

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- Coloured covers /
Couverture de couleur
- 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 Maritime Medical News,

(HALIFAX, NOVA SCOTIA.)

A MONTHLY JOURNAL OF
MEDICINE and SURGERY.

VOL. VII.—No. 5

MAY., 1895.

Subscription
\$1 per annum.

The Success of Peptogenic Milk Powder

In the feeding of sick babies has led many mothers to infer that the Peptogenic Milk Powder is especially designed for sick babies.

On the contrary, however, the Peptogenic Milk Powder is peculiarly designed for the preparation of the exclusive food of an infant during the entire nursing period. The milk prepared with the Peptogenic Milk Powder has the digestibility of mothers' milk and is thus obviously the proper food for the healthy infant and the most robust infant.

It is a pity to deprive a good, healthy infant of the benefits of such a food, by relying upon it only for the rescue of infants of naturally feeble digestion, or infants who have been made ill by the use of unsuitable foods.

Fairchild's Peptogenic Powder is the one means of compensating for the deprivation of mothers' milk.

FAIRCHILD BRO'S & FOSTER,
NEW YORK.

CONTENTS.

ORIGINAL COMMUNICATIONS :	Page.
Case of Crossed Hemianalgesia. By M. A. B. Smith, M. D.	95
The Reaction of the Urine. By A. Halliday, M. D.	98
EDITORIAL :	
Inter-Provincial Reciprocity of Medical Registration	111
DR. FARRELL'S ADDRESS TO THE GRADUATES OF DALHOUSIE UNIVERSITY	113
BOOK REVIEWS	114
BOOKS RECEIVED	115
SELECTIONS :	
Prof. A. C. Bernay—The American Lancet—The Buffalo Medical and Surgical Journal—Map of the World	110
Meeting Maritime Medical Association—Articles upon special methods in staining in microscopy—Meeting American Medical Publishers Association—Indigestion	115
Pass List Medical Faculty	116

STEARNS' Wine of Cod Liver Oil

WITH PEPTONATE OF IRON.

HAVE YOU TRIED IT
IN CASES OF
LA GRIPPE?

IT is a valuable tonic reconstructor, palatable and delicious, and wherever employed in cases of tardy convalescence from this tedious and baffling complaint it has proven of genuine value. It *promotes the appetite*, relieves the *hopeless weary feeling* and brings back *vigor, life and color* to the despondent patient. If you desire further information regarding its range of usefulness

SEND FOR
LITERATURE and
CLINICAL REPORTS.

FREDERICK STEARNS & CO.,
WINDSOR, ONT.

The Physician of To-Day

has escaped a great many popular prejudices—his preceptors had to fight them.

Cod Liver Oil was one of them—but there was some reason back of that prejudice. Plain cod liver oil could never have become popular—patients requiring it could not, on account of its taste and indigestibility, take it in this plain form.

The modern idea of it—SCOTT'S EMULSION—together with the intelligent, experimental tests of progressive physicians, have resulted in vastly multiplying the uses of cod liver oil.

SCOTT'S EMULSION of Cod Liver Oil with Hypophosphites is employed with success where plain oil is out of the question.

Prepared by **SCOTT & BOWNE**, Chemists,

Scott & Bowne Building, New York.

SAMPLE of Scott's Emulsion delivered free to the address of any physician in regular practice.

FORMULA: 50% of finest Norwegian Cod Liver Oil; 6 grs. Hypophosphite of Lime; 3 grs. Hypophosphite of Soda to the fluid oz.

OF THE MANY PREPARATIONS

of Codliver Oil now offered to the Physician,

PUTTNER'S EMULSION,

introduced twenty years ago,

IS UNDOUBTEDLY THE BEST

maintaining its superiority over all competitors,

RICH IN OIL.

partially predigested by pancreatine,

PALATABLE AND ACCEPTABLE

even to delicate stomachs,

IN LARGE BOTTLES

making it the cheapest to the patient,

ALWAYS FRESH,

being made daily in Halifax,

IT DESERVES THE PREFERENCE

of the intelligent prescriber.

Established**LEITH HOUSE.**1818.**KELLEY & GLASSEY,**

(SUCCESSORS A. McLEOD & SONS.)

Wine and Spirit Merchants.

IMPORTERS OF ALES, WINES AND LIQUORS.

Among which is a very superior assortment of

Port and Sherry Wines, Champagnes, Bass's Ales, Guinness's Stout, Brandies,
Whiskies, Jamaica Rum, Holland Gin, suitable for medicinal purposes; also.

Sacramental Wine, and pure Spirit (65%) for Druggists.

WHOLESALE AND RETAIL.

Please mention the MARITIME MEDICAL NEWS.

McGILL UNIVERSITY, Montreal.

Faculty of Medicine. Sixty-First Session, 1893-94.

FACULTY.

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

EMERITUS PROFESSORS.

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

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

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

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

WILLIAM GARDNER, M. D., Professor of Gynæcology.

F. J. SHEPHERD, M. D., M. R. C. S. Eng., Professor of Anatomy and Librarian of the Faculty.

F. RULLER, M. D., M. R. C. S., Eng., Professor of Ophthalmology and Otolary.

JAMES STEWART, M. D., Prof. of Medicine and Clinical Medicine.

GEORGE WILKINS, M. D., M. R. C. S., Professor of Medical Jurisprudence and Lecturer on Histology.

D. P. FENHALLOW, R. Sc., Professor of Botany.

T. WESLEY MILLS, M. A., M. D., L. R. C. P., London, Professor of Physiology.

JAS. C. CAMERON, M. D., M. R. C. P. I., Professor of Midwifery and Diseases of Infancy.

R. F. RUTTAN, B. A., M. D., Assistant Professor of Chemistry, and Registrar of the Faculty.

JAS. BELL, M. D., Assistant Prof. of Surgery and Clinical Surgery.

J. G. ADAMI, M. A., M. D., Cantab. Prof. of Pathology.

G. W. MAJOR, B. A., M. D., Prof. of Laryngology.

LECTURERS.

T. JOHNSON ALLOWAY, M. D., Lecturer in Gynaecology.

F. G. FINLEY, M. B., (Lon.), M. D., (McGill), Lecturer in Medicine and Clinical Medicine.

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

HENRY A. LAFLUR, B. A., M. D., Lecturer in Medicine and Clinical Medicine.

GEO. ARMSTRONG, M. D., Lecturer in Surgery and Clinical Surgery.

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

DEMONSTRATORS & ASSISTANT DEMONSTRATORS.

Wm. R. SUTHERLAND, M. D., Demonstrator in Surgery.
WYATT JOHNSTON, M. D., Demonstrator in Bacteriology.

JOHN M. ELDER, B. A., M. D., Assistant Demonstrator in Anatomy.

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

D. J. EVANS, M. D., Assistant Demonstrator in Obstetrics.

N. D. GUNN, M. D., Assistant Demonstrator in Histology.

W. S. MORROW, M. D., Assistant Demonstrator in Physiology.

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

C. F. MARTIN, B. A., M. D., Assistant Demonstrator in Bacteriology.

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

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

Founded in 1824, and organized as a Faculty of McGill University in 1829, this School has enjoyed, in an unusual degree, the confidence of the profession throughout Canada and the neighbouring States.

One of the distinctive features in the teaching of this School, and the one to which its prosperity is largely due, is the prominence given to Clinical Instruction. Based on the Edinburgh model, it is chiefly Red-side, and the student personally investigates the cases under the supervision of special Professors of Clinical Medicine and Surgery.

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

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

Recently extensive additions were made to the building and the old one remodelled; so that besides the Laboratories, there are two large lecture-rooms capable of seating 300 students each, also a demonstrating room for a smaller number. There is also a Library of over 15,000 volumes, a museum, as well as reading-rooms for the students.

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

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

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

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

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

Elixir Sumbul



THIS ELIXIR is Purely a Vegetable Compound, made upon scientific principles. A Stimulative Nerve Tonic. It imparts Vigor to the System, indicated in all diseases resulting from a disordered state of the Stomach and Liver. Purifies the Blood.

A GREAT MORNING TONIC.

DOSE.—From half to one wine glass full three or four times a day.

For further information apply to

SUMBUL BITTER CO.,

243 HOLLIS STREET, HALIFAX, N. S.

SAFETY—CERTAINTY—CELERITY
 MARK THE EXHIBITION OF THE AMERICAN
 ANALGESIC—ANTIPYRETIC—ANODYNE
 ANTIKAMNIA (FINELY POWDERED)
 ANTIKAMNIA TABLETS
 ANTIKAMNIA & CODEINE TABLETS (4½ GR. ANTIKAMNIA
 ¼ GR. SULPH. CODEINE)
 ANTIKAMNIA & QUININE TABLETS (2 GR. ANTIKAMNIA
 1 GR. QUININE)
 ANTIKAMNIA & SALOL TABLETS (2½ GR. ANTIKAMNIA
 2½ GR. SALOL.....)
 ANTIKAMNIA QUININE & SALOL TABLETS (2 GR. ANTIKAMNIA
 1 GR. QUININE 1 GR. SALOL)

“Surgery 200 Years Ago” (Illustrated), also samples and literature mailed to physicians only, on receipt of professional card.

THE ANTIKAMNIA CHEMICAL COMPANY, St. Louis, Mo.

The Maritime Medical News.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. VII.

HALIFAX, N. S., MAY, 1895.

No. 5.

Original Communications.

CASE OF CROSSED HEMIANALGESIA.

By M. A. B. SMITH, M.D., Dartmouth, N. S.

(Read before Nova Scotia Branch British Medical Association.)

L. B., a lawyer aged 43 years. His family history is good. His father is living at the age of 82 years; his mother died aged 80 years. Three brothers are living and healthy; one died of typhoid. Three sisters, two healthy and one delicate, are living; one died in childhood.

The patient has always been temperate in his habits. There is no history of specific trouble. He has suffered from indigestion, but not within the last few years. He has always been fairly healthy, but not robust.

In appearance the patient is of medium size, thin, and has iron-gray hair with a tendency to baldness.

The patient, on the evening before his present illness was working late in his office. It was on the 5th of November. There was a fire burning, but the office door was open, and on his return home he complained of feeling chilly. He was feeling perfectly well, however, on Nov. 6th, the morning of the attack. It began suddenly while he was seated at breakfast. He was just finishing his meal and was about to take another cup of tea, when he

experienced what he describes as a "shooting sensation" on the right side of his face, with great pain and numbness over that side of the face: he also felt dizziness. He immediately got onto a sofa. He remained there five minutes. He states he had no confusion of thought, though he does not appear to remember all that occurred as described by his attendant. He found on rising from the sofa to get to bed that it was very difficult for him to walk. He felt like a drunken man. He had a tendency to sink down on the affected side. He was helped up stairs to bed. He then felt a great oppression or difficulty in breathing over the lower and anterior part of the chest. He was coughing a dry cough. He states:—"I remember I had a good deal of difficulty in breathing." He felt very dizzy, as if things were whirling round. Just after he got to bed the nurse gave him a drink of hot ginger, which he vomited. While giving him this the nurse noticed he had a tendency to get across the bed with his head to the right side. He would say "Oh my! where am I?" While drinking the tea he found that he had difficulty in swallowing. This difficulty continued, with gradual improvement, for three or four weeks. The ginger tea was immediately vomited, and for a few hours vomiting was persistent. It occurred occasionally after this for two or three days.

I arrived two hours after the patient had gone to bed. At that time the pain in the right side of the face was still severe. There was also pain and numbness in the right shoulder, arm, hand and fingers. The sensation on the right side of the face was so altered that I could press the point of a needle into the skin for a considerable distance without the patient feeling any pain. The anaesthesia was most marked over the cheek bone and side of the nose. He was aware that something was touching him but could not say what. The muscle sense was impaired, the analgesia was almost as marked in the right arm and hand. There was no paralysis. The right eye was congested and the pupils were unequal; either the right pupil was contracted or the left dilated. Light was unpleasant to the patient and he would close the right eye or turn away from it. I prescribed a powder of calomel and soda which operated twice during the night following. Evening temperature $99\frac{1}{2}^{\circ}$.

Nov. 7th. Pulse 56, Temperature $98\frac{1}{2}^{\circ}$, Respirations 10, morning.

Nov. 9th. Pulse, 84, Temperature $98\frac{1}{2}^{\circ}$, Respirations 12.

Nov. 10th. Pulse 76, Temperature $99\frac{1}{2}^{\circ}$, Respirations 14, morning. The respirations continued 12 or 14, usually, for a month. About this time the patient began to complain of numbness in the left hand while the right was improving.

Two days later the numbness was manifest in the left leg and it was apparent that there was analgesia over all the left half of the body. The point of a needle thrust through the skin on this side gave no pain. The analgesia continued as marked as before on the right side of the face. The other symptoms continued the same as already indicated.

Nov. 22nd. The patient left his bed and was dressed for the first time to-day. He sat in the parlor for some hours. On attempting to walk across the room he staggered very much,

toward the right side. The knee jerks were examined and found to be slightly exaggerated. There was still some photophobia.

Dec. 6th. Examination of the eyes by Dr. E. A. Kirkpatrick: "R. V. $\frac{2}{3}$, L. V. $\frac{2}{3}$. Emmetropia. *Left eye* perfectly normal. *Right eye*, slight ptosis of upper lid. Blood vessels in upper lid more prominent than those of the left upper lid. Nystagmus of a rotatory character especially when looking up and in. No actual paralysis of any of the oculo-motor muscles, but an evident weakness of all the muscles supplied by the third nerve. Instead, however, of a dilated pupil I find a slightly contracted pupil, but one that responds quite readily to light. *Accommodation* perfect. No hemianopia. No optic neuritis or any other disease of fundus. Slight photophobia. Strength of muscles not tested for."

At this time the anaesthesia on the right side of the face and the left side of the body still existed, though improvement was evident. The patient cannot distinguish a tumbler of hot water from one of cold on the left leg. He can walk about the room but with some uncertainty. Much exertion causes dizziness. The urine has a specific gravity of 1022 and contains sugar.

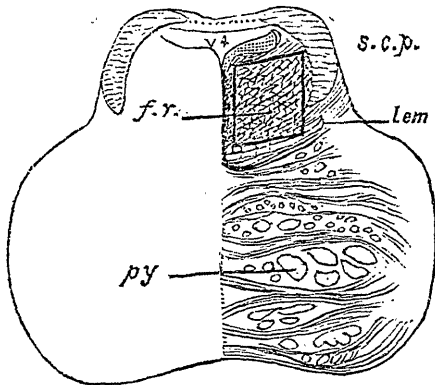
Jan. 6th. Examination with Dr. D. A. Campbell. The patient has a barely noticeable hesitancy in walking about his room. There are still areas of numbness on the left side. The patient says if he wishes to learn whether there is heat in the register he has to use his right hand. Dr. Campbell agrees with me that the heart appears to be healthy, and that there also appears to be a tendency towards atheroma of the arteries, though this is not certain.

I reported the above history to M. Allen Starr of New York, and received a full reply, in which he stated that the case had greatly interested him, and that in some particulars it resembled three cases reported by him.

The latter of the three to which he referred me, published in the *New York Medical Record*, Feb 11th, 1893, is very nearly identical. Dr. Starr went on to say:—"My diagnosis is:

1. Hemorrhage—from sudden onset—from evident symptoms, (1) of increased pressure viz: painful, slow and difficult respiration, glycosuria, vomiting; and (2) of irritation of the brain viz: forced posture, hypersensitiveness to light—and from gradual subsidence of local symptoms. I think embolism or thrombosis would not have caused all these symptoms of irritation and increased pressure, and the symptoms would not have subsided.

2. Location must be in the right side of the pons in its upper (cephalad) third, and in its dorsal superior portion. It involves the formatio reticularis and



Transverse section through upper part of pons. The anterior or ventral part below in the diagram. $\frac{1}{4}$ fourth ventricle; *s. c. p.* superior cerebellar peduncle; *f. r.* formatio reticularis; *lem*, lemniscus or fillet; *py.* pyramids motor. Square indicates lesion.

the fillet or lemniscus, as both tactile and muscle sense are affected and does not affect the pyramidal tracts as there is no paralysis. The forced position in bed—the staggering gait—now both show that the cerebellar peduncle which passes into the pons was invaded—at first pressed upon and irritated—later slightly impaired in function. The III nerve paresis shows that the

lesion extended high enough to involve the III nerve nuclei controlling motion of eyeball, but not high enough to reach the pupil centre as the pupil is contracted—not dilated. It would be interesting to test the IV nerve, as this should be affected, as there is rotatory nystagmus. The lesion did not extend low enough down, i. e., caudad, to invade the VII nerve nucleus, as there is no facial paralysis. Hence it is easy to locate it accurately.

The glycosuria is due to increased intra-ponine pressure—not to X nerve lesion. The difficulty in swallowing is due to the same cause, unless a small part of the clot has penetrated down and reached the XI nerve nucleus—though this is unlikely as VII and VIII have escaped."

In the report of the case in the *Medical Record* of Feb. 1893, which, as I have said was similar to the above, though without any history of involvement of the third nerve, Dr. Starr estimated the size of the lesion as not greater than one-quarter of an inch in diameter. At that time he stated he had reached the following conclusions:

"1. If in any case anaesthesia of one side of the face occurs (not due to neuritis of the trigeminus or to cortical lesion) the lesion lies in the medulla or pons, in the outer third of the formatio reticularis. Its position in this part is to be determined by the other symptoms present; for if it is situated high up (cephalad) in the pons it will be on the side opposite the anaesthesia, and if it is situated low down (caudad) in the pons or in the medulla it will be on the same side as the anaesthesia.

2. If in any case anaesthesia of the limbs occurs (not due to cerebral lesion) the lesion lies in the medulla or pons, in the *inner* two-thirds of the formatio reticularis, and upon the side opposite to the anaesthesia; or in the spinal cord.

3. If one side of the face and the limbs of the opposite side are anes-

thetic the lesion affects the entire lateral extent of formatio reticularis, and lies in the medulla or pons, below the point of union of the ascending and descending root of the fifth nerve.

4. If the face and limbs of the same side are anæsthetic, the lesion lies in the brain at a point higher than the junction of the ascending and descending roots of the fifth nerve in the pons."

One point in the present case appears to differ from the corresponding statement in these conclusions, for while the lesion is placed high up in the upper (cephalad) third of the pons it is stated to be on the *same* side as the anæsthesia of the face, namely the right side.

In explanation of the fact that the anæsthesia, which appeared in the right upper extremity at the commencement of the seizure, partly disappeared from this region in a few days, while at the end of the same period it was manifested on all the left side of the body and became permanent there, Dr. Starr says:—"Pontine hemorrhage always causes irregular early symptoms due to pressure and finally permanent symptoms due to destruction of tissue."

THE REACTION OF THE URINE.

By A. HALLIDAY, M. D., Stewiacke.

Read before Nova Scotia Branch British Medical Association, March 21st, 1895.

Opinions of those who have studied this question are uniform as regards the reaction of the urine for 24 hours when mixed, but when we come to the reactions of the several different quantities going to make up the whole for the 24 hours there are few questions on which there seems to be greater diversity of opinion.

And yet this question is of considerable importance physiologically, and besides we find in the examination papers of all large insurance companies

questions on this point and considering that the applicant may come to you before or after dinner, after great exertion or great inertia it seems to me that there is no great utility in merely stating that a urine is acid, neutral or even alkaline, thus in reality enunciating only one proposition of a syllogism from which it is impossible to draw a conclusion.

I will now give extracts from various authors showing the great differences of opinion and also the different explanations they give for the results, and then I will give some observations I have taken of my own urine and the urine of others and will point out where they agree and disagree.

The following occurs in Dujardin-Beaumont's work on diseases of the kidney:

"Urine in the normal state is always acid and if it becomes neutral it is only as Fustier has shown before a meal.

Bence Jones has claimed that there exists a compensatory equilibrium between the acidity of the urine and that of the gastric juice. According to him the urine is at its minimum of acidity at the time when the stomach is at its maximum of acidity.

Roberts has maintained that the urine becomes alkaline 2 or 3 hours after a meal.

Byasson affirms that the urine is least acid after the first meal while the most acid urine is that of the night.

Neubauer and Vogel have adopted Byasson's view. Georges view also holds that the alkaline reaction appears 2 hours after the meal.

Delavand affirms on the contrary that the urine is acid during the entire day except in the morning when it is generally neutral or alkaline.

Finally Fustier who has made an important study of the reaction of urine has shown that urine is always more acid after meals and that its maximum acidity is about 4 hours after dinner; urine on the contrary is

always neutral or alkaline about 8 or 9 o'clock in the morning or before the ingestion of any food."

Tyson in his book says: " * * * * * after a meal the urine may become neutral or even alkaline. The cause of this change in the reaction is still disputed. Roberts believes that it is due to a mixture with the blood of the elements of food which are largely alkaline and that the resulting increased alkalinity affects the action of the urine secreted."

Bence Jones contended that it is the demand made on the blood for the elements of the acid gastric juice which thus affects the reaction of the urine secreted during digestion.

While neither explanation is altogether satisfactory the former seems more likely to be correct."

The following is from Vierordt's Medical Diagnosis:

"But in the 24 hours the reaction varies considerably so as to be alkaline and yet physiological.

"The variations proceed in such a way that after every meal consisting of a mixed diet the acidity declines until after about 2 hours it becomes alkaline, but this quickly passes so as to give place again to an acid reaction. These variations have been referred by many to the loss by the body of acids and alkalies in stomach and intestinal digestion. Hence it is assumed that the separation of HCl in the stomach increases the alkaline-ness of the blood and hence the urine becomes less acid or alkaline.

"But according to recent investigations by Noorden this increased alkalinity of the blood does not exist. By a graphic representation of the reaction of the urine during 24 hours we obtained the so-called "acid curve." This with some healthy persons and under like conditions (as to time and quality of food) is tolerably constant but with other healthy persons it varies considerably."

Purdy in his recent publication on the urine states as follows:

"Normal mixed urine is always acid. The acidity is due to acid sodium phosphate. . . . The degree of acidity of the urine varies at different times of the day especially with regard to food. Soon after a meal the acidity begins to diminish and in from 3 to 4 hours the alkaline tide reaches its height. . . .

The urine is rendered alkaline by the administration of alkaline carbonates or the salts of vegetable acids also though to a less extent by the following circumstances.

- (1) Soon after a full meal.
- (2) After discharge of gastric juice in abnormal ways.
- (3) After hot baths and free perspiration.
- (4) Upon a vegetable diet."

More quotations of a similar nature might be given but they express more or less some one or other of the above views.

I will now proceed to give you the results of my own observations. During the first 2 days of observation I had not obtained all the necessary apparatus (burette) and consequently the results are more general.

The first day of observation I took ordinary diet and on the second exclusively milk diet. I kept a correct record of the articles of diet also the Sp. Gr. color, &c. of the urine, but consider these either irrelevant or unnecessary to this particular part of the subject and so have not given them in the sheets which I will now pass round.

On December 16th, the first day observed I had owing to want of apparatus as before stated to judge of the degree of acidity by the eye, that is whether the litmus was more or less deeply stained.

Before breakfast the urine was acid, while an hour after breakfast it was still acid but less so. Two hours afterwards it was neutral and continued so till $3\frac{1}{2}$ hours after dinner

when it was slightly acid. From this onward it was acid during afternoon, evening and night.

December 17th, on milk diet the following results were observed :

Before breakfast very acid, one hour after also acid, \bar{v} ii. requiring 20 m. KHO. for neutralisation, 2 hours afterwards also acid but in 3 hours neutral and continued so till 3 hours after dinner when it became slightly acid. The reaction continued the same during remainder of the day and night.

December 26. Before breakfast the urine was highly acid, but this greatly diminished within $1\frac{1}{2}$ hours after breakfast. On this day my meals were very irregular owing to professional engagements. At 11 o'clock I had a cup of tea and bread, at 1.30 the urine was neutral. At 2 o'clock I had more tea and bread while at 3 the urine was acid 100 c. c. requiring 2 c. c. NaHO. sol. to neutralize. Notice about this that under the same existing circumstances as regards meals occupation (driving) the urine changed its character; i. e. was acid, became neutral and again acid. The acidity steadily increased during the remainder of the day. At 6 o'clock immediately before tea it was acid 100 c. c. urine requiring 5c.c. NaHO. sol. for neutralization while 2 hours after tea (which was the heaviest meal of that day and included meat &c.) 100 c. c. required, 18 c.c. NaHO. solution and 4 hours afterwards 100 c.c. required 28 c.c. NaHO. During night the acidity declined 100 c.c. only requiring 16 c.c. NaHO. solution for neutralization.

December 27. Urine before breakfast was exceedingly acid, 2 hours afterwards still very acid (100=20) but in another hour and 20 minutes this rapidly declined just before dinner $1\frac{3}{4}$ hours after dinner it was neutral while 4 hours after the acidity was again on the increase. Notice that while $3\frac{3}{4}$ hours after breakfast the acidity had greatly decreased, 4 hours

(nearly the same time) the acidity was on the increase. This acidity increased up till the following morning.

December 28. Urine again very acid before breakfast and also 2 hours afterwards, $2\frac{3}{4}$ hours afterwards marked decrease, $\frac{3}{4}$ of hour after dinner neutral, but in $3\frac{3}{4}$ it was again increasing in acidity and in $4\frac{3}{4}$ hours markedly so, on this day it fell after tea but increased towards midnight although during the night it was only slightly so (100=6.6) less than at 12 o'clock.

December 29. Before breakfast very acid, $2\frac{1}{2}$ hours afterwards still so, one hour after dinner slightly acid, 2 hours after almost neutral 100 c.c. requiring 0.5 c.c. NaHO. sol. Three hours after dinner acidity increased quite a little. This increase steadily kept going on till 11 o'clock. The urine during the night (1 a. m.) not nearly so acid (100 c.c.=8 c.c. NaHO).

December 30. Sunday, on this day by abstaining from breakfast till a late hour, 12 o'clock, I tried to find how the reaction would be influenced by the change. At 9 a. m. urine was highly acid (100=24 NaH.O.) at 11.30 still before breakfast still more so (100=30) one hour after breakfast very acid while 3 hours afterwards it was neutral and continued so for 5 hours. After tea it became a little acid and at 12 o'clock was pretty acid 100 c.c. requiring 14 c.c. NaHO. solution. At 1 o'clock in morning it was very acid (100=32) and at 7 in the morning there was quite a decline of acidity which however obtained again before 9 o'clock (100 c.c.=32 NaHO.)

December 31. Before breakfast very acid, slight decline towards mid day and a great decline in 1 hour, while 1 hour after dinner it again increased but 2 and 3 hours after dinner it was neutral. 2 hours after tea it was slightly acid, $4\frac{1}{2}$ and $5\frac{1}{2}$ after neutral, and in another hour and half (after tea and cake) it was acid; also



AS A FOOD AND STIMULANT IN WASTING DISEASES

— AND —

IN THE LATER STAGES OF CONSUMPTION,

Wyeth's Liquid Malt Extract

IS PARTICULARLY USEFUL.

It has that liveliness and freshness of taste, which continues it grateful to the feelings of the patient, so that it does not pall on the appetite, and is ever taken with a sense of satisfaction.

AS AN AID TO DIGESTION.

"Dr. C. of Ottawa writes, it is an excellent assistant to digestion and an nutritive tonic."

"Dr. D of Chatham writes, it is a most valuable aid and stimulant to the important digestive processes."

FOR MOTHERS NURSING PHYSICIANS WILL FIND

WYETH'S LIQUID MALT EXTRACT

WILL GREATLY HELP THEM.

The large amount of nutritious matter renders it the most desirable preparation for Nursing Women. In the usual dose of a wine-glassful three or four times daily, it **EXCITES A COPIOUS FLOW OF MILK**, and supplies strength to meet the great drain upon the system experienced during lactation, nourishing the infant and sustaining the mother at the same time.

Sold everywhere 40c. per bottle, \$4.00 per dozen.

25 Years in Evidence.

DEAR SIR:

Some twenty-five years since we introduced largely to the Medical Profession a combination, which we called "**Beef, Wine and Iron,**" giving the exact ingredients and making no claim of proprietorship. It has been very freely prescribed with most satisfactory results. Our sales have been very extensive amounting to many million bottles, besides a large quantity in bulk for dispensing in prescriptions. The claims we advanced to its value as a **Nutrient, Stimulant and Tonic**, have been fully verified, and its advantages have been highly appreciated by thousands of the leading practitioners all over the world. To a great degree, this has been due to the intelligent preparation of the **Beef Juice**, which is combined with the **Wine and Iron**. We maintain, that, to manufacture it so as to contain the nutrient material in a small bulk, expensive apparatus is essential, in order to secure express in and evaporation at a low temperature. This can only be provided to advantage, if the manufacture is to be conducted on a very large scale. We import the Sherry Wine, hundreds of casks at a time. We are receiving from the best Beef butchers, supplies of the most desirable Beef, free from fat or gelatin. We have no hesitation in stating that as a Tonic Stimulant and Roborant, **Wyeth's Beef Iron and Wine** had proven more uniformly beneficial than any combination we have ever known.

IT IS A VALUABLE RESTORATIVE

IN CONVALESCENCE.

As a nutritive tonic it would be indicated in the treatment of Impaired Nutrition, Impoverishment of the Blood, and in all the various forms of General Debility.

Prompt results will follow its use for Pallor, Palpitation of the Heart, and cases of Sudden Exhaustion, arising either from acute or chronic diseases. Doctors, and members of other professions, find it very effectual in restoring strength and tone to the system after exhaustion produced by over mental exercise.

AN IMPORTANT POSTSCRIPT.



"Wyeth's Beef Iron and Wine" has made a great reputation because it contains what it claims.

In each tablespoonful of this preparation there is the essence of one ounce of Beef and two grains of Iron, in solution in Sherry Wine. It is therefore a refreshing stimulant, the effect of which is not merely to quicken the circulation and impart a temporary benefit, but also to supply actual strength.

Physicians and patients have been much disappointed in the benefit anticipated, and often ill effects have been experienced from the use of the many imitations claiming to be the same or as good as Wyeth's. In purchasing or prescribing please ask for "Wyeth's" and do not be persuaded to take any other.

JOHN WYETH & BROS., DAVIS & LAWRENCE CO., Ltd., Mont'l.
Manufacturing Chemists, Philadelphia. *General Agents for Dominion.*

P. S.—A sample bottle will be mailed you free of charge if you will write the D. & L. Co.

at 12 o'clock. At 3 a. m. the acidity was not so great as at 12 p. m.

January 1. Before breakfast very acid, $3\frac{1}{4}$ after less so and 1 hour after dinner still declining. 2 hours after dinner neutral and 4 hours afterwards acid which continued till 11 o'clock when it was very highly acid, except that at $2\frac{1}{2}$ hours after tea it was a little less and it is to be noted that 10 o'clock, on hour before great acidity I took milk &c. At 1 30 it was not quite so acid, before breakfast next morning it was still very acid.

The only other observations of my own urine in this connection were taken February 10th, from 8 o'clock evening till 3 a. m. every hour except 2 o'clock. This was taken in order to find out whether there was a period of maximum or minimum acidity during the night.

[See table.]

On reviewing those facts we see that there is considerable want of uniformity on the different days and for the same reason it is very difficult to draw hard and fast conclusions, one fact is pre-eminent and it is this that the urine is always at its maximum of acidity in the morning before breakfast and during part of the forenoon. And I think we may be permitted to say that generally there is a more or less gradual decline of acidity till the minimum is reached about an hour or so after dinner, when the urine is neutral. But in nearly all the cases towards 4 or 5 o'clock in the afternoon there is a gradual rise of acidity and with more or less slight variations to a maximum about midnight.

As will be seen more distinctly on Sunday December 30th, the first meal of the day is that which has most influence for in 3 hours the urine becomes neutral. Of course on the other days it usually reaches neutrality about 1 or 2 o'clock that is—after dinner but I am not so sure that dinner has a great effect because there is a

gradual decline from breakfast onward and while there is neutrality from 3 to 5 hours after breakfast even granting that dinner has been taken still if we look at the results of the afternoon they do not give nearly so pronounced a verdict in favor of the influence of the mid-day meal for on nearly all the 9 days of observation, there is a return to acidity in periods varying from $\frac{3}{4}$ to 4 hours after this meal.

As regards tea which was usually taken from 5 to 6 o'clock while the influence is felt it is speaking generally not nearly so marked and in some instances not marked at all, even when I arranged to eat articles which might affect it—e. g. Dec. 26. Took tea at 6 o'clock and the principal article of this meal was intentionally meat. Just before tea 100 c. c. were neutralized by 5 c. c. NaHO. sol., while 2 hours afterwards 100 required 18 and in $4\frac{1}{2}$ hours 100 required 28.

According to these observations, then Delvand's view that neutral or alkaline urine is seen only in the morning and that acidity is present during the remainder of the day, is distinctly contradicted. So also is Fustier's view that the maximum acidity is about 4 hours after dinner. In no instance was this so in my own case, neither was it as he states "Always neutral or alkaline about 8 or 9 in the morning or before the ingestion of any food," but exactly the reverse.

Byasson, as I stated at the beginning of this paper, "Affirms that the urine is least acid after the first meal, while the most acid is that during the night." With the latter part of this view I agree as evidenced by my own urine and also more or less with George's, who states that the alkaline reaction appears 2 hours after the meal.

Thus far then I seem to contradict Fustier and Delvand, but I have only been considering my own particular urine and when I come to consider some of the urines of other persons I

will, to use a vulgar phrase, soon "knock the bottom" out of the contradiction.

To sum up then, my urine is very acid in the morning and about an hour after breakfast it begins to decline rapidly till it reaches neutrality about or shortly after mid-day meal: further there is no doubt that each meal influences it, that which evidently does so most is breakfast, for from an acidity of 100 c. c. of urine requiring 24 c. c. or 30 of NaHO. sol. it will in an hour or two fall rapidly, but other meals do so altho perhaps not so apparent for as you may nearly always notice there is neutrality maintained for several hours.

Again we may say that after tea there is not so marked an effect, but there nearly always is some effect towards lessening of the acidity and then we must remember that this meal is usually a light meal compared with other meals of the day. To prove this I took at tea Dec. 28., at 5.30 two eggs. At 5 o'clock the acidity had been 100 c. c.=24 c. c. NaHO. sol. At 7 o'clock about 1½ hrs. after 100 c. c.=20 c. c. NaHO. and at 8 o'clock 100 c. c.=7.5 of the solution.

Respecting the greater acidity of the morning, we must remember that we have more or less the whole accumulated acidity of the night without food.

The observations of Feb. 10 do not shew any minimum of acidity towards 1 or 2 o'clock, such as there is in the daytime. See table.

I may here state that the total acidity expressed in grammes of oxalic acid, calculations being made for 4 days, was as follows:—

Dec. 26	gms. 1.508.
27	1.181.
28	1.152.
29	2.324.

Average 1.546 gms.

Vogel puts the figure at from 2 to 3 gms. Kerner at 1.8 to 2 gms. My figure is slightly under Kerner, but considering my slight physical build it probably coincides with Kerner.

We come now to consider other urines and first I will take that of a party T. N. McG. who has done everything he could to help me.

I gave him litmus paper and got him to note the reactions on 9 different days.

As you will see from the tables the following is a summary of the results:

	Neutral.	Acid.
Before breakfast,	7 days.	2 days.
Before dinner (or after b'k.)	6 "	3 "
After dinner,	2 "	7 "
Before tea,	3 "	6 "
After tea,	1 "	8 "
Evening,	one day not taken,	8 "

On one day Feb. 3, I got samples of this gentleman's urine, and examined them myself with the following results:—

	Urine.	NaHO. sol
Before break'f, 7 a.m.	Ac. 100Cc.	=3 to 4Cc.
½ after "	10.30 Ac. 100	=4
3 " "	1.30 N.	
1½ after dinner,	4 Ac. 100	=5
2½ to 3 "	5.30 N.	
1 after tea;	7 Ac. 100	=6

Feb 11. Took lunch at 10 p. m. Passed no urine between that and 7 a. m., when urine was slightly acid, you see then from this case what a difference there is. After examining my own urine and finding it so markedly acid, I was rather surprised when morning after morning he would give me "neutral" as the result: So much so that on several occasions I had the specimen sent and examined it myself.

Further, I found out in his case the following fact:—He never was in the habit of taking anything after his six o'clock meal till breakfast next morning. In such cases the urine was always neutral. But when he accidentally twice and when on the third occasion by my instruction took lunch about 10 o'clock at night, then in the morning the urine was slightly acid.

I would like also to call your attention to this case to note how slight the

amount of acidity there was relatively and absolutely for the whole day. You notice from the tables that on Feb. 3., when I estimated the acidity in no case did 100 c. c. urine require more than 6 c. c. Na.HO. sol. for neutralization.

Here then is a direct support of Fustier's views, and a direct contradiction of the views of Byasson, Neubauer and Vogel.

You see in my own case and in that of T. N. McG. conditions which are just the converse of each other.

I will now give you the reactions of another man in whom the conditions are very much like my own. These are given on table.

A. G.	Dec. 30.	Dec. 31.
Before breakfast,	Ac.	Ac.
After "	Ac.	Ac. (faint)
Before dinner,	Ac.	N.
After "	N.	N.
Before tea,	Ac.	N.
After "	Ac.	Ac.
Evening,	Ac.	Ac.

From the above we observe that the urine is always acid in the morning and that after breakfast the change comes. It was impracticable for me to make a quantitative estimation in this case.

Another man E. H. M. also took reactions for me and he gave acid every time, but I do not give this much weight, as he is not sufficiently reliable.

The last case I give is another which is in opposition to the findings of my own.

Case of M. E., Dec. 30 :—

Before breakfast,	- - - - -	N.
After "	- - - - -	N.
Before dinner,	- - - - -	Ac.
1 hour after dinner,	- - - - -	Ac.
2 " " "	- - - - -	Ac.
Before tea,	- - - - -	Ac.
After "	- - - - -	Ac.
Evening,	- - - - -	Ac.

Feb. 6.—Urine passed at 8 o'clock, not taken.

Before break'ft, 9 o'clock, N. or slightly Ak.	
1 hour after breakfast,	Ac. 100 = 8
2½ " " "	Ac. 100 = 15
1 " " dinner,	Ac. 109 = 20
2½ " " "	Ac. 100 = 6
5 " " "	Ac. 100 = 20
2 " " tea,	Ac. 100 = 20
4 " " " (evening) Acid.	

In order to make sure that the reaction of urine for the time examined was taken and not the average for the night. I got this party to give me samples as below, with these results shewing that the urine secreted then was actually neutral.

February 7 :—

8 o'clock, before breakfast, N. or slightly A.K.
9 " " " N.

My position then is this, that while Fustier who holds that the morning urine is least acid is partly right. Byasson, Neubauer and Vogel who hold the opposite view are also partly right.

It looks as if these different observers had only examined the urine of one person and drawn conclusions therefrom and for that reason they partly state a truth but are too limited in its application, for exactly opposite conditions may obtain and yet be strictly within physiological limits as all persons, myself included, at the time of observation were in strictly good health.

We come now to consider the application of these facts and in this connection, I will give you the opinions of a later investigator on this subject, Lauder Brunton. The following is an extract from a lecture of his in the Brit. Medical Journal, Oct. 20, 1894, p. 857.

The most important constituents of the blood are chloride of sodium and water. Chloride of sodium is a neutral salt, but during digestion both it and water are decomposed in the gastric glands and hydrochloric acid is poured into the stomach while a corresponding amount of soda is

returned into the blood, and its alkalinity increases *pari passu* with the acidity of the stomach. Part of this alkali is excreted in the urine so that the urine during digestion is often neutral or alkaline, and possibly some of it passes out through the liver with the bile of the pancreas and intestinal juice, where, again mixing with the chyle from the stomach, neutralisation takes place, so that neutral and comparatively inactive chloride of sodium is again formed from the union of active alkali and acid. But it is most probable that what occurs in the stomach occurs in the other glands, and that it is not merely excess of alkali resulting from gastric digestion which is poured out by the liver, pancreas, and intestine, but that these glands also decompose salts, pour the alkali out through the ducts and return the acid into the blood.

In order to make this statement more plain, let us work out a case in accordance with these principles:—

Let a man take breakfast at 8 or 9 o'clock; secretion of gastric juice and decomposition of NaCl. is begun. The surplus of soda thus formed is returned to the blood and this of course in quantity as digestion goes on. Thus the blood is rendered more alkaline and the urine less and less acid contemporaneously. Suppose that the gastric digestion goes on for 3 hours, the urine should be least acid then.

But all the soda is not excreted by the kidney; part of it goes to create the alkalinity of the intestinal juice, pancreatic juice, bile etc. And part of the alkali mixing with the chyle is used up neutralizing the HCl. from the stomach giving neutral NaCl. Then absorption of the alkaline contents of the intestine will take place, all of which tends to keep up the alkalinity of the blood and hence of the urine.

According to this the urine ought to remain alkaline or neutral during

all the period of gastric and intestinal digestion.

But we must take into consideration another factor, viz; the latter part of "that these glands also decompose salts, pour the alkali through the ducts and return the acid into the blood."

This then would explain why after gastric and during intestinal digestion there is a return to the acid state.

Now in our imaginary case, at the end of 3 hours the acidity would be least and there would be an immediate decline of alkalinity and a corresponding rise in acidity.

Then again, suppose that in 4 hours he takes more food, there should be a still greater alkalescence, for then we have two forces at work, the one returning alkali to the blood and the other returning acid, but as the latter is further "under way" there will probably be a greater or less inclination towards acidity just at first which will gradually fall towards neutrality or alkalinity as gastric digestion goes on, so that in an hour or two after the second meal the forces will be more or less balanced and from this onwards as intestinal digestion of remainder of first meal and the beginning of the second meal is proceeding there will be a gradual return to acidity.

Again with a 3rd meal we would have a repetition of this change of conditions till ultimately 5 or 6 hours after a meal, say the last at night, when the stomach has finished its work and there is an ascendency of intestinal action there will be an increase of acidity of blood and hence of urine.

I do not know on what facts Brunton formed this theory, but I am persuaded that it is inadequate, because while it covers such a case as my own, how are we going to explain from this platform the neutrality or let me say the lessened acidity in the morning of such a case as that of T. N. McG. or M. E.

I certainly think that to complete his explanation granting that it is correct something has to be either added or subtracted.

It appears to me that it might be explained by the rapidity of absorption of the intestinal contents. During their digestion in the intestine there is as shown, an increase of acidity, but they are alkaline in consistence themselves and if they are absorbed very slowly they may of themselves neutralize the acidity and maintain the

neutrality of the urine.

I merely suggest this, but I think it is well worth attention, as the fact of it is one would give us a remarkable key to the activity of intestinal digestion and absorption.

In concluding this part of my paper, I may just add that I have details of the diet of the several parties and am perfectly sure that the difference in quality was certainly not sufficient to cause the great differences of reaction in the different parties.

Reaction of Urine.

Dec. 16th, 1894.

Ordinary Diet.

Hour.	Time from Meals.	Reaction.	Sp. Gr.	Quantity.	Colour.
8.30	Before breakfast.	Acid.	1025	̄ix.	No. 4
9.30	1 hr. after breakfast.	Slightly acid.	1013	̄iv. ss.	No. 3
10.30	2 " " "	N.	1010	̄iii. ss.	No. 3
12.30	½ " " dinner.	N.	1012	̄ii. ̄v.	No. 1
1.30	1 " " "	N.	1003	̄vi.	No. 1
2.30	2 " " "	N.	1014	̄v.	No. 1
4.00	3½ " " "	Slightly acid.	1012	̄iii. ̄ii.	No. 1
5.30	5½ " " "	Acid.	1010	̄ii.	No. 3
6.30	½ " " tea.	Acid.	1010	̄ix.	No. 3
7.30	1½ " " "	Acid.	1003	̄viii.	No. 2
10.30	¼ " " "	Acid.	1021	̄iii. ss.	No. 3
11.30	5½ " " "	Acid*	1010	̄iv. ss.	No. 3
During night		Acid.	1010	̄v. ss.	No. 3

Reaction of Urine.

Dec. 17th, 1895.

Milk diet.

Relation to Meals.	Reaction.	Sp. Gr.	Quantity.	Colour	
Before breakfast.	Ac.	1025	5iii. ss.	No. 4	25 min. KHO. neutralised 5i.
1 hr. after breakfast	Ac.		5vii.	No. 4	20 " " " " 5vii.
2 " " "	Ac.		5vi.	No. 4	
3 " " "	N.		5i.	No. 1	
1 " " dinner.	N.	1024	5i. 5ii.	No. 2	
2 " " "	N.	1016	5ii. 5vi.	No. 2	Possibly slightly acid.
3 " " "	Ac.	1006	5iii.	No. 2	5 M. K. H. O. neutralised 5i.
4 " " "	Ac.	1005	5iv.	No. 3	
2 " " tea.	Ac.	1025	5ii. 5vi.	No. 4	
4½ " " "	Ac.	1025	5ii. ss.	No. 3	15 M. K. H. O. neutralised 5i.
During night.	Ac.	1012	5xi.	No. 2	
Before breakfast.	Ac.	1024	5iv.	No. 3-4	

Reaction of Urine.

Dec. 26th, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour	Reaction	Urea. Na H O.	Acidity expressed in gms. of Oxalic Acid.
8.45	Before breakfast	155 c. c.	1023	No. 3	Ac.	c.c. cc. 100=16	[0.248
11.00	1½ hrs. after do.	80	1020	No. 2-3	Ac.	100=8	0.064
1.30		225	1016	No. 2	N.		
3.00		250	1009	No. 1	Ac.	100=2	0.05
6.00	Before tea.	450	1007	No. 1	Ac.	100=5	0.225
8.00	2 hrs. after tea.	75	1016	No. 2	Ac.	100=18	0.135
10.30		100	1019	No. 2-3	Ac.	100=28	0.28
During night.		385	1015	No. 3	Ac.	100=16	0.606

Gms. 1.508=
Total per day.

Dec. 27th, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour	Reaction	Sol. NaHO. Reqd. to Neutralize.	Acidity expressed in terms of Oxalic Acid.
		c. c.					Gms.
8.30	Before breakfst	30.5		No. 1	Ac.	100=30.4	.092
11.00	2 hours after do.	50		No. 3	Ac.	100=20	.01
12.50	Before dinner.	50		No. 3	Ac.	100=3	.015
2.45	1½ hrs. after do.	120	1018	No. 2	N.		
5.00	4 " " "	220	1013	No. 2	Ac.	100=5.4	.118
6.30	½ " " tea.	180	1005	No. 1	Ac.	100=9.6	.172
8.00		260	1004	No. 1	Ac.	100=12	.312
10.00		170	1007	No. 1-2	Ac.	100=22	.110
11.30		50		No. 2			
During night.		180	1024	No. 3	Ac.	100=24	.352

1.181 =

Total for 24 hours. Allow a little for 11.30, which was not taken.

Dec. 28th, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour	Reaction	Sol. required to Neutralize.	Acidity expressed in terms of Ac. Oxalic.
		c.c.					Gms. Calculated last sheet.
8.30	Before breakfst	180	1024	No. 3	Ac.	100=24	
11.30	2 hrs. after do.	60	1023	No. 3	Ac.	100=24	.74
12.15	2½ " " "	25		No. 2	Ac.	100=16	.04
1.00	¾ hr. after din'r	100	1010	No. 2	Ac.	100=9.8	.098
2.00	1½ " " "	180	1004	No. 1	N.		
4.00	3½ " " "	105	1013	No. 2	Ac.	100=5.2	.053
5.00	4½ " " "	60	1020	No. 2	Ac.	100=24	.144
Tea at 5.30							
7.00	1½ " " tea.	100	1011	No. 2	Ac.	100=20	.20
8.00	2½ " " "	155	1005	No. 1-2	Ac.	100=7.5	.118
9.00	3½ " " "	40		No. 1-2	Ac.	100=9.6	.038
12.00	6 " " "	130	1020	No. 2	Ac.	100=12	.156
During night, probably ab't 2 o'clock.		2.50	1009	No. 1	Ac.	100=6.6	.165

1.152

Dec. 20th, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour	Reaction	Sol. required to Neutralize.	Acidity expressed in terms of Ac. Oxalic.
		c. c.					
9.00	Before breakfast	160	1021	No. 3	Ac.	100=20	.320
12.00	2½ hrs. after do.	65	1023	No. 3	Ac.	100=24	.156
1.40	1 hr after dinner	200	1003	No. 2	Ac.	100=4	.08
2.30	2 " " "	250	1001	No. 1	Ac.	100=0.5	
3.30	3 " " "	80	1010	No. 2	Ac.	100=8	.640
4.30	4 " " "	60	1016	No. 2-1	Ac.	100=16	.096
7.30	2 hrs. after tea.	205	1011	No. 2	Ac.	100=20	.510
11.00	" " "	205	1014	No. 2	Ac.	100=20.8	.426
About 1 a. m.	Night.	120	1006	No. 1	Ac.	100=8	.96
9. a. m.	Before breakfast	215	1023	No. 2	Ac.	100=24	

2.324

Average total for 4 days=Gms. 1.546 oxalic ac.

Dec. 30th, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour.	Reaction.	Sol. required.
11.30	Before breakfast.	25		No. 2-3	Ac.	100=30
1.00	1 hr. after "	40		No. 2	Ac.	
3.00	3 " " "	70	1019	No. 2-3	N.	100=32
4.30	4½ " " "	115	1012	No. 1-2	N.	
5.00	5 " " "	120	1001	No. 1	N.	
Tea at 5 o'clk						
6.00	1 " " tea.	175	1006	No. 1-2	Ac.	100=2
7.00	2 " " "	285	1003	No. 1	Ac.	100=1
9 o'clock.	Two apples.					
12.00		195	1020	No. 2	Ac.	100=14
1.00	During night.	25		No. 2	Ac.	100=32
7.00		265	1012	No. 3	Ac.	100=16
9.00	Before breakfast.	35		No. 2-3	Ac.	100=32

Dec. 31st, 1894.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour.	Reaction.	Sol. required to Neutralize.
9.00	Before breakfast.	35		No. 2-3	Ac.	100=32
12.00	2½ hrs. after "	45		No. 2-3	Ac.	100=20
1.00	3½ " " "	40		No. 3	N., or slight acid	100=1
Dinner at 2.						
3.00	1 " " dinner.	55		No. 3	Ac.	100=12
4.00	2 " " "	225	1005	No. 1	N.	
5.00	3 " " "	125	1019	No. 2	N.	
7.30	2 " " tea.	190	1010	No. 1	Ac.	100=3
9.00	4½ " " "	180	1011	No. 1	N.	
10.00	Tea and cake at 9.45	85	1015	No. 1	N +	
11.00	1½ hours after.	20		No. 2	Ac.	
12.00		85	1014	No. 2	Ac.	100=12
3 a. m.		205	1010	No. 2	Ac.	100=10

FELLOWS' HYPOPHOSPHITES!

(SYR: HYPOPHOS: COMP: FELLOWS.)

To the Medical Profession of Canada :

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

- 1st. The statements contributed are founded upon experience, and I believe them true.
- 2nd. This compound differs from all hitherto produced, in composition, mode of preparation, and in general effects, and is offered in its original form.
- 3rd. The demand for Hypophosphite and other Phosphorus preparations at the present day is largely owing to the good effects and success following the introduction of this article.
- 4th. My determination to sustain, by every possible means, its high reputation as a standard pharmaceutical preparation of sterling worth.

PECULIAR MERIT.

FIRST.—*Unique harmony of ingredients suitable to the requirements of diseased blood.*

SECOND.—*Slightly Alkaline re-action, rendering it acceptable to almost every stomach.*

THIRD.—*Its agreeable flavour and convenient form as a syrup.*

FOURTH.—*Its harmlessness under prolonged use.*

FIFTH.—*Its prompt remedial efficacy in organic and functional disturbances caused by loss of nervous power and muscular relaxation.*

GENERAL EFFECT.

When taken into the stomach, diluted as directed, it stimulates the appetite and digestion, promotes assimilation and enters the circulation with the food—it then acts upon the nerves and muscles, the blood and the secretions. The heart, liver, lungs, stomach and genitals receive tone by increased nervous strength and renewed muscular fibre, while activity in the flow of the secretions is evinced by easy expectoration following the stimulant dose. The relief sometimes experienced by patients who have suffered from dyspnea is so salutory that they sleep for hours after the first few doses.

NOTICE—CAUTION.

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

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

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

For Sale by all Druggists.

DAVIS, LAWRENCE & CO. LTD.

Wholesale Agents, MONTREAL.

WYETH'S

Compound Syrup White Pine.

MESSRS. WYETH desire to ask the attention of the medical profession to this invaluable expectorant, which after considerable experimental work and study, they have been enabled to perfect and present as a medicated syrup, which for beauty and efficiency they feel assured cannot be surpassed.

This preparation represents in each fluid ounce combined in the most palatable form the following ingredients:—White Pine Bark 30 grains, Wild Cherry Bark 30 grains, Spikenard 4 grains, Balm Gilead Buds 4 grains, Blood Root 3 grains, Sassafras Bark 2 grains, Morph. Sulphas 3-16 grain, Chloroform 4 minis incorporated into a syrup, which will preserve unimpaired their therapeutic properties. As an expectorant, it certainly possesses exceptional merit, and has proven of invaluable service in allaying those distressing symptoms so apparent in larvngal troubles.

Practical physicians need hardly be told how frequently ordinary cough remedies and expectorants fail: the agents that *relieve* the cough *disorder* the stomach. It is a misfortune of the action of most remedies used against cough, that they are apt to distress the stomach and impair the appetite. As in all cases of chronic cough it is of vital importance to maintain the nutrition, the value of a remedy acting as Wyeth's Syrup White Pine can be readily appreciated.

Its efficiency is likewise manifest in relieving that obstinate and persistent irritation that frequently accompanies the development of pulmonary affections. The quantity of Morphia Sulphate is just sufficient to exercise a calmative effect, and yet so minute as to be free from objections.

In coughs, colds, and similar affections, such as hoarseness, sore throat, etc., whether recent or of long standing, it will be found to give immediate relief.

MESSRS. WYETH & BRO. have also the same combination with the addition of Tar "Syrup White Pine and Tar."

WYETH'S

Fluid Extract Ergot.

In directing the special attention of the Medical Profession to our Fluid Extract of Ergot, we fully realize the responsibility assumed in making the representations we do in regard to our preparation.

No article in the *Materia Medica* has so often disappointed the practitioner, and scarcely any drug is more susceptible of change, deterioration, and in time becomes entirely inert. We have hesitated to ask the unconditional endorsement of the Profession until we had fully demonstrated for ourselves the value of the Fluid Extract we make, but now, after several years' continued evidence of its successful use in the hands of medical men throughout the country, during which time we have manufactured many thousands of pounds, we confidently claim for it a value and efficacy superior to any other preparation of this drug.

The menstruum used is that best adapted for extracting all the active matter, and retaining its full power. It is entirely free from acid, and can be used subcutaneously without irritation in most cases having in this respect a great advantage over the watery solutions, which decompose very rapidly. Our menstruum is simply Water, Alcohol and Glycerine; no heat whatever is used in its manufacture. Since adopting this formula, a number of valuable papers from foreign authorities have endorsed our views. Our large operations, and long experience, enables us to select the choicest importations of Ergot as offered, thus insuring material of unexceptionable quality.

Those who order our fluid extracts, *Physicians in prescribing them, as well as Druggists in supplying them, may rest assured that they will find each one thoroughly reliable as representing the properties of the original drug.*

Physicians who wish to use them, should designate our manufacture (WYETH & BRO.), when prescribing, to insure ours being dispensed.

JOHN WYETH & BRO., PHILADELPHIA.

General Agents for Canada, DAVIS & LAWRENCE CO., (Limited.) Montreal.

Jan. 1st, 1895.

Hour.	Relation to Meals.	Quantity.	Sp. Gr.	Colour.	Reaction.	Sol. required to Neutralize.
8.30	Before breakfast.	130	1026	No. 3	Ac.	100=28
12.30	3½ hrs. after "	95	1026	No. 3	Ac.	100=12
2.00	1 " " dinner.	45		No. 3	Ac.	100=6
3.00	2 " " "	60	1020	No. 2	N.	
5.00	4 " " "	135	1015	No. 2	Ac.	100=8
7.00	1½ " " tea.	235	1007	No. 1	Ac.	100=8
8.00	2½ " " "	135	1002	No. 1	Ac.	100=4
10.00	4½ " " "	85	1019	No. 2	Ac.	100=8
11.00	Milk at 10.	20		No. 2	Ac.	100=30
1.30		100	1021	No. 2	Ac.	100=24
8.30	Before breakfast.	135	1021	No. 3	Ac.	100=26

Feb. 10th, 1895.

Hour.	Relation to Meals.	Reaction.	Solids required to Neutralize.
8.00	2 hours after tea.	W.	
9.00	3 " " "	Ac.	100=8
10.00	4 " " "	Ac.	100=16
11.00	5 " " "	Ac.	100=20
12.00	6 " " "	Ac.	100=14
1.00	7 " " "	Ac.	100=23
3.00	1½ " " supper.	Ac.	100=25

REACTIONS OF URINE OF T. N. M.

Dec. 22 :

Before breakfast N.
 " dinner Ac.
 After " Ac.
 Before tea Ac.
 After " Ac.
 Evening Ac.

Dec. 23 :

Before breakfast N.
 " dinner N.
 After " Ac.
 Before tea Ac.
 After " Ac.
 Evening Ac.

Dec. 27th :

Before breakfast N.
 After " N.
 Before dinner N.
 After " Ac., faint.
 Before tea Ac.
 After " Ac.
 Evening Ac.

Dec. 28 :

Before breakfast N.
 After " N.
 Before dinner N.
 After " Ac.
 Before tea Ac.
 After " Ac.
 Evening Ac.

Feb. 3rd, 1895 :

Before breakfast, 7 a. m. Ac. 100=3.4
 1½ hours after breakfast, 10.30 a. m. Ac. 100=4
 3 " " " 1.30 N. strictly.
 1½ " " " dinner, 4. Ac. 100=5
 2½-3 " " " " 5.30 N.
 2 " " " tea, 7. Ac. 100=6

Feb. 11th :

Took lunch at 10 p. m. Passed no urine between that and 7 a. m., when urine was acid.

REACTION OF URINE OF A. G.

Dec. 30th, 1894 :

Before breakfast.....	Ac.
After ".....	Ac.
Before dinner.....	Ac.
After ".....	N.
Before tea.....	Ac.
After ".....	Ac.
Evening.....	Ac.

Dec. 31st, 1894 :

Before breakfast.....	Ac.
After ".....	Ac.
Before dinner.....	N.
After ".....	N.
Before tea.....	N.
After ".....	Ac.
Evening.....	Ac., faint.

Reaction of E. H. M. : Acid each time for two days.

URINE OF M. E.

Dec. 30th, 1894 :

Before breakfast.....	N.
After ".....	N.
Before dinner.....	Ac.
1 hour after dinner.....	Ac.
2 " ".....	Ac.
Before tea.....	Ac.
After ".....	Ac.
About 8 o'clock.....	Ac.

Feb. 6th, 1895 :

Urine passed at 8 o'clock, reaction not taken.	
9. before breakfast.....	N., or slightly ak.
1 hour after breakfast.....	Ac. 100=8
2½ " ".....	Ac. 100=15
1 " " dinner.....	Ac. 100=20
2½ " ".....	Ac. 100=6
5 " ".....	Ac. 100=20
2 " " tea.....	Ac. 100=20
4 " ".....	slightly ac.

Feb. 7th :

8 o'clock, before breakfast.....	N., or slightly ak.
9 " ".....	N.

Selections.

PROF. AUGUSTUS C. BERNAY'S, of the Marion Sims College of Medicine, of St. Louis, has sent us a handsome pamphlet containing the reports of a number of important surgical cases in which he operated last November in the presence of many well-known physicians who were in St. Louis on their way to attend the meeting of the Mississippi Valley Medical Association. The report is published as a compliment to those gentlemen.

THE *American Lancet*, according to the statement of its publishers, will no longer be issued. After acting as editor for twenty-four years, Dr. Leartus Connor retired from the responsible editorship, and it is supposed that this circumstance is largely responsible for the discontinuance of one of our most welcome and valuable exchanges.—*Ex.*

THE *Buffalo Medical and Surgical Journal* has arrived to a good old age, hale and vigorous, and as aggressive as ever. It seems to partake of the nature of wine which improves with age. Dr. William Warren Potter, the manager editor, writes to us that he proposes to celebrate the semi-centennial anniversary of his journal by increasing its reading pages from sixty-four to eighty, and by making other improvements which will tend to increase its efficiency. May all of us live to celebrate its next semi-centennial anniversary—if not in the flesh, in the spirit at least.—*Ex.*

A map of the world of very convenient size has just been issued by the Rio Chemical Co., of St. Louis. It is an excellent piece of work and up to date, and may be relied upon for accuracy. The Rio Chemical Co. are mailing a copy to every physician in the United States, Canada and Europe.

Maritime Medical News.

MAY, 1895.

EDITORS.

D. A. CAMPBELL, M.D. Halifax, N.S.
 J. W. DANIEL, M.D., M.R.C.S. St. John, N.B.
 MURRAY MACLAREN, M.D., M.R.C.S. St. John, N.B.
 JAMES MACLEOD, M.D. Charlottetown, P.E.I.
 JOHN STEWART, M.B. Halifax, N.S.
 G. M. CAMPBELL, M.D. Halifax, N.S.

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

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

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

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

EDITORIAL.

INTER-PROVINCIAL RECIPROcity OF MEDICAL REGISTRATION.

In our issue of last month we recorded with great satisfaction the completion of the arrangements necessary to be made on the part of the Province of New Brunswick in order to give practical effect to the scheme of inter-provincial reciprocity in the matter of medical registration, as agreed upon by the several Medical Boards of Nova Scotia, New Brunswick and Prince Edward Island.

With increased pleasure we now record that the Medical Council of P. E. Island has also taken the final steps by which its position as one of the contracting parties is fully defined and determined. At its meeting held on April 2nd last, the following resolution was unanimously adopted:

"Whereas, at a meeting of the con-

joint committee, composed of duly elected representatives of the several legally constituted Medical Boards of Nova Scotia, New Brunswick and Prince Edward Island, held at Truro, N. S., on Friday, Nov. 24th, 1893, a report was agreed upon in the matter of reciprocal registration to be submitted to the several Medical Boards of these provinces;

And whereas, the said report was duly submitted to this Council at its meeting held on Thursday, Jan. 11th, 1894;

And whereas, this Council then decided to re-commit the report to the conjoint committee with suggestions of certain amendments to be made thereto;

And whereas, the amended report endorsed by the signatures of all the members of the said conjoint committee has been submitted to this meeting and duly considered;

And whereas, this Council is officially informed that the amended report has been adopted by the Medical Boards of Nova Scotia and New Brunswick as the basis of reciprocal registration;

Therefore resolved, that this Council do now, and does hereby adopt the said amended report without further amendment.

Though last of the Maritime Provinces to thus formally accept the basis of reciprocity as laid down in the report of the conjoint committee, Prince Edward Island nevertheless fairly claims to be first in the avowed declaration of her desire to obtain and readiness to realize this true fraternity of the profession in these, as also in all the other provinces of the Dominion. As evidence of this we mention the Medical Act, 1892, of this province, with its specified provisions for reciprocity upon the most broad and liberal terms, also the act to amend the same, passed in 1894, with its further provisions (as set forth in its preamble), to secure the maintenance

of a satisfactory standard of medical education, so as to enable the Medical Society of Prince Edward Island and the Medical Council to co-operate with similar societies and councils in the other provinces, to establish a system of "reciprocal registration"—these acts being the outcome of the earnest desire and vigorous efforts of the Medical Society in this direction, and of the statesmanlike views, the high-toned sentiments and magnanimity of the legislature of the province.

The following official communication from the Registrar of the Medical Board of Nova Scotia to the Registrar of the Medical Council of P. E. Island, dated Feb. 9th, 1894, clearly defines the attitude of Nova Scotia in regard to reciprocity, and places that province in the front rank of those deciding to accept the proposed terms. Dr. Lindsay's communication reads thus:

"I have to inform you that at a meeting of the Medical Board of Nova Scotia held yesterday, the report of the conjoint committee re reciprocal registration for the Maritime Provinces was unanimously adopted without amendment. As soon, therefore, as we are informed that the report has been similarly adopted by the Councils of P. E. Island and New Brunswick reciprocity in registration will be considered as established."

For the general information of our readers, and for the purpose of facilitating, if at all it may, the work now before the committee of the Canadian Medical Association, who are soon to report upon what they consider to be the best means of obtaining a uniform standard of medical education for the Dominion of Canada, we have given this exhibit of what has been already so happily accomplished in this direction in these Maritime Provinces, and now subjoin the following statement of the principal terms of the treaty of reciprocity thus established:

1. The passing of the preliminary or matriculation examination in all

cases before beginning or entering upon the course of medical study.

2. The following uniform standard of matriculation examination:

COMPULSORY.

English language—including grammar, composition and writing from dictation.

Arithmetic—including vulgar and decimal fractions, and the extraction of the square root.

Algebra—to the end of simple equations.

Geometry—Euclid, books I., II. and III., with easy deductions.

Latin—including grammar, translation from specified authors, and translation of easy passages not taken from such authors.

Elementary mechanics of solids and fluids, comprising the elements of statics, dynamics and hydrostatics.

OPTIONAL.

One of the following subjects:

History of Canada, with questions in modern geography.

History of England, with questions in modern geography.

French, translation and grammar.

German, " "

Greek, " "

3. The requirement in all cases of a four years' graded collegiate course of four sessions of not less than six months each.

4. The medical curriculum shall include satisfactory and sufficient courses of lectures and instruction in anatomy, practical anatomy, chemistry, practical chemistry, physiology, histology, materia medica, pharmacy, therapeutics, surgery, medicine, obstetrics, diseases of women and children, medical jurisprudence, hygiene, pathology, including bacteriology, together with evidence of attendance for a period of not less than twelve months upon the practice of an approved general hospital.

5. That proof be required that the candidate, previous to graduation or obtaining a diploma, has passed satisfactory examinations in the subjects of the above curriculum, and that the examinations have been conducted and the diploma granted by a medical school, college or university, or other licensing body which itself requires a four years' graded course.

6. In cases where the certificates submitted do not fulfil these requirements, that the applicant be compelled to complete what is deficient, and attend the necessary classes, &c., pass the required examinations and obtain a diploma as specified in last section, or complete the curriculum as above, and then pass the examinations prescribed by the Board or Council before its own examiners.

7. That the requirements as to the medical curriculum shall be enforced in reference to all persons beginning study after January 1, 1895.

8. That the privileges of reciprocal registration shall be open to all persons whose names may be on the register of either province at the date of the adoption of the terms of this agreement, as well as to those who shall subsequently be duly registered.

8. That a person registered in one province and wishing to remove to another, shall be required to bring from the Registrar of the province he is leaving, a certificate shewing that he is at that time a legally qualified practitioner of such province, and that no charge of a criminal or professional character is pending against him, and that on presentation of these credentials alone the applicant be registered on payment of the usual registration fees.

**DR. FARRELL'S ADDRESS TO THE
GRADUATES OF DALHOUSIE
UNIVERSITY.**

In his address at the recent convocation of Dalhousie College, Dr. Farrell

congratulated the graduates and students on the honors and distinctions they had gained. Thoroughly trained and possessing their degrees, they had got the word "go" from the starter and were entering on the race of life, and while all could not win, he advised each one to resolve that he or she would win or take at least a leading place in the finish. Such a spirit would be sure to materially influence the progress of all. He wished them to keep in mind that in education the moral side in man or woman was by far the most important. The foundation of true education was a strong faith in God and divine promises and that sweet spirit of charity which makes us tolerate the opinions of others. Without this foundation the whole superstructure would be unsteady and unsound. True education, he said, was the harmonious development and growth of all the powers of soul and body, and not the unequal development of one beyond the other. He could remember not a great many years ago, when the craze for mental development and intellectual growth was proportionately far greater than to-day. And to what an extent it was carried, at the expense of health and bodily vigour. Young men devoted themselves to mental work exclusively in season and out of season, so that often when they had just gained the goal for which they were striving the poor body gave way and they sank into untimely graves. This practice, he was glad to say, was to a great extent changed, and to-day physical culture held as high a place in the universities as the intellectual. It was now, he said, beginning to be recognized that the playground and the gymnasium should play as important a part as the class-room. That physical education was not neglected at Dalhousie was proved, he thought, by the fact of the students there coming off the victors so often in football in many

a hard-fought field. If he were asked what young Canadians were most lacking in as they started out in the race of life he would mention two faults, one of which was a want of patriotism. If Nova Scotia were as rich in patriotism as she is in natural resources she would be a far more prosperous country. He regretted that so many of our young men after getting an excellent education in Nova Scotia found it necessary to seek a livelihood and preferment elsewhere. It was too much a habit of many young men to come back and make comparisons unfavorable to their own country. Nova Scotia, with her boundless resources, offering preferment equal to that of any country in the world, instead of sending away her own young men should induce those of our lands to come to her. We should always find something to praise in our own country. Joseph Howe said if he could find nothing else to speak highly of in Nova Scotia he would maintain there were higher tides there than elsewhere. Or like the Canadian who was once driven to desperation by the praises of Switzerland at the expense of Canada, exclaimed: "Why, I could take that little country of yours and throw it into Lake Superior and you wouldn't hear it splash." Going out into the world they would expect to realize what they doubtless had heard of being taken by the hand and getting the right hand of fellowship and so on, but he wanted to tell them it did not "palm out." It was only by their own exertions they could achieve success. There was no such thing as luck. Luck meant getting up an hour earlier in the morning than anybody else. In conclusion he would exhort them again to cultivate a spirit of patriotism, a spirit of energy and push, and all together to strive to make Nova Scotia, with her infinite resources, what she ought to be, the brightest gem in the British crown.

Book Reviews.

The International Medical Annual and Practitioners' Index. A work of reference for Medical Practitioner. 8 vo., p.p. 648. Illustrated. Thirteenth year. New York: E. B. Treat, 5 Cooper Union, 1895.

The thirteenth volume of this series compares favorably with its predecessors. The plan of the work has been noticed in previous years. We have no hesitation in pronouncing it to be the best work of its class, containing as it does condensed yet comprehensive accounts of advances in all branches of medical science, with full references.

The special articles which characterize this work are of more than usual interest, and are worth more than the price of the volume.

The illustrations are numerous and well executed. As a whole the book is convenient in size, replete with fresh matter and should find a place in the library of every practitioner.

Transactions of the Antiseptic Club, reported by Albert Abrams. E. B. Treat, Publisher, New York.

This is a book full of wit and humor. In the introduction we note "Criticism of medical works is usually gauged by two factors—the status of the digestive apparatus and the conceit of the reviewer. The latter accommodates his review to stereotyped methods of expression as; "This book has supplied a long felt want; It is useful alike to both physician and student, etc., etc." It has an antiseptic binding, the leaves have been thoroughly iodoformized, and the printers' ink rendered sterile." There is plenty to laugh at in this volume of Transactions of the Antiseptic Club." Here is a prescription that indicates a modern tendency

Extracti gall-ae (Gray's)	...	ʒiij
Acidi gall-ici (Brown's)	...	ʒi
Olei gaul-theriæ (White's)	...	ʒi
Aquæ (Black's)	...	gallon

"Mix with Green's universal pestle in Indigo's patent riveted copper-lined mortar, at a pressure of five pounds as determined by Lavender's poundometer: then filter through filtering paper imported by Garnet & Co., No. 116 Alimentary Way, near the Island of Reil, on the Isthmus of Fauces.

"Dr. Always Bite."

Buy it and have a laugh.

Books Received.

The International Medical Annual and Practitioners' Index. A Work of Reference for Medical Practitioners. By a large corps of editors and contributors. New York: E. E. Treat, 5 Cooper Union, 1895. Price \$2.75.

Transactions of the Antiseptic Club. Reported by Albert Abrams. Illustrated. New York: E. B. Treat, 5 Cooper Union, 1895. Price \$1.75.

Surgery of Two Hundred Years Ago. Illustrated from original copper plates.

This is a very interesting little volume sent out by the Antikamnia Chemical Company of St. Louis.

Infection and Immunity, with special reference to the new Diphtheria Anti-Toxine. By Charles Russell Bardeen, B. A., Assistant in Histology, John's Hopkins University. Reprinted from the School Bulletin.

Annales De Oculisti que. An English edition of this valuable periodical is now published in monthly numbers at New York. By Dr. Geo. T. Stevens.

Annali di Medicina Navale. Sennaio, 1895. Fascicolo 1, Fascicolo 4. Malattie. Predominante Nei Paesi Caldi E. Temperati. Scunaio, 1895.

THE time for the meeting of the Maritime Medical Association is approaching. The present indications point to a large and successful gathering. A number of interesting and important papers will be read. The

citizens and Profession of Halifax will leave nothing undone to entertain the visitors. Every practitioner should strive to be present. Titles of papers should be sent in as early as possible.

The editors of the *Saint Louis Medical and Surgical Journal* announce a series of articles upon special methods in staining in microscopy to begin with the June number. These articles written by the celebrated Unna will be translated by Dr. Cale, of Saint Louis. A limited number of copies of entire series will be printed in pamphlet form. Those desirous of obtaining copies should subscribe early.

The American Medical Publishers' Association will hold an important meeting at Baltimore, at the same time of the American Medical Association. Among other subjects to be discussed will be commissions, reading notices, wrappings, the editor as business manager, trade advertising, insert advertisements, premiums, speculative advertisers, copy. This association is daily growing and will be an important factor in medical journalism in the future. Mr. Charles Wood Fassett, of St. Joseph, Mo., is secretary, and Dr. Landon B. Edwards, of Richmond, Va., is the president.

INDIGESTION.—*Oil of cloves*, 2 or 3 minims; *diluted hydrochloric acid*, 15 minims; *tincture of nux vomica*, 20 minims; *compound tincture of cardamom*, 2 fluidrachms. Mix. To make one dose, given before meals, thrice daily. If there is much pain, give about 3 minims of *spirit of chloroform*. If acid eructation is severe, give *sodium bicarbonate*, 10 grains, instead of the *hydrochloric acid*. If there is attendant constipation, give $\frac{1}{2}$ drachm doses *fluid extract of cascara* at bedtime —(J. P. CROZER GRIFFITH, *Philadelphia Polyclinic*, March 2, 1895.)

UNIVERSITY OF DALHOUSIE.

The pass list of the Medical Faculty is as follows, order alphabetical:—

Final M.D., C.M. Examinations.

Fairbanks, Harry Gray.
McDonald, John Clyde.
McKay, Catherine Joanna.
Moore, Ernest Fraser.
Munro, Cranswick Burton.
Murphy, George Nelson.
Simpson, Henry Osmond.

THIRD YEAR.

McEwen, Henry Emanuel.
Olding, Clara Mary.
Ross, Alexander.
Williamson, Samuel W.

Primary M.D., C.M. Examinations.

Bentley, Robie Dugwell.
Bissett, Ernest Eugene.
Fairbanks, Harry Gray.
Gates, Charles Randall.
Grierson, Robert.
MacDonald, William Henry.
Munro, Cranswick Burton.
Payzant, Henry Allison.
Slauenwhite, Stephen.

FIRST YEAR.

Archibald, Mathew George.
Gandier, George Gaw.
McKenzie, Kurdoch Daniel.
Thompson, Alfred.

THE first paragraph of Parke, Davis & Co's. advertisement on back cover should read:—"We have perfected arrangements for a supply of Diphtheria Antitoxin prepared under the supervision of Ira Van Gieson, M. D., and Nelson L. Deming, M. D., the well known bacteriological experts of New York City, and issued under their certificate of quality and strength.

DISSOLVED in the "Wine of Cod Liver Oil" (Steams') are the active principles of Cod Liver Oil, to the exclusion of the oil itself—a statement which a somewhat extended examination has to some extent confirmed. Thus on extracting the wine with ether and carefully treating the ethereal extract (which is an oily, brown, resinous body, having a peculiar fishy

smell) with a strong sulphuric acid solution of glucose, the beautiful purple reaction characteristic of biliary constituents is obtained. The same reaction is effected when the extract used in the preparation of the wine is similarly tested, but to a more marked degree. Recent investigation has led to the isolation of several distinct bodies in Cod Liver Oil, notable amongst which are the alkaloids aseline and morrhaine, in association probably with morrhucic, formic, butyric and phosphoric acids. These principles have been tested clinically, and the results formed the subject of an exhaustive report by Gantier and Mourgue in the *Journal de Pharmacie*, March, 1890, who concluded that the combined active principles of Cod Liver Oil act as powerful stimulants of nutrition and assimilation and show definitely the nature of the principles to which the oil to some extent owes its valuable medicinal properties. The wine evinces an acid reaction, is alcoholic, and contains also Peptonate of Iron.—THE LANCET, London, Eng., July 7, 1894.

THE WILD FLOWERS OF CANADA.

This Dominion will soon be covered with wild flowers as with a carpet. It is interesting to hear that splendid prizes are to be given to those who know the Wild Flowers of Canada by name, form and color. European and American judges of floral nature say Canadians should be so carried away with the beauty of their own native bloom as to ensure an acquaintance with the Wild Flowers of Canada by every man, woman, boy and girl in the Dominion.

In this connection the Montreal STAR is coming in for much praise for a splendid work it is publishing, entitled "The Wild Flowers of Canada," in portfolio form, sixteen flowers in each portfolio, three hundred plates in all, natural colors and natural size, the whole forming an invaluable treasure for the library. For a limited time these valuable portfolios may be obtained from the Montreal STAR or local newsdealers at 15 cents each. Amazingly cheap.

1866. "H. V. C." 1894.

28 Years in the hands of the Medical Profession.

HAYDEN'S VIBURNUM COMPOUND.

A powerful and perfectly safe ANTISPASMODIC, TONIC AND NERVINE without
a successful rival in the world

IN THE AILMENTS OF WOMEN, AND IN OBSTETRIC PRACTICE.

In **Tedious Labor, Inertia, Rigidity of the Os Uteri and Convulsions**, it cannot but excite the admiration of the Obstetrician by its perfect action. Its employment in a single case will prove all we claim for it.

In **DYSMENORRHOEA, MENORRHAGIA, THREATENED ABORTION AND DANGEROUS FLOODING** it is too well and favorably known to the profession, to require any comment from us.

REFERENCE:—Any of the most eminent Medical Men in the United States.

For our large illustrated hand book, *free*, send your address to

THE NEW YORK PHARMACEUTICAL COMPANY,
BEDFORD SPRINGS, MASS.

New York Post-Graduate Medical School and Hospital.

THIRTEENTH YEAR—SESSIONS OF 1894-95.

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

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

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

FACULTY.

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

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

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

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

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

Surgery.—Lewis S. Pitcher, M. D., Seneca D. Powell, M. D., A. M. Phelps, M. D., Robert Abbe-M. D., Charles B. Kealey, M. D., Daniel Lewis, M. D., Willy Meyer, M. D., B. Farquhar Curtis, M. D., Ramon Guiteras, M. D.

Diseases of Women.—Professors Bache McEvers Emmet, M. D., Horace T. Hanks, M. D., J. R. Nilson, M. D., H. J. Boldt, M. D., A. Palmer Dudley, M. D., George M. Edebohn, M. D., Francis Foerster, M. D.

Obstetrics.—C. A. von Ramdohr, M. D., Henry J. Garrigues, M. D.

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

Hygiene.—Edward Kershner, M. D., U. S. N.

Pharmacology.—Frederick Bagoe, Ph. B.

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

For further information please call at the school, or address **CLARENCE C. RICE, M. D., Secty., D. B. ST. JOHN ROOSA, M. D., LL. D. President.** | Cor. 2nd Ave and 20th Street, New York City, **F. E. FARRELL, Superintendent.**

WHEELER'S TISSUE PHOSPHATES

WHEELER'S COMPOUND ELIXIR OF PHOSPHATES AND CALISAYA. A Nerve Food and Nutrient Tonic for the treatment of Consumption, Bronchitis, Scrofula, and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial, *acceptable to the most irritable conditions of the stomach*: Cone-Calcium Phosphate $\text{Ca}_3 2\text{PO}_4$, Sodium Phosphate $\text{Na}_2 \text{H}_2\text{PO}_4$, Ferrous Phosphate $\text{Fe}_2 2\text{PO}_4$, Trihydrogen Phosphate H_3PO_4 , and the active Principals of Calisaya and Wild Cherry.

The special indication of this combination is Phosphate in Spinal Affections, Caries, Necrosis, Ununited Fractures, Marasmus, Poorly Developed Children, Retarded Dentition. Alcohol, Opium, Tobacco Habits Gestation and Lactation to promote Development, etc., and as a *physiological restorative* in Sexual Debility, and all used-up conditions of the Nervous system should receive the careful attention of the rapetists

NOTABLE PROPERTIES.—As reliable in Dyspepsia as Quinine in Ague. Secures the largest percentage of benefit in Consumption and all Wasting Diseases, *by determining the perfect digestion and assimilation of food*. When using it, Cod Liver Oil may be taken without repugnance. It renders success possible in treating chronic diseases of Women and Children, who take it with pleasure for prolonged periods, a factor essential to good-will of the patient. Being a Tissue Constructive, it is the best general utility compound for Tonic Restorativ-purposes we have, no mischievous effects resulting from exhibiting it in any possible morbid condition of the system.

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

Dose.—For an adult, one table-spoonful three times a day, after eating; from 7 to 12 years of age, one dessert-spoonful; from 2 to 7, one teaspoonful. For infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of T. B. WHEELER, M. D., Montreal, P. Q.

To prevent substitution, put up in bottles only, and sold by all Druggists at ONE DOLLAR.

BELLEVUE HOSPITAL MEDICAL COLLEGE, CITY OF NEW YORK. Sessions of 1895-96.

THE REGULAR SESSION begins on Monday, September 23, 1895, and continues for twenty-six weeks. During this session, in addition to the regular didactic lectures, two or three hours are daily allotted to clinical instruction. Attendance upon three regular courses of lectures is required for graduation. The examinations of other accredited Medical Colleges in the elementary branches, are accepted by this College.

THE SPRING SESSION consists of daily recitations, clinical lectures and exercises and didactic lectures on special subjects. This session begins March 23, 1896, and continues until the middle of June.

THE CARNEGIE LABORATORY is open during the collegiate year, for instruction in microscopical examinations of urine, practical demonstrations in medical and surgical pathology, and lessons in normal histology and in pathology, including bacteriology.

For the annual Circular, giving requirements for graduation and other information, address Prof. AUSTIN FLINT, Secretary, Bellevue Hospital Medical College, foot of East 26th Street, New York City.

H. W. CAMERON,

Pharmaceutical Chemist and Druggist.

219 BRUNSWICK STREET, HALIFAX, N. S.

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

Physicians Supplies a Specialty.

Orders by mail promptly attended to.

TELEPHONE 339.

NIGHT BELL AT DOOR.

HALIFAX MEDICAL COLLEGE,

HALIFAX, NOVA SCOTIA.

Twenty-Seventh Session, 1895-96.

THE MEDICAL FACULTY.

- ALEX. P. REID, M. D., C. M.; L. R. C. S. Edin.; L. C. P. & S. Can.; Emeritus Professor of Medicine and Professor of Medical Jurisprudence.
WM. B. SLAYTER, M. D.; M. R. C. S. Eng.; L. R. C. P. Lon.; F. O. S. Dub.; Emeritus Professor of Obstetrics and Gynaecology.
EDWARD FARRELL, M. D., Professor of Surgery and Clinical Surgery.
JOHN SOMERS, M. D., Professor of Medicine.
JOHN F. BLACK, M. D., Professor of Surgery and Clinical Surgery.
GEORGE L. SINCLAIR, M. D., Professor of Nervous and Mental Diseases.
DONALD A. CAMPBELL, M. D., C. M.; Professor of Medicine and Clinical Medicine.
A. W. H. LINDSAY, M. D., C. M.; M. B. C. M., Edin.; Professor of Anatomy.
F. W. GOODWIN, M. D., C. M.; Professor of Materia Medica.
M. A. CURRY, M. D., Professor of Obstetrics and Gynaecology.
STEPHEN DODGE, M. D., Professor of Ophthalmology and Otolaryngology.
MURDOCH CHISHOLM, M. D., C. M.; L. R. C. P., Lond.; Professor of Clinical Medicine and Therapeutics.
NORMAN F. CUNNINGHAM, M. D., Adjunct Professor of Surgery.
WILLIAM TOBIN, F. R. C. S., Irc., Professor of Laryngology and Rhinology.
G. CARLETON JONES, M. D., C. M.; M. R. C. S., Eng.; Professor of Diseases of Children.
LOUIS M. SILVER, M. B., C. M., Edin.; Professor of Physiology.

LECTURERS, DEMONSTRATORS, ETC.

- GEO. M. CAMPBELL, M. D., Lecturer and Demonstrator of Histology.
W. D. FINN, M. D., Lecturer and Demonstrator of Pathology.
F. U. ANDERSON, L. R. C. S., L. R. C. P. Ed.; M. R. C. S. Eng.; Demonstrator of Anatomy.
C. E. PUTNER, PH. M., Instructor in Practical Materia Medica.
W. H. HATTIE, M. D., C. M., Lecturer on Bacteriology and Hygiene.
WALLACE McDONALD, B. A., Legal Lecturer on Medical Jurisprudence.
A. I. MADER, M. D., C. M., Class Instructor in Practical Surgery.
MONTAGUE A. B. SMITH, M. D., Class Instructor in Practical Medicine.
C. DICKIE MURRAY, M. B., C. M., Edin.; Lecturer on Embryology.
JOHN STEWART, M. B., C. M., Edin.; Lecturer and Demonstrator of Pathological Histology.
THOS. W. WALSH, M. D., Assistant Demonstrator of Anatomy.

EXTRA MURAL LECTURER.

- GEORGE LAWSON, PH. D., etc., Professor of Chemistry and Botany at Dalhousie College.

FACULTY OF PHARMACY.

- AVERY F. BUCKLEY, L. PH., Lecturer on Pharmacy.
F. W. GOODWIN, M. D., C. M., Lecturer on Materia Medica.
G. M. CAMPBELL, M. D., Instructor in Microscopy.
GEORGE LAWSON, PH. D., etc., Professor of Chemistry and Botany.
ALBERT H. BUCKLEY, PH. M., Examiner in Mat. Med. and Botany.
W. H. SIMPSON, PH. G., Examiner in Chemistry.

The Twenty-Seventh Session will open on Wednesday, Oct. 3rd, 1895, and continue for the seven months following.

The College building is admirably suited for the purpose of medical teaching, and is in close proximity to the Victoria General Hospital, the City Almshouse and Dalhousie College.

The recent enlargement and improvements at the Victoria General Hospital, have increased the clinical facilities, which are now unsurpassed, every student has ample opportunities for practical work.

The course has been carefully graded, so that the student's time is not wasted.

The following will be the curriculum for M. D., C. M. degrees:

1ST YEAR.—Inorganic Chemistry, Anatomy, Practical Anatomy, Botany, Histology.

(Pass in Inorganic Chemistry, Botany, Histology and Junior Anatomy.)

2ND YEAR.—Organic Chemistry, Anatomy, Practical Anatomy, Materia Medica, Physiology, Embryology, Pathological Histology, Practical Chemistry, Dispensary, Practical Materia Medica.

(Pass Primary M. D., C. M. examination.)

3RD YEAR.—Surgery, Medicine, Obstetrics, Medical Jurisprudence, Clinical Surgery, Clinical Medicine, Pathology, Bacteriology, Hospital, Practical Obstetrics, Therapeutics.

(Pass in Medical Jurisprudence, Pathology, Materia Medica and Therapeutics.)

4TH YEAR.—Surgery, Medicine, Gynaecology and Diseases of Children, Ophthalmology, Clinical Medicine, Clinical Surgery, Practical Obstetrics, Hospital, Vaccination.

(Pass Final M. D., C. M. Exam.)

Fees may now be paid as follows:

One payment of	\$250.00
Two of	130.00
Three of	90.00

Instead of by class fees. Students may, however, still pay by class fees.

For further information and annual announcement, apply to—

G. CARLETON JONES, M. D.,

Box 246.

Secretary Halifax Medical College.

Physicians and Surgeons

when treating diseases in which Neuralgia, Pyrexia or Hyperpyrexia, is attended by WEAK HEART ACTION will find that no Analgesic or Antipyretic equals

Antitoxine

(STRENGTHENS THE HEART'S ACTION.)

An Antipyretic, Analgesic, Antineuralgic and Antitoxic, which, while powerful in the relief of pain and reduction of elevated temperature, is perfectly safe in every case, as it *strengthens the heart's action*. For sale by all Leading Wholesale Druggists. This remedy is manufactured and owned exclusively by THE BRITISH ANTITOXINE MFG. Co. of London, England. Free samples will be sent to all doctors and druggists who apply to the importers. Imported into Canada solely by

For dispensing only.

LYMAN, KNOX & CO., Montreal.

MARITIME MEDICAL ASSOCIATION.

The Fifth Annual Meeting of the Association will be held in Halifax on

Wednesday and Thursday,

July 3rd and 4th, 1895.

All registered medical men in the Maritime Provinces are invited to attend and to become members of the Association.

Gentlemen who intend to read papers are requested to forward at their earliest convenience the titles of the same to the Secretary.

GEORGE M. CAMPBELL, *Hon. Sec.*

DOCTORS DISAGREE

As to whether ethical propriety permits them to prescribe proprietary preparations but all do so, and few of the many thousand physicians who have used the

AMICK Chemical treatment for Consumption and diseases of the air passages could be induced to discontinue.

Express Receipts on File show 7000 Shipments to Physicians in March, '94—1900 during March, '95

TEST MEDICINES (Sent Physicians only) FREE FOR EACH CASE.

DR. CHAS. BRENNAN, Birmingham, Ala., writes: "Am having really wonderful success with your remedies."

DR. D. ALDEN LOOMIS, Louisville, Ky.: "Your treatment is doing better work in these diseases than all others combined."

DR. J. L. FOXTON, County Physician, Huron, Dak.: "All my patients using your treatment are improving rapidly, it is working wonders."

DR. W. H. MOORE, U. S. Examining Surgeon, Medicine Lodge, Kans.: "My third stage consumptive, the lawyer, who could scarcely walk, gained fifteen pounds in two months and has resumed practice."

DR. R. M. TEVIS, Crooksbury, Ind.: "Patient, my own daughter, has gained eight pounds and is to all appearances cured; you have saved her life."

DR. A. M. McCONNELL, Union City, Tenn.: "Mr. N., one month under your treatment for Consumption is entirely cured: all my patients taking your medicines are doing well."

DR. C. S. LOMBARD, Negaunee, Mich.: "If ever there was a cure of pulmonary tuberculosis, this case is; patient, second stage, was never better in her life; has just married and moved to Brooklyn, N. Y., a little the happiest mortal upon the planet."

DR. H. R. WOOD, Galesburg, Ills.: "The treatment in Miss W's case, Consumption, worked like magic her previous physician gave up the case, saying it was hopeless. I thought so also, but she is now well."

THOUSANDS OF SIMILAR EXPRESSIONS FROM DOCTORS ON FILE.

AMICK CHEMICAL COMPANY, CINCINNATI, OHIO.

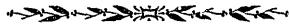
DR. LAPHORN SMITH'S

PRIVATE HOSPITAL

— FOR —

MIDWIFERY and DISEASES OF WOMEN,

250 BISHOP STREET, MONTREAL.



Dr. Laphorn Smith announces to the medical profession that he has opened a Private Hospital for Obstetrical and Gynæcological cases. For particulars as to weekly charges, address:

DR. LAPHORN SMITH,

MONTREAL.

ESTABLISHED 1830.

JAMES BOWES & SONS,

Book and Job Printers,

142 HOLLIS STREET,

HALIFAX, N. S.

**JOB PRINTING of all Descriptions Executed
Promptly to Order.**

**WHO BINDS?
KNOWLES',**

**COR. GEORGE & GRANVILLE STS.
HALIFAX.**

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

The Maritime Medical News.

—REACHES THE—

LIVE PRACTITIONERS

—OF THE—

MARITIME PROVINCES.

JAMES BOWES & SONS,

Halifax Printers,

KEEP IN STOCK . . .

MAGISTRATES' BLANKS,
DEEDS, MORTGAGES,
LEASES, BONDS, &c.
JUDICATURE BLANKS.
PEDIGREE BLANKS.

PATENTS
CAVEATS, TRADE MARKS
COPYRIGHTS.

CAN I OBTAIN A PATENT? For a prompt answer and an honest opinion, write to **MUNN & CO.**, who have had nearly fifty years' experience in the patent business. Communications strictly confidential. A Handbook of information concerning Patents and how to obtain them sent free. Also a catalogue of mechanical and scientific books sent free.

Patents taken through Munn & Co. receive special notice in the *Scientific American*, and thus are brought widely before the public without cost to the inventor. This splendid paper, issued weekly, elegantly illustrated, has by far the largest circulation of any scientific work in the world. \$3 a year. Sample copies sent free.

Building Edition, monthly, \$2.50 a year. Single copies, 25 cents. Every number contains beautiful plates, in colors, and photographs of new houses, with plans, enabling builders to show the latest designs and secure contracts. Address **MUNN & CO., NEW YORK, 361 BROADWAY.**

THE BEST ANTISEPTIC
FOR BOTH INTERNAL AND EXTERNAL USE.

ANTISEPTIC,
PROPHYLACTIC,
FRODO-RANT.

LISTERINE

NON-TOXIC,
NON-IRRITANT,
NON-ESCHAROTIC.

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

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

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

Lambert's Lithiated Hydrangea.

FORMULA.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis, it is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended upon in clinical practice.

DOSE.—One or two teaspoonfuls four times a day, (preferably between meals.)

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

URINARY CALCULUS, GOUT, RHEUMATISM, CYSTITIS, DIABETES, HÆMATURIA, BRIGHT'S DISEASE, ALBUMINURIA AND VESICAL IRRITATIONS GENERALLY.

We have much valuable literature upon GENERAL ANTISEPTIC TREATMENT, LITHEMIA, DIABETES, CYSTITIS, ETC., to forward to physicians upon request.

LAMBERT PHARMACAL COMPANY, St. Louis, Mo.

VACCINE VIRUS.

PURE AND RELIABLE

**ANIMAL VACCINE LYMPH,
FRESH DAILY.**

LIBERAL DISCOUNT TO DRUGGISTS. SEND FOR CIRCULAR.

10 Ivory Points, double charged, \$1 00

10 Quill Slips (half-quills), double charged, 1 00

ORDERS BY MAIL OR TELEGRAPH PROMPTLY DISPATCHED.

NEW ENGLAND VACCINE CO.,

CHELSEA STATION, BOSTON, MASS.

Wm. C. CUTTLER, M. D.

J. F. FRISBEE, M. D.

Diphtheria

Antitoxin.

**A Strictly Reliable Serum Prepared after the
Method of Behring and Roux.**

Inasmuch as the Antitoxic Serum produced in our Bacteriological Department will not be available until April or May, we have perfected arrangements for a supply of **DIPH-
THERIA ANTITOXIN** prepared under the supervision of **Ira
Van Gieson, M.D., and Nelson L. Deming, M.D.**, the
well known bacteriological experts of New York City, and
issued under their certificate of quality and strength.

This Antitoxin conforms to the conditions of the ordinance
of the Board of Health of New York City, is absolutely sterile,
and will be supplied in vials of 10 Cc. each.

Three grades of strength will be furnished.

1. A weaker serum which will contain 600 antitoxin units
for immunizing purposes and for the treatment of mild cases.
Issued under **blue label**; price per vial \$1.90, strictly net
cash.

2. A stronger serum of 1000 antitoxin units for curative
purposes—of sufficient strength for the great majority of cases.
Issued under **yellow label**; price per vial \$3.50, strictly net
cash.

3. A still stronger serum of 1500 antitoxin units for ex-
ceptionally severe cases. Of this strongest grade our supply
for the present will be limited. Issued under **green label**;
price per vial, \$5.25, strictly net cash.

**Orders may be sent to our Detroit address; our New
York City office at 90 Maiden Lane; our branch at 1008
Broadway, Kansas City, Mo.; or our laboratory at Walkerville,
Ont.**

PARKE, DAVIS & COMPANY.