.
 OF ALL KINDS. ALSO,
 Empty Capsules (5 Sizes).
 New Preparations added continually. Samples and Price-Lists sent on application.

The Canada Lancet,

A MONTHLY JOURNAL OF
 MEDICAL AND SURGICAL SCIENCE,
 CRITICISM AND NEWS.

The independent organ of the Profession, and the largest and most widely circulated Medical Journal in Canada.

Issued promptly on the 1st of each month.

Subscription \$3 per annum in advance. Single copies 30 cents, for Sale by
 WILLING & WILLIAMSON, TORONTO.
 Office at Dudley & Burns, Printers, Colborne Street
 Rear Canadian Bank of Commerce.

All Communications containing Remittances, Drafts or Post-Office Orders, to be addressed to J. FULTON, M.D., Manager, Toronto.

DR. DE JONGH'S

(KNIGHT OF THE LEGION OF HONOUR—FRANCE; KNIGHT OF THE ORDER OF LEOPOLD—BELGIUM.)

LIGHT-BROWN COD LIVER OIL.

SELECT MEDICAL OPINIONS.

Sir HENRY MARSH, Bart., M.D., T.C.D.,

Physician in Ordinary to the Queen in Ireland.

"I have frequently prescribed Dr. DE JONGH'S Light-Brown Cod Liver Oil. I consider it to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

Dr. JONATHAN PEREIRA, F.R.S.,

Author of "The Elements of Materia Medica and Therapeutics."

"It was fitting that the author of the best analysis and investigations into the properties of Cod Liver Oil should himself be the purveyor of this important medicine. I know that no one can be better, and few so well, acquainted with the physical and chemical properties of this medicine as yourself, whom I regard as the highest authority on the subject. The Oil is of the very finest quality, whether considered with reference to its colour, flavour, or chemical properties; and I am satisfied that for medicinal purposes no finer Oil can be procured."

Dr. EDWARD SMITH, F.R.S.,

Medical Officer to the Poor-Law Board of Great Britain.

"We think it a great advantage that there is one kind of Cod Liver Oil which is universally admitted to be genuine—the Light-Brown Oil supplied by Dr. DE JONGH. It has long been our practice, when prescribing the Oil, to recommend this kind, since, amidst so much variety and uncertainty, we have confidence in its genuineness."

Dr. BARLOW,

Senior Physician to Guy's Hospital.

"I have frequently recommended persons consulting me to make use of Dr. DE JONGH'S Cod Liver Oil. I have been well satisfied with its effects, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. PROSSER JAMES,

Lecturer on Materia Medica and Therapeutics at the London Hospital.

"I have always recognized your treatise on Cod Liver Oil as the best on the subject, and adopted its conclusion as to the superiority of the Light-Brown over the Pale Oil. I have the less hesitation in expressing myself in this sense since I am only endorsing the opinion sent to you more than twenty years ago by Dr. Pereira, my illustrious predecessor in the chair of Materia Medica at the London Hospital."

Sir. G. DUNCAN GIBB, Bart., M.D., LL.D.,

Physician and Lecturer on Forensic Medicine, Westminster Hospital.

"The experience of many years has abundantly proved the truth of every word said in favor of Dr. DE JONGH'S Light-Brown Cod Liver Oil by many of our first Physicians and Chemists, thus stamping him as a high authority and a true Chemist whose investigations have remained unquestioned."

Dr. LETHEBY,

Medical Officer of Health and Chief Analyst to the City of London.

"In all cases I have found Dr. DE JONGH'S Light-Brown Cod Liver Oil possessing the same set of properties, among which the presence of choleic compounds, and of iodine in a state of organic combination, are the most remarkable. It is, I believe, universally acknowledged that this Oil has great therapeutic power; and, from my investigations, I have no doubt of its being a pure and unadulterated article."

Dr. LANKESTER, F.R.S.,

Coroner for Central Middlesex.

"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. DE JONGH. He has also written the best Medical Treatise on the Oil, with which I am acquainted. Hence I deem the Cod Liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

Dr. BANKS,

King's Professor of the Practice of Physic at the University of Dublin.

"I have in the course of my practice extensively employed Dr. DE JONGH'S Light-Brown Cod Liver Oil, and I have no hesitation in stating that I consider it the best of all the specimens of Oil which have ever come under my notice. The fact of so able and accurate an observer as Dr. DE JONGH subjecting the Oil to careful analysis previous to its exposure for sale, is a sufficient guarantee of its purity and excellence."

Dr. EDGAR SHEPPARD,

Professor of Psychological Medicine, King's College London.

"Dr. Sheppard has made extensive use of Dr. DE JONGH'S Light-Brown Cod Liver Oil, and has great pleasure in testifying to its superiority over every other preparation to be met with in this country. It has the rare excellence of being well borne and assimilated by stomachs which reject the ordinary Oils."

DR. DE JONGH'S LIGHT-BROWN COD LIVER OIL.

Is supplied ONLY in IMPERIAL Half-Pints, Pints and Quarts, which are sealed with BETTS' Patent Metallic Capsules impressed on the top with DR. DE JONGH'S Stamp, and on the side with his Signature, and which are labelled under the Pink Wrapper with his Stamp and Signature, and the signature of his Sole Consignees.

WITHOUT THESE MARKS NONE CAN POSSIBLY BE GENUINE.

Sold by all Respectable Chemists and Druggists throughout the World.

SOLE CONSIGNEES

ANSAR, HARFORD & CO., 77, STRAND, LONDON.