Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

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

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

THE

CANADA LANCET

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

THE OLDEST MEDICAL JOURNAL IN THE DOMINION.

Vol. XXX. No. 12. } TORONTO, AUGUST, 1898. { Price, 30 Cents. $3 per Annum.

CANADA LANCET PUBLISHING CO., PUBLISHERS, TORONTO.

INDEX TO CONTENTS.

PAGE

ORIGINAL ARTICLES AND COMMUNICATIONS—

Some Points in the Diagnosis of Morphia Addiction 599
Eczema Seborrhœicum 601
Abdominal Pregnancy 605

COMMUNICATIONS—

Treatment of Inebriates 607
On the Treatment of Consumption 609

MEDICINE—

The Hospital Treatment of Consumption 611

SURGERY—

The Dangers of Rectal Operations 618
Pathology and Surgery of Intussusception 623
Method of Removing Large Calculi from the Bladder, etc 624

NERVOUS DISEASES AND ELECTRO-THERAPEUTICS—

The Relation of Mental Diseases to General Medicine 627
Neurotherapy 628
Neurology in General Medicine 628

OBSTETRICS AND GYNAECOLOGY—

Pregnancy and Fibroid Tumors 630

PAGE

NOSE AND THROAT—

The Choice of Instruments Used in Operating upon Cartilaginous or Bony Enlargements of the Nasal Septum and upon Deviated Septa 632
The Diagnosis of Post-Nasal Adenoids in Children and their Removal 633
Dangers of the Nasal Douche 636

PAEDIATRICS—

Rochet and Jourdante : Incontinence of Urine in Children 637

PATHOLOGY AND BACTERIOLOGY—

Syphilis of the Stomach 641
Tuberculosis 641
The Biology of Leucocytes 643
Periodic Paralysis of Oculomotor Nerve 644

EDITORIAL—

The Toronto General Hospital Staff 645
The Ontario Medical Library Association 647
The Discipline Committee, etc 648

BOOK REVIEWS—

Notes 652

PUBLISHERS' DEPARTMENT—

Notes 653

SOLUBLE HYPODERMIC TABLETS.	Per Bottle 100 Tablets	Per Tube 20 Tablets
MORPHINE MURIATE .....1-6 gr.	$ 45	$ 13
MORPHINE MURIATE .....1-4 gr.	50	14
MORPHINE NITRATE.....1-4 gr.	90	22
MORPHINE NITRATE.....1-6 gr.	70	18
MORPHINE NITRATE.....1-8 gr.	55	15
MORPHINE NITRATE.....1-12 gr.	50	14
MORPHINE SULPHATE.....1-8 gr.	30	10
MORPHINE SULPHATE.....1-6 gr.	35	11
MORPHINE SULPHATE.....1-4 gr.	40	12
MORPHINE SULPHATE.....1-3 gr.	50	14
MORPHINE SULPHATE.....1-2 gr.	65	17
MORPHINE and ATROPINE No. 1, (Morphine Sulph. 1-8 gr.) (Atropine Sulph. 1-200 gr.)	45	13
MORPHINE and ATROPINE No. 2, (Morphine Sulph. 1-6 gr.) (Atropine Sulph. 1-180 gr.)	45	13
MORPHINE and ATROPINE No. 3, (Morphine Sulph. 1-4 gr.) (Atropine Sulph. 1-150 gr.)	50	14
MORPHINE and ATROPINE No. 4, (Morphine Sulph. 1-4 gr.) (Atropine Sulph. 1-100 gr.)	60	16
MORPHINE and ATROPINE No. 5, (Morphine Sulph. 1-8 gr.) (Atropine Sulph. 1-150 gr.)	45	13
MORPHINE and ATROPINE No. 6, (Morphine Sulph. 1-8 gr.) (Atropine Sulph. 1-100 gr.)	50	14
MORPHINE and ATROPINE No. 7, (Morphine Sulph. 1-6 gr.) (Atropine Sulph. 1-150 gr.)	50	14
MORPHINE and ATROPINE No. 8, (Morphine Sulph. 1-6 gr.) (Atropine Sulph. 1-120 gr.)	55	15
MORPHINE and ATROPINE No. 9, (Morphine Sulph. 1-4 gr.) (Atropine Sulph. 1-200 gr.)	50	14
MORPHINE and ATROPINE No. 10, (Morphine Sulph. 1-4 gr.) (Atropine Sulph. 1-120 gr.)	55	15
MORPHINE and ATROPINE No. 11, (Morphine Sulph. 1-4 gr.) (Atropine Sulph. 1-60 gr.)	60	16
MORPHINE and ATROPINE No. 12, (Morphine Sulph. 1-3 gr.) (Atropine Sulph. 1-120 gr.)	75	19

SOLUBLE HYPODERMIC TABLETS.	Per Bottle 100 Tablets	Per Tube 20 Tablets
MORPHINE and ATROPINE No. 13, (Morphine Sulph. 1-2 gr.) (Atropine Sulph. 1-150 gr.)	$ 75	$ 19
MORPHINE and ATROPINE No. 14, (Morphine Sulph. 1-2 gr.) (Atropine Sulph. 1-120 gr.)	75	19
MORPHINE and ATROPINE No. 15, (Morphine Sulph. 1-2 gr.) (Atropine Sulph. 1-100 gr.)	75	19
MORPHINE and ATROPINE No. 16, (Morphine Sulph. 1-2 gr.) (Atropine Sulph. 1-240 gr.)	75	19
NITROGLYCERIN.....1-50 gr.	40	12
NITROGLYCERIN.....1-150 gr.	40	12
NITROGLYCERIN.....1-100 gr.	40	12
NITROGLYCERIN.....1-200 gr.	40	12
NITROGLYCERIN, 1-100 gr. & STRYCHNINE, 1-50 gr.....	40	12
PHYSOSTIGMINE SULPH., 1-60 gr. (See Eserine Sulph.).....	80	20
*PILOCARPINE MURIATE.....1-5 gr.		
*PILOCARPINE MURIATE.....1-8 gr.		
*PILOCARPINE MURIATE.....1-20 gr.		
*PILOCARPINE NITRATE.....1-20 gr.		
*PILOCARPINE NITRATE.....1-8 gr.		
*PILOCARPINE NITRATE.....1-4 gr.		
SODIUM ARSENIATE.....1-30 gr.	30	10
STRYCHNINE NITRATE.....1-150 gr.	50	14
STRYCHNINE NITRATE.....1-100 gr.	35	11
STRYCHNINE NITRATE.....1-60 gr.	40	12
STRYCHNINE SULPHATE.....1-150 gr.	30	10
STRYCHNINE SULPHATE.....1-120 gr.	30	10
STRYCHNINE SULPHATE.....1-100 gr.	30	10
STRYCHNINE SULPHATE.....1-60 gr.	30	10
STRYCHNINE SULPHATE.....1-20 gr.	40	12
STRYCHNINE SULPHATE.....1-30 gr.	30	10
STRYCHNINE SULPHATE .....1-50 gr.	30	10
STRYCHNINE and ATROPINE No. 1, (Strychnine Sulph. 1-50 gr.) (Atropine Sulph. 1-150 gr.)	50	14
STRYCHNINE and ATROPINE No. 2, (Strychnine Sulph. 1-30 gr.) (Atropine Sulph. 1-120 gr.)	50	14
STRYCHNINE and ATROPINE No. 3, (Strychnine Sulph. 1-60 gr.) (Atropine Sulph. 1-150 gr.)	50	14

*Prices on application.

The Canada Lancet.

VOL. XXX.] TORONTO, AUGUST, 1898. [No. 12.

ORIGINAL ARTICLES AND COMMUNICATIONS.

SOME POINTS IN THE DIAGNOSIS OF MORPHIA ADDICTION.

BY STEPHEN LETT, M.D., M. C. P. & S. ONT.,

Medical Superintendent of the Homewood Retreat, Guelph, Ont.

The far-reaching and important factor of being able to make an absolute diagnosis in cases of suspected morphia addiction is of such moment that any possible light on the subject should receive publication. The malady is frequently a secret one—known only to the unfortunate habitué, who uses every possible means to keep the fact hidden from nearest friends and relatives, as well as the medical adviser, until dire necessity compels an acknowledgment of that which has been so long withheld at the cost of exquisite physical and mental torture and ruin to the general health. The importance of a correct diagnosis is further manifest in many medico-legal cases; errors have led to serious results—inflicting injustice, undeserved penalties, and even sacrifice of life, when a correct diagnosis would have averted these catastrophies.

I am pleased to find that Dr. Mattison, medical director of the Brooklyn Home for Habitués, has in the *Quarterly Journal of Inebriety*, Vol. XX., No. 2, page 203, directed attention to this matter, and ably presents the subject, as witnessed by myself and others engaged in the special line of treating cases of narcotic addiction. Dr. Mattison, in the same article, points out the way to a diagnosis in the following words:—

"The detection of morphinism in women need never be difficult. We have infallible means to decide it. Two tests place the diagnosis beyond doubt. One is urinary analysis: the other, enforced abstinence. The latter is the better. The former is best made by the Bartley process—Dr. E. H. Bartley, Professor of Chemistry, L. I. College Hospital. There are other methods, but they are complex. This is simple and sure. It is: Make suspected urine alkaline with carbonate of soda. To this add one-fourth its volume of chloroform or amylic alcohol. Shake well, allow to settle, draw off the chloroform and add a small amount of iodic acid. If morphia be present a violet tinge will be noted. The other test suggests itself. Forced abstinence from morphia for forty-eight hours will surely give rise to reflex symptoms due to opiate need, and settle habitual taking beyond dispute."

I was of Dr. Mattison's opinion until recent experience proved to me that the means of diagnosis above suggested are open to grave errors which might lead to most serious results. Doubtless there are many cases in which a correct diagnosis may be made by one or other or both the tests he has so advantageously published. Yet there are instances where they will prove to be fallacious.

Take the physiological test of enforced abstinence for forty-eight hours. It is not always possible to have the suspected person placed in such a position, surrounded by the proper safeguards, and have the necessary espionage exercised to prevent the possibility of clandestine morphia-taking. Supposing, however, this supervision possible, the patient might have been addicted to some other drug—cocaine, phosphorus, paraldehyde chloral, etc., or even alcohol; the sudden and protracted deprivation of the accustomed drug would be followed by a train of symptoms so closely allied to those consequent upon the sudden withdrawal of morphia that it would require a very acute diagnostician to make a diagnosis that could not be called in question.

By means of the science of chemistry there is at our command a surer and better method. Urine can always be obtained from the suspected person, and a proper analysis of it will reveal the presence or absence of morphia. The Bartley mode of testing the urine, as set forth by Dr. Mattison, is open to error, for not only have I proved that the iodic acid and chloroform reaction test can be obtained with some urines in which I have absolute certainty no morphia exists, as evidenced by the source from which it was obtained, as well as by chemical analysis hereafter described, but also have had negative results by the Bartley test with urine voided by a patient known to be taking two and three-quarters of a grain morphia sulph. in twenty-four hours that, unless very critically examined, it was impossible to say any reaction had taken place, and yet a sample of this latter urine treated by the method hereinafter described unmistakably reacted to the iodic acid and chloroform test.

Upon these facts we are forced to the conclusion that some urines contain a substance or substances which unless separated before the final test is made will give a reaction the same as morphia; and that in some persons taking below three grains of morphia in twenty-four hours the Bartley test is not reliable.

The urines which, I am absolutely sure, contained no morphia, gave with the Bartley test a very positive reaction, and beyond a slight excess of uric acid in my own case, the persons from whom other specimens were obtained are in perfect health. I may further add that the uric acid separated from my urine when acidulated with hydrochloric acid, the uric acid collected in a filter and well washed, gave the reaction with iodic acid and chloroform. The question whether this is entirely due to the uric acid or some adherent substance has as yet not been determined, this together with the isolation of any other substance causing the reaction is reserved for further investigation now in progress.

The method I recommend for the detection of morphia in the urine is as follows:

Collect about twenty ounces (less will do) of the suspected urine. If

it has not an acid reaction acidulate with dilute hydrochloric acid until it reddens blue litmus. Concentrate to about three ounces and let stand in a cool place for twelve hours, then filter. To the filtrate add sufficient carbonate of sodium to render it alkaline and let it stand for twelve hours, then filter and collect the precipitate, wash this with distilled water made slightly alkaline by carbonate of sodium and dry. Digest the dried precipitate with pure alcohol at a gentle heat and filter, evaporate the filtrate to dryness, dissolve the residue with dilute sulphuric acid, and test for morphia by the iodic acid or other well-known tests for morphia salts.

By the above method I have succeeded in obtaining morphia sulphate from the urines of persons taking very minute amounts of the drug, and have been able to identify the crystals by means of the microscope, when the Bartley test failed.

ECZEMA SEBORRHŒICUM.

BY WM. NELSON, M.D.C.M., DERMATOLOGIST TO THE METROPOLITAN DISPENSARY, MONTREAL.

(Read before the Montreal Medico-Chirurgical Society, May 23rd, 1898.)

Many years ago Willan and Bateman described a serpiginous, papular-edged, ringed eruption, limited to the trunk, and called it "Lichen Circumscriptus." Afterwards, at the Blackfriars Skin Hospital and elsewhere, it became familiarly known as "Flannel-rash." Still later, Duhring noticed that the trunk eruption was always preceded or accompanied by a so-called seborrhœa of the scalp, and he re-christened it "Seborrhœa Corporis." This clinical observation of Duhring's attracted Unna's attention, and he, with characteristic energy, set about a thorough microscopical and clinical study of the process, the results of which he gave to the profession at the International Medical Congress of 1887. His views, of course, did not receive anything like universal acceptance, but among the few who recognized that Unna had brought to light the greater portion of a great truth was that brilliant dermatologist, G. T. Elliott, of New York. It was my privilege during the years 1889 90 to watch the latter's work as carried on in the New York Skin and Cancer Hospital, and this paper will epitomize what I then learned, what I have since gathered from his writings, and what my own experience has taught me.

Eczema seborrhœicum or dematitis seborrhœica embraces a number of clinical manifestations that formerly were looked upon as distinct diseases, but which are now known to be simply so many phases of one and the same process; thus, seborrhœa sicca, seborrhœa corporis, pityriasis capitis, faciei and barbæ, alopecia pityrodes, and many cases of so-called psoriasis and syphilis represent nothing more than different grades of the process first described by Unna.

The process is a parasitic, catarrhal inflammation of the skin that primarily attacks the scalp, where it may remain localized for an indefi-

nite period. More often it extends behind the ears and a little below the margin of the hair upon the forehead, or appears in the interpalpebral space and beside the alæ of the nose. Very often the disease skips the face and shows itself upon the middle of the sternum and between the shoulders (seborrhœa corporis of Duhring), or the groin, axillæ, umbilicus or areolæ of breasts may be attacked. No portion of the body is altogether exempt—not even the palms and soles—but the before-mentioned regions are those for which the disease has a preference.

In this paper I will not touch upon the disease as it appears when superimposed upon or complicated by other morbid conditions such as eczema, syphilis or psoriasis.

The clinical appearances vary according to the intensity and position of the process. The earliest and slightest grade is represented by more or less branny or greasy scaling—the latter occurring when a seborrhœa oleosa exists; the skin may be normal as to color, or slightly reddened. The subjective symptoms are not marked, consisting only of slight itching and a sensation of flushing of the part when the patient is heated. This is the condition so often met with on the scalp, and which has had so many christenings. The next step is characterized by the appearance of sharply defined macules of various dimensions and colors, the most common tints being those of salmon-yellow or raw-ham. These macules may become the seat of thick, greasy crusts, which in appearance and to the touch are not unlike common yellow soap (seborrhœa cerea). A higher grade of severity is manifested by groups of small papules, dark-red in color, and often capped with scales. These papules increase in size and number, coalesce and form a papulo-squamous patch, which soon clears in the centre, leaving a papular-edged, ringed lesion enclosing a yellow scaly centre. The union of a number of these lesions gives rise to crescentic, gyrate and wreath-like figures. The trefoil so often seen upon the chest and the scallop, extending from hairy margin of forehead, are good examples of what is produced by the coalescence of these different lesions. The greatest intensity of the disease is represented by some of the lesions mentioned plus more or less vivid redness, weeping and crusting, but the accompanying infiltration is always very slight as compared with that of simple eczema.

Pathologically the disease is a catarrhal inflammation of the skin, the depth and area of the inflammatory infiltration being in proportion to the intensity of the process. In the milder forms represented clinically by more or less scaling there is found a slight infiltration about the papillary vessels and ascending branches of the subpapillary plexus. In the more intense grades the whole cutis may be involved in the inflammatory process. While the microscope reveals nothing absolutely distinctive, it most certainly does away with the old belief that the sebaceous glands are primarily and almost exclusively the seat of the morbid processes that produce the manifestations known as the seborrhœas. The sebaceous glands have been found to be normal in appearance and to take an even stain with osmic acid, and no one has been able to demonstrate an incomplete metamorphosis of their cells. The presence or absence of fatty scales or crusts depends upon the existence or non-exis-

tence of a seb rrhœa oleosa, the degree of hyperplasia of the horny lining of the follicular duct, and the completeness or incompleteness of the keratinization of the horny layer.

ETIOLOGY.—The disease is met with at all ages, but the period between 15 and 35 is that during which the greater number of cases are developed. The sexes are probably equally liable, but women more often seek relief.

Heat and moisture favor development and extension, and therefore we meet with the disease most frequently in those who perspire freely, who wear tight-fitting, close-textured hats and caps, who often wet the hair and scalp with plain water, who pass through the barber's hands and fail to disinfect the head afterwards, and, lastly, those who are brought into close personal contact with individuals in whom the disease already exists. It has been repeatedly observed that the marriage of a person possessing a healthy scalp and skin with one suffering from even the milder grade of the disease (dry dandruff, for instance) may be followed by the more or less rapid infection of the healthy partner.

Unna claims that he has found a mulberry coccus constantly present in the diseased tissues and that inoculations with it produce vesiculation, redness and subsequent baldness. Sabouraud fathers the statement that the micro-organism of seborrhœic eczema is the same as that of alopecia areata. These claims have received no corroboration.

The recognition and proper treatment of eczema seborrhœicum are of very considerable importance, not only because of the disfigurement or discomfort incidental to its different grades, but also for the very good reason that it, and it alone, is responsible for over 80% of all cases of premature baldness. Elliott's analysis of 234 consecutive cases of alopecia prematura, met with in private practice, is as follows:

Alopecia Areata	8	
Congestion of brain	1	
Excessive intellectual work	4	
Syphilis	2	
Prolonged neuralgia	3	
Anæmia, neurasthenia and debility	3	
Scarlatina and Typhoid fever	4	
Idiopathic	2	
Alopecia from purely local causes	207	or 88.46%
	243	

Every one of these 207 cases due to purely local causes manifested some grade of eczema seborrhœicum, *i.e.*, the clinical phenomena were such as were known as pityriasis capitis, alopecia pityrodes and seborrhœa sicca, or, progression to a higher intensity having taken place, there were associated with the appearances mentioned more or less extensive areas or circumscribed patches of redness covered with scales or crusts, and often presenting evidences of weeping. The majority of cases displayed only the symptoms belonging to alopecia pityrodes and seborrhœa sicca, but many had, in addition to scalp symptoms, manifestations of the disease

upon some other portion of the body. Another interesting fact was that in 164 out of the 207 cases the patients were between the ages of 20 and 40.*

The treatment of the uncomplicated disease is entirely local and, as a rule, satisfactory; especially is this so in regard to the body emption. The malady at its primary seat—the scalp—is more resistant, and usually requires some perseverance in order to eradicate it; not only this, but as one attack leaves the skin of this part peculiarly liable to another, and the possible sources of infection being innumerable, a prophylactic should be used indefinitely.

The classic remedies for eczematous conditions are of little or no benefit, and in the treatment of the scalp the time-honored tonic and stimulant applications are worse than useless. Two drugs exert a special influence upon the disease, viz: Sulphur and resorcin, and they may be used singly or in combination. The mercurials, with the exception of the oleate, are of little value, and the latter gives its best results in cases of long standing and when the eczematous element predominates.

A brief outline of the routine treatment I have found most satisfactory may not be out of place, and is about as follows:

1st. Of the disease on non-hairy surfaces:—All scales and crusts are to be removed by washing with spirits of soft soap, or, if the part be tender, by the application of salicylated oil. Then any one of the following may be used: Sulphur ointment alone, or with 3% to 5% of resorcin added; Borophenyl ointment 10%, or thymol 4%. A more elegant way of applying these remedies is by means of Bassorin Varnish or Pick's Jelly, the formulæ for which are:

Bassorin 48.0, dextrin 25, glycerin 10, aq. ad 100.0. Sig.: Bassorin Varnish. Gum tragacanth 5.0, glycerin 2.0 aq. ad 100.0. Sig.: Pick's Jelly.

These, when spread upon the skin, dry quickly and leave a film that excludes the air, keeps the drug in close contact with the diseased surface, and is easily washed off.

2nd. Of the disease as met with on hairy surfaces: that of the scalp being taken as the type and acute conditions ignored. The head should be shampooed once or twice a week, not by a barber, but by the patient. Green soap is the best for this purpose, the disagreeable odor being disguised by dissolving it in Eau de Cologne or white spirits of lavender. Any of the ointments already mentioned may be used, or, an oleate of mercury cream, the strength of which may be from 2½% to 10%. In the majority of cases, however, lotions are preferable, and they are especially so in treating the scalps of women and those who wear long hair. One containing 3% to 10% of resorcin in equal parts of alcohol and water is of good general service. More elegant preparations that are prophylactic and curative can be made use of as toilet articles.

In using ointments or creams on the head the hair should be parted and the selected dressing rubbed into the scalp with the finger-tips, as it is the skin and not the hair that requires treatment. A good method of applying lotions to long-haired scalps is found in the use of the ordinary

* *New York Med. Jour.*, Feby. 4th, 1893.

medicine dropper, the nozzle of which can be pushed through the hair down to the skin before the bulb is compressed. In this way the whole scalp can be gone over without wetting the hair to any appreciable extent.

29 McGill College Avenue, Montreal.

ABDOMINAL PREGNANCY.

BY S. H. LARGE, M.D., CLARKSBURG, ONT.

Mrs. H., age 36. Family history, good. Personal history, has had two children and two miscarriages, both at the fifth month. Menstruation has been regular ever since the age of fifteen. She has had very good health up to the present.

I am indebted to Dr. Hurlburt, of Thornbury, for the following history: I was called to see Mrs. H. on Sept. 28th, 1897; found her suffering from pain all over the abdomen, especially severe in the region of the liver. Pulse 90. Temperature 99. Had been vomiting. Menses regular. Bowels constipated. Found she had been treated for gall-stones by former physician. Applied mustard over stomach. Gave 1/10 gr. each calomel, cocaine, and morphine, with 3 grs. bismuth, every hour for 12 doses, then Rochelle until bowels were moved.

Examination per vaginam.

Os patulous. Right tube enlarged and very tender. Applied to uterus belladonna and glycerine, and painted tr. iodine over right side. Heard in a few days that she was up and doing her work

On January 2nd, 1898, she was seized with violent pain in right iliac region. Dr. Hurlburt and I saw her together. Temperature normal. Pulse 110.

Examination per vaginam. The os was normal, and the uterus was empty on passing the sound; there was a distinct tumor on right side which was very tender. We diagnosed abdominal pregnancy, and decided to operate the following morning.

On January 3rd we found that she had had a very bad night, and the pain had been very severe; the abdomen was greatly distended and very tympanitic. Pulse 120, and very thready. Extremities cold. Temperature normal, and it looked as if the sac had ruptured.

Gave her 1/30 gr. strychnine hypodermically, and then gave her an anæsthetic, using the A.C.E. Mixture. After she was thoroughly under the influence of the anæsthetic we made a thorough examination of the interior of the uterus and found it empty.

Operation. Preparation of operating room. All articles of furniture, curtains, and mats were removed from the dining-room, and carbolic acid was burnt on coals, also a tin of carbolic acid and water was put on the stove and allowed to boil. The operation was done on the kitchen table.

Preparation of patient. A dose of Rochelle salts was given the night before, and the abdomen was washed with antiseptic soap and ether, and

then bichloride. Towels were boiled and placed around abdomen. Instruments were boiled and put into a solution of carbolic acid.

After making hands aseptic, an incision four inches long was made in the median line; after cutting through the skin and integuments, and after all hemorrhage had been arrested by artery forceps, the peritoneum was picked up between two forceps and cut between; the finger was then used as a guide and the opening enlarged with scissors. On digital examination a five months' fœtus was found lying amongst the bowels, and there were also a great number of clots and quite a quantity of serous fluid, showing that the sac had ruptured. The fœtus was removed through the opening. On examining the placenta it was found to be quite adherent and was separated with great difficulty, and there was very severe hemorrhage, which was controlled by boiled hot water and artery forceps. The cavity was then packed with iodoform gauze for a few moments, and on removal it was found that all hemorrhage had ceased. After drying the cavity with prepared lint a drainage tube was inserted, and the peritoneum was brought together with silk, then the muscles and skin with silkworm gut and a dressing of boracic acid and iodoform, absorbent and gauze, and a many-tailed bandage.

The patient was very weak after the operation, but on giving her strychnine hypodermically, and brandy per rectum, she revived. We would have given her an intra venous injection of salt solution but did not have the appliances with us. Her diet after the operation was brandy, milk, egg albumen, and beef juice, that is, beef just warmed and then squeezed.

She made a good recovery, and she now wears an abdominal silk belt and is going around.

The temperature on the fourth day went up to 100, but when the bowels were moved it went down to 99.

I would like to enumerate some of the many difficulties a country surgeon has to contend against:

1. The patient was nine miles from our office.

2. Country people have a great abhorrence of an operation, and if you do an operation and it terminates fatally you are done for in that locality.

3. It is impossible to have trained nurses, as nine times out of ten operations have to be done in poor families, and they are unable to get them. We had two neighbor women assisting us. You have to act as nurse, generally, yourself.

4. It is very hard to get country people to go to a hospital; they think when you mention hospital to them that their time has come, and will start to make preparation for the "great beyond."

Generally the places you have to operate in are not very aseptic, and it is a wonder sometimes how they escape septic trouble.

Communications.

TREATMENT OF INEBRIATES.

TO THE EDITOR OF THE CANADA LANCET:

SIR,—In the June number of the LANCET you publish a letter in which I am criticized for not favoring the Keeley method of treating inebriates, for not visiting Keeley Institutes in the United States, for recommending the utilization of local hospitals for the treatment of inebriates, and also for suggesting the appointment by the Government of an inspector of inebriate institutions.

From the character and tone of this communication it is very evident that it was neither written by a medical man nor by a Canadian, and that the writer is more concerned for the interests of the company controlling certain proprietary remedies than for the interests of the unfortunate inebriate.

Although a reply seems almost superfluous under the circumstances, it may possibly serve a useful purpose, if, with your kind permission, I should state some of my reasons for not favoring the Keeley treatment.

A little over a year ago a lady called upon me to secure my interest in the Keeley treatment for inebriate prisoners. She was fortified with a number of documents and publications that placed the Keeley treatment in a most favorable light. I was so well impressed with her presentation of the case that I took some trouble to have her name placed on the programme for a paper to be read on the subject before the National Conference of Charities and Correction which met in Toronto in July last, notwithstanding that the programme had already been arranged for. I spoke favorably of the Keeley treatment to a member of the Ontario Government, to the Inspector of Prisons, as well as to the members of the Prisoners' Aid Association.

During this time I accepted the statistics furnished me as trustworthy. After a careful investigation, however, I was forced to the conclusion that if not absolutely inaccurate, they were at least misleading. For instance, it is claimed that by the introduction of the Keeley treatment in the branches of the U.S. Military Homes for Disabled Volunteer Soldiers, from 80% to 90% of those taking treatment for inebriety are permanently cured of their inebriety. I have letters from three of the surgeons of these branches. The first stated that the Keeley treatment was never used in the Home with which he was connected, as they found other treatment quite as effective. The other surgeons state that although the environment of the soldiers in these Homes was most favorable to reformation while taking the Keeley treatment, special privileges being granted to Keeley "graduates," yet not more than from 20% to 25% appear to be permanently reformed. One of these surgeons puts the proportion of "cures" at 25%, and the other at only 20%.

I also found that at the Washingtonian Home, Boston, during the last

few years fully 50% of the patients have taken some form of "Gold Cure" treatment, and at the Walnut Lodge Hospital, Hartford, these cases amounted to 70%, while 50% have taken the Keeley Gold Cure; some of these have taken the "Keeley Cure" several times.

While on a visit to the Massachusetts Reformatory for Women last winter, I asked the lady superintendent if she had had any experience with, or knowledge of, the Keeley treatment. Her reply was to the effect that from what she had seen of the results of the treatment it was far from being satisfactory. I put the same question to the secretary of the Massachusetts Prison Association. He said, "I have known scores to take the 'Keeley Cure,' but I know of only one case where the cure was permanent." On the other hand, on asking the secretary of the New York Prison Association the same question he said, in effect, "The Keeley cure is all right, but the treatment of Dr. ——, of ——, Ont., is quite as good. Don't bother about the Keeley treatment."

The Rev. Dr. Buckley, editor of the *Christian Advocate*, New York, through physicians and clergymen, obtained the results of treatment of 534 cases of inebriety in "Keeley Institutes." Of these, 251 relapsed within the comparatively short period of nine months, 13 became insane, 11 died and 2 committed suicide.

Your correspondent finds fault with me for not visiting "Keeley Institutes" in the United States. I went where I had reason to believe I could obtain reliable information, and I was not disappointed. I saw Dr. Lett of Guelph, Dr. Crothers of Hartford, Conn., Dr. L. D. Mason of Brooklyn, Dr. Hutchison of Foxboro, Mass., and Dr. Ellsworth of Boston. These gentleman have attained an eminent position in their specialty and they have made valuable contributions to the literature of the inebriety question, and, moreover, their practice is in accordance with the tenets of legitimate medicine. I did, indeed, visit the "Keeley Institute" in Toronto, as well as two other so-called "Gold Cures," one in Canada and one in the United States, and although I was most courteously treated by the gentlemen in charge of these institutions, the amount of scientific information vouchsafed could be put in a very small compass. As already intimated, I had correspondence with the Keeley Company at Dwight, Illinois, and I had the Keeley literature and their so-called statistics placed at my disposal.

Under these circumstances I fail to see any advantage in visiting the individual "Institutes." I intended visiting some of the United States Military Homes where the Keeley treatment had been in operation, but I ascertained that the Keeley treatment had been abandoned in all these Soldiers' Homes, and that representatives of the Keeley Company or Keeley Institutes had been prohibited giving treatment to the inmates of these Military Homes. I may say that I obtained this information from the "Report of the Board of Managers of the National Home for Disabled Volunteer Soldiers," 1897, page 194. The publication was kindly sent me by Gen. W. B. Franklin of Hartford, Conn., the President of the Board. This does not look like an endorsation of the "Keeley Cure" by the United States Government. I may add here that I also failed to find that the Keeley treatment is in use in any penal institution anywhere, although the Keeley Company claim that such is the case.

I am, on principle, opposed to the adoption of proprietary remedies, but notwithstanding this, had I found that the representations of the Keeley Company could be substantiated, that the remedies were harmless, that their statistics were reliable, and that 80 or 90 per cent. of their "graduates" abstained permanently from intoxicants, I would have felt it to be my duty, in the interests of humanity, to report favorably to the adoption of the Keeley treatment for the relief of pauper inebriates and inebriate prisoners. For seven or eight years the Prisoners' Aid Association has been urging the Ontario Government to establish one or more Reformatories for inebriates, but the Government hesitates to do this on account of the very large expenditure necessary both for buildings and for maintenance. It can readily be seen that this expenditure would be avoided if 80 per cent. or 90 per cent. of prisoners and paupers can be permanently cured by a course of four or five weeks' treatment.

Unhappily no treatment has as yet been devised that can effect such a desirable reformation. Had I found that the "Keeley Cure" could accomplish this, I would gladly hold up both hands for its immediate adoption, notwithstanding the fact that—as stated to the Prisoners' Aid Association by a representative of the Toronto "Keeley Institute"—the minimum charge would be $30 per patient.

Yours, etc., etc.,
A. M. ROSEBRUGH.

[This letter must close the discussion in these columns. The subject is important but does not come properly within the sphere of the CANADA LANCET, and would make too great demands upon our space.—ED.]

ON THE TREATMENT OF CONSUMPTION.

TO THE EDITOR OF THE CANADA LANCET.

SIR,—When we think of the many points which must be considered, the many indications in the treatment of consumption, the indispensable outdoor or pure air, the special diet, the needs of the skin, the degree of fever, and nature and amount of exercise required, etc., the absurdity of certain physicians "coming out," one every few months or weeks, with a new "cure," is very striking.

Almost every case of consumption, even in the second stage, will recover if we can properly and practically meet all the indications suggested by the various symptoms in each individual case, without any specific or special new cure whatever.

Almost every physician of a few years' practice has been surprised to find an advanced case get better and practically well, when he has had no hope of such result. Amongst the multitudes of remedies long known, hygienic and other, certain ones had been prescribed which just met the particular requirements and conditions of the case; while the patient had been a "good" one, and able to carry them out, as prescribed, which very few are able to do.

And it is just here that nearly the whole secret of "cure" lies, and of what would be the recovery of a large proportion of consumptives who now die on our hands, or, alas! far from home, when they should have remained in Canada where already acclimatized.

However long close and careful the examination and after-study of each particular case by the consulted physician, of the whole history and the precise present condition of all the various physiological functions: the amount of air breathed, the remaining digestive, and especially assimilative powers, and the condition of the skin, between which, *i.e.*, the oxygen inspired, the food assimilation, and the skin function there is such close relationship; the study of the patient's strength and temperature, as bearing upon the exercise to be recommended, whether active or passive, etc; of the extent of the pre-bacillary auto-intoxication, the after self-infection and the present virulency of the bacillary action, and of numerous other points. And however well the many indications may be now met by the physician in his detailed advice in all the special points of treatment for this particular case, the great difficulty now usually looms up.

Is the patient in a position, have he and his friends the intelligence, the possible facilities or means, to have the advice of the physician properly carried out in the necessary detail? Can he keep out in the open air all day and be practically or almost so at night, by proper ventilation of the bedroom? Can he carry out rules for increasing the air or oxygen supply in the blood and tissues—the super-respiration now required—the lung gymnastics if necessary, or other means of supplying a sufficiency of oxygen? Can he command the proper food? Or the proper tempered baths in suitable form? Or the massage or extremity movements if passive exercise be advisable? Will the special medication for special troublesome, wearing-out symptoms be properly attended to?

In not one case in ten can these questions be safely answered in the affirmative.

When we shall have learned clearly that, as shown many years ago in a pamphlet on my own collective investigations in respect to the chest measurement of consumptives, and much more recently by Dr. J. E. Squire, Physician to the North London Hospital for Consumption, that those patients, in the "early stage," breathe only about one-third as much air as average persons in health, learned that this hypo-respiration is the cause of the disease and that the bacillus is *post-hoc* (although later becoming virulent and a more or less active infection) more attention will then be given to an increased oxygen supply in the diseased body, in some form, as the first and indispensable remedy, and less to new cures and fads.

Already we have learned that phthisical patients can be properly treated only in special sanatoria or hospitals.

It now remains for us to endeavor to have these provided.

Yours, &c.,

EDWARD PLAYTER.

MEDICINE.

IN CHARGE OF

N. A. POWELL, M.D.,

Professor of Medical Jurisprudence and Lecturer on Clinical Surgery, Trinity Medical College ; Surgeon to the Hospital for Sick Children, and to the Extern Department Toronto General Hospital ; Professor of Surgery, Ontario Medical College for Women. 167 College St. ; and

WILLIAM BRITTON, M.D., 17 Isabella Street.

THE HOSPITAL TREATMENT OF CONSUMPTION.

BY JAMES E. POLLOCK, M.D., F.R.C.P.,

Consulting Physician to the Hospital for Consumption, etc., Brompton.

It is well known that fifty years ago consumptive cases were excluded from the general hospitals, not that there was any idea that the disease might be communicated by contagion, but that its hopeless nature and prolonged course in most cases would uselessly occupy space in hospitals which ought to be devoted to the care of curable affections. This it was which mainly led to the foundation of the Brompton Hospital, in order that, whether curable or not, a refuge might be found for a very large class of sufferers from a pitiable disease. The great prevalence of the disease among all classes largely excited a humane desire for its relief, and a yearly increasing response was made in money to the appeals of a small committee, till now £24,000 per annum is found from several sources, which provides 231 beds, and supply advice and medicine to some 13,000 out-patients annually. The proposal for its foundation emanated from a few charitable laymen with no interests to consider except the relief of much suffering ; but, strange to say, it met with very decided opposition from the heads of the profession. Watson and Sir James Clark were against it, and it may be said that, with the exception of Williams, Walshe, and John Forbes, the rest of the profession discountenanced the idea of a special hospital. Those three boldly accepted office as consulting physicians, although Walshe alone ever treated any patients at Brompton. For a time he took charge of an out-patient department. In looking back to that time it is plain that there existed a fear that quackery would arise from the fact that some of the staff might assume a superior knowledge of chest disease. It was, no doubt, argued that a general knowledge of all branches of medical science made the best physician, even for special diseases ; and up to that time—with perhaps the exception of syphilis—there was no institution which limited itself to any particular affection. For these, and perhaps more personal causes, the physicians of general hospitals gave no help to the new

departure. The committee of management had, therefore, to select as physicians men unconnected with other hospitals; nor was the rule altered till, in 1869, being anxious to secure the services of Burdon Sanderson as physician, who had retired from the office of assistant physician in 1863, they rescinded the rule. Since then the staff numbers many physicians who have for years been attached to general hospitals.

The Hospital for Consumption was established at Brompton in 1 42, and at first contained 30 beds. In 1846 there were 90 beds, and in 1856, 200. In 1882, the new building being completed, there were and are now 321 beds. The locality was first chosen, no doubt, from the consideration that it was then suburban, and surrounded by gardens and fields. This condition has long since ceased, for the growth of London has extended for miles farther west, and new buildings, for the most part of high class, have changed the character of the place. The soil is gravelly, no doubt of riparian origin, and the writer can remember seeing the tidal influence of the Thames shown in several narrow inland drains within a mile of the hospital. The idea was also that the air was sedative and relaxing, in accordance with the views then held regarding the treatment of phthisis.

The death-rate from phthisis in England and Wales in 1838 was 38 per 10,000 living; in 1894, as shown further on, it had fallen to 14.

There is some interest in studying the results of treatment in the hospital during its early years, and I give the following summary from two reports made in 1849 and 1863 by the physicians.

It may be stated at once that there was no attempt or pretence at any specific treatment of phthisis, but all cases were treated on the general principles of practical medicine, and this, of course, varied with the individual views of the physician in charge. The diet was good and nourishing in all cases, and extras, including luxuries, adapted to the capricious appetite of the sick—such as chicken and oysters—while wine and other stimulants were supplied in quantities ordered by the physician. The bedding was good, with special spring arrangements for the worst bedridden cases, and open fires in winter and comfortable sofas and chairs contributed no little to the comfort of the wards. The arrangements for ventilating, heating, and cubic space are noticed further on.

In studying these results it must be remembered that the cases admitted were in all stages of the disease, and for the most part presented well marked symptoms on admission. It was natural that an institution open for the first time for consumption, to which only subscribers gave admission, should be so filled. Here was found a refuge for incurable cases, and those of doubtful nature, which in after years were found in the wards were put aside, from charitable motives, to admit sufferers of the more urgent class.

The first medical report in 1849 gave the results of six years' experience of in-patients, the cases being divided into three stages—consolidation of lung, softening, and cavity. The results are stated as "relieved," "much relieved," and "arrested."

REPORT FOR 1849.

In-patients, both sexes, 888 cases.

First Stage—

Relieved.....One half of all cases.
Much relieved..... 40 per cent.
Arrest..... 12 "

Second Stage—

Relieved..... 60 per cent.
Much relieved..... 23 "
Arrest..... 3 "

Third Stage—

Relieved..... 25 per cent.
Much relieved ..... 16 "
Arrest..... 3 "

More than one-half died within 18 months,
Duration of cases, 6 to 9 months..... 17 per cent.
" " 3½ years to 4..... 2 "

The second medical report, made in 1863, gave the results of thirteen years, which may be condensed as follows :—

Admissions, in-patients, 8,693.
Deaths per cent., 14.97.
Weights of 3,872 cases increased in 2,487.

REPORT FOR 1891.

The following figures from the report of 1891 show the results in some more recent years :—

Total cases of phthisis, excluding acute and casualty cases, 1,070.
Deaths, 222, or 20.7 per cent.
Weights of phthisis patients (No. of cases, 846).
Gained weight..... 469
Stationary..... 141
Average gain per patient..... 5.1 lbs.

Total Mortality—

1885..... 18.3 per cent.
1886-7..... 15.9 "
1888..... 16.4 "
1889..... 17.1 "

St Bartholomew's Hospital for above years—
Phthisis cases, 340 ; deaths, 54 per cent.
Guy's Hospital for above years—
Phthisis cases, 180 ; deaths, 50 per cent.

Admissions of cases of phthisis to general hospitals were, of course, when symptoms became very urgent, as from hæmoptysis, pneumo-thorax, etc.

Being appointed assistant physician in 1855 in charge of out-patients, I soon became aware that the artificial division of phthisis into stages conveyed but little knowledge of the disease as a whole, especially as regards its probable progress and duration—in other words, its prognosis. It became evident that the affection had many varieties, and that its course was influenced by age, heredity, and the concurrence of

other disorders, as well as by symptoms referable to the lung condition, I therefore proceeded to note with accuracy not only the physical diagnosis but the concurrent history of each case; and after ten years I found myself able to tabulate the features of 3,566 cases of phthisis which had been under my own observation, the object being to show, as far as possible, the conditions which either favored or interfered with prolongation, and which, therefore, were indicative of an advance towards cure or to a downward course. In actual practice I have found my hands much strengthened by the knowledge so gained, having often been able to prognostica e a prolongation of cases which had been stethoscopically condemned. I have recorded elsewhere minute details of the above researches.*

The contributions of physicians of the hospital to the literature of tuberculous disease are indicative of the mental attitude of the profession in those days. In 1851 Dr. Theophilus Thompson gave able lectures on the methods of recognition and clinical aspects of phthisis, which were published by his son in 1863. In 1863 Dr. Scott Alison contributed a volume devoted to physical methods of recognizing chest disease; and about the same time Dr. Cotton issued "Phthisis and the Stethoscope." In 1872 Dr. Douglas Powell published a short clinical work, which was followed by an exclusively pathological treatise by Dr. H. Green. In 1879 appeared a work on "Pulmonary Hæmorrhage," by Dr. Reginald Thompson, which was followed in 1884 by "Family Phthisis," an exhaustive illustration of the heredity of disease; while in 1887 the well-known work of Dr. C. J. B. Williams and his son appeared on the "Etiology, Pathology, and Treatment of Phthisis." These were all before the days of Koch and Pasteur, whose discoveries were unsuspected additions to knowledge.

We must not speak of the present day, when the staff comprises some of the most earnest and successful students of bacteriology. There were two subjects closely connected with modern pathology which were sure to present themselves as problems to be worked out by experience at the hospital—the influence of the newly-discovered tuberculin and the question of the contagiousness of consumption.

In 1890, in consequence of the expectations raised by the reports from Berlin, it was resolved to submit a certain number of patients to the treatment by injections of Koch's tuberculin, and it was used on twenty-eight phthisical patients—eighteen males and ten females—the average age of males being thirty, and of females twenty-one.

The patients belonged to a class which generally improved under treatment by a good hygiene and suitable dietary:—

Tuberculization without cavity	17 cases.
Both lungs affected	7 "
Unilateral cavity, limited	8 "
Cavity in both lungs	1 case.

The tuberculin was supplied to the hospital from Berlin, under Dr. Koch's directions.

*Extracted from "Elements of Prognosis in Consumption," by James E. Pollock, M.D. *Longmans*, 1863.

The treatment was continued for four months.

Bacilli were detected in twenty-five out of twenty-eight cases.

We give the conclusions reported by the physicians :—

Tuberculin speedily causes inflammatory changes in an around tubercular lesions, and increases the amount of expectoration. Pyrexia always occurs. Bacilli not diminished in number. Causes loss of weight in most cases and extension of local disease.

The communication of tubercular disease by contact with or breathing the same air as persons suffering from that affection has been thoroughly investigated at the hospital, which affords the most abundant materials for elucidation of this important subject.

Since the recognition of the bacillus as being the invariable concomitant if not actually the proximate cause of consumption, the question of the communicability of the disease naturally comes to the front. The possibility of its production by inoculation of a healthy animal with morbid matter has been proved beyond question. That, however, is very different from the possibility of tuberculosis being conveyed by mere contact, however close, with a patient so affected, and it is of great importance to ascertain whether breathing the same air, inhabiting the same rooms, or ministering to a sick person can be a medium of infection.

The late Dr. Cotton first, and more lately (1882) Dr. C. Theodore Williams, collected all available facts regarding the officials of the Brompton Hospital and all persons employed in attending to the patients over a period of thirty-seven years. I have carefully studied the results they have published, and can vouch for their accuracy.

The hospital now consists of two separate buildings, which are on opposite sides of the road, but connected by a tunnel ; and it is to the older of these, which was for many years the hospital proper, that the report applies. In 1856 it contained 200 beds, and was, as regards ventilation and cubic space, much inferior to the splendid modern building over the way. The object being to make the patients comfortable, it was generally overheated, and the ventilation often went wrong. The fresh air was introduced from the area surrounding the basement, and was forced by a fan moved by machinery along a series of passages on the floors of the building, till it escaped into the corridors and wards through grated openings, and finally was supposed to make its way out through Arnott's ventilating openings near the ceilings.

The system was a wretched failure, for, in fact, the terminal wards scarcely received any change of air, the motor power from below being insufficient, and there being no extracting power to insure its passage out of the wards. An outbreak of erysipelas, which proved fatal in several cases, called our attention to the presence of impure air, and the whole system of ventilation was altered, the present mode, by extraction of the used air, being substituted. This outbreak revealed to us the important fact that the foul air from the phthisical patients produced its usual result, in hospitals of sore throats and erysipelas, but did not lead to a spread of tubercular disease among the healthy attendants on the sick.

We give the statistics of cases of phthisis which occurred among the

attendants on the sick and other residents in the hospital, for which we are indebted to the researches of Dr. C. Theodore Williams. These cover a period of thirty-seven years. Three-fourths of the cases admitted are consumptive, the rest being heart cases or other affections of the chest. The out-patient department in the old hospital was very faulty, the rooms being small and crowded with from 200 to 300 patients daily, which must have been a source of danger to physicians, clerks, and porters.

The resident medical officer has rooms in the building, and also the house physicians, who remain for six months.

Of resident medical officers there were four. None had phthisis. Of about 150 house physicians, eight became consumptive. In only one was the disease contracted in the hospital. One had hæmoptysis before he came to reside and in one, disease appeared two years after.

Matrons were six in all. None had phthisis. They were resident for many years.

Of nurses there were 101. Three died of phthisis after leaving the hospital; one only had phthisis while in hospital.

Gallery maids sweep and clean the floor for several hours daily. None had phthisis.

There were twenty porters who had to wait in out-patient rooms and also in the post-mortem room. They have to carry the bodies from the wards. Among them there was no case of phthisis.

Of secretaries and clerks there were nine. None were affected by the disease.

Of dispensers there were twenty-two. Three died of phthisis, of whom one was intemperate, one took ill two years after he left, and one died of phthisis in the hospital. Two dispensers held office for twenty years.

Of physicians and assistant-physicians there were twenty-nine, of whom eight died, one from phthisis.

This evidence negatives the idea of phthisis being an infective disease under such circumstances as being grouped in a hospital, breathing the same air, and living under the same conditions as others similarly affected.

Later investigations have proved the fact that consumption is communicable, although not by personal contact, and that its existence depends on its transmission from one tuberculous individual (human or animal) to another. Such transmission is not aerial, but resembles more the process of inoculation. A certain amount of diseased product must enter into the animal economy, whether by the lung or the intestinal tract. It is recognized that the sputum of tuberculous patients, if dry, may be such an agent, and that the flesh and milk of tuberculous animals may convey the poison.

In accordance with these views, the Brompton Hospital has made stringent regulations with regard to the sputum and excreta of consumptive patients. They are received into vessels containing a 20 per cent. solution of carbolic acid, and, together with the general refuse of the hospital, are consumed in an automatic destructor. All soiled linen and

handkerchiefs are boiled, and all cups, spoons, etc., used by patients are disinfected in boiling water. We need not enter further on these admirable arrangements.

The ventilation of the hospital is done by extraction of the used air into passages above the ceilings, which enter a large shaft, which is kept heated day and night at a temperature about 10° higher than that of the wards. The entering air is taken at the level of the windows, and in winter passes over heated pipes, so that an average of 63° is obtained in all wards and passages. The air is changed about twice in the hour.

We have briefly reviewed the views of the profession on phthisis fifty years ago, and contrasted them with those of to-day. As regards the clinical forms of disease and their recognition by physical signs, we cannot expect further advances. That which accelerates or retards the morbid processes incident to their history seems to be sufficiently known.

Bacteriology is the study of the hour; but it is plain that the presence of bacilli alone is not sufficient to account for all the phenomena of tuberculous affections, and we are perhaps in danger of substituting the work of the laboratory and the microscope for clinical observation at the bedside. However this may be, we have witnessed the immense decrease of deaths from phthisis and a decided lengthening of its duration. Fewer die of it, and are slower to die when affected.

In seeking for the causes of this vast improvement in the health of the country, we must attribute it mainly to improved drainage of the subsoil, more cleanly habits, removal of insanitary surroundings, better dwellings, and a higher status of comfort in the lower classes.

Our treatment of consumption also has changed. We enjoin exposure to fresh air, climates of the bracing order at high elevations, an adjusted nutritive diet, and attention to all which can promote a higher vitality.

As yet we know of no agents which we can safely apply locally to the interior of the body for the destruction of bacilli or septic material. The energies of the medical mind are to-day devoted to "preventive medicine," and in this consists our hope that the most fatal disease of our time may yet be extinguished.

A STILL MORE EXTENSIVE BREAST AMPUTATION.—Tansini (*Rig. Med.*) holds that in the attempt thoroughly to remove all lymphatic glands, which may possibly have become involved, secondary to cancer of the breast, recurrence in the skin has been overlooked. He calls attention to the frequency of recurrence of this sort in the form of isolated nodules in or near the scar. In order to avoid such recurrence, he removes the overlying skin of the whole breast, and a strip about four inches wide from the breast into the axilla. To cover the defect, a flap is dissected from the back, with its pedicle near the axilla, and stitched in position over the wound.—*Med. News.*

SURGERY.

IN CHARGE OF

GEO. A. BINGHAM, M.B.,

Associate Prof. Clinical Surgery, Trinity Med. Coll.; Surgeon Out-door Department Toronto General Hospital; Surgeon to the Hospital for Sick Children; Surgeon to St. Michael's Hospital. 68 Isabella Street.

FRED. Le M. GRASETT, M.B., C.M., Edin. Univ.; F.R.C.S.E.; M.R.C.S., Eng.; Fell. Obstet. Soc., Edin.; Surgeon, Toronto General Hospital; Physician to the Burnside Lying-in-Hospital; Member of the Consulting Staff, Toronto Dispensary; Professor of Principles and Practice of Surgery, and of Clinical Surgery, Trinity Medical College. 208 Simcoe Street.

THE DANGERS OF RECTAL OPERATIONS.

BY JOSEPH M. MATHEWS, M.D., OF LOUISVILLE, KY.

Professor of Surgery and Clinical Lecturer on Diseases of the Rectum in the Kentucky School of Medicine; Rectologist to the Kentucky School of Medicine Hospital and the Louisville City Hospital, etc.

Instead of bringing any clinical material before you this morning, if you will permit me, we will discuss briefly the dangers to be apprehended in operating for rectal diseases We will begin with the operation for internal hemorrhoids—is there any danger in this operation? If a patient were to ask you that question, you would likely very flippantly say, "No, there is no danger." I reported two thousand operations for hemorrhoids to the American Medical Association when it met at Cincinnati, without a death. On my return from that Association I lost a beautiful woman from the simple operation for internal hemorrhoids; the operation is therefore not devoid of danger. If you lose one patient in three thousand you cannot say that it is devoid of all danger, so I shall mention the dangers that might occur, and they might occur to you in your first case, rather than in the last of three thousand.

In the operation for internal hemorrhoids as practised by the ligature, for instance, an incision is always made around the base of the pile, leaving it as an isthmus, then tying the ligature. In that incision you may divide a very important artery. It is not once in five hundred cases, however, that I have to tie an artery in operating for internal hemorrhoids. By twisting, torsion, pressure, application of hot water, and such means, the hemorrhage can usually be checked; but suppose that you have not stopped the hemorrhage by such measures, suppose that you have not secured the artery? So great an authority as the late Samuel D. Gross reported having lost a patient in this city, when he resided here, from hemorrhage, after ligating an internal pile. I have had two or three nearly fatal cases of hemorrhage from ligating piles, discovering the danger in time to save the lives of my patients, but the facts show that we may have serious hemorrhage. Therefore, do not suppose because you are ligating small tumors that the operation may not

be dangerous from this cause. At the Louisville City Hospital, not long ago, a man died during the night from hemorrhage after he had a couple of piles ligated.

The second danger that I would mention in this connection is that from sepsis. I have tried to impress upon you that a small wound may be just as dangerous from this cause as a great wound, and have mentioned the pricking of the foot, for instance, with a pin, or a tack, or a nail, resulting in tetanus. You cannot conceive of a smaller wound, yet a fatal sepsis may supervene. You know the great distribution of nerves and lymphatics around the rectum, and you make an exposed wound whenever you cut around the base of a pile; consequently a septic condition may ensue, just as well as though you had a large wound.

The third danger, if you may so term it, in operations for hemorrhoids, is contraction of the anal orifice. All authors report this as one of the consequences of ligating internal piles. I do not often meet with this complication, but have seen it occur. I remember on one occasion I ligated seven large hemorrhoids in a young lady, dressing the wound carefully after the operation, as is my usual custom. Good recovery followed; there was no protrusion afterward, and no hemorrhage; but in about ten days after I discharged her, her father came to my office and said that his daughter was unable to have an action from the bowels; that she felt the desire to go to stool, that she took purgatives, etc., but she could not pass the feces. I asked him to have the patient come to my office, not thinking at the time what really might be the trouble, and to my surprise I found that the anal orifice was entirely closed. It was absolutely, totally occluded. The hemorrhoids had sloughed off, and perhaps because not watched as closely as they should have been, the surfaces had united, consequently closing the anal orifice, and if not promptly discovered would have gone on to a very bad condition. Therefore, I would have you watch out for this danger, and the best remedy is, every few days after operating for internal hemorrhoids, to slip your finger, well anointed, into the anus, introducing it as can be done without much pain; even at the risk of pain I would have you do it. Especially should this be done after the ligatures have separated. But suppose that you have contraction regardless of this care, what are you to do with it? I have mentioned this to you before, but as it is an extremely practical subject will go over it again. Some authorities call this condition stricture, and treat it as a stricture. One distinguished surgeon, a friend of mine, went so far as to attempt to dissect out this stricture in a patient whom he saw. This is not necessary; it is a traumatic stricture just at the anus, outside of the sphincter muscle; it does not involve the sphincter muscle at all; all you have to do is to introduce your speculum or dilator and break it down, and you will not have to do it again. It does not amount to a stricture and should not be treated as such, but it is simply a closure of the parts by granulation, traumatically, and is easily gotten rid of.

Let us next speak of the operation for fistula in ano. Are there any dangers attending this operation? Yes. In operating for fistula sometimes very extensive cuts must be made, as you have often seen me do in

this clinic: simply dividing the main channel will never effect a cure. After you have made your main cut, you have to take your probe and search for additional sinuses, and often they are found running in all directions. Let us suppose that one channel runs in such close relationship to, for instance, the urethra that you may have to divide this canal in making your cut. The main channel may run under an important artery distant from the anus, and division of this main tract would be dangerous. Consequently you have to determine whether you can finish your operation or not, but ordinarily you may cut some important vessels; therefore the hemorrhage before you dress the wound, after operating for fistula in ano, should be thoroughly checked. The danger then is injury to adjacent structures or organs, but the main danger is division of the sphincter muscle, which refuses to be repaired. So far as my reputation is concerned, I would much rather do a half-way operation for fistula in ano and fail to cure my patient, than to so divide the sphincter muscle that it could not be repaired, because, as I have said, this is an important muscle; it controls the feces, and if you destroy it by your cutting, or your manipulation, and it refuses to heal, the man or woman has incontinence of feces for life. I do not know of any better way that I can express the matter than to say, never divide the sphincter muscle but *once* during your operation. If you find an incomplete or crippled sphincter during the operation, beware of stretching it. At the risk of reiteration, allow me to again state, there is no use in dilating or stretching or breaking the sphincter muscle in doing an operation for fistula in ano. This refers to the stretching process that so many writers talk about—it was intended for an entirely different condition. You are going to divide the sphincter muscle in doing your operation for fistula, then why stretch? You will get relief of pain, etc., after you have divided the muscle, so you have nothing to gain by stretching it. The one danger, then, to be reminded of in operating for fistula in ano, lies in dividing the sphincter muscle.

Take the operation for a simple polypus of the rectum. Is there any danger in that? I will say there is very great danger. You will witness this condition often in children, 10, 12, or 14 years of age. The mother or father may say, or perhaps some physician has also suggested, that this child has piles. Children do not have piles. Whenever you hear of a protrusion from the anus in the infant, set it down in your mind that it is not piles. It is either a prolapse of the rectum, or it is a polyp. Suppose it is a polyp and you are called upon to remove it; is there any danger? A polyp is a tumor that is attached to the mucous membrane, or walls of the gut, by a pedicle; sometimes this pedicle is very long—it may be 5, 6, or 7 in. in length; generally, however, it is from ½ in. to 1 in. in length, and the operation suggested is that practised upon polypi in other portions of the body, for instance, in the nose or cervix, that is, twist it off. There is no hemorrhage of consequence, and the operation might not be attended by any particular danger, but you must remember that this polyp is supplied by an artery, and sometimes a good-sized artery, and in this twisting process you must, of course, include it. You cannot tell exactly whether you have twisted sufficiently or not to stop the hemorrhage, or to prevent hemorrhage after the polyp has been torn

away. Another operation is to tie this pedicle, catching the polyp either with your fingers or with an instrument. I desire to warn you against using an instrument in handling these polypi, especially in children, as they are easily torn off; but if the pedicle is long enough, lax enough and tough enough to tie, it is best to do so, because with a ligature around the pedicle you know that the danger of hemorrhage is reduced to a minimum. But the ligature that you apply may cut through the stump; this has occurred in my practice in half-a-dozen instances, in less than an hour after the operation, and you can readily see a fatal hemorrhage might result. This stem or pedicle may be attached very high up—2, 3, 4, or 5 in.—and when you have twisted or torn it off, the base or attachment is beyond the distance at which you can reach it with forceps; besides this, you may have great difficulty in recognizing it. Therefore, if you have hemorrhage in the rectum from removal of a polyp, it may prove to be a fatal hemorrhage. What are you going to do in such a case? Well, I would suggest that you always plug the rectum. You have not the time to divulse and look in and try to catch the artery, and, as Mr. Allingham says, the hemorrhage may be frightful. You had best at once prepare to stop it by plugging. The method of doing this has been explained to you time and again. The plug that I use is made of iodoform-gauze around a hard-rubber tube; by dilating the rectum well with your dilator or speculum, insert the plug as high as it will go, remove the speculum and let the gut grasp this plug. Of course, if I anticipated a violent hemorrhage, I would soak the plug in a solution of the persulphate of iron, diluted half-and-half with water; I say that, because there is some little danger of sloughing of the mucous membrane if you apply much of Monsell's solution undiluted, and I have found by diluting it I can check the hemorrhage as well as by using the solution in full strength. Therefore you will see there is some danger in even so simple an operation as tying off a rectal polyp.

Take the variety of internal hemorrhoids known as capillary piles. This is a dangerous form of piles—the small capillary variety is a pile that bleeds vigorously. You may be called sometimes, each one of you, to see a case in which there is violent hemorrhage from the rectum without any previous history of disease, and I state this to emphasize one point. I have seen physicians or surgeons amazed at this quantity of blood, suggesting that it was from the colon, or, as the common expression is, higher up than the rectum. I say to you that if you are ever called to a case of hemorrhage from the rectum, without any previous history of disease which would be a guide to you, if the patient has said that she suffers from internal hemorrhoids, protrusion, or something of that kind, it would lead you to infer the cause; but if you are called to a case that gives no such history, but has had one, two, or even five violent hemorrhages from the rectum, and has been treated on the premise that it came from the colon, or higher up than the rectum, you may be certain that it is from no such cause, because it is not. I have had many patients sent me with such a history, and in all of them the hemorrhage was found to come from just about one inch within the rectum, that is,

one inch from the anus. You may open the anus and see no hemorrhoids; you may get no history of a protrusion at all; but often there will be a congested condition around the lower edge, with exposure of an artery, which is the cause of all this trouble. Such a case puzzles many. I have seen them time and again, and you will see them. It is necessary for you to stop this flow of blood, because if it is half a pint to-day it may be a pint to-morrow; if a pint this week, it may be a quart next week. Suggest to such a patient that she take, for instance, an aperient, then wash out the bowel thoroughly. You should go to her home if necessary and take a three-valve speculum or dilator, and introduce it into the rectum after being freely anointed; open it as if you were simply going to inspect the bowel. If you desire not to give the patient an anesthetic for any reason, then take a piece of iodoform-gauze and dip it in a 5% solution of Monsell; squeeze it until about half dry and insert it in the anus, making it in the shape of a cone or bag, long enough to hang out of the anus, say 1½ inches; deposit it just inside of the rectum, so that the anus will grasp it when it closes after you take out your instrument. Then give the patient a hypodermic injection of morphine, and repeat it if necessary in an hour or two. Allow this plug to remain in the rectum just as long as it will. I say that, because unless you take a certain amount of precaution in this direction the patient will expel it within 20 minutes. Therefore, it is well to have the nurse or friend sit by the side of the patient and put her hand up against the anus, or, what would be better, put a pledget of cotton over the anus, and hold the hand over this cotton for an hour, or two hours, if necessary, changing from one hand to the other, or getting another nurse to substitute. In two or three hours the pain will have disappeared, and the patient will be able to retain the plug longer; but even if she should not, you will find when the plug is expelled, and the patient made quiet, that all hemorrhage has ceased and the patient is cured, proving beyond all peradventure that the hemorrhage comes from the lower end of the rectum. You may not be able to make it out by an examination; but if you will go upon the presumption that such is the fact, I will guarantee that you will find in 99 out of 100 cases in which hemorrhage has been diagnosticated as coming from the colon or upper rectum, that it comes from the lower end of the gut, as I have described. These hemorrhages never occur from above; there is no condition in the colon, save that of cancer, that would cause the loss of a pint of blood. It has often been said that an ulcer must exist in the upper part of the rectum, in the colon, or in the sigmoid flexure; how could an ulcer permit the discharge of a pint of blood? An ulcer is a pathologic condition with a deposit of fibrin or lymph, which prevents bleeding. Consequently the idea that an ulcer exists is disproved. If it were said that there were an abrasion or an injury to the bowel from a hard piece of fecal matter, or something of that kind, that had torn the surface and exposed a vessel, we might account for the hemorrhage; but we cannot do it with the idea that it is a simple ulceration. Therefore, if I have done nothing more than to give you a point as to how to stop hemorrhage from the rectum by simply plugging with iodoform-gauze dipped in Monsell's solution, it will aid you wonderfully in the practice of rectal diseases.

I will this morning mention only one more condition, and that is stricture of the rectum. Putting it in the simplest way, let us suppose a patient comes to you, and you feel just within the anus, say one inch from the sphincter muscle, a constriction through which you can pass your finger only, with no ulceration above, you say this is a simple stricture, easily reached, easily handled, and easily treated. Now, this is a great mistake. The operation for such a condition is either a division or breaking of the stricture. I broke a stricture of this kind in my office a few days ago, and the man nearly bled to death; so you will see there is considerable danger in this operation. Always apprehend a violent hemorrhage in dealing with a rectal stricture which is benign in its nature, as it will sometimes occur.

PATHOLOGY AND SURGERY OF INTUSSUSCEPTION.

In the Hunterian lecture on this subject Dr. Power gave the following conclusions (*British Medical Journal*):

Intussusception is a condition which brooks no delay in its treatment, for something must always be done at once, except, perhaps in those slight cases which are indistinguishable from severe colic. In all doubtful cases purgatives should be completely withheld. Cats and rabbits bear a simple invagination with remarkable freedom from symptoms, and after a varying period of time the invaginated bowel could be excised, and the animal would recover. All the animals, however, to which purgatives were administered, after the intestines had been invaginated, died when enterectomy was performed. Clinical evidence teaches the same lesson, for all the records of cases show that the symptoms have been seriously increased when the patient has been purged. The routine treatment of intussusception is to chloroform the patient, and steadily to fill his large intestine with hot salt solution under a hydrostatic pressure of not more than three feet in a child, the fluid being allowed to remain in the intestine at least ten minutes. The earlier this method is adopted after the appearance of the symptoms the better are the results obtained, but it should not be adopted in enteric intussusception, in cases where the symptoms are very acute, or in those where the absence of signs or symptoms, with a sub-normal temperature, leads the surgeon to suspect that the intestine is becoming gangrenous. In these cases, and when the intussusception is not reduced after irrigation has twice been tried, and when after reduction the intussusception has thrice occurred, the abdomen must be opened.

The surgeon must then be prepared to deal effectually with the conditions he may find by such operative means as he can carry out with the least amount of shock, and in the shortest space of time that is compatible with the safety of the patient. This will be insured if he uses the method with which he is the most familiar. But he should bear in mind that hardly a case can arise in which he is justified in closing the abdominal wound without at least an attempt to complete the operation by reducing or removing the intussusception. Such half measures as the

formation of an artificial anus are hardly ever justifiable, and the results obtained by them are usually most disastrous. In the light of our present knowledge it appears that the use of a button or bobbin is most likely to give good results when enterectomy has to be done for an enteric intussusception, while Maunsell's operation is best adapted for the cure of ileo-cæcal and colo-colic forms of intussusception.

METHOD OF REMOVING LARGE CALCULI FROM THE BLADDER.

Freyer (*British Medical Journal*) pronounces Bigelow's method, which consists in the rapid crushing of the stone, and complete removal of its fragments at one sitting by means of the aspirator and cannula, the safest and best for calculi of all sizes in patients of all kinds and conditions, provided only that this operation is feasible. When not practicable he considers that calculi up to about three ounces in the adult, and a corresponding weight in the child, are best removed by perineal lithotomy; beyond that suprapubically.

Dr. Freyer states that six and one-eighth ounces is the largest stone he has removed by Bigelow's method. He advises that in no case should a stone, large or small, be subjected to a cutting operation till, after trial, litholapaxy is found not to be feasible.

The lithotrites used by Dr. Freyer generally vary from No. 4½ up to 18 of the English scale; but it is only the larger sizes, from No. 11 up to No. 18, that are of any practical use in dealing with these large stones. One lithotrite was constructed for him many years ago by Weiss, and it has crushed some 320 calculi. It combines the handle and locking action of Bigelow's lithotrite with the fully fenestrated blades of Weiss and Thompson. This ball handle affords a much firmer grip to the hand than the old-fashioned wheel—a grip that is essential in dealing with large and hard calculi. The locking action is of the simplest character, the instrument being locked or unlocked by a quarter turn of the wrist, to the right or left respectively, and the left hand is free to grasp the female blade, and hold it steady in the bladder during the various manipulations, so that the tilting of the instrument that is liable to occur when the button-locking action is employed is thus obviated.

The cannulæ required for large calculi in the adult vary from Nos. 14 to 18.

Dr. Freyer has worked chiefly with a simplified form of the aspirator which Bigelow used for some years before his death.

THE SURGERY OF CHRONIC PERITONITIS.

Largeau (*Progrès Médical*, November 27th, 1897) advocates abdominal section for chronic peritonitis of the perihepatic, perigastric, peri-cæcal, pericystic, pelvic, and, above all, traumatic or post operative types. It often happens that the setting free of adherent structures, or the division of a band of organized lymph, causes the immediate disappearance of intolerable gastric or gastro-intestinal disturbance and chronic obstruc-

tion. In chronic tuberculous peritonitis the case is different. Care must be taken that the disease is not assuming a temporarily acute form when the abdomen is opened. It is true that mere exploration has given good results after all forms, but Largeau admits that where there is ulceration and suppuration the prognosis is bad. In the ascitic and in the dry form of tuberculous peritonitis abdominal section is alike satisfactory. A small abdominal wound should be made at first, and the deeper tissues divided with great care, as intestine is often adherent, and the diseased peritoneum is not always easy to distinguish. The lower end of the incision should be brought low down in a female subject, as it is important to explore the internal genital organs; in fact, tuberculous appendages, often the primary seat of the whole mischief, may require removal. The main part of the operation is thorough drying of the exposed cavity with fine sponges or compresses. Not only Douglas' pouch must be so treated, but care must be taken to dry all diseased peritoneum lying under coils of intestine; hence the operation always takes some time to do properly. Only soft adhesions between viscera should be separated. Whilst this drying process is the essential feature, the surgeon must never fail to seek for the primary seat of disease. The chances are very great in a female subject that the Fallopian tubes are at fault; but in women, as in all male cases, the cæcum and appendix must be searched, and tuberculous disease of the omentum (very common as a secondary complication), or an ulcerating area, beginning in the small or large intestine, looked for. The last condition is the gravest; when detected, pus is generally present around the breach in the intestine wall. This pus must be washed away; it is useless to attempt to close the intestine by suture, hence drainage is compulsory. Lastly, in the purely dry form of tuberculous peritonitis separation of adhesions often proves very satisfactory, as they are firm in this type, and give rise to obstruction. Washing out with chemical solutions or flushing of the peritoneum seems superfluous, and drainage is only needed when the intestine is ulcerated. It is important to close the abdominal wound carefully.

ENLARGED AND DISPLACED LIVER CURED BY CHOLECYSTOSTOMY.

Mauclaire (*Bull. de la Soc. Anat. de Paris*, November, 1897) writes of a patient of Le Dentu's, a stout woman subject to symptoms of gall-stone colic. Jaundice was not observed, but the fits of pain became intolerable. The liver descended to half-way between the hypochondrium and the iliac crest, but hepatic dullness extended well above the lower body of the ribs, and, as the displaced anterior edge of the liver was very thick, it was clear that the liver was hypertrophied. The stools were well colored. At the operation Le Dentu found the gall-bladder greatly distended, but not adherent. A big calculus was worked out of a kind of a pouch, close to the orifice of the duct, by careful manipulation. The edges of the wound in the gall-bladder were stitched to the abdominal incision. The bile came away for a fortnight, and the pain disappeared.

The patient's bed was now arranged so that her head lay lower than her pelvis, and the orifice of the fistula well compressed. In three days it had closed. Six weeks after the operation, after the patient had been up and about for three weeks, the abdomen was examined. The liver had reduced itself, and no longer came down below the false ribs. On careful percussion it was found that hepatic dullness was strictly limited to the normal area, so that both the displacement and hypertrophy had disappeared.

SURGICAL HINTS.

It is better to have too many assistants than too few.

A paronychia or "run around" rarely demands incision. Daily wet dressings with firm gauze packings between the nail and skin will usually effect a cure. The first packing hurts, the others as a rule do not.

When you boil water to be used in an operation, you should at the same time boil a vessel with which to dip it out, and this vessel should never be set down in an undisinfected place, for it is necessary to have its outside as clean as its interior.

In an emergency operation, if you happen to be without operating gowns, remember that a newly-washed night shirt will serve quite well. It is far cleaner than one's external clothing, and will protect the patient against the accidental contact of instruments or ligatures with one's surgically unclean shirt or trousers.

A patient with anal fissure should be instructed to smear the orifice inside and out, as well as he can, with vaseline before each movement of the bowels. This will in a great measure prevent fæces from clinging to the parts in passing, and will also greatly facilitate the passage of the stool. Do not advise such a patient to use glycerine locally.

If you happen upon a recent compound fracture where the end of the bone still protrudes through the opening which it has made in the skin, take every precaution that this end may not slip back until it has been thoroughly disinfected. In many instances it is safer to scrub and clean the surrounding parts, and then after forcing the fragment a little farther through, to cut it off. When this has been done the fracture may be reduced with a fair prospect of aseptic healing.

Fissure of the anus usually gives rise to intense pain which often lasts many hours after stool. This may be greatly alleviated by inserting a very narrow slip of moist gauze with a flat probe, so that the gauze lies against the raw surface of the fissure. It gives the same relief which is experienced when a light packing is placed between the skin and the nail in cases of so-called ingrowing toe-nail, and for the same reasons, namely, it prevents inflamed tissues from touching each other and drains away irritating wound secretion. Weakly iodoformized gauze is best because of the local anæsthetic action of the drug, but be sure that no idiosyncrasy exists forbidding its use.—*International Journal of Surgery.*

NERVOUS DISEASES AND ELECTRO-THERAPEUTICS.

IN CHARGE OF
CAMPBELL MEYERS, M.D., C.M., M.R.C.S., Eng., L.R.C.P., Lond.,
Neurologist to St. Michael's Hospital. 192 Simcoe Street.
STEPHEN LETT, M.D., M.C.P.&S., ONT.

THE RELATION OF MENTAL DISEASES TO GENERAL MEDICINE.

Under this title Dr. Cowles summarizes the practical results of recent advances in psychiatry (*Boston Medical and Surgical Journal*, September 16, 1897). A contrast is drawn between the "depleting treatment" of the first quarter of the century, and the "supporting treatment" which accompanied the establishment of the scientific medicine of to-day. In appreciation of this principle alienist physicians have been leaders; Van Deusen's theory of "neurasthenia," a term introduced by him, antedating the publication of Beard's conception of "nervous exhaustion," manifested by "irritable weakness." The study of the nervous system and the exposition of the degenerative *sclerosis*, to which it is subject, have shown one great truth—that overwork and exhaustion may be potent causes of nervous diseases, not only of a functional, but of an organic character, and the great significance of this, in relation to mental diseases, lies in the inference that anything which interferes with the maintenance of proper nutrition of the neuron may begin by abating power in the mental function. The relation of mental to general diseases, on clinical lines, is thus a close one. The best advances in psychiatry have been made by the application of medical common sense, and there is no mystery in the adaptation of the principles of the "supporting treatment" to the needs of the insane. Such objective symptoms as might be noted, *e.g.*, constipation, dyspepsia, neuralgia, etc., would be palliated by the means any physician might employ, but this would be done with the understanding that they are all likely to be only expressions of the prime condition, which calls first for elimination, nutrition, rest and sleep; then for mental and physical hygiene; and then, as convalescence progresses, for proper exercise, entertainment, occupation and gradual restoration to self-responsibility.

Dr. Cowles reviews briefly later advances in the study of toxic influences, and of the anatomy and physiology of the nervous system, and concludes with a warning which may not be without value to hospital physicians as well as to a general medical audience:

"Now that mental pathology is becoming clearer in the light of general pathology, shall not a new interest arise in the study and treatment of insanity? Already the practice of alienists is getting upon new lines. Great success has been attained in some torpid mental and bodily states of long standing by the use of thyroid extract. Much attention is being given to the disinfection of the intestinal canal and its systematic and

thorough evacuation by high enemata. Elimination of retained auto intoxicants has been attempted with some success by the subcutaneous injection of large doses of a solution of common salt. These and other procedures are still largely experimental. But whatever you do, while you exhibit all the effective tonics, of which nutrition, rest and sleep, are the best, there is one controlling practical principle to be remembered, and, with this, one special caution. It is a safe rule that mental symptoms always mean weakness; excitement is an extreme degree of irritable weakness, in which there is great exhaustion in the mechanism of mental control. This thought should beget care in the use of sedatives and hypnotics. Beware of the coal-tar compounds and the like; they are good and sometimes necessary for proper use, but not for many days in succession. Change them and omit for a while; they go against nutrition, and drug intoxication often aggravates the disease and is mistaken for it. When your patient is taking food well, be content with his getting two or three hours of sleep or less in each twenty-four hours, even when excited. Such sleep is better than when it is drug produced. When the appetite flags and sleep is not produced by persistence in hypnotics, the complete suspension of all medicines, and frequent feeding, will often be followed by gradual cessation of excitement, a clearing tongue, and improvement in sleep. These brief hints are simply mentioned by way of example. Above all things it should be remembered that the indication is always for a "supporting treatment."

NEUROTHERAPY.

THE TREATMENT OF VERTIGO KNOWN AS MENIERE'S DISEASE.—De La Tourette (*Semaine Médicale*, 1897, p. 301, No 38) reports the case of a man fifty-eight years old. The patient, who had been previously quite well, was taken suddenly one morning in June, 1893, with a violent vertigo, having all the features of Meniere's disease. Following this the patient complained of a persistent noise in the right ear, and of a continuous vertigo, for which he was given quinine in large doses with excellent results. Apropos of this case the author takes up the history, causation, lesions and diagnosis of Meniere's disease. He points out the role played by hyper-excitability of the labyrinth in the production of vertigo, and dilates on the efficacy of quinine in the treatment of the auricular forms of vertigo. The medicament should be given in ten-grain doses once or twice a day for a period of at least a fortnight.—*Post Graduate.*

[This is a larger dose than has hitherto been recommended and we quite agree with the author.—ED.]

NEUROLOGY IN GENERAL MEDICINE.

From neurology, General Medicine has learned much and will learn still more of the effect of mental states, mental impressions, disposi-

tion—of character, if you choose, and I believe that better than others the neurologist appreciates the paramount importance of heredity, probably because it is more frequently forced upon his attention. If surgeons and gynecologists would oftener consult the heredity and personal equation of the patient they would less frequently be annoyed by post-operative neuroses, insanities and the lesser nervous troubles that go to make up an incomplete recovery. And this leads me to mention what has already begun and what, God grant, may soon be consummated; the passing of the reflex. When to the nerve specialist comes a case of epilepsy with a note from the family physician saying that the ovaries have been removed without effect, and so, perhaps, the trouble is in the brain, or a case of convulsive tic, with the message that the spasm has continued in spite of cauterization of the turbinates, or, as occurred to me a few days ago, he sees a born neuropath with typical trumatic neurosis who has undergone five pelvic operations for relief of her nervous symptoms, he groans in spirit and looks longingly forward to the millennium when the man who operates shall have or procure an adequate understanding of that for which he cuts. In the meantime, under the keen scrutiny and rigid requirements of Neurology the so-called reflex as a cause of grave nervous disorder is gradually being pushed into its rightful place; that is, among the relatively unimportant curiosities of etiology.—Patrick, in *Chicago Medical Recorder.*

HEMORRHOIDS.—Dr. Coston (*Mathews' Medical Quarterly*) prefers the clamp-and-cautery operation over all others for the following reasons: 1. In the operation with ligature you tie up the most sensitive of all nerve ends, and they are sure to resent it by intense pain, which will continue until the stumps slough and the ligatures come away. In the cautery operation you have no such result to contend with; the nerve end is simply cut away and cauterized, and there is nothing left for it to do but cicatrize, and it is left in the best possible condition for this. 2. The ligature may slip and secondary hemorrhage occur; after the clamp and cautery operation there is no danger of secondary hemorrhage. If hemorrhage occurs it does so immediately, and the operator can blame only himself for it. 3. There is no danger of a recurrence. Kelsey, of New York, and Smith, of King's College, London, both support me in this statement, and they have had a vast experience with this operation. It will be admitted by all that recurrences do follow the ligature operation. 4. Convalescence is much more quickly completed, for the reason that it begins at once under the eschar produced by the cautery, and would be completed by the time the ligatures came away should the two operations be used on separate tumors in the same case at the same time. 5. The mortality following the clamp and cautery operation is practically *nil.* 6. The cautery operation requires less care from the physician after the operation. 7. There are no unpleasant sequelæ.

OBSTETRICS AND GYNAECOLOGY.

IN CHARGE OF

G. P. SYLVESTER, M.D.,
Corner Isabella and Church Streets.

C. A. TEMPLE, M.D., C.M., F.T.C.M.,
Assistant at St. Michael's Hospital. 200 Spadina Avenue

PREGNANCY AND FIBROID TUMORS.

BY H. C. COE, M.D., OF NEW YORK.

(Concluded from last month.)

It is hardly necessary to say that a woman with a large interstitial fibroid who becomes pregnant should be kept under careful observation. Doubtless such patients may go on to full term, though rarely. Few of us would care to have any member of our family take such a risk, but would prefer to terminate the pregnancy at an early stage, or to at once perform hysterectomy.

From what has been said about tumors springing from the lower uterine segment, it will be inferred that in these cases pregnancy is a serious complication. The dystocia which is present during labor is a familiar theme in all text-books on obstetrics. From a gynecologic standpoint they are equally important. While it is granted that pregnancy may often continue to full term with impacted pelvic tumors, it is certain that the patient will suffer from various disturbances, and has the almost certain prospect of a difficult labor, usually with a dead child, unless an abdominal operation is performed. There can be little question that if an intelligent effort to dislodge the tumor from the pelvis under anesthesia is unsuccessful, the uterus should be emptied, provided that the cervical canal is not so contracted that it is impossible for the fetus to pass. It will be a question in most cases in which the patient is not seen until the fifth or six month (or even the fourth), whether it would not be better to allow the pregnancy to advance to term, and then to perform an elective Porro-Cæsarian operation.

The possibility of enucleating *per vaginam* an extraperitoneal (or even an intraperitoneal) fibromyoma of the lower segment will naturally suggest itself to one who is familiar with such work, and this procedure if practicable would seem to be preferable to sacrificing the entire uterus. It should be borne in mind, however, that the increased vascularity of these growths during pregnancy entails some risk of hemorrhage, so that the surgeon may be obliged to ligate the uterine arteries in order to control bleeding, or perhaps to extirpate the uterus. Pregnancy is not necessarily interrupted, and if it is, abortion does not imply an untoward result for the operation, since the obstruction to the escape of the product of conception has been removed.

The persistence of pregnancy after accidental injury of the gravid organ

during the course of abdominal operations shows that myomectomy by the upper route may be attempted with good prospect of success under favorable conditions. Certainly an explorative celiotomy does no harm, and may enable the surgeon to free an impacted or adherent tumor from the pelvis, so that the patient may go on to term—a far more rational procedure than to attempt enucleation of the growth *per vaginam*, with the finger, unaided by the eye. In fact, it may be better in a doubtful case to at once perform celiotomy in order to determine the exact nature and relations of the tumor. The incision may then be closed, and the growth attacked *per vaginam*, especially if pus be present, as in a successful case reported by the writer.

The indications for supravaginal amputation or total extirpation do not differ essentially from those in the case of the non-pregnant fibroid uterus. Rapid enlargement, marked pressure-symptoms, serious impairment of the general health, may lead the surgeon to adopt radical measures at the outset. He will be influenced in this decision by the fact that under these conditions pregnancy can not, and should not, continue, and the inevitable abortion will diminish the chances of recovery from a subsequent operation. The operation itself is no more difficult than under ordinary circumstances, and the prognosis is equally good. The abdominal is certainly preferable to the pelvic route, in view of the more perfect control of bleeding and the diminished risk of injuring adjacent structures, especially the displaced bladder or ureter.

To summarize: Submucous polypi may be removed in the ordinary manner when they are accessible. Subperitoneal growths can be disregarded unless they are pedunculated and become impacted in the pelvis, undergo torsion of the pedicle, or contract adhesions. Liberation of the tumor under anesthesia failing, it is entirely in the line of conservatism to open the abdomen, to separate adhesions, or to remove the tumor, leaving the uterus undisturbed.

Tumors in the lower segment may be let alone if they are found to rise out of the pelvis as the uterus enlarges. Should the contrary be true and pressure-symptoms arise, abortion should be induced if the patient is seen at a sufficiently early stage to allow the fetus to pass the obstruction.

Conservative myomectomy may be performed subsequently, and the hope of a second normal pregnancy may be confidently held out. If there is any reasonable doubt as to the diagnosis, explorative celiotomy is indicated, especially in view of the frequency with which impacted ovarian tumors are mistaken for fibroids. Liberation or removal of the tumor may not interfere with the course of the pregnancy. Should the tumor not be discovered until the latter half of pregnancy, it would seem better (in the absence of serious pressure-symptoms) to wait until near full term, and then to perform Cæsarian section, followed by supravaginal amputation, subject, of course, to the wishes of the patient.

The usual indications for hysterectomy in cases of fibroid tumor become more urgent if pregnancy occurs, since an exaggeration of the symptoms may be expected. The patient cannot bear a living child, her life is imperilled, and conservatism is out of place under the circumstances. The abdominal is preferable to the vaginal route for the extirpation of the pregnant fibroid uterus.

NOSE AND THROAT.

IN CHARGE OF

J. MURRAY McFARLANE, M.D.,

Laryngologist to St. Michael's Hospital. 32 Carlton Street.

D. J. GIBB WISHART, B.A., M.D.C.M., L.R.C.P.L.

Professor of Laryngology, etc., Ontario Medical College for Women; Lecturer in Laryngology and Rhinology, Trinity Medical College; Rhinologist and Laryngologist Hospital for Sick Children, St. Michael's Hospital, and the Girl's Home; Toronto General Hospital. 47 Grosvenor Street.

THE CHOICE OF INSTRUMENTS USED IN OPERATING UPON CARTILAGINOUS OR BONY ENLARGEMENTS OF THE NASAL SEPTUM AND UPON DEVIATED SEPTA.

BY DR. RICE.

One of the gentlemen has asked me what instrument he should obtain for this branch of nasal work. There is no fixed rule as to the necessary instruments. The one which will remove the obstruction most easily would naturally be the best. A scalpel or bistoury will cut off a cartilaginous convexity, and I have used them. The objection is that the bleeding is more profuse and continuous with a sharp knife than with scissors, trephine or saw. First remember that the amount of tissue to be removed is in proportion to the degree of obstruction existing, and to the total size of the nasal passage. It is wrong to cut away a large amount of nasal septum in a very free, open nostril.

There are certain small operative procedures which may be stated. We frequently see a horizontal ridge of cartilage near the floor of the nostril, which impedes nasal respiration a little, and which produces reflex irritability by contact with the turbinated side. Instead of sawing or drilling this off, it can be scarified through and through with the points of nasal scissors. We do not remove the mucous covering, but by the destruction of many of the small blood-vessels obtain sufficient contraction. Cartilaginous prominences which have a small base can be snipped off with the blades of nasal scissors; or a small prominence in a wide nostril can be contracted by a sub-mucous puncture of the galvano cautery. Where the deviation is considerable and in consequence the nostril quite narrow, we think the nasal saw is the best instrument. We have had a good deal of trouble with nasal saws because, as a rule, they are made too frail and much too long. They have been so flexible at the point that it was necessary to cut close to the handle, and this carries the end of the saw too far into the nostril; or the cutting surface has been so long that if we incise the cartilage with the point of the saw it is difficult to avoid wounding the skin at the orifice of the nose. Almost all deviations of the nasal septum are pretty far in front, and I would give the proper measurements of the saw as follows: Entire length 5½ inches; the blade 2¼ inches long, of which the sawing portion should only be 1¼

inches. You will find it difficult in many cases to commence the incision with the saw, as the surface of the cartilage is round and the saw easily slips away. This can be avoided by starting the saw nearly at right angles to the septum, and after the proper depth of the incision is reached, the saw can be turned parallel with the cartilage. It will make the operation easier if after the nasal speculum is introduced the patient's head, if we are operating on the right side, is turned by the assistant toward the right; or, if upon the left side, turned to the left. This places the nasal septum prominently for the operative work. A 10 p.c. solution of cocaine is the proper strength. After the saw is carried down to the bony maxillary ridge it is often better to finish the incision with the nasal scissors than to try to cut through the bone with a saw. We are fortunate when there is sufficient space between the floor of the nose and the septal ridge to allow us to carry the lower blade of the scissors into the interior meatus. After the line of incision has been finished by the scissors, the piece of cartilage can be removed with a small pair of alligator forceps, which I always use. These forceps are also useful in nibbling off any small prominences of cartilage or bone which may have escaped the saw. The trephine is used but little now-a-days, but we should not forget that there are one or two conditions where it may be employed with advantage, and one is where the bony or cartilaginous ridge or the deviated septum is horizontal in its long axis and almost resting upon the floor of the nose. It is so low as to make the use of the saw from above downward difficult, and there is no space to place the saw underneath to cut upward. Another condition where the trephine may be used is where a horizontal prominence extends so far backward that it cannot easily be removed with the saw. As to the necessary equipment of motor and trephine, we will speak at another clinic. An operator expert with the trephine does not need any shield to prevent his wounding the turbinated side of the nose. It is better in removing the horizontal ridges to cut somewhat from above downward and remove the ridge piece by piece, than to endeavor to remove the entire length of a horizontal ridge by carrying the trephine directly backward. Oftentimes in trying to remove it all there is so much cartilage and bone that a parallel trephine is completely filled before the operation is finished. It is of the utmost importance to remove in a cleanly way all cartilage and bone into which we have cut. If we do not, the patient and the operator will both be much troubled by the septic results following, such as local pain, rise in temperature, acute follicular tonsilitis, etc. There are numerous other instruments for the removal of deviated septa, such as the revolving knife, shaves, electrical saws, but many of them are quite expensive and nearly all the cases may be rectified by the simpler instruments.—*Post Graduate.*

THE DIAGNOSIS OF POST-NASAL ADENOIDS IN CHILDREN AND THEIR REMOVAL.

BY DR. RICE.

I desire at the commencement of our clinic to-day to speak briefly in regard to the large number of mouth-breathing children who come to us

for treatment. In the first place, it can be safely stated that in nine-tenths of these cases the lesion will be found to be either enlarged faucial tonsils or post-nasal adenoids, or a combination of both. These conditions must be excluded before the case is put down as nasal catarrh. I speak of this because I have seen so many children treated month after month for nasal catarrh who were suffering from tonsilar enlargement. It is a mistake easily made by persons of limited experience, because the nostrils are found to be filled with secretion; the child catches cold constantly, and everything points toward the ordinary condition of catarrhal rhinitis. It is, however, simply a matter of plugging the nasal openings posteriorly with adenoids and a consequent accumulation of nasal secretions. The symptoms in these cases are always pretty much alike—usually anæmic and illy-nourished, the child breathes partially or wholly through the mouth, catches cold at all times, suffers from impaired hearing, oftentimes earache; is croupy, with more or less bronchial catarrh through the winter. Such general symptoms as these always indicate more than simple nasal catarrh. The diagnosis is very easily made if we look into the anterior part of the nose. Although there may be accumulated nasal secretions, no deviation of the septum and no hypertrophy sufficient to occlude the nostrils will be found. Enlargement of the middle turbinated is very rarely a factor in children, so at once we are brought back to the vault of the pharynx as the source of trouble. We can state from clinical experience that there is more or less enlargement of the third tonsil in all these cases, and I have been impressed lately with the frequency of mouth-breathing children in whom there is very little faucial tonsilar enlargement. It has occurred to me that great enlargement of the faucial tonsils occurs more rarely than in former years, but that moderate enlargement of the post-nasal tissue is just as frequent. There can be no effective argument urged against the advisability of the removal of post-nasal enlargement when it interferes with nasal respiration. I oftentimes find it difficult to see this tissue with the rhinoscopic mirror in children, and it is much harder at the clinic than in a private office because children are frightened by the large audiences here. But after we have excluded anterior nasal obstructions, foreign bodies, little remains except post-nasal adenoids and faucial tonsils, and I frequently make the diagnosis with the curette. This Munger curette is much more easily introduced than the finger, and anybody who is accustomed to its use can quickly determine whether an enlarged tonsil exists. Let us employ it in the case of the child who is before us, and who has never breathed satisfactorily through the nose. You ask me whether an anæsthetic should not be employed in all cases. This depends on two conditions—the amount of tissue to be removed and the wish of the parents. If there are no enlarged faucial tonsils, and the enlargement of the third tonsil is not extreme, this can be removed very quickly and with one introduction of forceps. We should hardly undertake at one sitting to remove two faucial tonsils and a large amount of post-nasal enlargement without an anæsthetic. I would not advise the use of cocaine in these cases unless we are operating on a very sensitive child without an anæsthetic, and then only to be applied against the middle pharynx so

that the child will not notice the introduction of forceps behind the uvulva. Cocaine applied high up in the vault makes the tonsil hard and difficult of removal. The instruments best employed are the large cutting forceps and the curette. How shall we make the diagnosis with the curette in those cases where we cannot see with the mirror? If the curette is introduced into an adult pharynx the surface will feel as smooth as glass, and it is not possible to sink the point of the curette into the tissues. It is difficult even to scarify a normal post-nasal space because the surface is so hard and slippery. It is quite different in a vault filled with enlarged adenoids. When the point of the curette reaches this tonsilar enlargement, it will be felt to be soft and spongy, the point of the curette is easily pushed into it, and resistance is felt when we attempt to push the curette downward. This makes the diagnosis certain. You are all so familiar with the operative procedures in this case that only a few words remain to be said. After the anæsthetic has been given and the mouth-gag introduced between the teeth, it is best first to apply the cutting forceps to the roof of the vault. A mistake is made sometimes in trying to carry the forceps too high. Adenoid in children is easily reached and is frequently situated at the junction of the posterior wall and the roof, or even a little lower down on the posterior wall. We should be able to remove nearly the entire mass of post-nasal adenoid with two grasps of the cutting forceps, and then the curette can be employed to cut away all small projections and make the post-nasal space smooth. Clinically, in an operative sense, the vault of the pharynx might be divided into three parts, the middle and the two lateral spaces. The enlargement in the median line should be easily removed and then the curette and forceps should be turned a little to the side to grasp the lateral adenoid. In some children this lateral enlargement is very pronounced and may be suspected by the prominence of the ear symptoms. It is unnecessary to say that forceps and curette should be handled with no roughness whatever. If the instruments are directed too far laterally, the orifices of the eustachian tubes may be wounded, and I know of one case where the posterior end of the nasal septum was grasped and cut by forceps. If both faucial tonsils and third tonsil are to be removed, it is wise to proceed slowly and wait for the bleeding from one source to cease before producing further hemorrhage. I have never seen dangerous hemorrhage in any of these cases, but there are a number on record, so that we should be prepared to introduce tampons in the post-nasal space. Cotton, wet with a 4 per cent. solution of cocaine, is a good hemostatic, or styptic cotton could be introduced and afterwards strips of styptic gauze may be pushed through the anterior nares. When the faucial tonsils are large it is well to excise them first, during the primary anæsthetic stage. The child will breathe much better during the remainder of the operation. It is a wise precaution to keep the patient at least half an hour after the operation to be sure that there is no bleeding. I think it is better not to use anterior nasal washing or the posterior nasal syringe for several days after operating. Septic infection is exceedingly rare following post-nasal operative work. Explain to the parents that they must not expect perfect nasal

respiration for at least two or three weeks, as it will require that length of time for the vault to contract and congestion to subside. An operation like this is frequently followed by a severe catarrhal rhinitis which postpones somewhat the benefit looked for. In regard to the after treatment, we may use the nasal douche cap and Seiler's tablets if the nasal secretion persists, but the washing should be discontinued as soon as oversecretion subsides. A weak solution of menthol and liquid albolene sprayed into the nose will be of service until the nasal passages are thoroughly recovered.—*Post Graduate.*

DANGERS OF THE NASAL DOUCHE.

Lichtwitz (*Sem. Méd.*, November 26, 1897) deprecates the routine prescription of the nasal douche in all cases of hypersecretion of the nasal mucous membrane. Irrigation is called for only when the nasal fossæ require clearing of pus and crusts; for instance, in idiopathic ozæna. This affection is mainly limited to the nasal fossæ properly so called, and irrigation is in such a case the most fitting form of procedure. An ordinary syringe or enema syringe with suitable nozzle should be used. In all other nasal affections irrigation is inadequate or useless; it is even dangerous. Repeated flooding of the mucous membrane may give rise to olfactory lesions. Antiseptics are highly injurious, and pure water is badly borne; the physiological solutions of sodium chloride, sod. bicarb. or sod. sulph. are the only harmless liquids. In numerous cases irrigation has caused the sense of smell to be temporarily or permanently diminished or lost. Distressing frontal or occipital headache may result owing to the liquid passing into the sinuses. The injection of irritating liquids may even set up inflammation of these cavities. The most skilful and careful irrigation is insufficient in many cases to prevent the resulting headache. A very grave complication is the penetration of the liquid into the middle ear, suppurating otitis media occasionally supervening. In acute coryza, especially in children, douching should never be practised. In one such case known to the author mastoiditis followed irrigation of the nasal cavities. The predisposition to otitis is increased after retro-nasal operations, in particular after ablation of adenoid vegetations. For eight years the author has given up all irrigation after pharyngo-tonsillotomy, and during that period has met with no case of post-operative complication.—*Atlantic Medical Weekly.*

VICARIOUS MENSTRUATION AFTER HYSTERECTOMY.— Marsi (*British Medical Journal*) states that total hysterectomy was performed on a young woman in August, 1896. Ever since she observes that the urine becomes bloody at intervals precisely corresponding to former monthly periods. Between the times of appearance of blood the urine is absolutely normal, and at no time is there any evidence of disease of the urinary tract.

PAEDIATRICS.

IN CHARGE OF

ALLEN M. BAINES, M.D., C.M.

Physician, Victoria Hospital for Sick Children; Physician, Out-door Department Toronto General Hospital. 194 Simcoe Street, and

J. T. FOTHERINGHAM, B.A., M.B., M.D., C.M.,

Physician, St. Michael's Hospital; Physician, Outdoor Department Toronto General Hospital; Physician, Hospital for Sick Children. 39 Carlton Street.

ROCHET AND JOURDANET: INCONTINENCE OF URINE IN CHILDREN.

The difficulty in overcoming certain cases of incontinence in children is recalled by a somewhat elaborate, well-systematized paper by the authors who classify cases of incontinence in children under two general headings:

1. Those in which incontinence is the expression of a distinct local lesion, or those in which it develops in the course of a general disease, of which it is an expression of minor importance. Such forms of the disease are called symptomatic. The appropriate treatment is that directed to the general condition, as post-typhoidal adynamia, or to the local exciting cause, as a rectal polyp or balano-posthitis.

2. Those in which incontinence is the only symptom. Such cases are called essential, though in reality they more correctly would be named neurotic. The term "incontinence" is misleading, since this implies a a constant dribbling; whereas in children it nearly always assumes the form of involuntary urination.

The essential incontinence of children is always associated with a neurosis, usually hereditary; indeed, Guyon considers wetting the bed a pathognomic sign of this condition. It may be, perchance, the only sign, though it is often associated with other manifestations even more characteristic.

The condition itself may be directly brought about by undue contractility of an irritable detrusor muscle, or by hyperesthesia of the mucous membrane of the prostatic urethra, or by thoughts or ideas which produce frequent urination by day and incontinence by night.

In the class of cases in which the neurosis is manifested in the form of spasm of the vesical sphincter, this may result in either partial retention, which necessarily favors wetting of the bed, or of complete retention, which would cause a true diurnal and nocturnal dribbling (retention with overflow). Very exceptionally the neurosis may be expressed in the form of a paresis of the sphincters; this also would give rise to constant dribbling. In examining patients it is important to bear in mind the possibility of retention with overflow. This condition would be detected at once by catheterization, and if the injected fluid were returned through

the catheter with slight force the surgeon would at once suspect paresis in the detrusor muscles. The introduction of a catheter will also detect atony or hyperesthesia and spasm of the ureteral sphincters.

In case urethral exploration remains negative, abnormal sensibility to distention would be suggested as a possible cause of incontinence. Injection into the bladder would at once settle this question, since the viscus if hypersensitive to tention would reject the liquid when but a small amount had been driven in. In case exploration remains negative the incontinence may be classed as psychic.

The treatment should, of course, be primarily that applicable to neuropathies. Belladonna is particularly indicated in those cases which are probably due to an over-excitability of the detrusor muscles of the bladder. No one has been able to suggest a better means of administration than that first proposed by Trousseau. The initial dose is one-sixth of a grain of the extract given in the evening at bedtime. After several days this dose is doubled, the patient finally taking as much as from one-half to one grain, the surgeon carefully watching for toxic symptoms and stopping the medicine very gradually if the desired effects are obtained. Other medications, possibly serviceable in the same condition, are bromides, chloral, camphor, lupulin, lactucarium, and opium.

When the cause of incontinence is immediately traceable to hyperesthetic condition of the mucous membrane of the posterior urethra, general sedatives are still serviceable. Local treatment is, however, especially indicated, instillations of cocaine or of silver nitrate and the repeated passage of a cold full-sized sound being particularly useful.

The very rare cases of incontinence due to anesthesia of the urethro-vesical region, practically always due to lesions of the spinal cord, are said to be benefited by cauterization of the posterior urethra. Trousseau's advice for atony of the vesical sphincters is that strychia should be given in fairly full doses morning and evening, continuing the medicine for two days and then allowing two days of rest. The quantity of the drug is gradually increased. Guyon, in his class of cases, has been particularly successful with electricity. An electrode is introduced, insulated excepting at the end. The other electrode is placed either upon the pubis or the lumbar spine, and the Faradic current with slow interruptions is employed. Each treatment should last about five minutes; this directly exercises the weakened muscles and restores their tonicity. To control the psychic influences, especially the dream of micturating, various means are serviceable. Thus, the slumber may be rendered less profound by means of tea or coffee. These agents are, however, not to be commended in the treatment of neuropaths. Another method is to wake children regularly during the night. This method gradually accustoms the bladder to regular evacuations. The number of wakings should be proportionate to the quantity of urine secreted and to the frequency of micturition during the day. Punishment is successful in some cases, since it makes a powerful impression upon the brain. Suggestion has been utilized in other ways; thus, painful subcutaneous injections have been employed, or operations have been threatened. Finally, hypnotic suggestion has been used, Liebeault having claimed by this to have cured

cases. The first step in this treatment is to procure hypnotic sleep. It is then suggested that the child should rise at certain hours to urinate; gradually the number of risings by night is diminished until finally they are abolished entirely, the child being forbidden to urinate until it wakes in the morning.

The pure psycopathic incontinence dependent upon dreaming of micturition is probably the most troublesome of all to cure. Psychic treatment is alone efficient. The cure is usually spontaneous in these patients, and accomplished about the time of puberty, when amorous dreams replace those of micturition. These patients often become congenital hypochondriacs who swell the ranks of those who suppose themselves suffering from spermatorrhea, and who after gonorrhea hypnotize themselves concerning the urethra and are thus able to see a constant discharge of semen.

The cases of incontinence due to retention of spasmodic origin are readily cured by the regular passage of catheters and sounds. Once daily the bladder is comparatively evacuated. Once or twice a week full-sized sounds are passed after the catheter. Treatment is continued for about a month, amelioration is usually rapid, and the cure complete. Should incontinence of overflow result not from spasm of the sphincter but from paresis of the detrusors, the only treatment would, of course, be faradization.—*Gazette des Hôpitaux, 1897: Therapeutic Gazette.* Vol. xxi., No. 7.

CONTRIBUTION TO THE RESUSCITATION OF THE ASPHYCTIC NEW-BORN.—Wolfram reports a case of asphyxia in the new-born, where Schultze's method could not be used on account of the low ceiling of the room, and which was resuscitated by laying the baby cross-wise on his lap, with the head hanging down; he now encircled the thorax with his left hand, and the thighs of the child from behind with the right, lifted the latter up towards the abdomen, at the same time compressing the thorax. On relaxing this movement the first inspiration was obtained. In a second case of deep asphyxia the same method proved successful.—*Munch. Med. Wochensch, 1897, xliv., 287.—Pediatrics.*

DOUGLAS, CHARLES: INFANTILE STOOLS AND THEIR SIGNIFICANCE.—(*The Physician and Surgeon.* 1897. Vol. xix., No. 10).

After a careful consideration of the various forms of stools and their significance, the author reaches the following conclusions:

1. Green stools are never healthy stools.
2. They show imperfect digestion always.
3. In direct proportion with their presence is the damage and danger to the child.
4. These stools render children more susceptible to acute gastro-enteritis in hot weather.
6. The high infantile summer mortality follows children suffering from this colored stool.

6. Through unhealthy nutrition the blood is poisoned and the various tissues improperly nourished.

7. The excreting organs, particularly the kidneys and liver, are frequently damaged by the extraordinary duties imposed on them in eliminating these poisonous results from the blood.

8. This continued irritation and innutrition favors the development of inherited diatheses and acquired cachexias.

9. No child is free from complications dangerous to life, or from developmental errors who suffers from frequently recurring green shaded stools, particularly the very liquid and foul smelling ones.—*Arch. of Pæd.*

SULPHUR IN SEPTIC AND TUBERCULOUS ULCERS.

Miller, of Edinburgh (*Practitioner*, February, 1897), praises very highly the application of sulphur in obstinate or recurrent ulcers and abscesses. Sulphur is non-poisonous, and when applied to fresh surfaces there are formed sulphuretted hydrogen, sulphurous and sulphuric acids, and it is these three products that act on the tissues. Being *in statu nascendi*, their bactericidal action is especially lasting and energetic. In fresh wounds and ulcers the sulphur is applied as a fine powder; in septic and tuberculous abscesses a 10 per cent. glycerin emulsion is injected. The burning following the application of sulphur can be prevented by the addition of cocaine. The author says that under the sulphur treatment ulcers and abscesses that have before resisted every kind of treatment for months frequently heal within a week. Another of the advantages of sulphur is its cheapness.

PANCREATIC CALCULUS AND TEMPORARY DIABETES.

W. Polkyakoff (*Berl. Klin. Woch.*, March 14, 1898) describes the case of a man, aged 28, who during three weeks had four or five colic-like attacks accompanied by vomiting. After this (about two months) he had a persistent dull pain and feeling of oppression in the upper part of the abdomen. He lost flesh and became weak, in spite of his appetite being unusually good. The excessive hunger and thirst induced the patient to seek medical aid. The urine was then found to be excessive in quantity (about five pints per diem) and to contain much sugar. Great improvement followed suitable treatment for the diabetes, and the sugar entirely disappeared from the urine. Polyakoff discusses the nature of the attacks of abdominal pain from which the patient suffered, and comes to the conclusion that they were attacks of pancreatic colic. According to another author, pancreatic calculus, by causing atrophy of the gland, may, after some years, lead to diabetes and a form of diarrhœa somewhat analogous to "fatty stools." In this case, however, the diabetes was of temporary occurrence, and the disturbance of the pancreatic cells may have been only functional.—*British Medical Journal.*

PATHOLOGY AND BACTERIOLOGY.

IN CHARGE OF

H. B. ANDERSON, M.D., C.M.,

Pathologist to Toronto General Hospital; Professor of Pathology Trinity Medical College, and in charge of the Trinity Microscopic Pathological Laboratory, Toronto General Hospital. 241 Wellesley Street

H. C. PARSONS, M.D., 97 Bloor Street West.

I.

SYPHILIS OF THE STOMACH.

M. Dieulafoy related at the May meeting of the Académie de Médecine, the case of a man who had previously had syphilis, who suffered from simple ulcer of the stomach, which resisted for a year and a half every kind of treatment usual in such cases. It was only after specific treatment (injections of bi-iodide of mercury and iodide of potassium internally) that the affection was cured. It was evidently a case of syphilitic ulcer of the stomach, an affection which had been clearly established in a clinical and anatomo-pathological point of view by Cornil, Fournier, &c.

The speaker in commenting on the case said that syphilis of the stomach was not so rare as might be believed. The lesions presented themselves under various forms; hæmorrhagic erosions, ecchymosis of the mucous membrane, gummous patches, &c. There, as well in other cases of loss of substance of the gastric walls, it was probable that the gastric juice continued what the initial ulcer commenced. The symptoms resembled those of simple ulcer, pain, gastric intolerance, vomitings, hæmatemisis, cachectic wasting. None of the symptoms permitted to affirm the syphilitic nature of the gastric lesion. However, when the symptoms of ulcus simplex were observed in a syphilitic person it was natural to suppose the gastric lesion was of itself syphilitic. Consequently, it should never be forgotten when in presence of gastric ulcer to look for syphilis in the antecedents of the patient and apply the treatment accordingly. The notion of syphilis as a cause of gastric ulcerations was the more important to recognize, as it permitted to cure patients who might otherwise be advised to submit to surgical intervention.

II

TUBERCULOSIS.

At the Medical Congress held at Montpellier last April, the subject of tuberculosis was continued. M. Auche communicated a case of transmission of the malady by the placenta. A woman in the last stage of consumption was confined prematurely of a living child. She died three days

afterwards, and the autopsy revealed the presence of the ordinary lesions of pulmonary tuberculosis and the existence of tuberculous ulcerations on the intestine. Fragments of the placenta were injected into a guinea-pig, and provoked typical generalized phthisis. The child was placed in an incubator, and although every care was taken of it, it only lived four weeks. The post-mortem showed the presence of tubercles in the liver, the spleen, the lungs, and the kidneys. The digestive tract was healthy. It was unquestionably a case of transmission of the disease through the placenta.

III.

At a recent meeting of the Société de Chirurgie, M. Monod communicated a case of tetanus treated by amputation and injection of antitoxin. A woman, æt. 56, a hard drinker, entered the hospital for a complicated luxation of the wrist. The speaker treated the wound antiseptically, and injected antitetanic serum beneath the skin. In spite of the disinfection the wound suppurated a little, and fifteen days afterwards muscular spasms were observed in the neck, denoting a commencement of tetanus. The arm was immediately amputated, and the injection renewed. The contractions continued, with delirium, for several days, but finally the patient recovered. Bacteriological examination proved that the nervous phenomena were due to the bacilla of Nicolaier. The history of the case proposed two questions: How was it that the first injection, given in the classical way and at the outset, was powerless to arrest the tetanic accidents, and eventually, to which of the two, the serum or the amputation, was the recovery due? As to the first question, he would recall to mind the experiments of M. Roux, who divided his animals into neutral and non-neutral; in the first the serum always succeeded, whereas in the second no immunity was observed. It was probable that in a pathological point of view the above patient belonged to this last class. As regarded the part played by the operation and the serum in the recovery, he did not believe that the amputation alone prevented the development of the tetanus; the experiments of Nocard having proved that this mutilation had never arrested the evolution of the disease.

IV.

At the May meeting of the Society for Innere Medizin, Prof. Senator reported on two cases bearing on

THE PATHOLOGY OF THE SPINAL CORD.

They were cases of interruption of conduction of the cervical cord. The first case had a course of thirteen years, the second of one month. The patient, a woman of 36, was admitted into the Augusta Hospital in January, 1883. Up to three years previously, when she had a nervous fever, she had always been healthy. After this illness pains in the back of the neck came on, which ceased for a time and then returned. She

also complained of weakness of the legs. She was a big woman, and otherwise healthy. There was no sign of other spinal disease. The lower limbs showed symptoms of spastic spinal paralysis; the sense of position of the legs was quite wanting. In the arms considerable atrophy of the muscles and paresis; claw position of the hands. No reaction of degeneration; paralysis of the bladder. The condition did not change materially. She left the hospital, and for ten years she lived in a room on the fourth story, where the speaker visited her from time to time. Gradually pronounced disturbance of sensibility came on, with complete anæsthesia reaching as high as the nipple line; the atrophy of the arm ascended, particularly in the domain of the ulnar nerve. Blisters followed by ulcers formed on the toes. On the thighs also ulcers formed, which healed and broke out in other places. Six months before her death serious bedsores formed, and suppuration of hæmorrhoids, whereby the patient's condition was much reduced, and later on there was fever. During the later years the clonic spasms were so bad that the patient had to be fastened to the bed at night. The general diagnosis was not difficult; there was clearly a disease centre in the cervical cord, but the nature of the disease was still uncertain. The autopsy revealed a tumour in the cervical part, 7 centimetres in length, extending from the fifth cervical to the seventh dorsal segment, and which proved on microscopical examination to be a sarcoma. It had caused complete disappearance of the spinal cord at its site, so that not a trace of nerve substance was any longer present. There was both ascending and descending degeneration. The reflexes were exaggerated. Bastian had assumed, and Bruns had proved, they would be abolished when the interruption was complete, but the law was not without exceptions, as the case proved. The speaker saw the patient three months before her death. and the reflexes were then still exaggerated. Even if during the latter weeks of her life they had been abolished, this would have been no proof of the correctness of the Bastian-Bruns law, as the loss might have been due to the badly nourished condition of the patient. The anatomical condition was decisive for the question; the traces of recent destruction of the last remnants of nerve substance must have been found; muscular cells must have been been seen, but there were no traces of any. Individual cases had run a similar course to that related; for instance, a case, carefully examined by Bastian, and one published by Schultze of Bonn, Rosenthan and Mendelsohn, of Erlangen, had proved that the reflexes did not take the shortest course, but that over the calamus scriptorius, and that with powerful stimulalation they could even take other courses.

V

THE BIOLOGY OF LEUCOCYTES.

Virchow's Archiv, Bd. 151, H. 2, contains a study on this subject, by Drs. A. Leowy and P. F. Richter, workers in Prof. Senator's laboratory.

The first part of the article treats of the influence of artificially-pro-

duced leucocytosis upon bacterial infection and intoxication. For the production of the hyper-leucocytosis nuclein and spermine were employed. (Pilocarpine was tried, but soon given up.) Whilst the injection of these substances had scarcely any effect after infection, if the leucocytosis was set up before it even large doses of poison were frequently borne. The observation was particularly interesting that hyper-leucocytosis was effective not only against the bacteria themselves, but also against toxines. The practical importance of this is at present only small, however, as clinically the infection naturally precedes all treatment.

It showed, they remarked, that hyper-leucocytosis is preceded by hypo-leucocytosis, but as decomposition of leucocytosis takes place in both stages, it does not much matter whether the protection is ascribed to the one or the other. They have not succeeded in isolating the protecting body from the blood, but they have succeeded in demonstrating in blood thus changed an albuminous body not present in ordinary blood. The author tested *in vitro* the glycolytic power of blood rich in leucocytes and regularly found it reduced.

VI.

PERIODIC PARALYSIS OF OCULOMOTOR NERVE.

Klutschkin records an interesting case of ocular paralysis in a girl, æt. 15, who, since her childhood suffered from malaria, headache, &c. Since menstruation commenced these symptoms have become more severe, with vomiting and pain in the eyeballs. In 1896 she found herself unable to open the left eye at all. The headache at this time only lasted a few days and was accompanied by malarial symptoms. On examining the eye it was observed that the pupil of the left eye was much dilated and neither reacted to light nor on convergence. Diplopia was present although nothing abnormal could be discovered in the fundus.

There was a great reduction in the sensitiveness of the left nervus trigeminus. Two months later the oculo-motor paralysis returned. Under quinine treatment these attacks recurred. There was no trace of "migraine ophthalmo-plégique," but the case corresponded with Senator's periodic paralysis which occurs in the interval between the menstruation periods. The differential diagnosis was based on the assumption of malaria poison having weakened the peripheral branches of the trigeminal nerve.

Generally speaking, surgical intervention is indicated: (1) in cases of appendicitis with prolonged abdominal pain; (2) when suppuration is progressing, when symptoms of pyæmia supervene or the abscess threatens to perforate into the peritoneal cavity; (3) in cases of generalized peritonitis, consecutive to perforation of the abscess. Operation is contra-indicated when the patient presents cardiac adynamia. In typical cases, medical treatment (rest, opium, and diet) may be tried first; but, when the affection runs an abnormal course, surgical operation should be performed.—*Gersuny.*

As Sunlight is to Darkness

is the condition of the woman who has been relieved from some functional disturbance to her state before relief. Don't you know, Doctor, that there are few cases that pay the physician so well as those of women—and the Doctor that relieves one woman, lays the foundation for many more such cases—all women talk and your patient will tell her friends ASPAROLINE COMPOUND gives relief in all cases of functional disturbance—Leucorrhœa, Dysmenorrhœa, etc., and in the cases it does not cure it gives relief. We will send you enough ASPAROLINE COMPOUND—free—to treat one case.

DR. BRETON, of Lowell, Mass, says:

"I wish to inform you of the very satisfactory results obtained from my use of Asparoline I have put it to the most crucial tests, and in every case it has done more than it was required to do. I recommend it in all cases of dysmenorrhœa."

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

Prepared solely by

HENRY K. WAMPOLE & CO.,

Pharmaceutical Chemists,

PHILADELPHIA, PA.

DOCTOR!
Antikamnia

IS NEITHER

FRENCH NOR GERMAN

IT IS AMERICAN

MADE IN AMERICA

FOR AMERICANS

The Canada Lancet

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

EDITOR:
JOHN L. DAVISON, M.D.

ACTING EDITOR:
J. T. FOTHERINGHAM, M.D.

ASSOCIATE EDITORS:

Surgery:
G. A. BINGHAM, M.D.
F. LE M. GRASETT, M.D.

Medicine:
N. A. POWELL, M.D.
W. BRITTON, M.D.

Obstetrics and Gynæcology:
G. P. SYLVESTER, M.D.
C. A. TEMPLE, M.D.

Nervous Diseases and Electro-Therapeutics:
CAMPBELL MEYERS, M.D.

Pathology and Bacteriology:
H. B. ANDERSON, M.D.
H. C. PARSONS, M.D.

Nose and Throat:
J. MURRAY MCFARLANE, M.D.
D. J. GIBB WISHART, M.D.

Pædiatrics:
J. T. FOTHERINGHAM, M.D.
ALLAN BAINES, M.D.

Eye and Ear:
G. STERLING RYERSON, M.D.
C. TROW, M.D.

☞ *Advertisements inserted on the most liberal terms. All Cheques, Express and P.O. Orders to be made payable to* The Canada Lancet Publishing Co., 24 Wellington St. W., Toronto.

FRED. H. GRAY, Business Manager.

The Largest Circulation of any Medical Journal in the Dominion.

Editorial.

THE TORONTO GENERAL HOSPITAL STAFF.

The appointments in the various departments of the General Hospital for 1898-99 are announced, and the new House Staff have begun their duties. The appended list, which does not include the Consulting Staff, will give our readers some idea of the enormous advances made by that useful and excellent institution, and of the volume of work done annually, not only in teaching in both the Colleges of the city, but in the relief of the sick.

HOUSE STAFF:

H. Anderson,	John McCrae,
F. H. Bethune,	C. M. Stewart,
N. E. Farewell,	G. A. Sutherland,
W. E. Graham,	W. C. White,
D. McGillivray,	T. Bradley.

REGISTRARS:

G. W. Badgerow,	John McMaster,
Geoffrey Boyd,	K. C. McIlwraith,

Wm. Britton,
F. Fenton,
W. J. Greig,
B. Z. Milner,
R. D. Rudolf,
G. P. Sylvester,
C. B. Shuttleworth,
A. A. Small.

OUT-PATIENT DEPARTMENT:

Surgeons.	*Physicians.*
H. A. Bruce,	W. B. Thistle,
C. A. Temple,	G. Gordon,
F. Winnett,	J. E. Elliott,
A. H. Garratt,	W. H. Pepler,
F. N. G. Starr,	A. R. Gordon,
B. E. McKenzie.	H. C. Scadding.

EYE AND EAR INFIRMARY:

R. A. Reeve,
G. S. Ryerson,
G. H. Burnham,
Chas. Trow.

NOSE AND THROAT DEPARTMENT:

G. R. McDonagh,
Jas. D. Thorburn,
D. J. G. Wishart.

PATHOLOGISTS:

John Caven,
H. B. Anderson,
H. C. Parsons, } Assistants.
J. A. Amyot, }
J. O. Orr.

ELECTRICIAN:

C. R. Dickson.

ORAL SURGERY AND DENTISTRY:

G. S. Cæsar,
E. H. Adams.

BURNSIDE AND GYNÆCOLOGY:

J. A. Temple,
A. H. Wright,
U. Ogden,
J. F. W. Ross,
A. A. Macdonald,
L. M. Sweetnam.

ASSISTANT PHYSICIANS AND SURGEONS:

(ACTIVE STAFF, EMERGENCY BRANCH, BAY ST., TORONTO.)

Physicians.	*Surgeons.*
A. M. Baines,	Geo. A. Bingham,
W. P. Caven,	N. A. Powell,
J. M. MacCallum,	B. Spencer,
J. T. Fotheringham,	A. Primrose,
Graham Chambers.	E. E. King.

PHYSICIANS AND SURGEONS:
(ACTIVE STAFF, TORONTO GENERAL HOSPITAL.)

Physicians.	*Surgeons.*
J. E. Graham,	F. LeM. Grasett,
J. L. Davison,	I. H. Cameron,
A. McPhedran,	L. Teskey,
Chas. Sheard,	R. B. Nevitt,
T. F. McMahon,	G. A. Peters,
W. H. B. Aikins.	B. Riordan.

MEDICAL SUPERINTENDENT:
Chas. O'Reilly.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

The first meeting of the Directors appointed at the annual meeting in June last was held on the 22nd of July, when the following officers were elected for the ensuing year:

President, Dr. J. E. Graham; Vice-President, Dr. W. J. Greig; Secretary, Dr. H. J. Hamilton; Treasurer, Dr. Herbert Bruce; Curator, Dr. N. A. Powell; Assistant Curator, Dr. W. J. Wilson.

The establishment of an Academy of Medicine, as urgently advocated by Dr. Osler at the annual meeting and reported in our last issue, came up for consideration. As the proposal had the unanimous approval of the Directors, it was thought that the scheme merited a full and free discussion and the serious consideration of the three medical societies which are interested equally with this Association. It was therefore hoped that this subject would be brought to the notice of each society as soon as the autumn meetings are well under way.

For the purpose of making the Association more useful to its members and to the profession of the province outside of Toronto, it was pretty well decided to have printed and distributed among the members a catalogue of the more important and useful works now on the shelves.

Heretofore the Library has been open only from two o'clock to six each afternoon (Saturdays excepted). The Directors feel that the opening of the Library during the morning hours would be of advantage to some of its members. We understand the Library will after the August vacation be open during the morning as well as the afternoon. This, we are given to believe, depends somewhat upon the support and encouragement accorded by the Toronto members. We trust that the reading, the progressive, the advanced among our confreres will take steps, if they have not already done so, to identify themselves with an Association which was originated by the profession, is maintained by the profession, and conducted solely in the interests of the profession, and, therefore, indirectly for the benefit of the public at large.

Of the advantages of joining such an Association as this we propose to speak briefly in the next issue

THE DISCIPLINE COMMITTEE.

The *Canadian Pharmaceutical Journal* for July contains the following: "Envious thoughts are aroused in the pharmaceutical mind when one reflects upon the power possessed by the governing body of the medical profession to erase from the register the names of erring brothers . . . . But, alas! no such remedy is at hand in pharmacy as in the sister profession of medicine." Then follow some very severe remarks upon the licensed pharmacists who accept situations in departmental stores. Elsewhere in the same issue, with remarkable inconsistency, appears an editorial entitled, "Prosecution and Persecution," beginning with the advice, really a threat, "It would be well for the Ontario Medical Council to take heed to its ways," and proceeding to call in question in a very prejudiced and misleading way the recent very proper action of the Council in depriving of their licenses those members who had sold themselves to the Munyon Company. Another threat runs thus: "It might be well for the Council to remember that Corporations have been deprived of privileges conferred upon them when such privileges were being used to the detriment of the public welfare." Dr. Sangster, in moving the enforcement of the sentence upon one of the offending parties, put the case admirably when he said that in spite of the very extensive campaign conducted by the Munyon concern the provincial press in the attempt to rouse public ignorance and prejudice, he did not believe that there was any genuine public desire to be humbugged; but that if there were any widespread feeling that these men were being wronged, he would advise the Council, upon whom the Legislature had, in the passing of the Medical Act, laid the painful duty (hitherto so faithfully performed) of protecting the public against their operations, to go to the Legislature and lay upon them the onus of this disagreeable work, demanding of the Legislature that it punish these men themselves.

The druggists' journal goes on to say that there is no difference between the man who prescribes Munyon's Female Cure and he who orders Hayden's Viburnum Compound, and that "it is doubtful if the physician who orders Munyon is not more certain of the remedies used than the one ordering H. V. C." Two blacks do not make a white, and even if the premises were right the conclusion would be wrong. But we do know the formula of the latter remedy and not of the former. And, moreover, the Council would not discipline the man who in private practice might order H. V. C., or Paine's Celery Compound, or Munyon's Female Cure, although we all hold the man who would habitually prescribe in that style to be unworthy of public confidence. Furthermore, the Council is purging the profession of these men, not because they have, in their private capacity, ordered Munyon's remedies, but because they have sold themselves and by implication the honorable profession to which they belonged, to this soulless American trafficker in the needs and ignorance of the public. Canada cannot too soon cast out such foreign invaders; the breed is too common on the other side of the line, and we shall do well to hold them

rigorously at bay at our own frontier. To one statement of the article quoted, we say amen; it is as follows: "Why should the physician who accepts a salary from Munyon be considered guilty of 'infamous and disgraceful conduct' while another physician is allowed to lend himself to a departmental store, doctoring the proprietor, 'his sisters and his cousins and his aunts,' together with the whole staff, at cut-rate prices?" Our only comment is again that two wrongs cannot make a right. The evident motive of the entire article is to befriend the Munyon people, in the vending of whose wares the chemist makes a profit. We deprecate such sentiments, as the interests of the public and the *morale* of both chemist and physician are best conserved by mutual confidence and harmony. The action of the Council was taken without a dissenting vote.

THE VICTORIAN ORDER.

The passage through British Columbia of the contingent of the Victorian Order of Nurses on its way to the Klondike, a few weeks ago, was accompanied by much blare of trumpets and social prestige. The methods adopted here in "floating" the Order were also put into use there, and the same sort of unaccountable (?) prejudice and opposition stirred up. Letters have appeared in the Victoria *Daily Colonist* from persons interested in existing organizations, whose income and existence are threatened by the invading Order. The private nurses, too, seem to have been treated with the same lack of tact that characterized the treatment meted out to the medical profession here, else we should not find one of them writing thus, over her own name: "We feel very much pained by the insinuation that the nurses of the Victorian Order do their work out of love to God and man, whilst we work only for the sake of our fees." The whole thing inspires very mixed feelings—gratitude that those in high place should honestly desire to undertake for the good of the people at large, and resentment at the tactless interference with the rights and sentiments of those who have, with quite as much disinterestedness, been seeking the very same good ends.

PREPARATIONS OF IRON IN THE TREATMENT OF CHLOROSIS AND ANEMIA.

At a recent meeting of the Société de Thérapeutique, a report of which appears in *Le Progrès Médical* of April 3, a discussion on this subject was opened by M. Bardet, who said that the majority of authors regretted that it had been generalized by including in it the treatment of various forms of anemia, instead of limiting it to chlorosis. M. Bardet, however, was of the opinion that when it was necessary to employ iron preparations the special treatment became the same in each case He considered it difficult, in a discussion on therapeutics, to separate chlorosis, properly so called, and the various forms of anemia. It has been well aid that in the treatment of anemia the principal indication was to sup-

press the cause and then the anemia would disappear. But, he said, it was none the less true that the iron treatment played a great part in therapeutical intervention, and consequently it would be prejudicial to leave out anemia in this discussion. Moreover, he questioned whether it was correct to profess to be able to remove the causes, which were more frequently connected so closely with the effects that it was impossible to make out the precise limits between them.

The value of different preparations of iron had been the subject of much discussion. Some authors had advocated the use of the free metal; others had recommended the iron salts; others, again, had given the preference to organic preparations, and among these several authors had adopted exclusively the albuminates. M. Bardet was convinced that all these discussions were useless, and that all iron preparations were good or bad according to the particular cases, not forgetting that everything depended on the absorption, and that this was itself dependent exclusively upon the digestion; and as this was a most complex phenomenon, varying according to the individual, certain preparations might prove good for some persons and bad for others. All iron preparations might be tried, and the one that was tolerated by the patient was the right one.

With regard to the different preparations, M. Bardet preferred hemoglobin, although there was another preparation which he thought should not be forgotten in a discussion on this subject. This was glycerophosphate of iron, which he thought was destined to take an important place in therapeutics. Up to the present time it had not been easy of employment, owing to the difficulty in keeping it. M. Bardet had, however, made use of this salt in anemic persons by combining an organic iron preparation with the glycero-phosphate of iron, and particularly with the phospho-glycerate of lime. He had employed these combinations for the past three months with the best results.—*N. Y. Medical Journal.*

THE TREATMENT OF HEMORRHOIDS BY INJECTIONS.

The treatment of hemorrhoids by the injection of carbolic acid and glycerin, mixed in various proportions, into the substance of each pile by means of a hypodermic syringe was first used by American surgeons. S. G. Shaleeta, of the Kieff Jewish Hospital (in a reprint from the *South Russian Medical Gazette*), has modified this method by using pure liquid carbolic acid, injecting each pile with a Pravaz's syringe to a certain degree of fulness, and completing the operation in one sitting. Two, three or four syringefuls of the acid are injected, according to the number and size of the tumors. For external piles he uses a mixture of two parts of pure carbolic acid to one part of a two per cent. solution of cocaine. Even if four syringefuls of this mixture are injected the quantity of cocaine is not sufficient to cause dangerous symptoms. As a matter of experience only a few drops should be injected where we have to deal with external piles, the syringe being introduced through the mucous membrane, and not through the skin. The history of sixty-nine cases treated in this way is given, and the results in all cases were highly encouraging. When

the piles shrivelled up and separated the surface presented was similar to that produced by the operation for ligature or the clamp and cautery. The advantages which the author claims for this mode of treatment are: (1) Absence of marked pain during the injections. (2) No necessity for anæsthesia (this is a great advantage in old and feeble patients, and those exhausted by repeated hemorrhages). (3) Little risk of suppression of urine following this operation. (4) No loss of blood during the operation. (5) No necessity to keep the bowels quiet for three or four days after the operation, as is the case in other methods of operating.—*British Medical Journal.*

THE TREATMENT OF FISSURES OF THE ANUS WITH COCAINE AND ICHTHYOL.

Cheron (*Prakt. Dermatol.*, No. 7) proceeds as follows: The anal fissure is first made insensible by laying upon it, during five minutes, a bit of cotton soaked in a 5 or 10 per cent. solution of cocaine. As soon as the fissure is anæsthetized one or two drops of pure ichthyol are allowed to run into it. This treatment is repeated daily during four or five days, by which time improvement will have progressed so far that dilatation of the anus is easily accomplished, and the fissure may now be treated throughout its whole extent. As a rule, complete healing follows about ten applications.

STERILITY.

D. Vedder, of Christiana, Sweden, reports the results of examination of 310 married women who had never been pregnant though married at least one year. In fifty of these cases he was able to examine the husband also. He draws the conclusion that in 70 per cent. of these cases the husband is to blame for the sterility, either through impotence or through infecting his wife with gonorrhœa.—*Norsk Magazin fer Lagevid.*

HERMAPHRODITISM A VARIETY OF THE FEMALE SEX.

Virchow's experience has convinced him that on the whole hermaphrodites belong to the female sex. He has never discovered a teste in any hermaphrodite, although it is a difficult matter to decide exactly the nature of the seminal gland, upon which alone the actual question of the sex depends. There is only one authentic case on record (Obolenski's) in which both testes and ovaries were present.—*Klin. Therap. Woch.*

BOILS.—Bulkley's patients have derived much relief from an ointment containing 5 to 10 grains of carbolic acid, a drachm or two of fluid extract ergot, two drachms each of powdered starch and zinc oxide, and eight drachms of rose-water ointment. The mixture is spread on a moderately thick layer of absorbent cotton, which is held in place by strips of plaster at the sides of the boil.—*Denver Med. Times.*

Book Reviews.

CONSERVATIVE GYNECOLOGY AND ELECTRO-THERAPEUTICS. By G. Betton Massey. Published by F. A. Davis Co.

The author of this work is indeed to be congratulated on the third edition just published. It is eminently up to date, being rather a work for a practitioner who has already a knowledge of electricity than the student who knows nothing about the subject. The author presupposes one is already familiar with the forms of Batteries, their uses and effects, and commences immediately on woman and her ailments. The chapters on "Menstrual Derangement" and "Inflammatory Affections," with their excellent plates, are especially good. The chapter on "Fibroids" is good on the whole, but we cannot agree on the method of abdominal puncture being harmless.

The work is very interesting to one, and can be read with profit.

HYDE ON THE SKIN—NEW (4TH) EDITION. Just ready.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. For the use of Students and Practitioners. By J. Nevins Hyde, A.M., M D., Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago; and Frank H. Montgomery, M.D., Lecturer on Dermatology and Venereal Diseases, Rush Medical College, Chicago. New (fourth) edition. In one octavo volume of 815 pages, with 110 engravings and 12 full-page plates, four of which are colored. Cloth, $5.25; leather, $6.25. Lea Brothers & Co., publishers, Philadelphia and New York, 1897.

It is significant of the recognized value of this work that the demand for a new edition came even earlier than was anticipated by the author or publishers, attesting that it is steadily growing in favor. The reasons for this fact are not hard to find. Professor Hyde is one of the foremost of American dermatologists and teachers and he has been able to impress upon his book the stamp of experience with a clearness that makes it of the highest service as a practical guide as well as a text-book. It answers the needs of the general practitioner, the specialist and the student, and is a happy example of the fact that an apparently wide range of adaptation can be given within the compass of a volume of convenient size and price.

The new edition has been revised throughout, and every chapter bears evidence of the change and improvement made possible by the advance of dermatology. It has also been enriched with new engravings and colored plates.

A HAND-BOOK OF MEDICAL CLIMATOLOGY, embracing its principles and therapeutic application, with scientific data of the health resorts of the world. By S. Edwin Solly, M.D., M.R.C.S., late president of the American Climatological Association. In one octavo volume of 470 pages, with engravings and colored plates. Cloth, $4.00. Lea Brothers & Co., publishers. Philadelphia and New York, 1897.

The time is ripe for a scientific, practical and authoritative treatise upon this most important subject, which has hitherto never been placed at the command of the profession. Faith in great curative virtues of climatic prescriptions is too often shown only *after* the failure of drugs, and perhaps the change is ordered without full knowledge of essential conditions Fortunately, recent years have seen the virtual completion of governmental and professional observations covering practically the whole of the United States, and giving precise data of a range of resorts affording climates of almost every variety and excellence. European nations have long since recognized the health and wealth-giving value of their climatic resources, and have published full data regarding them. Combining all this information often in a comparative and tabular form, Dr. Solly has now for the first time furnished the physician with the information necessary to a choice of a climate adapted to a given case Thirty years of experience and special study have enabled the author to reduce the vast volume of observations to a scientific basis, and to draw therefrom laws affording trustworthy conclusions of practical applicability. The work is therefore one of importance to every physician, since his power for good can be greatly enhanced by adding an accurate knowledge of this science to his therapeutical armamentarium.

PUBLISHERS' DEPARTMENT.

POSITION WANTED AS ASSISTANT.—A '98 Graduate of Trinity University desires engagement with practising physician as *locum tenens*, or assistant during 5th year. Please state terms. Address, DOCTOR, CANADA LANCET Office, Toronto.

THE SHIP'S DOCTOR.—The Arlington Chemical Co. are now publishing a very handsome booklet called "The Ship's Doctor," that will be very interesting to many physicians throughout the country. They are also sending out some very handsome photos for framing that may be had on application to The Arlington Chemical Co., Yonkers, N.Y., mentioning THE CANADA LANCET when writing for same.

THE TREATMENT OF CHOLERAIC DIARRHŒA.—The Lambert Pharmacal Co., of St. Louis, have recently published a most useful and valuable collection of clinical reports bearing on the treatment of summer complaints.

A handsomely cloth-bound copy of this work will be sent free to any physician applying for it to the Lambert Company, and will prove a valuable addition to the library.

We are sorry that our copy did not reach us in time for review in this issue; we hope to give it thorough consideration in our next issue.

We desire to call attention to the advertisement of Messrs. Griffiths & Macpherson Company, importers of the English Kola Compound, known as Clarke's.

This preparation of Dr. Clarke's has gained an enviable reputation in England for successful treatment in cases of Asthma and Hay Fever, and is rapidly gaining favor with the profession in Canada. We are informed that its use in cases of Asthma in the Home for Incurables in Toronto has met with marked success.

Messrs. Griffiths & Macpherson will be pleased to send any physician a sample bottle on application to either of their offices, at 121 Church street, Toronto, or 140-142 Cordovan street, Vancouver.

THE PROMPT SOLUTION OF TABLETS.—We are glad to know that the Antikamnia people take the precaution to state that when a prompt effect is desired the Antikamnia Tablets should be crushed. It so frequently happens that certain unfavorable influences in the stomach may prevent the prompt solution of tablets that this suggestion is well worth heeding. Antikamnia itself is tasteless, and the crushed tablet can be placed on the tongue and washed down with a swallow of water. Proprietors of other tablets would have had better success if they had given

more thought to this question of prompt solubility. Antikamnia and its combination in tablet form are great favorites of ours, not because of their convenience alone, but also because of their therapeutic effects.—*The Journal of Practical Medicine.*

AN INTERESTING ENGRAVING.—There has just been issued a handsome engraving of an old painting of the first meeting of the Medical Society of London, which was held in 1773, and it contains portraits from life of the most prominent of the original members.

Among those represented are: Edward Jenner; William Saunders, whose work on "Diseases of the Liver" was the authority for many years; John Aikin, a noted miscellaneous writer and the publisher of a "General Biography"; William Babington, author of a "New System of Mineralogy," and one of the founders of the "Geological Society"; Thornton, author of a "Philosophy of Medicine"; Edward Bancroft, a naturalist; Robert Hooper, who published a "Medical Dictionary," and a number of other famous men of their day.

As this was probably the first medical society on record, and was the predecessor of the British Medical Society, the engraving represents an event of much interest to every member of the medical profession, and should prove an attractive addition to the walls of the office or home.

A copy will be mailed to any physician applying for it by the proprietors of the Tongaline preparations, the Mellier Drug Co., No. 2112 Locust street, St. Louis.

Very seldom do I say anything for a preparation that might be used as a testimonial, but I feel that I have sufficiently tried Unguentine to lend a word of encouragement to its varied uses. I used it almost exclusively in a case of severe conjunctivitis, due to strong caustic Silver Nitrate, with the most gratifying results. The severe pain ceased almost instantly, the severe burning subsided and the lachrymal fluid checked. Patient comfortable in twenty minutes and slept soundly for the night. We never had any more swelling or further alarm. I have treated another case of conjunctivitis, with similar results, that was brought about by Chrysophranic Acid, used for a ringworm. We use Unguentine exclusively in our family for all sores, bruises, diseases of the skin (including parasitic troubles), and mucous membranes, such as hæmorrhoids, etc. We have equally as good results in general practice. I treat all my cases of operative hæmorrhoids with Unguentine successfully. Endomitritis is treated handsomely by filling six grain capsules with Unguentine and putting two or three of them as far in the uterine canal toward the fundus as possible with suitable forceps and adjusters. The results have been fine with all I have treated so far.

Unguentine is the fat man's friend. I speak from personal experience. It has no superior for chafes. It is worth its weight in gold for this alone to fat folks. The so-called "Tetter" in the hands of our fishermen and watermen has no show for existence when Unguentine is applied freely twice a day.

I am, very respectfully,

F. P. GATES.

THE GREAT FACT IN MODERN MEDICINE:

"The Blood is the Life,"
And Where Nature fails to make Good Blood,
WE CAN INTRODUCE IT.

BOVININE is Bovine Blood Unaltered from the Arteries of the Bullock;
The Universal Auxiliary of Modern Medicine and Surgery,
and the TRUE "ANTITOXIN" of Healthy Nature.

In the more enlightened progress of Modern Medicine, "Blood-letting" has given place to Blood-*getting*.

Aye! Get Good Blood—but How? Not by the Alimentary Process. It has already failed to do its work (else the patient would not be sick); and in acute disease must not even be allowed to do the work it can. Stimulate as you will, the whole sum of the patient's alimentary power when fully forced into play, is unable to keep up the nourishing and supporting contents of the blood. There is absolutely but one thing to do; and, thank God, that can be done, usually with success, as ten-thousand-fold experience has proved. That one thing is this: where Nature fails to PRODUCE good and sufficient Blood, WE CAN INTRODUCE IT from the arteries of the sturdy bullock, by the medium of BOVININE.

The vital activity of this living blood conserve rests on no man's assertion: it speaks for itself, to every properly equipped physician who will test its properties microscopically, physically, or therapeutically.

TRY IT IN PRACTICE.

TRY it in ***Anæmia,*** measuring the increase of red cells and hæmaglobin in the blood as you proceed, together with the improving strength and functions of your patient.

Try it in ***Consumption,*** with the same tests from week to week.

Try it in ***Dyspepsia*** or Malnutrition of young or old, and watch the recuperation of the paralysed alimentary powers.

Try it in ***Intestinal*** or gastric irritation, inflammation, or ulceration, that inhibits food itself, and witness the nourishing, supporting and healing work done entirely by absorption, without the slightest functional labor or irritation; even in the most delicate and critical conditions, such as Typhoid Fever and other dangerous gastro-intestinal diseases, Cholera Infantum, Marasmus, Diarrhœa, Dysentery, etc.

Try it per rectum, when the stomach is entirely unavailable or inadequate.

Try it by ***subcutaneous*** injection, when collapse calls for instantaneous blood supply—so much better than blood-*dilution!*

Try it on ***Chronic Ulceration,*** in connection with your antiseptic and stimulating treatment (which affords no nourishment) and prove the certainty and power of topical blood nutrition, abolishing pus, stench, and PAIN, and healing with magical rapidity and *finality.*

Try it in ***Chronic Catarrhal*** Diseases; spraying it on the diseased surfaces, with immediate addition of peroxide of hydrogen; wash off instantly the decomposed exudation, scabs and dead tissue with antiseptic solution (Thiersch's); and then see how the mucous membrane stripped open and clean, will absorb nutrition, vitality and health from intermediate applications of pure bovinine.

Try it on the ***Diphtheritic Membrane*** itself, by the same process; so keeping the parts clean and unobstructed, washing away the poison, and meanwhile sustaining the strength independently of the impaired alimentary process and of exhaustive stimulants.

Try it on ***anything,*** except plethora or unreduced inflammation; but first take time to regulate the secretions and functions.

Try it on the ***patient*** tentatively at first, to see how much and how often, and in what medium, it will prove most acceptable—in water, milk, coffee, wine, grape, lemon or lime juice, broth, etc. A few cases may even have to begin by drops in crushed ice.

A New Hand-book of Hæmatherapy for 1898, epitomizing the clinical experience of the previous three or four years, from the extensive reports of Hospital and private practice. To be obtained of

THE BOVININE COMPANY, 75 W. Houston Street, New York.

F.

Dr. Hamill, 88 Yonge St., who conducts the Medical Exchange office, wishes us to say that there is an active demand just now for inviting Medical Practices, and advises those contemplating a sale to place their offers with him at as early a date as possible.

COCA ERYTHROXYLON.—We need not enter into a full description of the history of the Erythroxylon Coca, as we believe that most medical men are fully acquainted with the principal facts concerning the plant. We may, however, recall to mind that the leaf is the only part of the plant used. The stimulating and strengthening property of the leaf in its natural state has been tested by experienced travellers and botanists during several centuries, and it is this invigorating property which the physician wishes to bring into use, and which he is enabled to do in a palatable form by means of "Vin Mariani," this wine being indicated where there is great depression, long continued exhaustion, and where a special stimulative action is desired. "Vin Mariani" is agreeable, palatable, imparting by its diffusiblity an agreeable warmth over the whole body, and exciting functional activity of the cerebro-spinal nerve centres. We have frequently prescribed this wine, and we can, from practical experience, recommend it.—*The Provincial Medical Journal, London, Eng.*

New Hospital for Nervous Diseases

DR. MEYERS (M.R.C.S. Eng., L.R.C.P., Lond.) having found increased accommodation necessary, has removed his Private Hospital to Heath St., Deer Park. The situation of the new Hospital is the best and most attractive in the suburbs of Toronto, having three acres of ground shaded by fine old oaks, and laid out for tennis, bicycling, etc. The interior has been completely renovated and possesses all the necessary appliances for the treatment of

DR. MEYERS' PRIVATE HOSPITAL FOR NERVOUS DISEASES.

Diseases of the Nervous System

Hydrotherapy after the system of Wisternitz, including needle, Russian shower baths, etc., and electricity in its various forms are administered. It has a skilled masseuse and trained nurses, the head nurse having been for several years under Dr. Weir Mitchell, of Philadelphia.

Dr. Meyers devotes his entire attention to Nervous Diseases, having prepared himself especially for this work by several years study both in England and on the continent.

This is the only Institution at present in Canada devoted exclusively to the treatment of Nervous Diseases.

For Terms, etc., apply to

D. CAMPBELL MEYERS, M.D.,

Hours, 2 to 4 p.m. ***192 Simcoe St., TORONTO.***

AMYLOLYTIC FERMENTS.—In an article on this importan subject, be Wyatt Wingrave, M.R.C.S. England (Assistant Surgeon to the Central London Throat and Ear Hospital), in the London *Lancet*, May 7th, 1898, we are informed of a personal necessity that arose in the writer's experience for a reliable starch digestant. A crucial comparative examination was therefore made of many malt extracts and of Taka-Diastase, the tests being conducted both chemically and clinically.

He summarizes briefly: 1. That Taka-Diastase is the most powerful of the starch or diastatic ferments, and the most reliable, since it is more rapid in its action, *i.e.*, "it will convert a larger amount (of starch) in a given time than will any other amylolytic ferment." 2. That Taka-Diastase seems to be less retarded in its digestive action by the presence of the organic acids (butyric, lactic, acetic), and also by tea, coffee and alcohol, than are saliva and the malt extracts. This is an important point in pyrosis. 3. That all mineral acids, hydrochloric, etc, quickly stop and permanently destroy all diastatic action if allowed sufficient time and if present in sufficient quantities. 4. That Taka-Diastase and Malt diastasy have, like ptyalin, no action upon cellulose (uncooked starch). All starch food should therefore be cooked to permit of the starch ferment assisting Nature in this function.

The Ball Nozzle Syringe diffuses a soft, gentle, conical-shaped film of water, *reaching every part of the vaginal cavity*, cleansing thoroughly the mouth and neck of the womb and the *cul-de-sac*, and removing therefrom every particle of foreign matter, the presence of which is the cause of disease, pain and suffering. Its effect is one of gentle bathing, or spraying, rather than one of percussion, such as follows the application of a solid straight stream. This absence of force is absolutely necessary in applications to sensitive organs. The stream is curved in every direction, and is a hollow stream; it is therefore impossible for it to enter a practically straight canal such as the uterine canal.

The Ball Nozzle Syringe

Accomplishes Wonders for the Health of Women.

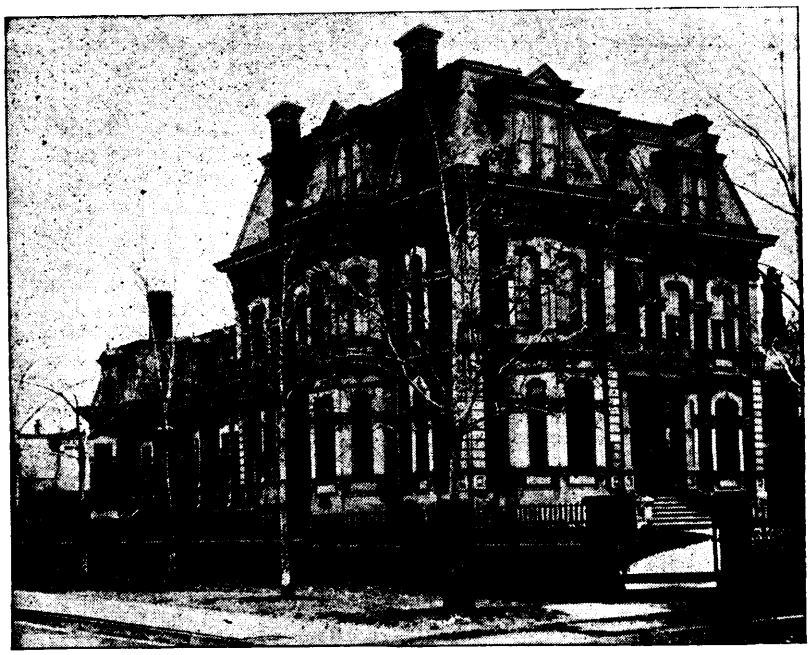
Endorsed by the Highest Medical Authorities. . .

SEND FOR PRIVATE CIRCULAR.

MANUFACTURED BY . . . . . .

The Ball Nozzle Co. Limited

Confederation Life Building, TORONTO.



Conspicuous by their Absence

Nausea and Depression are unknown to our patients, and their general health improves from the beginning of the treatment.

Doctor, this is a matter to be well considered by you when advising where a patient be sent for the treatment of Inebriety or Narcotism. We use none of the injurious ingredients, strychnine, atrophine or apomorphine, so common in most treatments, and the results are complete and permanent.

You may at all times visit your patient, and keep him under your own observation.

For Full Particulars and Literature Apply to .....

THE KEELEY INSTITUTE

COMPANY OF ONTARIO, Limited,

582 Sherbourne Street, - - - TORONTO.

PICTON, ONT., Aug. 26th, 1897.

I am, both in person and in my professional work, greatly indebted to the preparations introduced by Messrs. Brand, and in particular their well-known Essence of Beef. From experience in a considerable number of cases of continued fever, pneumonia and other exhausting diseases, among which typhoid fever deserves especial mention, I can speak most highly of the strengthening properties of the Essence. In ulcerated stomach, whether simple or malignant, and in intractable dyspepsia, not only can the Essence be borne without discomfort, but frequently paves the way to the exhibition of other forms of nutriment. After surgical operations, nothing I have found more rapidly relieves the patient from shock and from the nausea following anaesthetisation than the repeated administration of the Essence with or without the accompaniment of alcoholic stimulants. In short, as a tonic, a stimulant and a very perfect food, I am sure the preparation deserves the attention of every medical man, and the profession, no less than the public, are indebted to Messrs. Brand, the inventors, for a boon of the utmost value in the very class of diseases most fraught with trouble and anxiety.

ARTHUR W. HARE,
M.B.C.M., M.R.C.S., F.R.C.S.E., F.R.S.E.

Formerly Prof. of Surg. Owens Coll., and Examiner and Professor in the Victoria University, etc., etc.

◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇

BRAND & CO., LONDON, ENG.

Established 1850. Incorporated by Act of Parliament.

TRINITY MEDICAL COLLEGE, TORONTO.

In affiliation with the University of Trinity College, The University of Toronto Queen's University, The University of Manitoba, and specially recognized by the several Royal Colleges of Physicians and Surgeons in Great Britain.

THE WINTER SESSION OF 1898-9 WILL COMMENCE OCTOBER 1, 1898.

FACULTY.

PROFESSORS.

WALTER B. GEIKIE, M.D., C.M., D.C.L., F.R.C.S E., L.R.C.P., Lond.. Dean of the Faculty; Member of the Council of the College of Physicians and Surgeons of Ont.; Member of the Consulting Staff of the Toronto General Hospital.—Holyrood Villa, 52 Maitland Street.

Professor of Principles and Practice of Medicine.

J. ALGERNON TEMPLE, M.D., C.M., M.R.C.S., Eng., Gynæcologist to the Toronto General Hospital; Physician to the Burnside Lying-in Hospital.—205 Simcoe St.

Professor in Obstetrics and Gynæcology.

THOMAS KIRKLAND, M.A., Principal of Normal School Toronto.—432 Jarvis Street.

Professor in General Chemistry and Botany.

C. W. COVERNTON, M.D., C.M., M.R.C.S., Eng., Lic. Soc. Apoth., Lond.; Ex-Chairman and Member of the Provincial Board of Health.

Emeritus Prof. of Medical Jurisprudence and Toxicology.

FRED. LE M. GRASETT, M.D., C.M., Edin. Univ.; F.R.C.S.E.; M.R.C.S. Eng.; Fell. Obstet. Soc., Edin.; Member of the Acting Surgical Staff of the Toronto General Hospital; Physician to the Burnside Lying-in Hospital; Member of the Consulting Staff of the Toronto Dispensary.—208 Simcoe St

Professor of Principles and Practice of Surgery, and of Clinical Surgery.

W. T. STUART. M.D., C.M., Trin. Coll., and M.B. Univ Toronto; Professor of Chemistry, Dental College, Toronto.—195 Spadina Avenue.

Professor of Practical and Analytical Chemistry.

CHARLES SHEARD, M.D., C.M., Fell. Trin. Med. Coll., M.R.C.S., Eng.; Member of the Acting Staff of the Toronto General Hospital; Consulting Physician to the Victoria Hospital for Sick Children.—314 Jarvis Street.

Professor of Physiology and Histology, and of Clinical Medicine.

G. STERLING RYERSON, M.D., C.M., L.R.C.P., L.R.C.S. Edin., Surgeon to the Eye and Ear Dept., Toronto General Hospital, and the Victoria Hospital for Sick Children.—60 College Ave.

Professor of Ophthalmology and Otology.

LUKE TESKEY, M.D., C.M., M.R.C.S., Eng., Member of the Acting Surgical Staff of the Toronto General Hospital, Member of Staff Hospital for Sick Children, and Professor of Oral Surgery, Dental College, Toronto.—612 Spadina Avenue.

Professor of Anatomy and of Clinical Surgery

JOHN L. DAVIDSON, B.A., Univ. Tor., M.D., C.M., M.R.C.S. Eng.; Member of the Acting Staff of the Toronto General Hospital.—20 Charles Street.

Professor of Clinical Medicine.

G. A. BINGHAM, M.D., C.M., Trin. Coll., M.B. Univ. Tor.; Surgeon Out-door Department, Toronto General Hospital; Surgeon to the Hospital for Sick Children.—64 Isabella Street.

Professor of Applied Anatomy, and Associate Professor of Clinical Surgery.

NEWTON ALBERT POWELL, M.D., C.M. Trin. Coll., M.D. Bellevue Hosp. Med. Coll., N.Y.; Lecturer on the Practice of Surgery, Woman's Medical College, Toronto; Surgeon Out-door Dept., Toronto General Hospital.—Cor. College and McCaul Streets.

Professor of Medical Jurisprudence and Toxicology, and Lecturer on Clinical Surgery and Surgical Appliances.

D. GILBERT GORDON. B.A., Tor. Univ.; M.D., C.M.; Trin. Univ.; L.R.C.S. & P. Edin.; L.F.P. & S. Glasgow, Physician Out-door Department, Toronto General Hospital.—646 Spadina Avenue.

Professor of Sanitary Science, and Lecturer on Clinical Medicine.

E. B. SHUTTLEWORTH, Phar. D., F.C.S.; Late Principal and Professor of Chemistry and Pharmacy, Ontario College of Pharmacy.—220 Sherbourne Street

Professor of Materia Medica and Pharmacy, etc

H. B. ANDERSON, M.D., C.M., Fell. Trin. Med. Coll.; Pathologist to Toronto General Hospital.—241 Wellesley Street.

Professor of Pathology, and in Charge of the Trinity Microscopic Pathological Laboratory Tor. Gen. Hosp.

LECTURERS, DEMONSTRATORS, INSTRUCTORS AND ASSISTANTS.

E. A. SPILSBURY, M.D., C.M., Trin. Univ., Surgeon to the Nose and Throat Department, Toronto General Hospital.—189 College Street.

Lecturer on Laryngology and Rhinology.

ALLAN BAINES, M.D., C.M., Fell. Trin. Med. Coll.; L.R.C.P., Lond.; Physician Out-door Department Toronto General Hospital; Physician to the Victoria Hospital for Sick Children.—194 Simcoe Street.

Associate Professor of Clinical Medicine.

D. J. GIBB WISHART, B.A., Tor. Univ., M.D., C.M., L.R.C.P., Lond.; Professor of Ophthalmology and Otology, Woman's Medical College; Surgeon Eye and Ear Department, Hospital for Sick Children —47 Grosvenor Street

Senior Demonstrator of Anatomy.

J. T. FOTHERINGHAM, B.A., Tor. Univ.; M.D. C.M., Trin. Univ.; Physician Out-door Dept., Toronto General Hospital and the Hospital for Sick Children; Professor of Materia Medica, College of Pharmacy.—39 Carlton St.

Lecturer on Therapeutics and on Clinical Medicine at Toronto General Hospital.

H. B. ANDERSON, M.D., C.M., Fell. Trin. Med. Coll., Pathologist to Toronto General Hospital —233 Wellesley Street.

Second Demonstrator of Anatomy.

C. A. TEMPLE, M.D., C.M.—315 Spadina Avenue.

FREDERICK FENTON, M.D., C.M.—Cor. Scollard and Yonge Streets.

A. H. GARRATT, M.D., C.M.—160 Bay Street.

HAROLD C. PARSONS, B.A., M.D., C.M.

Assistants in Practical Anatomy.

C. TROW, M.D., C.M., Trin. Univ., L.R.C.P., Lond., Surgeon to the Eye and Ear Department of Toronto General Hospital.—57 Carlton Street.

Clinical Lecturer on Diseases of the Eye and Ear.

W. H. PEPLER, M.D., C.M., Fell. Trin. Med. Coll. L.R.C.P., Lond.

Assistant in Pathology.

FRED. FENTON, M.D., C.M.

Assistant in Histology.

CLINICAL TEACHING.—The Toronto General Hospital has a very large number of patients in the wards, who are visited daily by the medical officers in attendance. The attendance of out-door patients is also very large, and thus abundant opportunities are enjoyed by students for acquiring a familiar knowledge of Practical Medicine and Surgery, including not merely major operations, but Minor Surgery of every kind, ordinary Medical Practice, the treatment of Venereal Diseases and Skin Diseases, and the Diseases of Women and Children. The Burnside Lying-in Hospital, amalgamated with the Toronto General Hospital, has recently had the staff largely increased, and will afford special and valuable facilities for the study of Practical Midwifery. The large new building, close to the Hospital and School, will be very convenient for students attending in practice. The Mercer Eye and Ear Infirmary is also amalgamated with the Toronto General Hospital, and affords special facilities for students in this department.

Daily Clinical instruction in the spacious Wards and Theatre of the Hospital will be given by members of the Hospital staff on all interesting cases Medical and Surgical. ☞ Arrangements have also been made for the delivery of *daily clinics*, out-door, in-door and bedside, in the *Hospital*, by the respective members of the in-door and out-door Hospital Staff, which has been recently largely increased.

FEES FOR THE COURSE.—The Fee for Anatomy Surgery, Practice of Medicine, Obstetrics, Materia Medica Physiology, General Chemistry, Clinical Medicine and Clinical Surgery, $12 each. Applied Anatomy, $10. Practical Anatomy, $10. Practical Chemistry, Normal Histology and Pathological Histology, $8 each. Therapeutics, and Medical Jurisprudence, $6 each. Botany and Sanitary Science, $5 each. Registration Fee (payable once only), $5. Students are free in all the regular branches after having paid for two full courses. Surgical Appliances is an optional branch; fee, $5.

Full information respecting Lectures, Fees, Gold and Silver Medals, Scholarships, Certificates of Honor, Graduation, Diplomas, Fellowship, etc., will be given in the Annual Announcement.

W. B. GEIKIE, M.D., D.C.L., Dean, 52 Maitland Street.

BAYER'S
PHARMACEUTICAL PRODUCTS

SOMATOSE A tasteless, odourless, nutrient meat p[owde]r; it contains all the albuminoid p[rinci]ples of the meat in an easily soluble fo[rm]. It has been extensively employed and i[s] found to be of the greatest service in consu[mp]tion, diseases of the stomach and intestinal tract, chlorosis and rickets. It is of great value in convalescence from all diseases. SOMATOSE strengthens the muscles and stimulates the appetite in a remarkable manner. Dose for adults: a level teaspoonful three to four times a day with milk, gruel, coffee, etc.

IRON SOMATOSE (Ferro-Somatose). A first-class tonic, containing the albuminous substances of the meat (albumoses) organically combined with iron. Special indications: Chlorosis and Anaemia. Daily dose: 75 to 150 grains.

MILK-SOMATOSE (Lacto-Somatose). A strength giving food containing the albuminous matter (albumoses) of the milk.

TRIONAL A most reliable and quickly-acting hypnotic of the Sulfonal group. Dose: 16 to 20 grains, in a large cup of hot liquid.

IODOTHYRINE The active principle of the thyroid gland. It is most efficacious in Strumous Diseases, Myxoedema, Obesity, Rickets, Psoriasis, Eczema, and Uterine Haemorrhages. Dose: 5 grains two to eight times a day for adults; 5 grains one to three times daily for children.

LYCETOL Tartrate of Piperazine Anti-Arthritic, Uric Solvent. Has a marked effect on the diuresis. Dose: 16 to 32 grains daily.

ARISTOL An Iodine Cicatrisant which is an excellent odourless substitute for Iodoform and highly recommended for Burns, Wounds, Scrofulous Ulcerations, etc.

EUROPHEN A perfect substitute for Iodoform. Odourless and non-toxic. Has a covering power five times greater than Iodoform. Especially useful in Ulcus molle et durum.

LOSOPHAN A cresoltriiodide particularly efficacious in the treatment of all kinds of cutaneous disorders caused by animal parasites.

PROTARGOL A new silver preparation. Most reliable in cases of Gonorrhoea. Antiseptic wound healer. Excellent results in cases of Gonorrhoeal Ophtalmia. Solutions of ¼ to 2%. Ointments.

TANNIGEN An almost tasteless intestinal astringent. Most efficacious in Chronic, Acute and Summer Diarrhoeas. Adult dose: 8 grains every three hours.

TANNOPINE (Formerly "Tannone"). A new intestinal astringent. Special indications: Tuberculous and non-tuberculous Enteritis, Typhus. Dose: 15 grains, three or four times daily.

SALOPHEN Specific for Influenza, Headache, Migraine, Acute Articular Rheumatism, Chorea, Sciatica. Dose: 15 grains four to six times daily. In powders, etc.

PHENACETINE-BAYER
PIPERAZINE-BAYER
SULFONAL-BAYER
SALOL-BAYER

Samples and literature may be had on application to the

DOMINION DYEWOOD & CHEMICAL CO., TORONTO.

Sole Agency and Depot in Canada for all "BAYER'S" Pharmaceutical Products.

(WHOLESALE ONLY)