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THE

CANADA LANCET.

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

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MALTINE IN PULMONARY PHTHISIS.

The great value of MALTINE in all wasting diseases, and especially in Pulmonary affections, is becoming more and more apparent to the Medical Profession.

Since we issued our pamphlet on Maltine one year ago, we have received nearly one thousand commendatory letters from the Medical Profession from most parts of the world, a large portion of which speak enthusiastically of it in Pulmonary affections.

Any physician who will test MALTINE, Plain, in comparison with Cod Liver Oil, in a case of Pulmonary Phthisis, will find that it will increase weight and build up the system far more rapidly. There are, however, many cases where the compounds with Hypophosphites, Phosphates, Peptones, Malto-Yerbine, and Pepsin and Pancreatine are strongly indicated.

After full trial of the different Oils and Extract of Malt preparations, in both hospital and private practice, I find MALTINE most applicable to the largest number of patients, and superior to any remedy of its class. Theoretically, we would expect this preparation, which has become *practically officinal*, to be of great value in chronic conditions of waste and mal-nutrition, especially as exemplified in phthisis. Being rich in Diastas umnoids and phosphates, according to careful analysis, it aids in digesting farinaceous food, while in itself it is a brain, nerve and muscle producer.

WM. PORTER, A.M., M.D., *St. Louis. Mo.*

---

123 Lundsdowne Road, Notting Hill, W., London, October 16th, 1880.

I have used MALTINE with Cod Liver Oil with the happiest results in a case of tuberculosis attended with tubercular peritonitis, in which the temperature of the patient rose to 105 1-5° and persistently remained above 100° for upwards of two months. The only medicine taken was MALTINE with Cod Liver Oil, and an occasional dose of Carbonate of Bismuth, to check diarrhœa. She gradually improved and made a perfect recovery. I find MALTINE with Cod Liver Oil is more readily taken and more easily assimilated than Cod Liver Oil in any other form.

EDMUND NASH, M.D.

Bridge House, Revesby, Boston, Lincolnshire.

The trial of your MALTINE I made in the case of a lady suffering from phthisis pulmonalis has been most satisfactory. Her left lung had been in the last stage of disease for some time, and her temperature ranged for many months between 101° and 104°. After taking the MALTINE for a few days the temperature came down to 100°, and to-day it stands below 99°, which makes me feel sanguine that the disease is checked.

THOMAS HUNTER, L.R.C.P.

Kensington Dispensary, London, Nov 24th, 1879.

We are using your MALTINE among our patients, and find *great benefit* from it, especially in cases of phthisis.

DR. CHIPPENDALE, *Resident Medical Officer.*

The Beeches, Northwold, July 28th, 1879.

I find that my patients can readily digest your MALTINE with Cod Liver Oil without causing any unpleasant after-feeling. I have full confidence in the virtue it possesses to sustain the system during prolonged diseases of a tubercular or atrophic nature.

FREDERICK JOY, L.R.C.P., M.R.C.S.

PROF. L. P. YANDELL, in *Louisville Medical News, Jan. 3rd, 1880*:—MALTINE is one of the most valuable remedies ever introduced to the Medical Profession. Wherever a constructive is indicated, MALTINE will be found excellent. In pulmonary phthisis and other scrofulous diseases, in chronic syphilis, and in the various cachectic conditions, it is invaluable.

Adrian, Mich., Feb. 16th, 1880.

I have used your MALTINE preparations in my practice for the past year and consider them far superior to the Extract of Malt. I have used your Malto-Yerbine in my own case of severe bronchitis that has troubled me for the past five years. It has done me more good than anything I have ever tried.

J. TRIPP, M.D.

Leighton, Ala., Feb. 18th, 1880.

I am more pleased with your MALTINE preparations every day that I use them. I don't know how I could dispense with them in some cases I have under my care at this time. In one case especially, the MALTINE with Cod Liver Oil has had a most marked effect, agreeing with the patien 's stomach, without the least trouble, after other preparations of Cod Liver Oil had been tried in vain. J. M. KUMPE, M.D.

New Richmond, Wis., Aug. 14th, 1880.

After having given several of your elegant MALTINE preparations thorough trial I have found none o hem to disappoint me. I consider it invaluable and as indispensable to the profession as opium or quinine.

F. W EPLEY, M.D.

In order to test the comparative merits of MALTINE and the various extracts of Malt in the market, I purchased from different druggists samples of MALTINE and of the most frequently prescribed Extracts of Malt, and have subjected them to chemical analysis.

As the result of these examinations, I find that MALTINE contains from half as much again to three times the quantity of Phosphates, and from three to fourteen times as much Diastase and other Albuminoids as any of the Extracts of Malt examined.

PROF. WALTER S. HAINES, M.D.,
Professor of Chemistry and Toxicology, Rush Medical College, Chicago.

In comparison with the alcoholic Malt Extracts, your MALTINE is about ten times as valuable, as a flesh former; from five to ten times as valuable, as a heat producer; and at least five times as valuable, as a starch digesting agent.

PROFESSOR ATTFIELD, F.C.S.
Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain

Ontario Medical Association

NOTICE IS HEREBY GIVEN, THAT THE

First Annual Meeting

OF THE

Ontario Medical Association

WILL BE HELD IN THE

MEDICAL COUNCIL HALL,

Corner of Bay and Richmond Streets, Toronto,

On WEDNESDAY & THURSDAY, June 1st & 2nd.

The meeting will be convened at 10 o'clock a.m. Through the kindness of the different Railway Companies, Tickets can be obtained for the round trip for one and one-third fare—good until the 6th of June. Those not receiving Certificates entitling them to reduced fare, will please apply to the undersigned.

J. E. WHITE, M. D.,
Secretary.

Fellows' Hypo-phos-phites.

Contains **The Essential Elements**—to the animal organization—Potash and Lime ;

The **Ozydizing Agents**—Iron and Manganese ;

The **Tonics**—Quinine and Strychnine ;

And the **Vitalizing Constituent**—Phosphorus,

Combined in the form of a Syrup, with *slight alkaline reaction.*

It differs in effect from all others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has sustained a high reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic, and Nutritive qualities, whereby the various organic functions are recruited.

Its action is prompt, stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy to the intellect, removing depression or melancholy, and hence is of great value in the treatment of **mental and nervous affections.**

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicted in a wide range of diseases.

A PHYSICIAN'S TESTIMONY.

A letter from one of the most eminent physicians in England, E. J. DAY, M.D., F.C.S., &c., *has written the following letter to* MR. FELLOWS :

DORCHESTER, DORSET, ENGLAND, October 2, 1880.

DEAR SIR :

Feeling it my duty to the medical profession, as well as to the public, to make known the effects of Syr. Hypophos : Co. : Fellows, I send you the results of my short but satisfactory experience. After using it in several pulmonary cases with good effect, I prescribed your Syrup for a middle-aged female patient, suffering from "melancholia," who was, up to the time she commenced taking it, so bad that her friends and husband had made preliminary arrangements for her removal to an asylum : so great, however, was the improvement under the new treatment, which consisted solely in giving your Hypophosphites, that she shortly was able to attend properly to her household duties ; it is only right to mention, that the drugs prescribed before, failed. Although your Syrup of Hypophosphites contains the active bitter tonics, with iron, etc., my young patients and invalids take the preparation readily. As a nervine tonic, I consider it ranks very highly, and is a valuable addition to the list of pharmaceutical preparations. I can, with great confidence, recommend it in cases of general debility ; consequently, those gentlemen who dispense their own medicines should not be without it.

I am, sir, yours truly,

E. J. DAY, F.C.S., M.R.C.S., L.S.A., M.M.P.A., R. & W. Medical Officer of Health, Public Analyst.

To MR. JAMES FELLOWS, London.

Letter from D. J. WYRBANTS OLFERTS, F.R.C.P.E., I.P.C.S., L.M., *British Government Surgeon for L. M. & D. District.*

ARMAGH, IRELAND, LURGAN, October 22, 1880.

MY DEAR SIR :

Having prescribed your Syrup of Hypophosphites in my practice, and having every reason to be satisfied with its good effects, I do not hesitate to say, I consider it a very valuable and excellent addition to modern *materia medica.* It has been found in my hands particularly beneficial in cases of low nervous tone, and with those convalescing from debilitating ailments. Your hypophosphites was first introduced to my notice by my friend, Dr. Killgarift, Surgeon to the Mater Misercordiæ Hospital, Dublin. To avoid substitution in prescribing, I always write, Syr. : Hypophos. : Fellows : Comp.

Very faithfully yours, J. WYBRANTS OLFERTS.

To MR. FELLOWS, Snow Hill, London.

Prepared by JAMES I. FELLOWS' Chemist.

Circulars sent to Physicians on application.

☞ *NOTICE.—Gentlemen : I will be pleased to forward a sample bottle, with formula, on application, to those who mention THE CANADA LANCET.*

Address JAMES I. FELLOWS, Drawer 1965, MONTREAL.

TRINITY MEDICAL COLLEGE,

(ESTABLISHED IN 1850.)

INCORPORATED BY ACT OF PARLIAMENT.

IN AFFILIATION WITH THE UNIVERSITY OF TRINITY COLLEGE, THE UNIVERSITY OF TORONTO AND THE UNIVERSITY OF HALIFAX; AND RECOGNIZED BY THE SEVERAL ROYAL COLLEGES OF PHYSICIANS AND SURGEONS IN GREAT BRITAIN.

THE SESSION will commence on MONDAY, the 3rd of October, 1881, and continue for Six Months. The Lectures will be delivered in the new College Building, close to the Toronto General Hospital.

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Prof. of Practical Chemistry and Toxicology.

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Demonstrator of Anatomy.

G. S. RYERSON, M.D., L.R.C.P. & S., Edin.; Surgeon to the Mercer Eye and Ear Infirmary, Toronto General Hospital.—317 Church Street.

Lecturer on the Eye, Ear and Throat.

HOSPITALS.—The Toronto General Hospital has a very large number of patients in the wards, who are visited daily by the medical officers in attendance. Toronto being the great railway and manufacturing centre of Ontario, accidents requiring operation are of frequent occurrence. The attendance of out-door patients daily 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 Veneral Diseases, and the Diseases of Women and Children.

THE BURNSIDE LYING-IN HOSPITAL.—This Hospital has recently had its staff largely increased, and will afford special and valuable facilities for the study of Practical Midwifery. The management of this institution is now amalgamated with that of the Toronto General Hospital, and a large new building, close to the Hospital and School, is now in use, and will be very convenient for students attending its practice.

CLINICAL TEACHING.—No pains will be spared in imparting daily clinical instruction in the spacious wards and theatre of the General Hospital, and every opportunity will be given students of seeing for themselves, with the members of the Hospital Staff, all interesting cases—Medical and Surgical.

PRACTICAL ANATOMY.—Practical Anatomy is very thoroughly taught. The supply of material is abundant, and the dissecting room is under the personal care of gentlemen who have had ample experience in the best anatomical schools in Great Britain.

FEES FOR THE COURSE.—The Fee for Anatomy, Surgery, Practice of Medicine, Obstetrics, Materia Medica, Physiology, and General Chemistry, $12 each. Practical Anatomy, Practical Chemistry, and Microscopy, $8 each; Medical Jurisprudence, $7; Clinical Medicine and Clinical Surgery, $6 each; Botany and Sanitary Science, $5 each; Registration Fee (payable once only), $5 Students are free in all the regular Branches after having attended the School during two full courses. Special arrangements have been made for gentlemen desiring to enter this School, who may have attended two or more courses of Lectures in other recognized Schools or universities. Dental and other casual students can attend any course of Lectures in this Institution on paying the usual fees for the same.

HOSPITAL FEES.—The Toronto General Hospital, $20 for a perpetual ticket; the Lying-in Hospital, $5 for six months.

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

W. B. GEIKIE, M.D., *Dean of the Faculty.*

J. FRASER, M.D., *Secretary.*

JOHNSTON'S FLUID BEEF

IMPROVED COOKERY.

OR, THE

SCIENTIFIC PREPARATION OF FOOD

Has lately occupied some public attention, and it may be anticipated that a more general knowledge of the chemical composition, preparation, and physiological effects of food will be the result. In this connection we submit the latest theory for the preparation of a perfect beef tea or "hygienic food," and in soliciting a perusal, trust it may prove not uninteresting.

Every vital action, mental or muscular, is accompanied with a proportionate waste in the structures of the body, and to renew this continuous waste is the ultimate design of all food. In order that food may be thus transformed into the various parts of the living organism, it is first essential that the materials of such structures shall be contained in the food supplied, for the human system is absolutely incapable of producing muscular fibre, cellular tissue, blood, brain, bone, etc., out of substances which do not contain the elements of which those organs are composed. And in proportion as food contains such elements in an available form, so is it termed nutritious or otherwise. Extract of Meat, or Beef Tea, is everywhere acknowledged as a harmless stimulant, serviceable in prostration, or as an adjunct to easily digested food; but outside medical or scientific circles it is not generally known that such extracts are simply the flavor of meat (technically the soluble salts of flesh), and as such are not in any real sense nutritious. In this connection we quote from the standard authorities, Drs. Edward Smith, H. Letheby, and Baron Liebig:

In the paper read by Dr. EDWARD SMITH before the British Association, August, 1868, he says of Meat Extract: "When, therefore, you have excluded fat, fibrine,

gelatine and albumen, what have you left? Certainly not meat, as we understand the word, for nearly every part of it which could be transformed in the body and act as food is excluded, therefore "Liebig's Extract of Meat" is not meat. It is clearly meat flavor. IT IS THE PLAY OF "HAMLET" WITHOUT "HAMLET," IT IS MEAT WITHOUT MEAT. Its true nutritive value is that which classes it with tea and coffee, and makes it a nervous stimulant. THE DELUSION rests with those who would regard it as a nutrient in the sense of meat or bread." And again: "Let its precise value be made known. Then we shall no longer have sick and dying men, women and children fed with Liebig's Extract of Meat, under the delusion that it is nutriment in the ordinary sense. Liebig's Extract is meat flavor—a nervous stimulant, and has good qualities, BUT IT IS NOT FOOD. All that is necessary for nutrition should be added to it."

The "London Examiner" says: "In making up the International Scientific Series, Dr. Edward Smith was selected as the ablest man in England to treat the important subject *of foods*." In his treatise *on* food, page 88, Dr. Edward Smith says:—"There is but little left in the extract to nourish the body, and the elements which it really possesses are salts and the flavor of meat which disguises the real poverty of the substance. If it then be asked why so much of the flesh is thus unused, we answer that only the soluble parts of the meat could be obtained in this form, whilst the insoluble but most nutritious parts are left behind, and only such of the soluble parts are retained as do not put on the putrefactive process, and hence nearly all nutritious matters are excluded. If it be further asked whether the popular belief in the value of this food is altogether based upon fallacy, we answer no, for it is a valuable addition to other foods, since it yields an agreeable flavor, which leads to the inference, however incorrect, that meat is present. If, however, it be relied upon as a principal article of food for the sick, it will prove a broken staff. ALL that is required for nutrition should be added to it. Liebig, in a letter to the "Times," stated that it is not nutriment in the ordinary sense, and Prof. Almen has shown the small nutritive value of this substance in the Transactions of the Medical Society of Upsala, in 1868. "USED ALONE FOR BEEF TEA IT IS A DELUSION."—Page 89.

Dr. H. LETHEBY says: "False views have been entertained of the nutritive power of Extract of Meat, for as one pound of it represents the soluble constituents of 34 pounds of lean meat, it has been assumed that its nutritive power is in like proportion, but Liebig has taken care to correct this error by showing that the Extract merely represents the soup or beef tea obtained from that quantity of meat, and as it is deficient in albumen, it must be conjoined to substances which are rich in this material."—Cantor Lectures on Food, p. 165.

In the "Lancet" of November 11, 1865, Baron Liebig says:—"Were it possible to furnish the market at a reasonable price with a preparation of meat combining in itself the albuminous together with the extractive principles, such a preparation would have to be preferred to the "Extractum Carnis," for it would contain ALL the nutritive constituents of meat." Again:—"I have before stated that in preparing the Extract of Meat the albuminous principles remain in the residue; they are lost to nutrition; and this is certainly a great disadvantage."

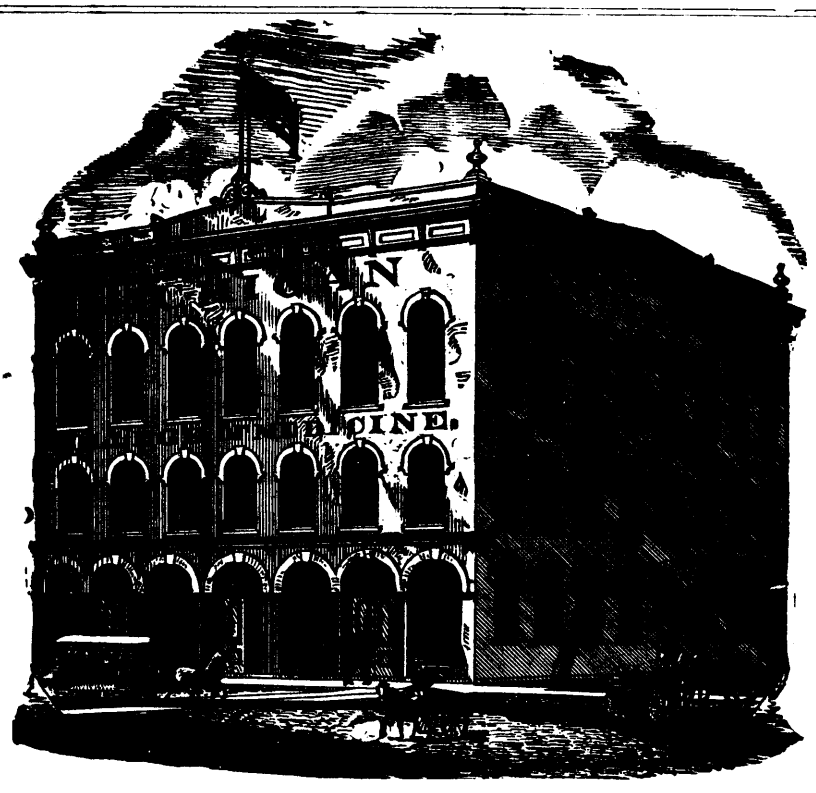
For further reference see the works of Voit, Meissner, Bunge, *The British Medical Journal*, 1872, or any late authority on the subject.

To obtain a perfect Beef Tea, then, it is essential that the albumen and fibrine (which are the flesh-forming or nutritious qualities of meat) shall be added to the extractive or stimulative qualities, and that these shall be present in a form admitting of easy digestion by the most capricious and irritable stomach. This is the theory which led to the preparation of "JOHNSTON'S FLUID BEEF" (the only meat extract which fulfils all the conditions of a perfect food).

The "Christian Union," Glasgow, Sept., 1878, says:—"Some time ago a leading London journal threw out the suggestion that it would be a good thing if some practical analyst, or somebody else, would discover an extract of unusual strength-renewing property to resuscitate the enfeebled constitution of those who, by overwork or study, had sacrificed themselves. The idea was admirable, and one which thousands have often expressed. And it will be surprising and welcome to such to learn that there is already an Extract just of the nature so ardently longed for. We refer to JOHNSTON'S FLUID BEEF which possesses all the nutritive properties that can possibly be contained in any preparation."

The "Lancet," London, July 13, 1878, says of JOHNSTON'S FLUID BEEF:—"The peculiarity of this preparation is that the ordinary Extract is mixed with a portion of the muscular fibre in a state of such fine division that the microscope is required to identify it. It is unnecessary to say that the actual food value of the Beef Tea is greatly increased by this admixture, and the medical profession have now a Fluid Meat which is comparable in nutritive power to the solid. The new preparation is excellent in flavor, and we cannot doubt that it will be very extensively used."

JOHNSTON'S FLUID BEEF, then, is essentially an Extract of Beef, prepared upon the most approved principles, but differing from all other Extracts or Essences or Beef Tea, inasmuch as it is in combination with the actual Beef itself, and that in a form so assisting nature in the process of digestion that it is readily absorbed by the most hopeless dyspeptic or prostrate infant. Animal food offers a means of strength not furnished by any other article of diet, but from an enfeebled state of the digestive apparatus such nourishment has not hitherto been available to many who most require it. Digestion proper is the process by which food is chemically dissolved so that the nutritious elements which it con-



Michigan College of Medicine Detroit.

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Demonstrator of Anatomy.

FOR ADMISSION, Students are required to pass a matriculation examination. (See College circular).

THE CURRICULUM embraces three years of graded study. The Collegiate Year consists of a preliminary (or optional) Session of about fourteen weeks, and a Regular Session of six months.

THE REGULAR SESSION will open on the first Tuesday in September, and will close early in the following March. The Preliminary Session commences on the second Tuesday in March. During both the Preliminary and Regular Sessions, the several Professors will take special pains to examine the students upon the subjects of the previous lectures.

The large CENTRAL FREE DISPENSARY in the College building is open daily, and affords a vast amount of clinical material, which will be utilized for the practical instruction of the students. In addition to this, ample Hospital advantages are offered to the students of this College. The Michigan College of Medicine Hospital is under exclusive control of this Faculty, and is distinctively a Clinical Hospital, the students being brought into direct bedside communication with the patients.

FEES.—Matriculation Fee (paid but once), $5; Annual Fees (including tickets for Regular and Preliminary Terms), $50; Optional (or Preliminary) Term, to students who do not attend the Regular Session, $15; Graduation Fee, $20.

For further particulars, and for College circular, apply to

J. J. MULHERON, M.D., Registrar.

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(*FERRUM DIALYSATUM.*)

A Pure Neutral Solution of Oxide of Iron in the Colloid Form. The Result of Endosmosis and Diffusion with Distilled Water.

PREPARED SOLELY BY

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PHILADELPHIA.

This article posesses great advantages over every other ferruginous preparation heretofore introduced, as it is a solution of Iron in as nearly as possible the form in which it exists in the blood. It is a preparation of invariable strength and purity, obtained by a process of dialysation, the Iron being separated from its combinations by endosmosis, according to the law of diffusion of liquids. It has no styptic taste, does not blacken the teeth, disturb the stomach, or constipate the bowels.

It affords, therefore, the *very best* mode of administering

IRON

in cases where the use of this remedy is indicated.

The advantages claimed for this form of Iron are due to the absence of free acid, which is dependant upon the perfect dialysation of the solution. The samples of German and French Liquor Ferri Oxidi Dialys., which we have examined, give acid reaction to test paper. If the dialysation is continued sufficiently long, it should be tasteless and neutral.

Our Dialysed Iron is not a saline compound, and is easily distinguished from Salts of Iron, by not giving rise to a blood-red color on the addition of an Alkaline Sulpho-Cyanide, or a blue precipitate with Ferro-Cyanide of Potassium. It does not become cloudy when boiled, When agitated with one part of Alcohol and two parts of Ether (fortior), the Ether layer is not made yellow.

Physicians and Apothecaries will appreciate how important is the fact that, as an antidote for Poisoning by Arsenic, Dialysed Iron is quite as efficient as the Hydrated Sesquioxide (hitherto the best remedy known in such cases) and has the great advantage of being always ready for immediate use. It will now doubtless be found in every drug store to supply such an emergency.

Full directions accompany each Bottle.

In addition to the Solution, we prepare a Syrup which is pleasantly flavored, but as the Solution is tasteless, we recommend it in preference; Physicians will find our **Dialysed Iron** in all the leading Drug Stores in the United States and Canada.

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Original Communications.

APHASIA OR ALALIA.

Delivered before the Medico-Chirurgical Society of Ottawa.

BY J. A. GRANT, M.D., M.R.C.P., LOND., ETC., ENG., PRESIDENT.

In this age of progress, the strain upon the system is varied and interesting, and no where is such more observable than in the alterations and vibrations of nerve power, in the genus homo, the outcome not alone of the great intellectual struggle, but of the requisite effort to grapple with the varied circumstances of life. Thus we daily observe how diseased manifestations find their way to the surface, and complicate the distribution of that nerve power so requisite to maintain functional activity and organic structural perfection, in the most comprehensive sense. No question is now attracting a greater degree of interest than that of "cerebral localization." Fashion and new fangled phraseology are certainly very attractive, still we cannot underestimate the importance of the new facts which have resulted from recent and careful investigations. In the brain we have represented a very confederation of varied and diverse nerve centres, not conflicting in their actions, but rather working together as a whole, for the maintenance of health and vitality. Careful investigations having defined in a manner, physiological functions of certain cerebral parts, we have thus clearer ideas of any pathological conditions which may develop. Thus from the normal healthy nerve centre and defined function, have we a clue to the abnormal deviation of nerve power. The more carefully we inquire into this subject, the more self-evident it becomes, that great care is necessary in making a physiological analysis of the disorders or deviations of speech, in those suffering from lesions of the brain. How strangely disease within the encephalon frequently acts, notwithstanding the close aggregation of the various parts of the brain. For example, hydrophobia, one of the most fatal of nervous diseases, presents after death, no particular histological changes, and in some cases of violent forms of insanity, no clue to the exact cause has been traced to pathological changes in the brain substance. The problem of mind and matter is one which for many years has disturbed many of the most careful physiologists. Of such we have ample proof in the writings of Brown Sequard; Ferrier, Hammond, Maudsley, Winslow, Ecker, and others well known to the profession. Careful inquiry, in the hands of special observers, is gradually developing a degree of information, satisfactory in character, and much closer to the point than the original ideas of Cabanis, who conceived the idea, that mental manifestations are as much secretions of the brain as bile is of the liver. Brain power controls glandular action. Bile force and brain force each play their part in the animal economy, but act very differently. The one we see and trace in its normal and abnormal distribution, the other we call a force, and know it to be very closely associated with the phenomena of life. Such are the problems which complicate the whole domain of cerebral physiology. The advance in physiological knowledge, since the days of Sauvages and the two Franks, is very considerable, and although for many years a comparative quietus stole over the minds of observers in this respect, we find that since the days of Lockhart Clarke and other cotemporaneous continental workers, much light has been thrown on the whole subject of pathological inquiry by the action of chemical agents on brain substance, and subsequent microscopic examination. This particular era, marked the whole upward tendency of physiological anatomy, and has been the means of conveying to us many of the advanced ideas we possess, based on clinical facts, substantiated by physiological and pathological data.

In order to arrive at a proper estimate of the question of Alalia or Aphasia, it is considered sufficient, by some of our most acute observers, to note carefully a certain number of cases, and to seek in each for the mode of manifestation, of the anomaly of speech. Thus alone is the idea dissi-

pated, that the faculty of articulate language can be regarded as an indivisable entity, having a specific organ in sole command. The anatomi-o-physiological method of analysis, is the only satisfactory basis of enquiry in this compound subject. Since the days of Hippocrates the phenomenon, aphasia, was known and described in a certain sense. The more carefully we enquire into the peculiarities of each case, the more we observe the diversified character which surrounds, and complicates the precise point of nervous disturbance, at fault. Hence the difficulty of specific terms, such as aphasia; alalia; (dyslalia, disordered speech); dysphonia, alterations in the quality of voice, &c. As examples bearing on this interesting subject, I shall cite the three following cases:

Case I.—Mr. H. V., æt. 53 years, married, and a family of four children; thin conformation of body; has enjoyed tolerably good health excepting a few attacks of rheumatism, since 1863; of a modified character, and never complicated with either endo-or pericarditis. In 1860 had an attack of partial loss of speech, in which there was chiefly a thickness of articulation, although not entire loss of power. This condition continued fully an hour, when complete ability to articulate returned, followed by a confused feeling about the head for fully two days, when work was resumed as usual. At the onset of the attack the prostration was such as to render the task of making out the way from his mill to the house, near at hand, somewhat difficult. April 15, 1881, was again seized with dizziness and imperfect vision, followed by almost entire suspension of the power of speech; only a word or two on any point could be pronounced at the one time, although the brain was apparently cognizant of what was passing on around. This attack lasted about twelve hours, during all of which time there was unusual excitability of the whole nervous system and comparative inability to sleep. No paralysis whatever of any other portion of the body, and throughout the other movements of the tongue and lips were regular, and deglutition and respiration quite normal. Two weeks previous to attack, received a severe saw wound in the hand, necessitating the removal of the little finger, otherwise, there was no apparent cause. Has been a constant slave to tobacco. At present as well as usual, enjoying normal functional activity. In this case it is evident there was but a partial disorder of co-ordination of the movements required for the articulation of sounds, glosso-ataxy, but deglutition was not interfered with, although the motor element in the function of deglutition, and those controlling the articulation of sounds, are closely allied at their origin, in the medulla oblongata. Thus, we observe how clinical facts point out a duality of power more conservative than conflicting, and not unlikely in this particular case, rendered defective in the speech sense, by the accumulative toxic effects of nicotine.

From the low asthenic state of the system, and evidently defective blood supply to the nerve centres, a stimulating method of treatment was adopted, which was productive of the most beneficial results.

Case II.—J. G., æt. 55, of strong conformation of body, and in excellent health generally, except in 1875, when an attack of acute hepatitis supervened, however, of short duration. Never had acute rheumatism, although the family history points in that direction; always active and energetic in life, and possessed of well-developed physical power. In May, 1861, without any apparent cause, or even premonitory indication, there quite suddenly developed a slightly defective power of speech, which only lasted a short time and passed away without leaving even a trace of defective nerve power. In March, 1880, an unaccountable degree of drowsiness was observed during the discharge of ordinary business duties, which, however, attracted no particular attention. March 16th, 1880, during the night awoke suddenly and found inability to speak, or even articulate a word distinctly, still there continued an ability to move and protrude the tongue, and although apparently conscious, the ideas could not even be communicated intelligently, by writing. After a lapse of six hours the power of speech returned, which appeared to be materially aided by a full bleeding from the arm. Has always been a moderate liver, and never troubled with indigestion or its consequences. Since that date he has enjoyed very fair health, and the only noticeable fact, is an occasional disposition to drowsiness, even although sleep had been ample and composed during the night. Never experienced any injury about the head or body, and in fact was never subject to any illness whatever, beyond the above, and the hepatic attack specified. Had no difficulty in swallowing,

during the existence of defective lingual power. At present enjoys very good health, and exhibits no impairment of power in the nerve centres. The will to speak in this case during the attack was not completely impaired. There was an effort made to answer, without the power to carry it out. There was here not only a degree of central stupor or hebetude, but also a loss of memory of words, exhibited in the defective power to write. A full, bounding pulse, and evident plethoric condition of the system indicated free depletion, which being carried out, resulted most favourably. As the removal of the stop logs in our river jam gives freedom to the onward flow of the timber, so the removal of the stop globules, likely arrested, in some portion of the basal brain nerve centres, gives increased power and vigor to parts suffering from some partially arrested blood supply. No portion of the whole system requires a more healthy and vigorous supply of blood than the brain, in order to perform its functions regularly, in the most comprehensive sense, hence the necessity of vigorous action, adopted under such circumstances.

CASE III.—R. C., æt. 9½ years; thin conformation of body, but regular as to shape in every particular, with, however, preponderating nerve-power, giving indications of precocity considerably in advance of his years. April 7th, seized with obstruction of the bowels, which after several hours was relieved by a hot bath and frequent enemata, the following day being comparatively easy. On the evening of the 9th, without any apparent cause, he was attacked with acute congestion of the right lung, which rapidly extended to the left chest superiorly. On the 10th complained of seeing objects double (diplopia), and followed on the 11th and 12th with loss of articulation of sounds (glosso-ataxy) deglutition at the same time being considerably interfered with. Hearing and consciousness continued throughout, except at occasional short intervals, when partially insensible brief periods passed over, associated with excessive dilatation of either iris and squinting, which suddenly disappeared on the application of light, thus giving evidence of more than ordinary muscular tonicity in the visual organs, as well as more power in the centres of supply. On the evening of the 12th, sudden and unexpected pain developed in the ilio-cæcal region, there being great tenderness on pressure, and inability to bear even the clothing. The pain rapidly extended to the entire abdominal walls, thus complicating matters very considerably, although the bowels had been well regulated by enemata. As suddenly as the abdominal pain supervened, the head symptoms quite subsided, the iris became normal, squinting removed, power of speech and deglutition restored, in fact a phase of affairs, which looked exceedingly like metastatic action, whatever the precise cause. On the 15th, the lung trouble had about cleared. After considerable effort, and for fully ten days from this date constant attention was necessary to guard against the consequences of this certainly irregular and doubtful abdominal complication. In this case the first point of interest is the fact, that associated were observed, aphasia, the result of want of co-ordination in the movements required for the articulation of sounds, glosso-ataxy, and decided interferer ce of the function of deglutition, both being connected with the same motor nerves. In case I., such was not observed, perfect deglutition, and glosso-ataxy being well defined at one and the same time. Thus the physiological presumption that both functions having a common nervous origin and supply, should *a priori* have been simultaneously affected, has not been realized in this particular instance. This difficulty is partially explained by the fact, that the central tracts which unite the points of origin of the medulla to the cortical layer of the hemispheres, have fasciculi which convey will-power, regulating both deglutition and verbal articulation. Thus, we observe the interesting manner in which clinical facts strengthen the idea of the duality of power in the nervous tracts connecting the *brain proper* with the medulla, so vigorously contended for in the able investigations of Schroder Van der Kolk.

In case III., the development of aphasic complication points to the idea that not only might the debris of disintegrating elements in the mesenteric capillaries become the subject of future minute vascular interruption, but the tear and wear of lung tissue as well, where so important a vital process is involved, thus giving rise to secondary changes, embolic or otherwise, rendering partially defective the nervous supply, as developed in this particular instance. In these three cases no paralysis beyond the aphasic conditions was observed although in the majority of such, paralysis of the right

side particularly, is a common associate. The late Broca, of Paris, "from that fact chiefly located the seat of articulate language" in the third left frontal convolution. This idea is also carefully received and recorded by Austin Flint, DaCosta and Reynolds. Dr. Gall, one of the original observers on this point, inclined to the belief that the faculty of speech had its place in those portions of the anterior lobes of the brain which lie on the supra-orbital plates. MM. Dax, Bouillaud, Jackson and Trousseau, have each most carefully examined into this subject, and still we observe, as in all matters of science, considerable uncertainty and diversity of opinion, so far as the precise question of locality is concerned, as well as that of right or left side. The facts of side and locality, though in the aggregate, common in one direction, have well defined exceptions, and thus we observe how difficult it becomes to advance any absolute laws, in connection with the great motive nervous power which regulates the system.

In connection with the cases of aphasia at present noted, there are a few points of additional interest to which I shall briefly refer. In the primary attack of Case I., the onset was sudden, in fact, almost instantaneous, but the second attack was only acute, occupying some hours in its development.

Case III., subacute, and marked in the first week of the general illness. These divisions, with the exception of the chronic form, correspond very nearly with the defined classification of Gowers in connection with diseases of the spinal cord, and indicative of some vascular, inflammatory, or degenerative condition. Gowers considers a lesion of sudden occurrence developing symptoms in the course of a few minutes, to be generally vascular in character. In the acute and sabacute forms, the symptoms develop more slowly, from a few hours to a few days, and the acute and subacute varieties, from a few hours or a few days to a week or two. Chronic inflammatory causes extend into a few weeks or a few months. It is considered that the conditions which favour hæmorrhage, are of far less diagnostic value, with regard to the spinal cord, than the brain.

A fourth case of aphasia, in a gentleman aged 54 years, came under observation in February last, associated with hemiplegia, and the result of syphilitic disease, in which both the motor and sensory nerves were affected. More than likely the growth of syphilomata, springing from the connective tissue of the membranes, or tissue about the basal convolutions of the brain was the cause of the attack. "In cases of degenerative neural disease, it does not appear that the anatomical process presents any recognizable difference from that which occurs as a result of other causes. (Gowers on the cord, p. 68.") He considers that rapid improvement of the disease, under potass iodide or mercury is strongly corroborative as to the diagnosis of syphilitic disease. Still there are conditions such as neural changes, softening, degeneration, etc., states of the nervous system reached not readily by medicinal treatment. Considering the manner in which defective brain power or nerve power operates on the functions of the system locally and generally, it appears prudent in all such cases to inquire into the conditions of muscular nutrition and irritability, as in the examination of the spinal cord; how various symptoms developed; and what were the most likely causes of their production? Daily practice points out how exceedingly difficult it is, occasionally, to decide between functional diseases, depending upon transitory impairment of the functions of the cord itself and the central functions. So also, many states of the brain are complex and difficult to determine either as to cause or precise character. From these varied considerations, it is evident the method to be followed, and the various signs necessary to be inquired into, to arrive at an approach to accurate diagnosis in cases of aphasia are very considerable, and are thus briefly put by Jaccond, *Gaz. Hebd.*, 1865. "The mobility of the tongue; the articulation of sounds; the preservation or absence of the ability to read mentally; of memory of words; of ability to write, and lastly, the gauging of the intellectual condition."

Difficulties may arise to obscure diagnosis, but such points made out, always will afford some clue to the character of this interesting disease, concerning which I have endeavored to bring together a few facts.

Ottawa, May 12th, 1881.

ANOTHER case of nephrectomy in a child, with suppurating and cystic kidney, was performed recently at the Evelina Hospital, New York, by Mr. Morrant Baker. The child was at last accounts, doing well.

THE PATHOLOGY OF TUBERCLE.

BY C. SHEARD, M.B., M.R.C.S., ENG., TORONTO.

Prof. of Physiology, and Normal and Pathological Histology, in Trinity Medical School. Read before the Toronto Medical Society, April 21st, 1881.

The subject of the pathology of tubercle is with the modern improvements in the methods of its examination becoming every day more interesting, by renewed consideration of its manner of growth and deposit. I believe such knowledge will yet be attained as will aid us in *preventing* the initiatory deposit of that growth, which, when deposited, unfortunately resists too powerfully our efforts to procure its removal. I revert to the subject of tubercle, strong in the belief of the frequent association of *tuberclular phthisis and simple catarrhal pneumonia.*

I will avoid unnecessary theorizing and intend my paper to be more an answer to two questions, viz. :—

What is tubercle ? and how is it produced ?

Firstly—As to what tubercle is. According to the old doctrine of Laennec, tubercle was regarded as "the product of a peculiar constitutional disease"; that it never could be developed out of a simple inflammation, such as in the lungs from an acute or chronic pneumonia, or take its rise from a bronchial hemorrhage; that it was a *specific growth ab initio.*

Virchow, whose merits in this field of pathological research are very great, goes, I think, too far in asserting as he does, that even the doctrine of miliary tuberculosis is founded upon error, and that *all* the alleged miliary tubercles of the lungs are *bronchitic, peri-bronchitic* and *pneumonic deposits.* This remark I think not altogether true, since it is by no means of rare occurrence for the same transparent gray granules, which in acute miliary tuberculosis are scattered in great number through the lungs and most organs, and whose tubercular nature can hardly be questioned—to be met with also in phthisical lungs, but I think there is sometimes a danger of mistaking for tubercles, dry concretions of pus present in partially occluded bronchial tubes. We frequently see by the side of miliary tubercle, yellow cheesy deposits occurring in the form of miliary granules, and which, I think, we must consider as original tubercles, having undergone the caseous or semi-fatty change. We have no proof that these cheesy miliary deposits are the products of vesicular pneumonia. We have no criterion by which to distinguish a cheesy tubercle from a cheesy miliary granule of inflammatory origin—and when examined microscopically, these deposits show themselves to possess some of those elements which enter into the formation of a true grey miliary tubercle. On examining microscopically a section of a grey miliary tubercle, we see its structure to be as follows :—A large quantity of fibrine partially organized, forming a meshwork or framework for the support of other elements, which framework stains dark, blue or black in hæmatoxylin solutions.

In and between the fibres are found clear spaces which presumably have been filled during life with *mucus or serum*, and supported by the framework are found *cells* of three distinct kinds :—1st. The small, shrivelled, contracted and dark cell, which Niemeyer has regarded as the tubercular cell *par excellence*, and which are undoubtedly shrivelled and contracted leucocytes. They have no demonstrable nucleus, and are found abundantly through the deposit and in the tissue surrounding that deposit. They are identical in their microscopical characters with cells frequently found at the peripheral part of scirrhus, described as indifferent cells, and which vary from the tubercular cells only in their number and in their less compact arrangement.

2nd. Cells larger than the preceding ones, with their protoplasm differentiable into nuclear and perinuclear portions; these are epithelial cells shed from the alveolar wall during the process of inflammation.

3rd. I may mention giant cells occasionally found in miliary tubercles about to undergo fatty change; these are simply large masses of protoplasm with an attempt at the formation of a nucleus. For my own part I have never succeeded in satisfactorily demonstrating giant cells in connection with tubercle. I have found them in connection with necrosed bone, and also in amyloid degeneration of the kidney, but never in tubercle.

This deposit so composed, fills the whole of the alveolus of the lung. When there deposited it is adherent to the alveolar walls and spreads by infiltration of the adjoining tissue with those small cells first described.

In comparing the microscopical character of a

section through a grey miliary tubercle with that of true adenoid tissue, we find in the latter a more regular arrangement of the small round cells of adenoid tissue—an absence of branched leucocytes, the presence in their places of large oval endothelial cells peculiar to adenoid tissue, and lastly, what I regard as the most reliable differentiating test between tubercle and adenoid tissue is that when sections of the latter are shaken with water in a test tube the cells separate, leaving a perfect reticulation of reteform tissue destitute of cells, whilst in the former, although shaken until the tissue breaks down, the cells never leave that fibrous meshwork in which they are held. I do not agree with those who regard tubercle as a modified adenoid tissue, and much less do I agree with those who regard tubercle as being always associated with endothelial cell proliferation. Who can deny the frequency with which tubercle originates within the walls of the alevoli of the lungs altogether removed from any endothelial cells? Many have quoted Klein, (the original discoverer of the endothelial cell) as an advocate of this latter view, but in this he is misquoted. In his treatise "On the Relations of the Lymphatic System to Tubercle," he states, that after the appearance of the tuberculous change in the alveoli, the lymphatic trunks become enlarged in the neighbourhood of the blood vessels, this enlargement being in all probability due to the presence of inflammation. The character of the tubercular deposit in the lung is, that it never leaves the alveolar wall.

Let us contrast with this the exudation in catarrhal pneumonia. In the latter we have a large quantity of fibrine, newly organized, staining in hæmatoxylin solutions of a pale green colour. The fibrinous bands are thick and opaque. In the meshes of the fibrinous framework are leucocytes, large, free from pressure, and usually abundant. This mass of exudation is usually balled up in the centre of the alveolus. How much then do these two products resemble each other in their structural features? A little longer stage of development given to the pneumonic exudation, so that its fibrine might become firmer and more highly organized, its leucocytes more contracted, and their protoplasm more condensed, completes their transformation into the tubercular cell. Given a constitution where the absorbents are less active, so that inflammatory exudations are allowed to remain unabsorbed, and you have those conditions required to convert a simple inflammatory exudation into a mass of true tubercle.

I was recently asked to examine, microscopically, a large mass of exudation found upon the parietal peritoneum of the abdomen. The mass was about 1¼ inches in thickness at its thickest part, and about 3 inches in width; it extended from a point corresponding to the position of the umbilicus downwards toward the right ilium. Scattered through the intestines were masses of *tubercle.* Tubercles and enlarged mesenteric glands were found in the mesentery, and masses of lymph gluing together the coils of the intestines. I thought the mass in question was a mass of dry lymph, but on examining it microscopically I found it to be composed mainly of lowly *organized fibrine,* abundance of large branching leucocytes and a number of small, round, regularly-shaped nuclei, identical with the tubercle cells. This was not one of those masses of adenoid tissue so frequently met with in the peritoneum, since it was markedly different in its histological characters; neither did it respond to the test as previously mentioned. This I submit as an example of an exudation standing midway between simple inflammatory exudation and a complex tuberculous formation.

From these observations it is plain to my mind the close connection which exists between the products of simple inflammation, which in most constitutions are so ready to undergo absorption and entire removal, and *tubercle* which seldom if ever is absorbed and removed.

Secondly—As to how tubercle is produced? Niemeyer answers the question in reference to the lungs, by saying that "when tubercle appears in the lungs it is always as the changed product of a previous pneumonia." In reference to this point I may be permitted to submit a few experiments made upon rabbits by inoculating them, by injecting into their blood—old inflammatory products. The experiments number eight, and consisted of injecting into the jugular vein of a rabbit about ʒss of caseous lymphatic gland dissolved in saline solution and milk. The solution was slowly injected, the puncture allowed to heal, and the lungs examined after a period varying from two to ten weeks. At the end of these periods inflammatory products were found in the lungs—those of the earliest stages were the products of simple inflam-

mation, but those of later stages showed all the microscopical characters of true tubercle, but the most interesting feature was the situations where these were found; they were found either *between the aveolar spaces, beneath the pulmonary pleura* or *immediately surrounding the arterioles.* In no case was the deposit present primarily in the alveoli, but when present there, occurred only after breaking down of the alveolar septa. Now these three situations, viz., between the air vesicles, around the arterioles, and beneath the pulmonary pleura are known to be the tracts in which the lymphatics of the lung run..

I explain the presence of the deposit in these situations by supposing that the morbid material had been absorbed from the blood by the minute capillary lymphatics, and that after entering them had set up inflammation, and hence these changes. Apart from the theory, however, I think these experiments go to prove the possibility of simple irritation in the lymphatics giving rise to changes which may result in tubercular deposit apart from any previous pneumonia or vesicular deposit.

The insight into the causes of pulmonary phthisis has been materially aided by the better understanding of the nature of the nutritive changes which constitute it, and especially by the discovery of the dependence of tuberculosis upon those other morbid processes which usually precede it. Would we not be more correct—when speaking of the inheritability of pulmonary tuberculosis—to speak of the *disposition* to pulmonary tuberculosis being inherited. Here what is transmitted is not the disease itself, but a weakness and vulnerability of constitution which in the parents has already either been the cause of pulmonary tuberculosis or has only been developed in them by the disease. This weakness and vulnerability of constitution may arise from many other causes than phthisis. Every one knows how extremely liable, patients suffering from diabetes mellitus, are to suffer from a rapid and disintegrating tubercular phthisis.

Experience shows that delicate and ill-nourished individuals have as a rule, little power of resistance against injurious influences, and that generally they fall ill more easily, and recover from their illness slower than the strong and well-nourished. But the weak and ill-nourished differ from the strong and well-nourished, not only in the possession of this vulnerability but also because the inflammatory nutritive changes occurring in them, lead, as a rule, to a very abundant production of indifferent and perishable cells. It is said of such individuals among other things, that they have a bad skin for healing, because comparatively trifling traumatic injuries cause in them a strong irritation of the injured parts leading to an abundant production of pus cells. This peculiarity seems to depend partly upon the fact that an increased irritability is associated with weakness, partly on the fact that inflammatory irritation of the badly nourished and imperfectly developed organs leads more frequently to the formation of frail and perishable cells than to the formation of those from which young tissue is formed.

I think these pathological data show the important part played by a weakened constitution in the transformation of simple inflammatory products into tubercles.

FALL OF FIFTY FEET—FRACTURE OF FOUR RIBS—PLEURO-PNEUMONIA—RECOVERY.

BY A. J. SINCLAIR, M. D., PARIS, ONT.

J. G., aged 26, carpenter, a resident of Paris, always enjoyed good health, except an attack of erysipelas a few years ago, also had small-pox when quite young; temperate, robust looking, and of good family history. The accident occurred November 17th, 1880, as follows:—While at work on the roof of a factory, and while walking from one rafter to another he slipped and fell into the building below, which was four stories high. During his fall, when ten feet from the bottom, he struck a joist. When found he was lying on a heap of bricks on his back, quite unconscious, and was taken up by his fellow-workmen as dead. He soon rallied, and when seen by me shortly afterwards, he was quite conscious, and complained of extreme pain, which he described "as all over him." On examination I found a simple fracture of the 4th, 5th, 6th and 7th ribs on the right side, a little external to the angle; there was no deformity, but crepitus was well marked; pulse 80; respiration catching and diaphragmatic; countenance anxious; almost unable to answer questions, from the difficulty of breathing; extremities cold; no tenderness in the abdomen. Ordered

him to be laid in warm blankets, bottles of hot water to his feet and thighs; applied a bandage fourteen inches wide to his chest, as firmly as he could bear it, and gave him morphia sulph. gr. ½, to be repeated every second and third hour till the pain was relieved.

9. p.m.—Patient had the morphia every second hour since I saw him, and still complained of great pain; pulse 120, soft, easily compressed and regular; temp. in axilla 120 F.; slight nausea, but did not vomit; complains of headache; pupils widely dilated, but respond to light; great pain all over the chest; unable to move the right arm; almost unable to speak; respiration 40, jerking; hacking cough, which he suppresses; anxious, haggard look; slight delirium. To continue the morphine, and milk diet to be given sparingly for a short time.

18th, 8.30 a.m.—Patient restless all night; delirium increased till 5 a.m., when he slept for two hours, still complaining of great pain all over the chest, but more especially at the seat of the fracture; no emphysema; the left side is resonant on percussion, on right side slight dulness could be detected, but owing to the extreme tenderness I was unable to examine thoroughly. On ausculta tion harsh blowing sounds could be heard all over the left side of the apex of the right lung; tubular breathing, over the lower lobes; crepitant rales; respiration 44; wants to cough, but suppresses it; temp. 104° F.; pulse 130; ordered a warm poultice to be applied over the right side, external to the bandage, and in addition to the morphine to have five grain doses of carbonate of ammonia.

2 p.m.—Slept a short time since I saw him, and feels the pain slightly less in the chest, but complains of great tenderness in the right hypochondriac region; pulse 135, temp. 104.3° F.; bowels confined. As he had not passed urine since the accident, I passed a No. 10 silver catheter and drew off about two pints of bloody urine; cough extremely troublesome; expectoration scanty and slightly rusty.

10 p.m.—Patient is a little easier, pulse 135, temp. 104° F., respiration 45, unable to bear even the weight of the bedclothes in the right hypochondriac region; again passed the catheter and drew off about twelve ounces of bloody urine.

19th—9 p.m.—Patient slept a short time last night; anxious expression; skin harsh and dry; tongue dry and furred; bowels confined; headache; temp. 103.5° F.; pulse 130; resp. 42; passed catheter and drew off a pint of slightly bloody urine; cough troublesome; on percussion the left side resonant, right side resonant at apex, dulness over lower lobes. On anscultation left side puerile breathing; right side tubular breathing at apex, loss of all sounds over lower lobes; unable to move right arm; pain not so great in hepatic region, nor at seat of injury; takes his nourishment well.

9 p.m.—Patient in much the same condition as in the morning; drew off over a pint of urine of nearly normal color.

20th—9.30 a.m.—Patient worse this morning; unable to sleep from the cough being so troublesome; expectoration scanty, frothy and rusty; expectorated a small quantity of blood during the night; tongue dry and coated; bowels still confined, pulse 150, temp. 105° F., resp. 70; haggard, anxious expression; unable to pass urine. On percussion left side resonant, right side, complete dulness and loss of all sounds; slight bulging of intercostal spaces; to continue treatment and to have half an ounce of castor oil every five hours till the bowels move.

6 p.m.—Patient slightly improved; respiration 60, pulse 145, temp. 104.5° F., bowels moved freely after first dose of oil. No abdominal pain.

21st—Patient passed a restless night; delirious all night, but answers questions rationally this morning; cough dry and harsh; expectoration scanty and rusty; complains of the weight of the poultices which have been constantly applied over the bandage. Temp. 103° F., resp. 55, pulse 140, still loss of bronchophony and vocal fremitus and all sounds on right side; bulging of intercostal spaces, left side puerile breathing; patient lies on the back; drew off a pint of urine, which I found to be acid in reaction, spec. gravity 1020. No albumen.

9 p m.—Patient in much the same state as in the morning.

22nd.—Patient slept better last night, but disturbed with cough; able to move slightly, so I could measure the chest—right side 18½ Inches, left side 17¼ inches; complete dulness on right side and motionless; temp. 103° F., resp. 30, pulse 128.

23rd.—Greatly troubled with cough; bowels confined; ordered magnesia sulph. 3 grs., to be repeated if bowels do not move. From this time he gradually improved. I now ordered him the following:—

℞

Cinchonidia Sulph .....ʒii.
Acid Hydrobrom.....ʒiii.
Aquæ.....ad. ℥iv.—M

Sig.—A desert spoonful every four hours.

Et.

℞

Potas. Iodidi.....ʒiiss.
Aquæ.....ad. ℥iv.—M.

Sig.—A desertspoonful to be given three times a day, with an occasional dose of magnesia sulph.; to apply small blisters to right side.

The fluid soon began to disappear, and at the end of the second week the right side measured 17¾ inches. He was unable to pass urine without the aid of the catheter till the third week. He walked to see me, a distance of nearly half a mile on the 24th day after the accident, when I found his ribs united; vesicular murmur heard all over the right side, temperature and pulse normal.

Remarks.—The chief points of interest in this case are: 1—The distance he fell, with the slightness of injury sustained, no bones being broken except the ribs which was caused by direct violence.—2 The symptoms at first pointed to rupture of some of the abdominal viscera, but subsequent events proved them to be uninjured.—3. The amount of fluid which at one time threatened to prove fatal by asphyxia, and which was wholly absorbed by rest in bed, aided by pot. iodidi, cinchonidia sulph. and blisters. The ribs united without trouble by the bandage acting as an external splint, the fluid as an internal one.

NOTES ON SOME OF THE CHANGES IN THERAPEUTICS DURING THE PAST QUARTER OF A CENTURY.*

BY H. J. SAUNDERS, M.D., M.R.C.S., ENG., KINGSTON, ONT.

I propose this evening to consider a few of the points in which our therapeutics of to-day differ from those of a quarter of a century ago. This, of course, I can only do to a very limited extent, as the short time we are able to give to reading and discussing papers will not allow of anything like an exhaustive consideration of the subject. Yet it is one of considerable interest, and one which, I think, may not unprofitably occupy our attention for a short time.

No thoughtful man can fail to be aware of the fact that his own views of disease constantly undergo a progressive change, and that almost unconsciously to himself his methods of treatment gradually vary, as he adopts new remedies and discontinues old ones, till a comparison of his treatment of a certain case now with that of ten or fifteen years ago would, in many cases, show a startling difference. There are men still living who in the early years of their practice treated fevers and inflammatory affections as a matter of course by the enormous bleedings, purgations, and depressants, common fifty years ago, who, subsequently, influenced by the views of Hughes Bennett and Todd, discontinued these almost entirely, and used stimulants to equal excess; and, as the mischievous effects of the indiscriminate use of these became apparent, reverted to a more moderate use of both classes of remedies. The present day, or, perhaps, I should say the time of the past ten years, is marked by this character, *i.e.*, small and moderate doses of medicines. I qualify the statement of the present day, because it seems to me that during the last few years there is a strong tendency towards a return to large doses; large as regards their effect, though not, perhaps, in bulk; for example, it is taught by some that to produce a beneficial effect by certain medicines it is necessary to produce the physiological effect that formerly we were careful to avoid. By men of this school of thought, strychnia is given in progressively increasing doses till stiffness of the muscles of the neck is produced, and this state is sought to be maintained. Iodide of potassium is given in the same way till its unpleasant constitutional effects are produced, and the dose so reached is persisted in till improvement in the disease for which it is given is observable. Quinine is frequently given in the same way, and many other medicines which it is not now necessary to enumerate. This practice is very much facilitated by the form in which medicines are now given;

* A paper read before the Cataraqui Medical Society, and published by request of the Society.

the old-fashioned infusions and tinctures, of which a very large bulk was required to be given before a physiological effect could be produced, being now almost entirely superseded, in many instances, at any rate by the use of Fluid and Solid Extracts, and active principles, alkaloids and resinoids, of which a very minute dose is sufficient to produce the required effect.

Another very marked characteristic of practice in the present day is the endeavor to find specifics for everything. I presume this was always the case to a certain extent, but never so much as now. One cannot look through the files of modern medical papers without being struck by the frequency with which some particular drug is lauded as a specific in certain affections. Unfortunately, in too many cases, the experience of others does not correspond with that of the introducer of the drug, and after a brief run it sinks into oblivion.* This search for specifics has, I think, led to a very great extent to the abandonment of the systematic plans of treatment that our forefathers adopted, and is due, I believe, to two principal causes. First, the change in our theories of disease, which is, in many cases, looked on as disordered action only, whereas formerly the disordered action was regarded in every case as due to the presence in the system of noxious material to be expelled by purgatives, emetics, diaphoretics, diuretics, &c., through the various excretory organs. In certain cases this latter view (*i.e.*, the existence of a poison in the blood) is of course still held, as in the various contagious diseases, syphilis for example, and the malarial diseases, though even in these, the practitioner of the present day seeks rather to neutralize the poisons by iodide of potassium and quinine than to expel them. The other cause is the influence that the Homœopathic system of treating symptoms rather than the disease itself has exerted. In no case is this tendency towards the treatment of disease by specific remedies rather than by evacuant agents shown more than in affections attended by increase of temperature, where the whole effort of the modern physician is directed towards the reduction of the pulse and temperature by such agents as aconite, veratrum viride, gelseminum, cold baths, &c., which appear by their action on the nervous system to lessen the activity of the circulation, and secondarily the rapidity of tissue change and consequently the temperature.

Medicines are now administered on theoretically physiological and chemical grounds much more than formerly, and a great deal of experimental practice is carried on in this way, sometimes successfully, just as often, I think, not. The above is an instance of what I mean, but many others might be mentioned, and I will endeavor to illustrate a few of them. The discovery that ergot exerts its influence chiefly on involuntary muscular fibre, causing its tonic contraction, has led to its employment in many cases where there exists theoretically, relaxation of this class of muscular tissue. With this view it is given in uterine hemorrhages, in paralysis of the bladder, in hyperæmic conditions supposed to depend on imperfect contraction of the arterial muscles, or where greater contraction would be expected to be beneficial, phosphates and phosphorus are given to supply the lack of these substances in the tissues. The various antiseptics, on account of their power of preventing or arresting fermentation and putrefaction in non-living material, are given internally with the idea that they will have the same influence on the living tissues. Preparations of malt on account of the diastase they contain are given to assist the digestion of starchy materials, as this substance possesses the power of rendering starch soluble by converting it into glucose outside the body, and it is therefore taken for granted that it will do the same in the stomach. Pepsine is given to assist the digestion of albuminous articles of food for a somewhat similar reason. It is in fact assumed that chemical action within and without the body are identical, and the great influence that the vital forces and the presence of numerous heterogeneous compounds within the body may have in hastening or retarding, and in many instances totally altering chemical reaction, is, to a great extent, lost sight of. The omission to take into account these influences leads, I think, very often to the disappointing results of the administration of theoretically correct chemical remedies, *e. g.*, the color of the blood is supposed to be due to the presence of iron in the blood and the pallor of anæmia to be owing to its absence, yet cases

*Instances of this are not difficult to find. Condurango as a specific for cancer, and propylamine for rheumatism, are now rarely heard of, though it is not very many years ago since their discovery was heralded as introducing a new era in the treatment of these diseases. Of those now in use, I fear Chian turpentine will soon have to be added to the list of drugs that have failed to meet the expectations of their introducers.

of anæmia are frequently met with that the administration of no amount of iron will benefit; the distortions of the joints in gout and chronic rheumatism are due to the accumulation within them of insoluble urates and uric acid which theoretically are dissolved by potash, yet all of us have met with cases in which these deposits have persistently gone on increasing for years in spite of the administration of innumerable potash salts. Of late years preparations of malt have been lauded on account of their supposed power of supplying the lack of those constituents of the salivary and intestinal secretions that promote the conversion into a soluble form of the insoluble starchy portions of our food, that is noticed in certain forms of dyspepsia, yet I cannot of my own knowledge say that I have ever seen any improvement in this respect follow the administration of any of the malt preparations that I have used.

The intimate relation into which chemistry and therapeutics have been brought by the researches of late years has had a marked influence on our use of the products of the laboratory, and many of our most valuable remedies are the result of these researches. Chloral and its various derivatives that are indispensable to the modern practitioner were unknown except to the chemist fifteen years ago, yet who of us now would like to be without them? Salicylic acid, which, if not a specific in rheumatism, at any rate possesses an extraordinary controlling power over that disease, has not yet been in use for five years. I might almost say that the germ theory of Pasteur owes its origin to the ascertained power of carbolic acid and its homologues to check fermentation and putrefaction, and the number of reagents found to possess this property is constantly being added to by the chemist of to-day, and the practice of Listerism has only been rendered possible by their investigations. The number of remedies of this class is now very great, and nearly all possess some special advantage which will render them permanent occupants of our Pharmacopœia, as thymol, salicylic and boracic acids.

The discovery of the anæsthetic powers of chloroform and ether led to an investigation of their innumerable homologues with the result of the introduction of many of the others which, although none have been found worthy of taking the place of these two, have yet been proved in many cases to possess properties of great medicinal value, Some, as bichlorides of methylene and ethylene, are anæsthetic, but their use being attended, in a greater or less degree, with the same dangers as chloroform, they are not likely to come into general use; others, as amyl nitrite, having a different effect, are of great service in special affections. Yet the number of these bodies that may be produced is so great that it is not unlikely that we or our successors may in time see an ether yet introduced that shall be at the same time safe, easy of administration, and an effectual anæsthetic.

Before leaving the subject of new remedies that the past quarter of a century has introduced, I ought not to omit to refer to Electricity, which. from being cumbrous and unmanageable, induced almost entirely by manual labor by means of magnetic and static machines, has by the modern chemist been rendered so easy of induction and control that it is capable of being used for curative purposes without difficulty in almost any degree of intensity, and by means of various appliances may be used to send an almost imperceptible current through any part of the human system, or for surgical purposes may take the place of the knife. The use of this agent, as that of chemicals, is too much burdened with theory and its identity with the vital principle too often assumed; hence its application is often futile and sometimes harmful. Much experience is yet needed to test its true value.

Not only has science added largely to our list of remedial agents, but it has also increased the number of forms in which they may be used and the modes of application. Pills, powders, infusions and tinctures, continue to be used and probably always will, yet these have been supplemented by a great variety of preparations by which the administration of drugs may be facilitated. I have before referred to the extracts now so largely used by which the bulk of the drug is diminished. To make a medicine palatable was formerly thought beneath the notice of the physician and unworthy his effort. Now, however, great skill and labor is expended in this direction, and the diminished size of our pills, with their tasteless or tasty coatings, the elixirs, emulsions and compressed powders, the gelatine capsules in which nauseous drugs whose taste cannot otherwise be concealed may be enclosed, and the tablets of gelatine, each square

of which contains a definite quantity of a drug diffused through it, bear witness to the untiring efforts and the success of modern pharmacists to render, what was formerly repulsive, pleasant and attractive. The introduction and extended use of the hypodermic syringe have also enabled us to induce the effect of certain medicines with greater precision and rapidity than was possible before Dr. Alexander Wood published its advantages to the world, and none who have witnessed the speedy and complete relief from pain that may be caused by its use will feel inclined to underrate the value of this little instrument. In my opinion Dr. Wood is entitled to little, if any less credit for his invention than was Sir James Simpson for the introduction of chloroform. Formerly used almost exclusively for the introduction of morphia, it is now found equally applicable for the administration of numerous other remedies, most of the alkaloids, and even chloroform and carbolic acid, being given by its aid. My list of the peculiarly modern modes of administration of remedial agents would not be complete without a reference to the atomizer by which fluids can be applied in a fine state of subdivision, with such ease and certainty as almost to have supplanted the inhaler where applications are desired to be made to the respiratory tract. By its use, too, local anæsthesia is produced more rapidly and efficiently than by any other means.

Briefly, then, to sum up the changes in therapeutics during the last quarter of a century, I think they consist—1st. In the treatment of acute diseases, in the more or less complete abandonment of the class of evacuant remedies formerly employed and the substitution therefor of an expectant treatment, which, looking on disease as a merely temporary disturbance which the natural forces are endeavoring to rectify, seeks rather to leave these forces to do their work unhindered than to control or interfere with them, and where it does interfere, does so by endeavoring to compel a return to the conditions of health by the use of specific remedies for each purpose sought to be obtained, *e. g.*, if increase of temperature be marked, means are adopted to lower it; if pain be present, we endeavor to relieve it, &c., &c.; in other words, there is a growing tendency to treat the symptom rather than the disease, and in relieving that symptom to influence as little as may be the functions of the body that remain undisturbed. 2nd. In the substitution of a chemical for a vital theory of the action of remedies. I have already mentioned instances of what I refer to, but, perhaps, a more notable case of this class of treatment than any is that of diabetes, which has been treated by some by withholding the materials for the manufacture of sugar, thinking thereby to check the undue secretion, while others have endeavored to supply the waste by administering saccharine matters in large quantity. 3rd. In the substitution of organic for inorganic remedial agents. It is, I think, an undoubted fact, that the use of mineral agents is far less frequent than formerly, and that instead vegetable products and the results of organic chemistry are much more freely used. 4th. In the greater attention now paid to the surroundings of the patient. At no time in the history of medicine have the influence of pure air, food and drink, and cleanliness, on the progress of the disease been so fully recognized as at present, and the amount of money and labor spent to secure the most perfect ventilation and drainage in the most modern hospitals is a proof of this.*

In all that I have said this evening I have endeavored to avoid the expression of any opinion as to the advantages or disadvantages of the changes we note as taking place, and have merely recorded those that have seemed to me most noticeable. It is customary to speak of these changes as progress, and to regard them as improvements on the practice of our ancestors. In some respects they undoubtedly are so, but in others I am not quite so clear. Sir James Paget, in his address as President of the British Medical Association at Norwich, some years ago, spoke regretfully of the discontinuance of bleeding, which, in his opinion, was frequently clearly beneficial, and which he thought might be more freely used now-a-days than it is, with advantage. In a discussion I heard at Bristol, four years ago, on the treatment of rheumatism, in which the younger members of the profession spoke strongly in favor of salicylic acid and cold baths, I noticed that amongst the seniors there was an almost unanimous impression that the older methods of treatment, though more prolonged and attended with less speedy relief, were yet followed by fewer relapses and accompanied less frequently by cardiac complications; and for myself, though

* To these might be added—5th. Greater simplicity in prescribing, the modern physician being generally content to give one or two drugs where his predecessor would have given twenty or thirty.

I have heard and read strong condemnation of the use of antimonials in pneumonia, as tending to increase the danger of breaking down of the lung tissue by lowering the vitality of the system; yet, in my own case, and in others I have seen greater, more immediate and more permanent relief follow their use in the acute stages than that of any other drug. These are but a few of the instances in which the modern changes are of doubtful benefit, but more might be mentioned if time permitted. That in many respects a real advance has been made; that many of the more recent drugs introduced are most valuable there is no doubt; but, while endeavoring to find out newer and more efficient modes of treatment, there is, I think, some danger lest that which is good in the old be neglected, and lest pluming ourselves on our own advance in physiological, pathological and chemical knowledge, we should be tempted to underrate the valuable experience that our predecessors had gained by individual care and study as intelligent and thorough as that of later years. Our theoretical knowledge is not, with very few exceptions, sufficiently advanced to be of very great service in practice, and we must still, and probably for many years yet, rely on empirical knowledge, giving medicines and carrying out rules of treatment rather because our experience or that of others has shown them to be beneficial, than from any true knowledge of the *modus operandi*.

Within the limits of so short a paper as this necessarily is, I have been obliged to make my remarks generally with but few special references. Were I to enumerate in detail all the changes in therapeutic practice within our time, and all the additions that have been made to our pharmacopœia, a book would have to be written, instead of a twenty minutes' paper. For the same reason, and also because it did not belong strictly to my subject, I have omitted all reference to what promises to be the greatest advance of all, namely, preventive medicine, though it seems to me that we may look for greater success in this, a science that is rapidly emancipating itself from the trammels of theory and becoming daily more and more a legitimate deduction from facts, than we can hope to attain from the practice of therapeutics.

CASE OF CHLOROFORM POISONING.

BY A. B. ATHERTON, M.D., F.R.C.P. & S., EDIN., FREDERICTON, N.B.

March 26, 1881.—J. B., æt 39, male. Since birth the patient has had a small tumor in the outer half of the right eyebrow. Has come some distance to have it removed, and wishes to have the operation done early, so as to return home by 8.30 a.m. train. Generally healthy. Took a light breakfast at 6 a.m.

7.30 a.m.—Chloroform was given at the patient's request. A horizontal incision was made, and, after a somewhat tedious dissection, on account of wide and firm adhesion to the periosteum, a cystic tumor, about the size of a large hazel nut, nearly got out. Thinking that I could finish the operation without any more chloroform, I now removed the towel from his face. Breathing kept all right for a minute or two, when suddenly it stopped; and in spite of pulling forward of the tongue and lower jaw, slapping him on the chest, loosening the clothing, lowering of the head and raising the legs, and some attempts at artificial respiration, nothing was got from him but one or two gasps two or three minutes after breathing stopped. For, perhaps, ten (10) minutes these efforts were continued. Then finding no further evidence of returning respiration and his face becoming somewhat livid, I determined to open the windpipe. With two strokes of the knife I cut through the crico-thyroid membrane and cricoid cartilage. Immediately on entering the windpipe, air whistled through the opening, and with little or no interruption respiration was established.

Considerable bleeding of a venous character occurred from the wound in neck, but the application of artery forceps for a short time checked its flow. A tracheotomy tube was retained for a few minutes and then taken out.

The tumor was now removed and a few sutures put in. One suture of silver wire was inserted in the crico-thyroid membrane, the ends being cut short. Also one catgut stitch in the upper part of the external wound of the neck, the rest of the latter being left open for escape of air. Notwithstanding considerable remonstrance on the part of the patient, this was accomplished without any further exhibition of chloroform. Vomiting occurred once

just after re-establishment of respiration. I was aided during the removal of the tumor and subsequently by my servant man, it not being convenient to get any one more skilled so early in the morning. As is customary in my own practice, the patient was in the prone position during anæsthesia.

March 27.—Is able to be up and about the house. Little or no air has passed through the opening since last evening. Pulse 70. Full and regular.

March 29.—Left for home to-day.

March 31.—Wrote me that he was doing well. No inconvenince from eyebrow. Wound in neck healing.

Remarks.—The patient told me, after the operation, that he had slept little during the preceding night on account of dread of what he was to undergo in the morning. He, however, looked well, and I had no hesitation about administering the chloroform. He went under it rather badly, struggling somewhat, and being affected with a rigid spasmodic action of the body and limbs. I generally regard such action as an indication that the subject is a bad one for chloroform. But, in this instance, after he once got well under its influence, he behaved fairly, and during the whole time previous to the stoppage of respiration (probably half hour) he required no unusual attention in regard to his breathing. It seems to me strange, therefore, that after the removal of the chloroform this stoppage should have occurred, especially as he breathed all right for some appreciable length of time after it was withdrawn.

I did not, nor do I generally, note the condition of the pulse, as I believe that, with the exception of those cases where there is serious heart-disease, it is not only unnecessary, but serves to draw off one's attention from the breathing so as to increase the risk of our not noticing any sudden change in its character, and this is the more dangerous in the case of *chloroform*, because respiration quite often ceases without any preceding noise or stertor, such as is always or nearly always present when too much *ether* is given. If I had been operating on a lower limb, where I could not so readily perceive any disturbance in the breathing, I might think that I possibly overlooked the first symptoms of danger, but I am quite sure that respiration was going on as well as usual till it suddenly, and without warning, stopped. I confess that this has made me timid ever since when I have administered chloroform. I did not apply a battery in this case, because I feared to lose time enough to start it going, and there was no one by who could do so for me.

The idea of laryngotomy was suggested to me by my firm belief that most cases of trouble from chloroform are due to the respiration and not to the heart, and also by seeing somewhere lately, the operation recommended for those drowned, artificial respiration being afterwards used through the opening in the larynx. It was not until after the operation that, on looking up the subject, I discovered in the last "*Braithwaite*" that the chloroformist of St. Thomas' Hospital, London, recommends tracheotomy for *spasm of the glottis*, as well as for œdema or obstruction in the trachea, and I suppose that possibly this case may fairly come under that head. I believe myself that such spasm must have been present; otherwise I think the drawing forward of the tongue and jaw must have allowed air to enter the chest. Besides no attempt at respiration was made when I first cut through the soft parts over the larynx, while when I entered the latter, *forthwith* breathing began. Furthermore, may not some spasmodic action in the trachea be more likely to occur in persons who exhibit such action generally in body while getting under the influence of chloroform? However, whether the trouble arose from spasm of the glottis, or from failure to raise the epiglottis by drawing forward the tongue and jaw, or from the anæsthetic, so deadening the sensibility that the patient did not sufficiently feel the "besoin de respirer," certain it is that the opening in the larynx was effective in meeting the difficulty, and I should have no hesitation in future in repeating the operation under similar circumstances. It is just possible that the last of these suppositions is the correct one, and if so, then the cut into the larynx and the influx of blood gave the necessary stimulus to respiration. It seems to me, however, that when a patient had been so long asphyxiated and had been for some time subjected to pretty rough handling without any effect, that the operation would not be likely to produce such an effect. Then, again, no attempt at respiration was made when the soft parts over the larynx were cut, and one would scarcely expect so much more from the opening of the larynx, unless there were some obstruction above the part opened.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—It has long been a subject of wonder to many that the United States has never given some medal or other distinguishing mark to officers and men who have served so faithfully during the American War so long past, as other countries have done. True our neighbors are a Republican people, but so now are the French.

This idea has caused me to write, on account of an expression occurring in one of your obituary notices in the current number of your Journal, that a Canadian Surgeon had received the "American War Badge." I am not aware that any has ever been issued by the U.S. War Department. If so, can you tell me what is the nature of it, and whence can I procure information relating thereto?

ONE INTERESTED.

OTTAWA, May 20th 1881.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

March 24, 1881.

The Society met at 8.15. The Vice-President, Dr. George Wright, in the chair. The minutes of the previous meeting were read and confirmed. Dr. James Baldwin and Dr. McCullough were elected members of the Society.

Dr. Workman read a translation of an interesting case of intestinal invagination, in which 34 centimetres of gut were passed per anum.

Dr. Riddel related the following case: A. B., æt. 32, robust, syphilitic, a hard drinker, came to him with facial erysipelas, from which he shortly recovered. Delirium tremens ensued, with some puffiness of face and extremities. He recovered, but in about a month he was seized with convulsions and died. What was the nature of the kidney disease, if any, which he had? Was it erysipelas or delirium tremens from which he originally suffered? The heart and urine had not been examined.

Dr. Graham said the data were not sufficient to found a certain diagnosis upon. Acute desquamative nephritis may have been present. He then related a case of convulsions, suddenly developed without any known cause, followed by coma and ending in death, with no kidney lesions.

Dr. Oldright mentioned a case of empyema, in which he had operated by tapping the chest and washing the cavity out daily by simple syphon method, and invited those who took an interest in such cases to see it with him.

Dr. George Wright presented a dried anatomical preparation of ruptured diaphragm.

Dr. Graham mentioned several interesting cases.

A., acute tuberculosis. No physical signs of any moment during life; the lungs, on post-mortem, found studded with tubercle. He died of purpura hæmorrhagica.

B., æt. 49. Working in an office, he early contracted the habit of retaining his urine all day. Some catarrhal bladder trouble has now appeared, with albuminuria. He thought there was no doubt that the kidney trouble was caused by the habitually distended bladder.

C., for past five or six years, had suffered frequent attacks of jaundice. This finally became permanent. A year and a half before death occasional heart-murmurs were heard, systolic at the base; the last six months of life they were permanent. Post-mortem showed no valvular disease; the cystic and common ducts were constricted.

D., a case of lateral spinal sclerosis. The notes of this case he hoped to read to the Society at another time.

E., splenic leucocythæmia, white corpuscles, 1 to 8, 1 to 12, 1 to 15, varied at different observations. The field of red globules numbered 3,000,000.

A general discussion ensued.

Dr. Playter then read a paper upon "Contagious Diseases in Men and Animals," and showed how animals might be carriers of contagion and thus explain some cases of apparently spontaneous origin.

The meeting then adjourned.

April 7th, 1881.

Society met at 8.15. The President, Dr. Covernton, in the chair. The minutes were read and adopted.

Dr. Workman read a translation, describing a case of trephining, a triangular hole of considerable size being found in the skull. The skull was found in the grave of an ancient Dane or Norseman, about 200–500 A.D.

Dr. Cameron exhibited the lungs from a case of empyema of the left pleura. The case was that of

a boy 8 years of age, admitted to the Children's Hospital when the disease was already of some months' standing; after slow improvement, he had an attack of bronchitis of the healthy side, to which he succumbed. The left pleural cavity was filled with cheesy and liquid pus, the lung completely solidified and crowded against the vertebræ; the right cavity contained some clear serum, the lung was congested and had some caseous centres in it.

Dr. Oldright exhibited three specimens from the same subject, a man 73 years of age. The left hip was injured, 13 years ago, by a fall down stairs. There was evidence of fracture of the ischium and pubis; the femur was dislocated upon the dorsum ilii, and the head fractured at the neck. A piece of bone resembling the head was firmly attached to the under lip of the iliac crest; the upper extremity of the femur was loosely but strongly attached by ligaments to the ilium. The bladder was much thickened and inflamed, and contained a sacculum, at its upper part. A papillary growth from the inferior floor of the bladder obstructed the opening of the urethra. The left kidney contained a large cyst; the ureters were dilated.

Dr. Oldright then read his paper upon "Contagion and Infection." He confined his remarks principally to some questions of school quarantine, viz.: the length of time it was necessary to keep scarlet fever cases and the other members of an infected family at home, and as to the non-necessity of preventing the school attendance of apparently healthy children where a case of typhoid was present in the house.

A general conversation followed, in which different views were taken of the subject.

Dr. Workman's proposed addition to the By-laws, of which the usual three months' notice had been given, was now brought before the meeting.

Dr. Workman proposed that "The number of honorary members of this Society shall not at any time exceed twelve."—*Carried.*

ONTARIO MEDICAL COUNCIL—EXECUTIVE COMMITTEE.

The Executive Committee met at 2 p.m. on Tuesday, March 31st. Present:—Drs. Bergin, Allison, Burns, Husband, Macdonald and Edwards. The minutes of last meeting were read and confirmed.

A communication was read, requesting to be exempt from examination on certain subjects, the applicant having passed on said subjects before the Board of Pharmacy.

The committee decided that the courses and examination of the College of Pharmacy could not be accepted by the College of Physicians and Surgeons of Ontario, and that four years must be spent in professional study after matriculating.

In reply to a communication, the Committee states, that all primary candidates next spring, must present certificates of having undergone an examination at the end of their first session, from the school they attended.

A communication was now read, asking if the recent action of the Committee, regarding the Matriculation Examination of August, 1880, would have any effect on the examination of April, 1880.

The Committee decided that it would not affect any examination, excepting the one referred to, viz., August 1880 examination.

The Executive Committee now proceeded to examine tickets and credentials, etc., of the candidates for the professional examinations, which occupied the Committee until a late hour.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in Clinton on April 5th, Dr. Sloan, of Blyth, president, in the chair. The following members were present:—Drs. Sloan, Holmes, Worthington, Williams, Taylor, Campbell, Graham, Young and Stewart.

Dr. Worthington showed a young lady with lateral curvature of the spine, who is wearing a "Wyeth plaster jacket" with great comfort.

Dr. Stewart showed a case of badly united fracture of the tibia and fibula.

Dr. Campbell showed a uterine polypus which he removed a few days previously from an unmarried woman, aged 35. For a period of two years this patient suffered severely before the appearance of the catamenia, from acute pain referred to the region of the uterus. The menses were very profuse and for a period of several weeks the loss was so great, that she was unable to leave her bed. Dr. C., on making a vaginal examination, discovered a tumor about the size of a hen's egg in the vagina and having a pedicle which could be traced to the internal os. Dr. Campbell, with Dr. Scott's assist-

FOR CONSUMPTION AND WASTING DISEASES

HYDROLEINE.

("HYDRATED OIL.")

FOR DYSPEPSIA, INDIGESTION, ETC.

MALTOPEPSYN.

I desire to express to the Medical Profession my thanks and deep sense of obligation to them for their generous support and kind interest, shown by the almost universal use of Hydroleine and Maltopepsyn in their practice, and the great number of laudatory letters received from them.

I wish also to assure them that I shall continue to give my personal attention to all preparations either imported or manufactured by me and I shall endeavor to produce such remedies *only* as will merit the continued support of the Profession in all parts of the world.

The demand for Maltopepsyn has increased so rapidly, through this decided support of the medical profession, that it has made it absolutely necessary to increase my facilities. I have now leased the entire premises No. 57 Front Street East, erected a new engine, mills, choppers, presses and other machinery of the latest and most approved patterns. I shall be most happy to see any physician and show to him my methods for manufacturing Pepsine, Pancreatine, Exsiccated Extract of Malt, and the other ingredients of Maltopepsyn (as per formula.) I, with perfect security, guarantee to keep the quality to its present high standard, as I devote my entire time to that end.

I add enough testimony from distinguished medical men, the medical press, and leading chemists in the Dominion of Canada from the mass of letters received, to show conclusively the high reputation these two remedies have gained, leaving out the much greater amount of testimony received from England and the United States.

Very respectfully,

HAZEN MORSE.

57 Front Street East, Toronto.

IMPORTANT NOTICE.

I publish below exact formulas for Hydroleine and Maltopepsyn. Testimonials follow on next 3 pages.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonsful, equal to 120 drops, contains :

Pure Oil..... 80 m. (drops.)	Soda.....1-3 grains.
Distilled Water... 35 "	Boric Acid.....1-4 "
Soluble Pancreatin 5 grains.	Hyocholic Acid.....1-20 "

DOSE.—Two teaspoonsful alone, or mixed with twice the quantity of soft water to be taken thrice daily with meals.

MALTOPEPSYN.

The new Canadian Remedy for Dyspepsia, Indigestion, Cholera Infantum, Constipation and all Disease arising from Imperfect Nutrition.

FORMULA.

SACCHARATED PEPSINE (Porci).....	10 Grains.
" PANCREATINE.....	5 "
ACID LACTOPHOSPHATE OF LIME.....	5 "
EXSICCATED EXTRACT OF MALT (Equal to one teaspoonful of liquid extract of Malt.).....	10 "

HYDROLEINE.

LA GAUCHETERE STREET, MONTREAL, Nov. 24, 1880.

"I consider Hydroleine a valuable preparation, and I have shown my estimation of it by prescribing it to some thirty or more of my patients instead of ordinary Cod Liver Oil. Many of them continue to take it and have been greatly benefitted by its use."

J. J. DUGDALE, M. D.

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32 BEAVER HALL, MONTREAL. May 15, 1880.

"My experience with Hydroleine has been more than satisfactory. and I know no remedy like it in cases of a scrofulous or tubercular diatheses. In some of my cases the effects of this remedy have been really marvelious. Now, I wish you to send through Lewis & Co., a half dozen for my own personal use, as I wish to continue taking the Hydroleine myself."

E. H. TRENHOLME, M. D.

HASTINGS, ONT., 15th Sept., 1880.

"We are so well satisfied with the trial bottle of Hydroleine having put it to a severe test in an extreme case where we really did not expect the girl to live a week (she is now able to walk about the house), that we would like a dozen bottles."

DRS. CLARK & O'GORMAN.

RICHMOND, ONT., Nov. 25, 1880.

"I have to-day made arrangements with Mr. McElroy (the merchant of our village), to keep in stock a quantity of Hydroleine. It is the best thing I have ever used in all wasting diseases."

D. BEATTY, M. D.

MONTREAL, Aug. 12, 1880.

"I have prescribed your preparation, Hydroleine, very largely with the greatest satisfaction to myself and benefit to my patients. One delicate lady (Mrs. McC.,) gained *16 pounds* by taking four bottles of the medicine. In many other cases the increase in flesh and weight has been very remarkable."

E. H. TRENHOLME, M. D.

FREELTON, Dec. 17, 1880.

"After taking three bottles of Hydroleine her weight increased 9 pounds. She discontinued the remedy, and again fell back, but on commencing the Hydroleine again, as before, she immediately improved, and is continuing to do so under its use."

GEO. METHERELL, M. D.

HASTINGS, Dec. 6, 1880.

"We give it (Hydroleine) our unqualified approval, notably of late in convalescence from Typhoid, especially where bronchial trouble has been present. Your Maltopepsyn is an excellent remedy."

DRS. CLARK & O'GORMAN.

PORT ELGIN, ONT., Dec. 16, 1880.

"I have been prescribing Hydroleine in all wasting diseases for some months, and can heartily recommend it to the notice of the profession as a remedy of real merit."

LEWIS E. SHEPHERD, M. D.

LONDON, ONT., Dec. 7, 1880.

"I have used Hydroleine since August in tubercular diatheses with entire satisfaction, and consider it an estimable and highly efficient preparation."

H. W. LLOYD, M. D.

CANNINGTON, Dec. 22, 1880.

"I have used the Hydroleine in a number of cases, and with very satisfactory results. I am very much pleased with its action in pulmonary and other diseases attended with emaciation."

J. M. HART. M. D.

NEUSTADT, Dec. 21, 1880.

"I have found it (Hydroleine), to be a sovereign remedy. In one case of Gastrodynia, in which had employed all known remedies which were likely to be beneficial, with little effect, since taking Hydroleine the patient has had complete relief, the appetite increased, also marked increase of flesh."

T. C. SPENCE, M. D.

GRIMSBY, Dec. 27, 1880.

"I beg to testify to the excellent effects derived from the use of Hydroleine"

R. A ALEXANDER, M. D.

CREDIT, ONT.

"A delicate young lady took four bottles of Hydroleine, and gained 3½ pounds with each bottle, making a total gain of 14 pounds."

DR. DIXIE.

DUNDALK, Jan. 13, 1881.

"I refer to a case of incipient phthisis. The patient gained in weight while taking the first bottle of Hydroleine five pounds, and when last seen was taking second bottle, and had gained four pounds more. I may add that the cough and general condition of the patient were very much improved."

JAS. McWILLIAM.

CLINTON, Jan. 4, 1881

"It has answered the purpose better than anything I have yet used, and my impression is that it will supersede all other remedies now in use for chronic pulmonary troubles."

A. WORTHINGTON, M. D.

MALTOPEPSYN.

BRUSSELS, T., June 28, 1880.

"I believe Maltopepsyn to be equal, if not superior, to Lactopeptine or Pepsine, in the use of which I have had a very large experience."

WILLIAM GRAHAM, M. D.

CASE ATTENDED BY DR. BURNS, TORONTO, April, 1880.

Child of Mr. Edgell, Toronto, about two years old, suffering from Diarrhœa, brought on by indigestion; passed undigested food etc. Dr. B——— had tried many remedies without giving any relief, finally prescribed Maltopepsyn. After the child had taken six doses, there was marked improvement, and before one-half the bottle was used had entirely recovered."

WALLACE, N. S., Oct. 4, 1880.

"The Maltopepsyn was given in a marked and distressing case of Indigestion with the most rapid pleasing and beneficial results."

Z. W. KEMPTON, M. D.

ATHLONE, ONT., Jan. 20, 1880.

"The Maltopepsyn I obtained from you has far more than answered my anticipations. Having tried it in two old and very obstinate cases of indigestion, I found it to act like a charm."

C. McKENNA, M. D.

GEORGETOWN, ONT., Dec. 17, 1880.

"I like your Maltopepsyn; I find it to act very nicely and to do all that you recommend it to do."

WM. J. ROE, M. D.

MIDLAND, ONT., Dec. 24, 1880.

"I regard it (Maltopepsyn) as a very valuable preparation."

P. E. KIDD, M. D.

CAMBRAY, ONT., Jan., 1881.

"I have used your Maltopepsyn in severe cases of Indigestion and Malnutrition in adults and Diarrhœa of children, and am so well pleased with the results that I have instructed my druggist to keep a supply on hand."

T. W. READE, M. D.

ATHLONE, ONT., Dec. 30, 1880.

"After giving your Maltopepsyn a trial in some of my worst cases, for which it was recommended, I am well pleased with the way in which it acts. Continue to make a good article like that now in use and it will be a universal favorite."

R. HAMILTON, M. D.

OHIO, YARMOUTH CO., N. S., Dec. 1, 1880.

"I may say I like it (Maltopepsyn), much better than any preparation of the kind that I have used, as it is certainly both more prompt and effective, and it further has the advantage of being much cheaper."

J. A. W. MORSE, M. D.

ELMVALE, ONT., Dec. 30, 1880.

"From my experience with Maltopepsyn I feel justified in saying that is quite as useful as Lactopeptine, and more palatable. I regard it as an important remedial agent in the ailments of infants, which are generally due to indigestion; and in prescribing Maltopepsyn in those cases, I feel that I am giving, in an elegant and palatable form, what is most likely to assist nature, and at the same time I run no risk of injuring the child."

GEO. BROWN, M. D.

BOWMANVILLE, ONT., Dec. 31, 1880.

"I am much pleased with the preparation Maltopepsyn in the case of faulty or difficult digestion."

W. H. LAW, M. D.

OPINIONS OF THE MEDICAL PRESS.

HYDROLEINE.—This new preparation of Cod Liver Oil is deserving of the attention of the medical profession. Its use is not confined to cases of phthisis alone, but is found servicable in all wasting diseases, and also in convalescence from protracted illness. Under its use the weight may be greatly increased. It is claimed to be artificially digested by the combination employed, and produces no unpleasant eructations or nausea. Our own experience of its use has been most favorable.—*The Canada Lancet*, Toronto, December 1st, 1880.

Among the many new preparations brought to the notice of the profession, none perhaps deserves more attention than Hydroleine, a preparation of Cod Liver Oil. The efficacy of Hydroleine is, it is claimed, not confined to cases of phthisis solely, but it also has a valuable tonic effect on the system generally. We have been using Hydroleine for some time, with the most satisfactory results, and value it very highly for its nutritive and waste preventing properties. We have also been using Maltopepsyn in cases of indigestion, with marked success.—*Canada Medical and Surgical Journal*, Montreal, November, 1880.

FROM LEADING CHEMISTS AND DRUGGISTS.

144 ST. LAWRENCE MAIN STREET, MONTREAL, Nov. 18, 1880.

"I beg to say that Hydroleine is increasing in favor with the medical profession. It digests easily and in most cases rapidly; and brings up the weight of the patient. To prove which, several physicians have weighed their patients before beginning the remedy. My sales this month are larger than ever." HENRY R. GRAY, Chemist.

YORKVILLE, ONT., July 21, 1880.

"Since the introduction of Hydroleine into this locality, I have sold over three dozen bottles, and find that it gives every satisfaction; it is an excellent preparation and I have no doubt of its becoming very popular." WM. S. ROBINSON, Chemist.

WALKERTON, ONT., Oct. 27, 1880.

"I have been troubled with indigestion of and on for some years. Some time ago I commenced using Maltopepsyn, and must say I have had great relief, and I think will prove a cure with me before long." W. A. GREEN, Chemist.

TORONTO, July 1st, 1880.

"In reference to your preparation "Hydrated Oil," known as Hydroleine, it affords me pleasure to state I have sold over two dozen since its introduction, and it has given general satisfaction. In one case the person having taken two bottles gained upwards of 4 lbs. in about two weeks." EDWIN A. SMITH, City Pharmacy.

PRICE LIST.

Hydroleine, half pound bottles, - -	***Per Bottle, $ 1.00.***
" " " " - - -	" ***Dozen, 10.00.***
Maltopepsyn, 2 oz. bottles, containing nearly 1½ ozs. powder, 50c. per Bottle.	
" " " " " " "	***$5 per Dozen.***
" ***in half pound bottles,*** - - - -	***$5 per Pound.***

EXPRESS CHARGES PREPAID.

☞ Pamphlets by G. Overend Drewry, M. D., and H. C. Bartlett, Ph.D., F.C.S., explaining the principles upon which the discovery of Hydroleine is based, together with cases illustrating the effect in practice, and a pamphlet descriptive of Maltopepsyn sent free to any medical man upon application.

One bottle of Hydroleine will accomplish greater results than can be obtained by using ten bottles of Cod Liver Oil.

N.B.—I will forward to any ***Medical man*** desiring to test its virtues for himself one full-sized bottle Hydroleine upon receipt of fifty cents (half price), also one full-sized bottle of Maltopepsyn for 25 cents (half price,) express charges prepaid. This offer only applies to the first bottles.

HAZEN MORSE,
57 FRONT STREET EAST,
TORONTO.

Sole Agent for the sale of Hydroleine in the Dominion of Canada.

ance, removed the polypus by means of a long curved forceps. The patient is doing well.

Dr. Graham, of Brussels, exhibited a beautiful specimen of dilatation of the stomach arising from the cicatrization of a chronic ulcer. The patient from whom the specimen was taken was a locksmith, 28 years of age. He had suffered for seven years from pain after eating, and vomiting. About two years ago the stomach was found to be greatly dilated. He had several epileptiform convulsions and severe tonic spasms of the muscles of the lower extremities. Emaciation was extreme. He complained of having a ravenous appetite and uncontrollable thirst. He vomited large quantities of fluid containing products of fermentation. Dr. Graham began at this period to wash out the stomach. This was continued for five weeks and was attended by marked benefit. The thirst and vomiting disappeared. He rapidly gained flesh and strength and his state was so satisfactory that it was not considered necessary to use the stomach-pump any longer. He continued to all appearances in good health until two months ago, when the thirst and vomiting set in again. The tonic spasms of the lower extremities returned and were soon followed by death The stomach weighs 23 oz.; length from cardiac to pyloric extremity 20 inches; vertical diameter 7¼ inches; the pyloric orifice has a diameter of only ⅛ of an inch. An ulcer ¼ of an inch in diameter and nearly the same in depth, with undermined edges, is situated at the commencement of the pyloric orifice.

Dr. Graham concluded the report by saying, that the treatment of this case convinced him of the very great benefit derivable from Kussmaul's method of washing out the organ. He felt satisfied that although the pyloric constriction could never be removed, yet with proper attention to quantity and quality of food, and the use of the syphon or pump at the proper time, he may have been tided over many months, perhaps many years.

Dr. McDonald, of Wingham, read the notes of a case where he stretched the sciatic nerve for obstinate sciatica. The result in this case has been very encouraging.

Dr. Stewart gave a report of a case where he and Dr. Hurlburt performed a similar operation for an inveterate sciatica. Sufficient time has not yet elapsed to decide as to the permanent value of the operation in this case.

CO. GLENGARRY MEDICAL SOCIETY.

The Medical Society of the County of Glengarry held its first meeting in Alexandria, on Tuesday, the 15th of March, 1881.

Moved by Dr. Munro, and seconded by Dr. McDiarmid, that Dr. McMillan, of Alexandria, be appointed President of the Society for the ensuing year.—*Carried.*

The President having taken the chair, it was moved by Dr. Harkness and seconded by Dr. McDermid, that Dr. McDonell be appointed Secretary.—*Carried.*

Moved by Dr. Munro, and seconded by Dr. McDonell, that Dr. Harkness be appointed Vice-president.—*Carried.*

Moved by Dr. Munro, and seconded by Dr. McDermid, that the following gentlemen be appointed a committee to draught a constitution and by-laws, to be submitted at the next meeting of the Association, viz.: Drs. Harkness, Hunt, McBean, Falkner, and McDiarmid.—*Carried.*

Moved by Dr. McDonell, and seconded by Dr. McDermid, that the President, Vice-president, and Drs. Munro and McDiarmid, be appointed delegates to the Ontario Medical Association at their first meeting.

Drs. Munro, Hunt and Harkness, were appointed to read papers on medical items at the next meeting of the Society.

Routine business having been completed, Dr. Harkness read the report of a case of spontaneous artificial anus formed at the umbilicus with recovery, and Dr. McDonell a paper on the therapeutic effects of muriate of calcium in scrofula and kindred diseases.

An impromptu, but very interesting discussion on the above subjects then ensued, in which nearly all the members present took part; after which the meeting adjourned, to re-assemble on the 2nd Tuesday of June next.

MICHIGAN STATE BOARD OF HEALTH.

Reported for the CANADA LANCET.

The regular quarterly meeting of this Board was held at Lansing, Tuesday, April 12th, the following members being present: Rev. D. C. Jacokes, of Pontiac; Henry F. Lyster, M.D., of Detroit;

Arthur Hazlewood, M.D., of Grand Rapids, and Henry B. Baker, M.D., Secretary.

Dr. Lyster was elected President *pro tem.*

A letter from Prof. Kedzie declining the reappointment as member of the board, was received. His communication outlined the great progress in public health measures in this State since the organization of the State Board of Health eight years ago. Nearly every city, village, and township in the state now had its board of health and health officer. Kerosine explosions, so common eight years ago, have been banished. Everywhere in the state there is evidence of an advance in the stamping out of infectious diseases. The ventilation of churches, school-houses, and dwellings now receive an attention never known before. The water in our wells, the drainage of farms, and the sewerage of houses have all been brought into prominence by the labours of the press. In this work the board have been greatly assisted by the public press, but the press itself has been stimulated by the work of the board. In short there has been a general advance along the whole line, but we have kept such even step in this advance that we only became aware of our changed position by comparison with the landmarks of eight years ago.

The Secretary presented a communication from C. H. Voute giving statistics of the filth removed from privies and cesspools in various towns and cities in the State by means of the odorless excavating apparatus; in all about 2,300 tons or 15,000 barrels. Of that amount but 2,000 barrels could be pumped out, the remainder being removed by the "filling" process showing the liquid portion had mostly drained off into the soil, which must be much saturated with filth, and as a consequence many wells must be contaminated.

A letter was presented from John Mulvany, M,D., surgeon in the British Navy, detailing the effects of food rendered unwholesome through putrefactive taint. All of the crew of a large merchant vessel that put into the Falkland Islands, who ate of pork opened on a certain day became ill, and the illness continued until the ship was disabled and medical assistance was sought for in the Falkland Islands. There it was found that not only the pork but the beef was bad, and the meat was condemned by a board of surveying officers. Seven of the affected died, and *post mortem* examination revealed immense effusion into the pericardium, a stench from the brain, and congestion at the point of the calamus scriptorius in the fourth ventricle, with congestion of the jejunum and ileum. During life the chief symptoms were paralysis of the hands and feet, and agonizing pains in the toes; uncontrollable sleeplessness, loose bowels, stench from the skin, etc., symptoms entirely *sui generis.*

The Board requested Dr. Mulvany to present a complete account of the sickness.

Invitations to hold Sanitary Conventions during the coming winter were accepted from Coldwater and Ann Arbor.

Dr. Lyster, chairman of the special committee of the Board, to devise a plan for a board of health for the city of Detroit, reported, that he had in consultation with the city attorney and other citizens drawn up a bill providing a practical and a scientific board of health for that city, and the bill was now before the Legislature.

The annual examination of applicants in sanitary science will be held Tuesday, July 12, 1881. Candidates successfully passing the examinations will receive certificates that they are qualified to act as health officers in any city, village or township in the State.

It was decided to print revised editions of the documents on the restriction and prevention of each of the three diseases, diphtheria, scarlet fever and small pox. Arrangements were also made for the translation of these documents into the Holland and German languages.

Selected Articles.

INCISION INTO THE PERICARDIUM.

Dr. Rosenstein, of Leiden, relates (*Berliner Klinische Wochenschrift*, No. 5, *Med. Times and Gazette*) a case of purulent pericarditis, treated by a free incision into the pericardium much as we now treat some cases of purulent pleurisy. A boy, ten years of age, came under observation after having been attacked fourteen days previously with symptoms of gastric catarrh. On admission into the hospital, the following was noted as the *status præsens*:—"The patient lies by preference on his back, though an either side position does not cause any inconvenience. Nutrition is good; cheeks and mucous membranes remarkably pale; axillary temperature 99·8° Fahr.; pulse very small; respiration 40, costo-abdominal; alæ nasi working

strongly. The chest measures, at the level of the third dorsal vertebra, on the right side thirty-four, on the left thirty-six centimetres; at the level of the sixth dorsal vertebra, right side thirty-six, left side thirty-seven centimetres. The heart's beat is neither to be felt nor seen, nor are the heart-sounds audible *at any part of the chest.* On percussion, on the right side the percussion-sounds are normal as low as the sixth rib; on the left side, dulness commences between the first and second ribs, and gradually extends to the xiphoid cartilage, passing obliquely towards the left as far as the mid-axillary line, and to the right as far as the nipple-line (thus presenting a somewhat triangular space, apex up and base downwards). There is no change in the dulness on altering the patient's position. . . . ." A diagnosis of effusion into the pericardium was, of course, made; but its exact nature could only be determined by an exploratory puncture, and this was done. The presence of pus having been made certain, aspiration (between the fourth and fifth ribs, close to the margin of the sternum) with a Potain's apparatus was practised, and upwards of twenty-two ounces of pure pus were withdrawn. The relief afforded by this operation is compared with that which so often follows tracheotomy for laryngeal obstruction. The relief, however, did not last very long, and it became necessary to repeat the tapping on the third day, but the pericarditis was now found to be associated with a left pleurisy, which had developed since the first tapping. The pleura was accordingly tapped, and thirty-eight ounces of serous effusion were withdrawn. The pericardium was again tapped, and about four ounces of pus taken out. The patient's condition did not much improve: there was very considerable and increasing dyspnœa, with lividity, and some œdema of the feet and legs; sleep was much broken, and the general condition very low. Under the circumstances, it was determined to incise the pericardium, as the physical signs pointed pretty conclusively to a further accumulation of fluid within it. The operation was carried out under the strictest antiseptic precautions. An incision, about three centimetres long, was made between the fourth and fifth ribs, close to the left margin of the sternum, and each layer separately divided until the pericardium was reached. An opening was then made into it, through which a considerable quantity of pus escaped; two drainage-tubes were put in, and the wound dressed after Lister's method. The patient was, very shortly after the operation, able to lie on his back, and felt much relieved by it. It was not, however, until at least two hours later that the pulse became appreciable. On the day following, the temperature stood at 101° Fahr., but it then came down to normal and remained so. At the end of eight weeks, the pericardial wound, which had been gradually closing, was cicatrized. There were no further pericardial troubles. But the signs of the pleuritic effusion pointed to a fresh collection in this cavity, while there was still fever after removing thirty-five ounces of fluid; as the general condition therefore was not relieved, a free incision was made into the chest, and another fifty ounces were removed. Improvement now set in, and at the end of six weeks the wound had closed, and the patient was sent out of the hospital cured.

The author draws the following conclusions from his case :—1. The case teaches that purulent pericarditis, just as empyema, may at times run its course without giving rise to fever or œdema of the tissues, so that the nature of the exudation can only be decided after an exploratory puncture. 2. We must not abstain from removing the exudation on account of any supposed myocarditic changes. 3. In cases of considerable pericardial effusions, change of position may not influence the line of dulness; but this fact must not always be interpreted in favor of dilatation of the heart.

THE ANTISEPTIC TREATMENT AT VIENNA.

Dr. Wheeler, in a letter from Vienna (*Boston Med. Journal*, January 20), states that since Prof. Billroth has substituted irrigation for the spray, his operations have been more successful than before, while a troublesome apparatus has been got rid of.

"The antiseptic method as practised by him is as follows :—Before beginning an operation the part is shaved, scrubbed with soap and water, and washed with carbolic acid solution. If the skin seems greasy it is washed with ether. The nail brush and carbolic solution are used in the same way, on the hands of the operator and all the assistants, and everybody who is employed in the theatre wears a long clean linen duster. All the instruments, ligatures, sutures, and needles lie in the solution during the operation, while sponges and drainage-tubes are always kept carbolised. A small tank against the wall contains the irrigating fluid (a 3 per cent. solution of carbolic acid), which is brought within reach of the operator by a rubber tube, the nozzle of which is furnished with a stop-cock to regulate the force of the stream. If the operation is a small or superficial one, irrigation is employed only at the close, just before sewing up, when the wound is washed out with great care. But this operation is repeated a number of times during the operation if a deep hole is made. After the introduction of the drainage-tube the wound is sewed up, a piece of gutta-percha laid over it, and a very large quantity of Lister's gauze applied. The innermost layers of the gauze are the only ones that are soaked in the solution; and they are not applied smoothly, but crumpled up and laid on loosely. The outer

layers of the gauze are folded smoothly and put on dry; the mackintosh protective occupies its ordinary place, and the whole dressing is firmly held in position by a gauze bandage.

"It will thus be seen that in guarding against infection the most scrupulous attention is paid to every detail. In changing a dressing the same care is observed, the irrigation, of course, still taking the place of the spray. One point which deserves special notice is with reference to sponges. The sponge is regarded as one of the most dangerous sources of infection, and is never used except in the operating theatre, and there only on a freshly made wound. In doing ovariotomy, Prof. Billroth uses no sponges that have not been soaked for at least fifteen days in a 5 per cent. carbolic acid solution, as he has found living bacteria in sponges which have been kept twelve days in such a solution. In changing dressings and in wiping all wounds which discharge anything besides fresh blood, small wads of cotton batting that are always soaking in the carbolic solution, and which are thrown away as soon as used, do the work of sponges. If by any chance a sponge has come in contact with pus, it is never used again.

"In securing first intention, great importance is attached to compression of the wound and immobility of the part. The dressing is carefully adjusted, and the bandage applied so as to afford a very firm and equable pressure. In wounds of any size, deep sutures are used, which are fastened with lead discs and pierced bullets. If the seam is a long one, the discs are replaced by two strips of lead placed one on each side of the seam and parallel with it. Immobility is secured by a bandage of coarse muslin, impregnated with starch and dextrine. The ordinary use to which this material is put is the stiffening of ladies' dressess, and it can be had at any dress-maker's. For surgical purposes it is made up into rollers, which are soaked in water and applied outside of everything else. The bandage stiffens in a few minutes, and although, of course, not so solid as plaster of Paris, it affords very effectual resistance to any ordinary movement on the part of the patient. It is especially useful in operations on the neck, such numbers of which are performed by Billroth. After one of these, the patient's head, neck, and chest are enveloped in this bandage, which renders motion of the head impossible. The bandage must be cut or soaked in warm water in order to remove it, but it is said that there is no trouble in cutting it with a stout pair of shears."—*Med. Times and Gazette.*

BROMIDE OF POTASSIUM AND CALOMEL are said by Prof. Taylor to be incompatible. A soluble mercurial compound is formed which is highly poisonous, a kitten having been killed by some of it in the course of an hour and a half.—*Virginia Medical Monthly.*

AN OPINION ON BLOOD-LETTING.

It requires no little courage to confront the popular prejudice as Dr. Hiram Corson does in the following passage, taken from a paper on pneumonia communicated to the Philadelphia *Medical Reporter*;—

"I have been in active practice continuously for fifty-two years, and during all that time have not once had occasion to believe that there was any change in the human system or in the climate, which made it more hazardous to treat acute inflammatory affections by cups or leeches and other anti-febrile remedies, than it was in the beginning of my career. I am therefore free to declare that it is just as safe to use them now, and they are quite as efficient, as in days when the physicians of Philadelphia were using them so freely, with so much confidence and with so great success. Surgeons now perform fearful operations, by which not only is a great amount of blood lost, but the patient is also injuriously affected by the shock to the nervous system, yet the recoveries are oftentimes astonishingly rapid. Women in time of childbirth often flood until they are in the very presence of death, and yet, when it is arrested, they will in a few days be found as bright and cheerful as if nothing had happened, soon regain their usual strength and have no disability from their loss of blood. They bear it as well now as they did fifty years ago, Even those who would not bleed a woman in labour to save her from convulsions, have no fear that she will suffer from a flooding which happened after the delivery of the placenta. A man may cut his leg and bleed till he faints, but no one feels that the mere loss of blood will do him any permanent injury; and yet what a hue and cry from these same people if a physician should bleed a person to remove a congestion of the brain, or relieve a pain in the head or a pleurisy. I have rarely met with a graduate of the last fifteen years who has ever used a lancet, and yet these are the very persons who are so opposed to its use. They regard the older physicians who do use it as persons who are ignorant of the "valuable new remedies" (which they believe are discovered about the time they began to study medicine), when the truth is they are themselves ignorant of nearly all the means of cure save veratrum viride, aconite, digitalis, a few cathartics, morphine, chloral and—I was near forgetting them—poultices; poultices for croup; poultices for diphtheria and scarlet fever; poultices for the liver and poultices for the kidneys; poultices for the chest and poultices for the belly; and when you ask them what effect they expect from these means, they have no answer but this: 'They are very much used in the hospitals now.' Is there any reason why physicians who practised forty

years ago should not know as much of all the above remedies as these men educated during the crusade against blood-letting? Digitalis was much used long since; forty years ago I used tincture aconite, with good effect in many cases, as did others who practiced; and as for newer remedies does any one suppose that such men as Dr. John Atlee, Dr. Traill Green, Professor Gross and hosts of others—practitioners and close students—are ignorant of the reputed merits of these champion medicines?"—*Pacific Med. Journal.*

COD-LIVER OIL AS AN EXPECTORANT.

Dr. T. Lauder Brunton, in an article in the London *Lancet*, gives the following as his views on this subject:

One of the most powerful expectorants is simply a little warm food in the stomach, and in cases of chronic bronchitis, in which the patients complain of violent coughing immediately after rising, one of the best expectorants is a glass of warm milk, either with or without a little rum, and a biscuit or a piece of bread, about a quarter of an hour before they get up. A little warm beef tea will have a similar effect. After taking this for a short time they generally tell you that the sputum comes away much more easily than before, and they are not so much exhausted by it. But perhaps the remedy, *par excellence*, not only in cases of phthisis, but in chronic bronchitis, is cod-liver oil. Persons suffering from long-standing chronic bronchitis will often come to a hospital to beg for cod-liver oil, saying that it eases their cough far more than any cough mixture. Other oils or fats have not this power to the same extent as cod-liver oil. We cannot say positively what the reason of this may be, but I think there is no doubt about the fact. My own belief is that cod-liver oil is more easily assimilated than other oils, and not only so, but more easily transformed into tissues themselves. Whether it owes this property to its admixture with biliary substances, or to its chemical composition, we cannot say. Dr. Weir Mitchell quotes a remark made by an old nurse, that "some fats are fast, and some fats are fleeting, but cod-liver oil fat is soon wasted." By this she meant that there were differences in the kinds of fat accumulated under the subcutaneous tissues of men, just as there are differences in subcutaneous fats which accumulate in horses. The horse fed on grass soon gets thin by hard work, while the fat laid on when the horse is feeding on hay and corn is much more permanent. Persons fattened on cod-liver oil soon lose the fatness again, and this, I think, points to the power of ready transformation which the oil possesses. Supposing that it does possess this power, we can readily see how very advantageous it will be. In chronic bronchitis, and in catarrh and pneumonia, we have a rapid cell-growth, but want of development. The cells lining the respiratory cavities are produced in great numbers, but they do not grow as they ought to do. They remain, more or less, lymphoid cells, instead of developing into proper epithelium. They so rapidly form, and are thrown off so quickly, that they have not time to get proper nutriment, and if they are to grow properly we must supply them, not with an ordinary kind of nutriment, but with one which is much more rapidly absorbed, and is capable of much more rapid transformation in the cell itself than the usual one. This power is, I believe, possessed by cod-liver oil, and to its quality of nourishing the rapidly-formed cells in the lungs in cases of bronchitis and catarrhal pneumonia I believe its great curative power is owing.

SUBPERITONEAL UTERINE FIBROIDS.

CLINIC BY PROF. THOMAS, NEW YORK.

The patient who will now engage our attention, and who has been sent to us through the kindness of my friend, Dr. P. Brynberg Porter, is a native of Ireland, forty years of age, and unmarried. She states that she has been suffering for seven years, but has been able to work all the time. When asked the nature of her complaint, she replies, "I am all pains," and when requested to designate the special seat of the pain, she says that it comes "all around the lower part of the stomach and down the legs. She furthermore says that her "stomach often swells up," and that she sometimes has headache. She is regular in her monthly periods, but says that she suffers very much at such times, the pain coming on almost a week before the flow makes its appearance. When it is added that she suffers sometimes from backache, and occasionally has a slight leucorrhœa, you have the complete history of the case as elicited from the patient herself.

You will notice that there are really very few important symptoms indeed. There is a good deal of pelvic pain, certainly, and some dysmenorrhœa, but that is about all. She has, however, a certain uterine disorder in an unusually marked form. Under the circumstances, I think it has been the greatest blessing in the world to her that she has been obliged to work for her living; for if she had been a wealthy lady, with nothing to think about except her own ailments, I can hardly doubt that she would have altogether succumbed before this.

Now let me describe to you and roughly indicate on the black-board the condition of affairs that I discovered on making an examination in this case. When I carried my finger up into the vagina I found a nulliparous uterus, rather low down in the pelvis, and with a round, hard growth on

its anterior surface. On resorting to conjoined manipulation, which could be employed with remarkable facility in this case, on account of the laxity of the abdominal walls, I discovered another hard mass, as large as a small cocoa-nut, situated behind the uterus, while beneath it could be felt two other similar growths. Neither of the ovaries could be detected, and the fact that all these growths moved with the uterus when it was rocked from side to side, or forward and backward, by means of the sound, showed that they were without doubt all outgrowths of that organ. The uterus is, then, the centre of at least four solid tumors, and the question now arises, What are they? There can be but one answer to this, and that is that they are uterine fibroids, although very different in character from the fibroids we frequently meet with. They can, indeed, be nothing else. If they were phlegmons they would be fixed immovably in the pelvis. They cannot be ovarian tumors, on account of their position, to say nothing of their characteristics; and if they were malignant in character other symptoms would be present, and the patient's general health would be completely broken down. Indeed, it would have been a miracle if the patient were alive at all at the end of seven years. Finally, not to go into the process of exclusion more at length, it is impossible that they should be fæcal accumulations.

I wish to call your attention particularly to the insignificance of the symptoms here, where there is such a very marked abnormal condition in the pelvis, for the reason that I know of no cases which are so apt to entice the young practitioner into giving an erroneous opinion, especially as regards prognosis, as those like the one now before us. When he finds, on making a physical exploration, such a state of affairs as we have seen to exist here, he thinks that he has made a diagnosis of the utmost importance, and, led by his imagination to suppose that the worst results must inevitably ensue, he makes a dreadful prognosis. Every word that he tells the patient, however, is contradicted by the subsequent history of the case, and ten years afterward it may be that he will have it thrown in his teeth that he made this great blunder in regard to it. The inexperienced gynæcologist can hardly realize that such a state of affairs can exist in the pelvis without producing the most serious consequences, and, therefore, I want to forewarn you especially on this point.

Klaub, in his work on the Pathology of the Sexual Organs, the deductions in which are founded entirely on autopsies and microscopical examinations, has shown the fibroids of larger or smaller size (many of them, of course, quite minute) exist in nearly forty per cent. of all Anglo-Saxon women who have reached the age of forty. The remarkable prevalence of fibroids among negro women is notorious, and in my experience it is quite exceptional to find one of them in whom one or more fibroids cannot be detected. Some years ago I had the opportunity of being present at the autopsy of a negress who died of inflammation of the lungs, and it is an actual fact that no less than thirty-five fibroids, of all sizes, were found on her person. The largest was about the size of my head, and the next as large as a cocoa nut. Thousands of women who are affected with fibroids are in happy ignorance that they have a *tumor*, and in this connection I would offer the following piece of advice to you: When in any case you have made the diagnosis of fibroids, do not inform the patient of the fact unless you are forced to do so; because the very name of tumor is a kind of shibboleth to most women, and it will probably have a bad moral effect upon her. This should be observed as a general rule, although cases occasionally occur in which it is best to make the diagnosis known. It may be objected to the rule that there are some instances in which if we tell the patient that there is nothing serious the matter the future course of the case will not be in accordance with our predictions; but these are very rare exceptions indeed, and it is always possible for us to exonerate ourselves from blame by stating that the case is an exceptional one.

It is an important point in connection with the present case that the patient is approaching the menopause, after which she is scarcely likely to have any trouble whatever. As far as I am able to make out, there is every prospect of her living to a good old age, and if, when she had died at the age of ninety, for instance, an autopsy should be made, nothing abnormal would be detected about the pelvic organs except a considerable number of cretaceous particles embedded in some hard, fibrous masses of comparatively small size, the remains of the extensive growths which now surround the uterus.

But it may be asked, Is there nothing that we ought to do for this woman? Unquestionably there is something that can be done for her. The very fact of the existence of these fibroids shows that the patient's system is below par, to borrow a commercial expression. There are exceedingly few persons, as you know, who can be said to be in perfect health, and in this instance the presence of the fibroids is the evidence that something is wrong. I would, therefore, recommend a sufficient amount of exercise, a nutritious diet, and careful attention to all the emunctories of the body. I would surround the patient with the best hygienic conditions possible in her case, and, in short, would endeavor to get her system in the same condition that I would that of an individual in the first stage of pulmonary tuberculosis. She is not losing too much blood at her menstrual periods, and some efficient tonic is all the medication that she seems at present to require. It should be the physician's

endeavor to cheer the patient up as much as possible in such a case as this. Such women, when they find that they have fibroid tumors, are very apt to imagine the most terrible evils, and you will find that they are always asking if there is any danger of a tendency to cancer in their case. In regard to this point I may say that I never heard of but one instance of fibroid in which carcinoma occurred, and that was not very well authenticated. It is a remarkable fact that negro women never have cancer of the uterus, and yet, as I have mentioned, they almost invariably have uterine fibroids. Some time ago there was a discussion in the journals on the subject of uterine cancer in the negress, and a distinguished medical professor of Charleston, S.C., a gentlemen of immense experience in diseases of women of the African race, then stated that he had never seen a single instance of it. As another point of interest here I may mention that although I have had the opportunity of examining a vast number of cases of ovarian cyst, I have never yet met with a single instance of it in the negress.—*Boston Med. Journal.*

THE TREATMENT OF PRURITUS VULVÆ.—In a clinical lecture on the subject of vulvar pruritus, part of which we give above, Dr. Wiltshire (*Brit. Med. Jour.*, vol. i., 1881, p. 328) says that the first thing is to find, if possible, the cause. Extreme cleanliness must be enjoined. Demulcent washes are better than soap, unless carbolic or coal-tar soap be used; and usually even these are inadmissible. Almond meal, strong bran-water, decoction of rice, marsh-mallow, slippery elm, or fine oatmeal are suitable, especially the first, which, if pure, yields during use a marked odor of hydrocyanic acid and appears to soothe materially. When the pruritus is due to animal parasites, ointment of white precipitate, sulphur, or stavesacre speedily cures by destroying the insects and their ova. If nits persist about the public hairs, a lotion containing bichloride of mercury and acetic acid will dissolve them. Ascarides are destroyed by a carbolic lotion (1 to 60): general treatment, however, should be used, as iron, quinine, cod-liver oil, together with enemata of hamamelis, lime-water, iron, etc.

The vegetable parasites are treated by washes of borax, boracic acid, sulphurous acid, etc. Parasiticide lotions are certainly the most useful in the majority of cases, which point towards vegetable organisms as the commonest cause of the pruritus. The borax lotion should be of the strength of a drachm to five ounces of warm water, or stronger. Hydrocyanic acid, say ʒj of the dilute acid to water ʒx, or morphia (2 grs.), atropia (½ gr.), aconitia (½ gr.), or veratria (½ gr.) to the same amount. Infusion of tobacco (half an ounce to the pint) alone relieves some cases, and forms a good vehicle for borax or boracic acid. It is not well to use glycerin with the borax, as a rule, as it is apt, owing to its affinity for water, to aggravate the irritation. Strong solution of poppy is a good vehicle for borax. Chloral frequently does not suit. Ice suits some, very hot water others. In some cases ether spray might be tried. Ointments, if used, should be of non-rancid fats or cosmoline. Two drachms of iodine (tincture?) in two ounces of elder-flower water sometimes answers. Electricity may afford relief in neurosal cases. Probably faradism would be the preferable form.

In simple vulvitis, borax or carbolic-acid lotions relieve. An ointment of calomel or bismuth is also good. Malignant affections of the parts call for ablation, but where this is not practicable, sedative applications (conium, opium, belladonna) alone are often all that we can employ.

Of course urethral caruncles, urethritis, vaginitis, etc., should receive thorough treatment. When there is congestion with loading of the portal circulation, a mercurial and saline purge is helpful. When eczema with fissure is present, a poultice made of the clot formed by adding two drachms of lead-water to ten ounces of new milk is most useful. Diabetes must of course be combated, and frequent ablutions with borax washes form a good local treatment. In wakefulness from diabetic pruritus, codeia in one-grain doses in pill is often useful. The bromides are also useful.

Pregnant women often suffer terribly. When *oïdium albicans* is present, sulphurous acid gives relief. A tablespoonful should be freshly mixed with half a pint of warm water, barley-water, or almond emulsion for each application. Chloroform locally, in liniment, ointment, lotion, or vapor, answers well occasionally; bichloride of mercury, gr. i-v, ad ʒviij mist. amygdalæ, gives relief in some cases. It should not be used when there is abrasion. Section of the pudic nerve has been suggested in desperate cases, but has never been practised.—*Med. Times.*

IRON HYPODERMICALLY IN CHLOROSIS.—Dr. J. M. Da Costa in a lecture on chlorosis, reported in the N. Y. *Med. Gazette*, says, in speaking of a patient whom he is showing to the class: "Her rapid improvement is altogether due, I think, to a new remedy which I am employing in a very novel manner. I refer to the rapid introduction of iron into the girl's system by means of the hypodermic syringe." Heretofore it has been attempted to introduce iron by this means into the system, but all preparations have proved too irritating. Dialyzed iron is neutral and non-irritating, and is followed neither by costiveness nor disordered digestion. Dr. Da Costa used the iron diluted at first, but later pure in the dose of fifteen minims daily. This was finally increased to thirty minims, and the patient showed wonderful improvement, the venous murmurs disappearing, the digestion

becoming good, and the menstrual flow which had been absent for several months appearing regularly again. Dr. Da Costa thinks that the hypodermic use of iron should be retried in pernicious anæmia, the cause of its failure before being the great disturbances which have attended its use.—*Western Lancet.*

FOR ACUTE CATARRH.—Dr. T. F. Houston recommends for fresh cold in the head, accompanied with obstruction of the nasal passages :

℞ Carbolic acid.....	ʒj ;	4.00 fl. Gm.
Absolute alcohol..	ʒij ;	8.00 "
Caustic sol. of ammonia	ʒj ;	4.00 "
Distilled water.....	ʒiij ;	12.00 "

Mix. Make a cone of writing paper ; put a small piece of cotton in it ; drop on the cotton ten drops of the mixture, and inhale until all is evaporated. Repeat this every two hours until relieved.—*Southern Med. Record.*

NIGHT SWEATS.—The following prescription, given by Dr. Farquharson of London, is highly recommended in the treatment of night-sweats. It is also very useful in some forms of summer diarrhœa and as a prophylactic against painter's colic :

℞ Acidi sulphurici	ʒijss
Tinct. opii.....	ʒj
Syrupi aurantii.....	ʒj
Aquæ, ad	ʒviij—M.

Sig. Two tablespoonfuls three times a day.

TREATMENT IN CASES OF EXCESSIVE LOCHIAL DISCHARGES.—Dr. Hugh Miller, in a clinical lecture delivered at Glasgow, recommends the following prescription in cases in which there is an excessive discharge, accompanied by a relaxed condition of the uterus. He administers one drachm doses of liquid extract of ergot repeated every three or four hours, and

℞ Quiniæ sulph.	½ drachm.
Acidi hydrobrom.	6 drachms.
Aquæ ad.....	2 ounces.

Dose, one drachm in aq. ter. in die.

By this method large doses of quinia may be given without causing headache. In septic cases Dr. Miller advises the employment of sulphocarbolate of potash, in the form of powders, in doses of ten to fifteen grains internally three times a day.

When the discharge is suspended, the treatment consists of turpentine stupes applied over the lower part of the abdomen, with the addition of warm moist cloths, or of sponges, pressed out of hot water, and applied to the external parts. In special cases, which requrie an antiseptic form of treatment, Dr. Miller makes use of a solution of thymol, one part to five hundred parts of water, or, better, three grains of thymol to an ounce of eau de Cologne. This mixture, which has a pleasant and rather refreshing odor, is simply sprinkled over the napkins before they are used. In severe cases, with a putrid odor, a solution of permanganate of potash, injected with Higginson's syringe, provided with a vaginal portion, is made use of ; the injection of the fluid is continued till it returns unaltered in color. In all cases where the discharge is excessive, tincture of arnica is employed ; the tincture is used in the proportion of one teaspoonful to a cupful of water ; it acts as a mild astringent and disinfectant.—*Canada Med. Record.*

APOCYNUM CANNABINUM IN ANASARCA.—Bright's disease is becoming the fashionable disease to study, more especially since Charcot, who sets the fashion for many physicians in the United States, has been paying much attention to it ; these studies have been chiefly pathological and symptomatological. However, many independent observers have dealt with it from the therapeutical aspect, and Dr. J. S. Dabney (New Orleans *Medical and Surgical Journal*, February, 1881,) has found, he claims, that apocynum cannabinum is one of the best diuretics and hydrogogue cathartics that can be employed in the disease, as it causes not only marked diminution of the anasarca but also decrease of the albumen and casts. He claims for it certain advantages : First, a small quantity only, is necessary to produce diuresis, emesis or catharsis. Second, it has an agreeable aromatic taste Third, it has tonic properties. Fourth, its harmlessness, free emesis resulting on an overdose. While many of these claims seem rather strained, still there appears to be but little doubt that the remedy is of much value in ascites, anasarca and allied conditions.—*Chicago Medical Review.*

A CELLULOID NOSE.—A German medical journal states that a deutist in Bamberg recently modelled a celluloid nasal organ for a patient who had lost his nose in consequence of lupus. Rhinoplasty had been tried by Thiersch, but the absence of the nasal cartilages made the operation an unsuccessful one. The nasal passages were kept open by the introduction of goose-quills, and the patient was in a distressing condition. A plaster-of-Paris model of the parts was first made, and then a wax nose fitted to the same. This was afterward worked in celluloid, and two little silver canulæ substituted for the goose-quills. By a hooklet the celluloid nose was attached to a pair of spectacles. This apparatus is cleaned twice daily, and occasions so little inconvenience that the patient does not even remove it at night.—*Boston Jour. Chemistry.*

HON. THOS. A. SCOTT, the rail[illegible] magnate, has given fifty thousand dollars to the University of Pennsylvania and the same amount to Jefferson Medical College.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

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TORONTO, JUNE 1, 1881.

THE ONTARIO MEDICAL COUNCIL.

As the time draws near for the annual meeting of the Council, the profession may be supposed to be interested in what is likely to be done. In our opinion the Council has already done a great deal of good in improving medical education, and no disinterested looker-on can truthfully say anything else. To expect everything to run year after year with absolute smoothness is to look for far too much; but the frictions and the troubles springing from them, are annually lessening sensibly, and the only thing to be done by the Council in dealing with what now appears to be causing a good deal of feeling, in connection with the recent examinations, is to consider the whole of the circumstances carefully and judicially, and having done so, to adopt such a course as is absolutely just and right to all parties concerned, and this is due most of all to the Council itself. It is very unfortunate that any trouble or difficulty whatever should have arisen this year. It could easily have been avoided without even a thought of censure, and we think it unfortunate that the Executive Committee did not see the way clear to take such action as would have prevented all the trouble which has arisen, and which we will endeavour to explain.

The very first rule of the Council's printed regulations, under the head of "Examinations," is as follows:—"No teacher in any school of medicine in Ontario can hold the position of examiner on the subjects upon which he lectures, or upon which he may have lectured within one year prior to the date of the examinations." This is a very wise regulation and imperatively required where students from different schools go up for examination, for it precludes, if carried out in the spirit, as well as in the letter, the possibility of any portion of these having the manifestly unfair advantage over others, of being examined in any subject by the person who has instructed them in it, and with whose mode of teaching, and also of questioning, they must necessarily, be perfectly familiar. The justice and necessity of this regulation are so apparent that it is needless to discuss it. The examiner in Surgical Anatomy was Dr. Sullivan, Prof. of Surgery in the Kingston Medical School In the Calendar of that school (page 9) is the following paragraph:—"These lectures (Dr. Sullivan's) embrace the principles and practice of Surgery and Surgical Anatomy,"—"all the chief operations will be performed upon the cadaver in presence of the class."

Seeing this plain and definite announcement, the Toronto students of both schools, respectfully petitioned the Executive Committee, directing attention to the above quoted regulation of the Council, and also to the above paragraph in the calendar of the Kingston school, and praying that Surgical Anatomy might be given to some other examiner. In this petition the students allege that not even a thought of disrespect towards Dr. Sullivan was cherished. His position as examiner in that particular subject was in evident conflict with the Council's printed rules, and the students say they merely pointed this out, using the right of petition—a right enjoyed by every British subject. The Executive Committee at once sought and obtained further information on the subject, by writing to the Kingston school and also from one of its senior members, who happened to be in Toronto during the Committee's session, which was to the effect that Dr. Sullivan lectured on surgery and not on surgical anatomy, and that the printed statement in the school calendar was a mistake. This explanation was accepted and no change was made, although everybody knows that a teacher of operative surgery must, as a matter of necessity, teach surgical anatomy, and especially such as was embodied in several of the questions propounded by the examiner. The students felt much aggrieved that their largely signed petition, should have been ignored, and Dr. Sullivan, too, appears, as we think very mistakenly, to have regarded the matter as a personal one, when in reality it was nothing of the kind.

When the examinations came on, the final men

as a body were well satisfied with everything but surgical anatomy, in which subject it so happened that every member of the examiner's class passed, while a large number of the Toronto students were rejected, although some of them made a high percentage in all the other branches.

This is exactly how the matter stands at present, and the circumstances are such as will call for the wisest action on the part of the Council—no hasty decision, but a most careful and dispassionate survey of the whole case is urgently needed. As "prevention is better than cure," we do hope that hereafter such care may be taken as will prevent the possibility of such a thing recurring.

Would it not greatly conduce to simplicity and lessen possible grounds of complaint in future, very much, to have all the examinations conducted in Toronto? This would work better than the present plan and be more worthy of such a body as the Council. If it be wise to hold examinations in two places simultaneously, why not hold them in four or six towns? The plan is neither dignified nor wise and we hope it may be given up. Would it not be a wise step also in the direction of preventing future trouble, to extend the regulation quoted above, so far as to prevent any teacher of anatomy examining upon anatomy, or surgical anatomy—or a teacher of surgery, upon surgery, surgical anatomy, or surgical pathology — or a teacher of medicine, upon medicine, or medical pathology? Further, would it not be wise to prevent any one who is a teacher in a medical school and who must therefore personally know some coming before him, from taking any part in the oral examinations?

We earnestly wish to see the Council becoming yearly more useful, and more popular with the profession; and wisely conducted, there is no reason why this should not be so. We confidently look for a calm, wise and satisfactory solution of present difficulties, and we hope that in future every possible precaution may be taken to avoid giving any just cause of complaint.

THE AMERICAN MEDICAL ASSOCIATION.

The recent meeting of the American Medical Association in Richmond, Va., under the presidency of Dr. Hodgen, of St. Louis, was in many respects a successful one. About five hundred delegates were present, among whom were some of the luminaries of the profession in America—Gross, Sims, Thomas, Emmett, Wood, Holmes, Da Costa, Stillè, Woodward, Sayre, &c., &c. The President delivered a sound and practical address, in which he spoke of the recent progress in perfecting the methods of operative surgery. He divided surgeons into two classes—the one bold, reckless and ambitious, seeking to perform every practicable operation; the other cautious and conservative, avoiding operations whenever it was possible. The first class was largely made up of young men burning to follow the example of some great master; the second was recruited largely from the first, after many and bitter lessons of disappointment, drawn from the experience of many *grave* disasters. He then proceeded to speak of some of the unnecessary and often dangerous surgical procedures too frequently resorted to by gynæcologists, such as division of the cervix uteri for flexures, and for the cure of lacerations of the cervix uteri, and condemned the adoption of exclusive specialties by physicians not well trained in general medicine.

The work of the sections, of which there were six, was kept well in hand, and many interesting papers were read and discussed after the close of the general session each day. The address on surgery was delivered by Dr. McGuire, of Richmond, chairman of the Section. His subject was the consideration of "Gun-shot wounds of the Abdomen," in which he advocated operative interference in penetrating wounds with intestinal injury, and the use of the drainage tube. In such cases he would enlarge the wound, or make an incision in the linea alba sufficient to allow a thorough inspection of the injured parts.

Dr. Wm. Pepper of Philadelphia, delivered the address in medicine, in which he devoted himself to the consideration of the great importance of local lesions, as forming the cause of many apparently obscure diseases, and dwelt on the present tendency to assume the existence of blood-poisoning. Such a theory, he thought, lead to the dependence on merely supporting and inactive treatment, instead of the pursuance of active therapeusis. Reference was also made by him to the importance of seeking for remedies possessing special antidotal power against contagious diseases, and alluded to the remarkable results recently observed

in the treatment of diphtheria by the use of large doses of bichloride of mercury. An interesting discussion followed the reading of the address.

The address on obstetrics and gynæcology was delivered by Dr. James R. Chadwick, of Boston, chairman of the Section, in which he reviewed the progress in the literature of this department from 1876 to 1881. He claimed for Americans a special pre-eminence in this particular field, and said that the practice of gynæcology had reached among them a stage far in advance of other nations.

In connection with the general business of the association may be mentioned the adoption of a resolution, setting forth the necessity of publishing a weekly journal similar to the *British Medical Journal*, instead of the tardy volume of transactions hitherto published, and a committee was appointed to report upon a plan for the publication of a journal, salary to be given the editor, and other important details.

A proposal introduced by Prof. Gross, to establish a Section on Dentistry, similar to that of the British Medical Association was according to the rules of the association laid over to the next annual meeting.

The question of admitting Homœopathic students to attendance upon lectures at regular schools, which has been before the association for the past two years, come up for final settlement, and was ably debated by Prof. Dunster in the affirmative and Prof. Davis of Chicago in the negative. A compromise was effected by the passing of a resolution permitting the attendance of Homœopathic students upon lectures; but prohibiting the teachers from signing any diplomas or certificates of proficiency, for any persons whom they have good reason to believe intend to practice any exclusive or irregular system of medicine.

The social side of the meeting was in keeping with the well known hospitality of the people of Richmond. Public receptions, private entertainments, lunches, dinners, excursions, operas, etc., were sufficiently numerous and attractive, almost to turn the attention of the strongest minded from the more sober business of the association.

Dr. J. J. Woodward, of Washington, was elected President for the ensuing year, and St. Paul, Minnesota, selected as the next place of meeting on the first Tuesday in June, 1882.

UNIVERSITY OF TRINITY COLLEGE TORONTO.

The annual special convocation of this University, for the conferring of degrees in medicine was held on the 11th ult., when the following gentlemen received their degrees. The proceedings were, as usual, enlivened by the characteristic songs of the students.

M.D. & C.M.:—H. Minshall, J. Wishart, A. B. Cook, R. Patterson, G. O'Reilly, J. A. Sinclair, J. E. Shaw, A. J. Geikie, J. S. Atkinson, W. McKay, K. Henderson, J. A. McKinnon.

M.B.:—W. A. Allen, G. S. Beck, J. Baugh, C. W. Belton, T. G. Brereton, L. Bentley, M. L. Cameron, J. Ferrier, C. M. Freeman, A. H. Ferguson, A. K. Kerr, F. S. Keele, L. J. Lennox, P. May, W. F. McLean, H. R. McGill, G. McLain, H. P. McCausland, J. R. Macdonald, H. A. Mickle, Thos. G. Phillips, W. F. Peters, R. Raikes, E. A. Spilsbury, J. Simpson, T. Sullivan, T. H. Stark, A. McC. Sloan, E. A. Stutt, J. C. Urquhart, T. Walker, F. E. Woolverton.

University Gold Medalist — W. F. Peters. Standing in the entire examination, including primary and final branches, 87 per cent.

University Silver Medalist — James Baugh. Standing in the entire examination, 83 per cent.

Certificates of Honour—W. F. Peters, James Baugh, J. C. Urquhart, A. H. Ferguson, J. A. Macdonald, T. G. Brereton, L. Bentley, G. McLain.

The Chancellor in a brief address congratulated the Dean and Faculty on the success which had attended the examinations, and also as to the character of the work required of the candidates. From the correspondence he had seen in the press he thought some of these gentlemen had passed through a severe examination. They were entering upon a high and honourable profession, and he was sure the recipients of the honours conferred upon them that day would uphold the probity and integrity of their calling. He would like, he said, to see the bonds drawn still closer between Trinity Medical School and Trinity University. He trusted that the important question of sanitary science would receive a great deal of attention from those who were about to enter upon the practice of medicine. Such could not fail to prove of incalculable advantage to their

fellow-citizens, and to the whole country. Civic bodies, as they all knew, were slow to move in that matter, and it should, he believed, be taken up by medical men, who could do much to prevent the evils arising from the neglect of simple sanitary rules.

TRINITY MEDICAL SCHOOL.

The annual conferring of Fellowship Diplomas and awarding of honours in this school took place on the 2nd ult. Dr. Geikie, Dean of the Faculty presided, supported by the Rev. Provost Whitaker Rev. John Langtry, and members of the Faculty.

FIRST YEAR'S EXAMINATION.—J. E. Jenner, T. H. Robinson, A. D. Lake, J. C. McCullough, E. H. Williams, E. M. Hoople, J. Whetham, G. Shoults, B. H. Scott, J. S. McCullough, A. G. Elliott, W. F. Dickson, J. A. Thompson. D. F. Rae, S. M. Dorland, P. N. Davey, R. Hislop, J. A. McMichael, C. E. Duncombe, W. F. Freeman and S. L'Amoreaux.

Passed in three of the subjects—F. W. Rundle. In two subjects R. A. Barber and J. Woodruff.

FIRST YEAR'S SCHOLARSHIP.—J. E. Jenner.—Presented by Prof. Sheard.

PRIMARY EXAMINATION.—W. H. Macdonald, T. Sullivan, E. R. Woods, J. J. O'Keefe, L. Backus, J. Urquhart, T. W. Duncombe, S. A. Metherell, H. H. Graham, J. Johnston, A. D. Smith, W. Bonnar, R. W. Belt, W. Natrass, F. W. Fairbairn, J. B. Gullen, R. M. Fairchild, J. D. Wilson, A. Cameron, A. C. Gaviller.

SECOND YEAR'S SCHOLARSHIP.—W. H. McDonald.—Presented by Prof. Kirkland. Certificates of Honour.—W. Bonnar, L. Backus, A. D. Smith, W. Natrass.—Presented by Prof. Grasett.

FELLOWSHIP DEGREE—FINAL.—W. A. Mearns, A. H. Ferguson, W. F. Peters, T. G. Brereton, J. C. Urquhart, E. D. Vandervoort, F E. Woolverton, J. J. O'Keefe, J. A. Macdonald, R. Raikes, J. Ferrier, H. H. Kerr, H. R. McGill, C. M. Freeman, G. McLain. Gold Medallist.—M. A. Mearns; 1st Silver Medallist.—A. H. Ferguson; 2nd do.—W. F. Peters.

CERTIFICATES OF HONOR.—W. A. Mearns, A. H. Ferguson, W. F. Peters, T. G. Brereton, J. C. Urquhart.—Presented by Prof. Temple. In presenting them with the honours they had so nobly won, he congratulated them on the very high standing in the final branches, their diligence and general good character, and wished them every success in after life.

The MEDALS were then presented to the successful candidates. The 1st and 2nd silver medal by Rev. Provost Whitaker, and Rev. J. Langtry, in the absence of Profs. Kennedy and Covernton, and the Gold Medal, the highest honor in the school, by Prof. Fulton, who spoke in terms of the highest praise of Mr. Mearns, the winner of the gold medal, saying that he had passed a most creditable and successful examination, his average in all subjects being 92 per cent. His papers were prepared with great care, every answer being clear and full, yet without a redundant word. Although it was quite true that those who took high honours in college did not always do best in the contest of actual life, yet he had no doubt from his knowledge of Mr. Mearns' college career that he would become a successful professional man.

The successful final candidates being called forward made the usual affirmation as read by the Secretary, Dr. J. Fraser, that they would do all in they power for those who came under their charge, that they would never divulge anything learned in visiting the sick in violation of the confidence reposed in them professionally, and that they would always guard the honour of the profession, and promote the iuterests of their *Alma Mater*.

Dr. Geikie then presented the diplomas, and in a few brief remarks said their names were enrolled on the College list with pleasure, and with confidence in their future. He called upon them to keep untarnished the name of the College which was entrusted to them. and not only so, but to reflect all possible credit upon it. He called upon the Provost, whom he was pleased and glad to see with them, though he regretted it might be for the last time, to say a few words to the students.

Provost Whitaker, addressing himself specially to those who were soon to go out to their active duties in the world, said he trusted their diligent study here would be but the beginning of a life-long study, for those who would be successful must be students after they had left college. He need hardly tell them how great an advantage they would gain from devoting themselves to amassing information outside the immediate scope of their own profession. He would remind them, however, of the great end for which all were sent into

the world—to benefit others. No walk of life offered better opportunities for this than the medical profession. It might seem like offering a low aim to say that doing good to others involved doing them no harm, but if this aim were kept steadily in view how much would the condition of all be improved. Some could look back over many years, yet could they think of any friend or acquaintance of whom they could say he had not in word or deed done them any harm whatever. As medical men, they would have to aid and advise those suffering from bodily complaints, yet must they always remember that they must refrain from every word or action which would spiritually or morally injure their patients. The medical profession had been honoured by many bright examples of men who, not only became distinguished for their scientific knowledge, but were known for the purity and earnestness of their lives. Among these was one whose name would long be remembered in this city. He alluded to Dr. Bovell. He trusted they would seek not mere profit, not mere professional eminence, but that they would endeavour to achieve the more lasting honours of being helpful to their fellow-men. He would be doing dishonour to this place were he to refrain from saying that they could not discharge their duty in this respect in any purpose or strength of their own, but must look to Him who was the giver of all good, and consecrate their lives to him by faithful earnest prayer.

VICTORIA COLLEGE CONVOCATION.

The following degrees were conferred at the recent convocation in this University at Cobourg:

M.D., C.M.—Toronto School of Medicine.—W. H. Aikins, W. C. Edmondson, F. Howitt, A. C. Jones, M. Wallace, G. S. Bingham, R. C. Tellor, A. Nicholson, L. M. Sweetman, W. Gunn, J. G. Mennie, R. M. Fisher, H. R. Elliott, S. A. Bosankro, A. G. Machell, G. Wilcock, W. J. Tracey, W. A. D. Montgomery, W. J. Charlton, G. W. Hahen, A. Chapman, J. C. Burt, J. MacBride, J. M. Cotton, J. Simpson, W. Gilpin, R. S. Frost, E. A. Nealon, H. Y. Baldwin, T. Chisholm, R. W. B. Smith, J. B. White.

Montreal School.—H. Legault, P. E. F. Pager, J. Asselin, A. Lynch, J. A. Soulard, E. Martin, T. Hamelin, J. A. Prieux, J. B. LeRoy, F. X. Perrault, C. A. Fortier, C. Fautaux, G. Huot, E. N. Fournier, E. Voisard, J. A. Desjardins, Thos. E d'Otet d'Orsonnens, Edmond Robillard, G. B. Smith, H. Watt, A. W. Campbell, R. W. B. Smith, J. B. White.

L.LD. (Hon.)—W. T. Aikins, M.D., President, Toronto School of Medicine, and D.. Thos. E. D'Odet D'Orsonnens, President, Montreal School of Medicine.

CHARLES V. BERRYMAN, M.A., M.D.

The death of Dr. Berryman, at his residence in Yorkville, on the 2nd ult., removes another of the landmarks in the medical history of the past. He was born in Penzance, Cornwall, England in 1830, and was consequently fifty-one years of age at the time of his death. He received early in life a liberal education, and was naturally possessed of more than ordinary intellectual abilities. He was an undergraduate of the University of Oxford, Eng., and was destined by his father for the church, but his tastes and inclinations pointed in another direction. For several years he acted as chief dispenser and apothecary in his brother's business, through which he acquired an intimate knowledge of drugs, and which was the means of fitting him in after life for the discharge of the duties of the Professorship of Materia Medica, which he for so many years held in Victoria College. His medical education was received chiefly in the medical department of Victoria College known as "Rolph's School," in which he graduated in 1857. After graduation he practiced his profession for a short time in Chatham, but soon after received the appointment of Professor of Materia Medica and Medical Jurisprudence in the school in which he was educated. This position he retained until the collapse of the school in 1875. He received the degree of M. A. (Hon.) in Victoria University in 1861. He also represented this University in the Ontario Medical Council from 1866 to 1880. He served for several years as Reeve of the Municipality of Yorkville, and for many years on the acting staff of the Toronto General Hospital. His earlier years in the profession gave great promise of future usefulness, but from an unfortunate weakness his later years were somewhat clouded. He was well known in Canada having occupied a prominent position for a period of upwards of twenty-five years. He leaves a wife and family to mourn his loss.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The following are the names of the successful candidates at the recent professional examinations in medicine.

PRIMARY.—W. A. Allan, E. Bedard, J. Baugh, J. C. Burt, R. W. Belt, W. Bonnar, R. Coulter, A. Cameron, G. W. Clendenan, M. K. Collver, R. Coughlan, G. H. Denike, G. C. Dowsley, W. F. Eastwood, J. A. Freel, A. C. Gaviller, R. W. Garrett, W. H. Johnson, C. E. Jarvis, J. Johnston, J. M. Jackson, W. J. Lepper, J. A. Meldrum, T. F. McMahon, H. P. McCausland, A. C. Panton, S. R. Rogers, W. J. Robinson, D. B. Rutherford, A. D. Smith, S. H. Snider, J. E. Shore, J. M. Stewart, R. R. Wallace.

THIRD YEAR.—J. F. Bell, G. S. Cleland, J. T. Duncan, D. W. Montgomery, D. Rose.

FINAL.—H. W. Aikins, F. R. Alexander, F. R. Berry, G. S. Bingham, P. Cameron, J. G. Clarke, J. H. Duncan, C. V. Emory, W. C. Edmondson, H. D. Fraser, W. L. Gray, W. J. Gibson, H. E. Heyd, A. C. Jones, J. Jamieson, G. E. Josephs, L. J. Lennox, W. A. Lavell, W. A. Mearns, A. G. Machell, E. A. McGannon, G. McLain, J. S. McGurn, E. Oldham, J. F. O'Shea, J. Robinson, T. W. Reynolds, D. H. Rogers, J. Simpson, L. M. Sweetnam, W. A. Snow, W. J. Tracy, T. F. Woolverton, J. Walker, E. S. Wilson, D. Wallace, G. C. Wagner.

ONTARIO MEDICAL ASSOCIATION.—We beg leave again to remind our readers of the meeting which takes place in Toronto on the 1st and 2nd of June. The meeting promises to be an interesting one, and the attendance will no doubt be large, as reduction of fares by all the railways and steamboat companies have been secured. The following papers have already been promised: Dr. Coburn, Oshawa, Case of Aneurism; Dr. Oldright, Toronto, Case of Hip Joint Disease of fifty-three years' standing, with osteophyte; also Disposal of Sewer Gases; Dr. Rosebrugh, Hamilton, Forward Displacement and Descent of Uterus, and description of new Anteflexion Pessary; Dr. Canniff, Toronto, Case of Obscure Cerebral Disease; Dr. Groves, Fergus, Suprapubic Lithotomy; Dr. Palmer, Toronto, Laryngeal Phthisis; Dr. Curry, Rockwood, The Science of Medicine and Common Sense; Dr. King, Toronto, Pernicious Anæmia with case; Dr. Powell, Edgar, Case of Congenital Epiphysial Separation of the upper ends of both Tibiæ with plaster casts and photograph; Dr. J. Stewart, Brucefield, Treatment of night sweats of Phthisis by Coto bark; Dr. Graham, Toronto, Therapeutical uses of Sapo Viridis; Dr. Yeomans, Mount Forest, Notes on a Case of Empyema; Dr. McKelcan of Hamilton will also read a paper—subject not named.

CANADA MEDICAL ASSOCIATION.—The President Dr. Canniff, and officers of the Association are making every effort to render the meeting in Halifax on the 3rd of August a successful one. Arrangements have been made with the Intercolonial Railway Company for return tickets at one and one-third fare, and it is confidently expected that similarly favourable arrangements will be obtained from the various steamboat companies. Those who purpose attending the meeting should notify the President or local secretaries in order that certificates may be furnished to enable them to obtain the reduction in fare. We regret very much to learn that Dr. David, the general Secretary, will in all probability be compelled through continuous ill-health to resign his office at the next meeting. He has long been connected with the Association as its general Secretary, and was most indefatigable in his endeavours to further its interests. Dr. A. H. Wright, of Toronto, will act as Secretary in the interim.

TORONTO UNIVERSITY EXAMINATIONS.—The following are the names of the successful candidates:—

FIRST YEAR—Meikle, T. D., McKenzie, A. F., Spence, S., Clerke, J. W., Johnston, J. Z., Bray, J., Richardson, W. A., Draper, J. S., Jacques, W., Stewart, R. L., Thompson, A. S. *Scholarships.*—1st. Spence, J.; 2nd. Clerke, J. W.

SECOND YEAR—Robinson, W. J., Doelson F. J., Meldrum, J. A., Clerke, H. S., Fletcher, W., Hansler, J. E. *Scholarships*—1st. Robinson, J. W.; 2nd. Doelson, F. J.

PRIMARY EXAMINATION.—Coulter, R., Cuthbertson, W., Frost, R. S., Freel, A. I., Harrison, B. D., Jackson, H. P., Lepper, W. J., Nasmith, A. D., Ray, J. W., Shore, J. E., Walmsley, P. C., Willmot, J. W.

THIRD YEAR.—Panton, A. C., Knill, E. J., McMahon, T. F., Hanbidge, W., Fletcher, W., Ferrier, J., Cleland, G. S., Wallace, R. R., Mont-

gomery, D. W., Duncan, J. T., Bell, J. F., Eastwood, W. F., Fisher, R. M., Lafferty, J., Woolverton, F. S., McMurrich, J. P., Milroy, T. N., Kent, F. D., Johnson, W. H. *Scholarships*—1st. Wallace, R. R.; 2nd. Duncan, J. T.

A few whose names do not appear have passed on certain subjects in their respective years.

M.B.—Aikins, H. W.; Aikins, W. H.; Beck, G.S.; Bentley, L.; Bingham, G. S.; Bosanko, S. A.; Burt, J. C.; Cotton, J. M.; Cotton, R.; Elliott, H. R.; Edmondson, W. C.; Ferguson, A. H.; Gunn, W.; Howitt, F. W.; Jones, A. C.; Kerr, H. K.; Machell, A. G.; May, P.; Mearns, W. A.; Meldrum, P. G.; McBride, J.; McCracken, C.L.; McTavish, D. A.; Montgomery, W. A. D.; Nicholson, M. A.; Sweetnam, L. W.; Tracey, W. J.; Vandervoort, E. D.; Wallace, N.; Witherspoon, W. L.

Gold Medal, and Starr Gold Medal—Duncan, J. H.

M.D.—Spencer, B.; Gardiner, J. H.; Murray, S. S.; Burton, W. H.

MEETING OF THE MEDICAL COUNCIL.—The regular annual meeting of the Ontario Medical Council will be held in this city, commencing on the 14th inst. The following new members have been elected, as referred to in our last issue, viz. :—Dr. Cranston, of Arnprior, as the representative of the Bathurst and Rideau Territorial Division, and Dr. Day, of Trenton, as the representative of the Quinte and Cataraqui Division. They are both good men.

BISHOP'S MEDICAL COLLEGE, MONTREAL.—The following gentlemen have passed the primary and final examinations respectively in this institution:—Final—M. D., C. M.—F. M. R. Spendlove, Gold Medalist; R. H. Wilson, final prize; W. De Moulpied and E. Quinones, first class honors; J. A. Rochette and W. C. McGillis, second class do.

Primary—F. M. R. Spendlove, E. Quinones, J. A. Rochette, W. C. McGillis, and C. S. Fenwick. Several others passed in certain branches.

CANADIANS ABROAD.—Dr. Thos. Kelly of McGill College, Montreal, and Dr. E. F. Hatton, of Trinity Medical College, Toronto, have successfully passed the examination for the diploma of the Royal College of Surgeon, Eng., and were admitted members on the 19th of April.

A WELL-DESERVED COMPLIMENT.—At the semi-annual meeting of the Board of Governors of the College of Physicians and Surgeons of the Province of Quebec, held in Montreal on the 11th inst., on the letter of resignation of Dr. A. H. David, one of the representatives of Bishop's College, being read to the Board, it was moved by Dr. Marsden, seconded by the Hon. Dr. Church, "That this Board has received with regret, the announcement of Dr. David's withdrawal, owing to ill-health, from this Board; that before accepting such resignation it desires to put upon record its high sense of the services rendered to the profession and this College in the long series of years during which Dr. David has been a member of the former, and an active worker in the latter. His thorough early and professional training, his large experience and active nature enabled him to bring great power to the consideration and discussion of all matters affecting the interests of the profession. In parting with him this College ventures to express the hope that the cause is only temporary, and that Dr. David may yet be spared many years to bring his large store of useful knowledge and ripe experience to the assistance of the profession and to forward the work of the College." The motion was unanimously adopted.

APPOINTMENTS.—At a meeting of the Faculty of Trinity Medical College, Toronto, held on the 7th ult., J. Fulton, M.D., M.R.C.S., Eng., L.R.C.P., London, editor of the CANADA LANCET, and Prof. of Physiology in the above school, was unanimously elected to the Chair of Surgery *vice* Dr. Bethune, resigned; and Charles Sheard, M.D., M.R.C.S., Eng., was appointed to the Chair of Physiology.

J. W. Leslie, M.D., Toronto, has been appointed Assistant Surgeon to the Queen's Own Rifles, *vice* Dr. Bethune, resigned; Dr. H. A. Higginson, has been appointed Assistant Surgeon to the Prescott Battalion of Infantry, *vice* Dr. Ewing, promoted; and Dr. H. E. Vaux has been appointed Assistant Surgeon to the Brockville Battalion of Infantry, *vice* Dr. Mostyn, deceased.

CORONERS.—H. B. Webster, M.D., of Kentville, and W. S. Woodworth, M.D., of Upper Canard, have been appointed Coroners for the County of Kings, N. S.

RESECTION OF THE PYLORUS.—Billroth has now performed this operation for carcinoma three times. The first patient recovered and is able to digest solid food; the second lived eight days and died of asthenia; the third died twelve hours after the operation, from collapse. Dr. Wolfler, assistant to Prof. Billroth, performed the fourth operation on the 8th April. On the seventh day after the operation the patient was going on well.

SUPERINTENDENTS OF LUNATIC ASYLUMS.—The annual meeting of the Association of Medical Superintendents of Asylums in the United States, and the Dominion of Canada, will be held at the Rossin House, Toronto, commencing on the 14th of June.

Dr. Reddy has resigned his position on the staff of the Montreal General Hospital.

Books and Pamphlets.

A PRACTICAL TREATISE ON THE MEDICAL AND SURGICAL USES OF ELECTRICITY, including Localized and General Faradization, Galvanization, Electrolysis and Galvanic Cautery. By George M. Beard, A.M., M.D., and A. D. Rockwell, A.M., M.D. Third Edition, revised by Dr. Rockwell. With nearly 200 Illustrations. New York, William Wood & Co. Toronto, Willing & Williamson.

This work is already well known to the profession in Canada as the most exhaustive work of the kind on the subject. It has taken its place as a standard authority on the subject of which it treats. The authors are well known specialists in this line, and those who wish to make themselves familiar with the medical and surgical uses of electricity should read this book. It is a work of 750 pages, octavo.

A TREATISE ON BRIGHT'S DISEASE AND DIABETES, with especial reference to Pathology and Therapeutics. By James Tyson, A.M., M.D., Prof. General Pathology and Morbid Anatomy, Univ. of Penn, etc., etc.; with illustrations, including a section on Retinitis in Bright's Disease, by William F. Norris, A.M., M.D., Clinical Prof. Ophthalmology, Univ. of Pennsylvania. Philadelphia, Lindsay & Blakiston. Toronto, Hart & Rawlinson.

The author of this work is well known to the profession in connection with the study of diseases of the kidney, and urinary analysis; and the work before us bears evidence of a careful and thorough investigation and elucidation of the subjects of which it treats. The various forms of Bright's disease are well considered, and much original and valuable matter will be found in the section on diabetes. Dr. Norris has also done ample justice to the chapter on retinitis. We commend the work to our confreres as a most reliable treatise on these important diseases.

A MANUAL OF THE PRACTICE OF MEDICINE, designed for the use of Students and the General Practitioner. By Henry C. Moir, M.D., New York. Price, $2.50.

We believe that works of this kind, carefully prepared and not too much compressed, fill a useful place in our literature; but we really think that the author of this little volume has carried his work of condensation a little too far, so much so that the work will fail to be of service, except to students who are cramming up for a final examination. To such it will be found of no inconsiderable service in refreshing the memory on the essential points to be remembered. It is a most difficult matter to successfully compress even the principles of the science of the practice of medicine into so small a manual. About 50 pages of the work are occupied by prescriptions, adapted to the treatment of the various diseases under consideration.

ANNUAL REPORT OF THE ASYLUM FOR INSANE, Kingston. By W. G. Metcalf, Medical Superintendent.

Births, Marriages and Deaths.

On the 11th ult., Hugh Robertson, M.D., Prof. of Anatomy Trinity Medical College, Toronto, to Eliza Jane, daughter of J. Reid, Esq., Osprey, Ont.

On the 5th ult., Simon Fitch, M.D., of Halifax, N. S., to Elizabeth J. Ackerman, of Portland, Me.

At Metaghan, N. S., on the 25th of April, J. G. B. Morrison, M.D., aged 62 years.

On the 7th ult., Dr. Marshall M. P. Dean, of Keene, Ont., suddenly, of heart disease.

On the 19th ult., Dr. Geo. P. De Grassi, of Toronto, aged 39 years.

On the 14th ult., Dr. Joseph P. Nash, Mayor of Picton, Ont.

WARNER & CO.'S PHOSPHORUS PILLS.

11.—PIL. PHOSPHORI CUM QUINIA ET DIGITAL. CO. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Quiniæ Sulph., ½ gr.; Pulv. Digitalis, ½ gr.; Pulv. Opii, ¼ gr.; Pulv. Ipecac., ¼ gr.

DOSE.—One or two pills may be taken three or four times daily, at meals.

THERAPEUTICS.—This combination is especially valuable in cases of consumption, accompanied daily with periodical febrile symptoms, quinine and digitalis exerting a specific action in reducing animal heat. Digitalis should, however, be prescribed only under the advice of a physician.

12.—PIL. PHOSPHORI CUM DIGITAL. CO. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Pulv. Digitalis, 1 gr.; Ext. Hyoscyami, 1 gr.

DOSE.—One pill may be taken three or four times in twenty-four hours.

THERAPEUTICS.—The effect of digitalis as a cardiac tonic renders it particularly applicable, in combination with phosphorus, in cases of overwork, attended with derangement of the heart's action. In excessive irritability of the nervous system, in *palpitation of the heart, valvular disease, aneurism, etc.*, it may be employed beneficially, while the diuretic action of digitalis renders it applicable to various forms of dropsy. The same caution in regard to the use of digitalis may be repeated here.

13.—PIL. PHOSPHORI CUM DIGITAL. ET FERRO. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Pulv. Digitalis, 1 gr.; Ferri Redacti, 1 gr.

DOSE.—One pill, to be taken three or four times a day, at meals.

THERAPEUTICS.—This combination may be employed in the cases referred to in the previous paragraph, especially when accompanied with anæmia.

14.—PIL. PHOSPHORI CUM CANNABE INDICA. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Ext. Cannibis Ind., ¼ gr.

DOSE.—One or two pills, to be taken twice or three times a day, at meals.

THERAPEUTICS.—The Indian Hemp is added as a calmative and soporific in cases in which morphia is inadmissible from idiosyncrasy or other cause, as well as for its aphrodisiac effect.

15.—PIL. PHOSPHORI CUM MORPHIA ET ZINCI VAL. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Morphiæ Sulph., 1-12 gr.: Zinc. Valer., 1 gr.

DOSE.—One pill may be taken twice or thrice daily, or two, at bedtime.

THERAPEUTICS.—Applicable in consumption attended with nervous irritability and annoying cough; in hysterical cough and neuralgia it may be given at the same time with *cod liver oil.*

16.—PIL. PHOSPHORI CUM ALOE ET NUC. VOM. [Warner & Co.]

℞ Phosphori, 1-50 gr.; Ext. Aloes Aquosæ' ½ gr.; Ext. Nucis Vomicæ, ¼ gr.

DOSE.—One may be given daily at or immediately after dinner.

THERAPEUTICS.—In *atonic dyspepsia, neuroses of the stomach, hypochondria* and *constipation*, this combination fulfils important indications.

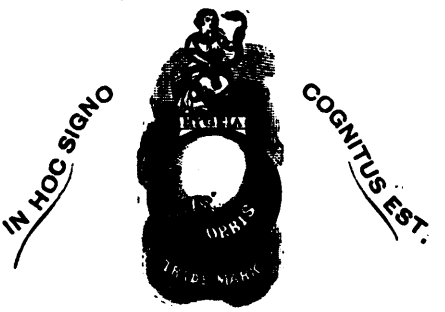
BE CAREFUL TO SPECIFY WARNER & CO. WHEN PRESCRIBING.

WARNER & CO.'S

SOLUBLE SUGAR-COATED

PHOSPHORUS PILLS.

Observe the following Trade Mark on each label as a guarantee of genuineness.



The method of preparing Phosphorus in pilular form has been discovered and brought to perfection by us, without the necessity of combining it with resin, which forms an insoluble compound. The element is in a perfect state of subdivision and incorporated with the excipient while in solution. The non-porous coating of sugar protects it thoroughly from oxidation, so that the pill is not impaired by age. It is the most pleasant and acceptable form for the administration of Phosphorus.

Specify WARNER & CO. when prescribing, and order in bottles of one hundred each when practicable, to avoid the substitution of cheaper and inferior brands.

PILLS SENT BY MAIL ON RECEIPT OF LIST PRICE.

WM. R. WARNER & CO., CHEMISTS, PHILADELPHIA.

Messrs. WM. R. WARNER & CO. NEW YORK, November 11, 1877.

GENTLEMEN.—The Phosphorus Pills submitted to me for chemical analysis and microscopic examination, afford only traces of Phosphoric Acid, and contain the one-twenty-fifth of a grain (gr. 1-25) of the element in each Pill, as expressed upon the label; they do not exhibit particles of undivided Phosphorus, the mass being perfectly homogeneous in composition, soft in consistence and thoroughly protected by the non-porous coating of sugar from the oxidizing influence of the air. Each pill is an example of what skill, care and elegant Pharmacy can do.—I regard them as a marvel of perfection.

Very respectfully, A. E. McLEAN,
Analytical Chemist and Microscopist,
(Late of Edinburgh, Scotland.) 40 and 42 Broadway, N. Y.

CENTENNIAL WORLD'S FAIR AWARD.

"The Sugar-Coated Pills of Wm. R. Warner & Co. are Soluble, Reliable and Unsurpassed in the perfection of Sugar-Coating, thorough composition and accurate subdivision."
"The pills of Phosphorus are worthy of special notice. The element is thoroughly diffused and subdivided, yet perfectly protected from oxidation."

Attest, *A. T. GOSHORN, Director-General.*
[SEAL] *J. L. CAMPBELL.* *J. R. HAWLEY, President.*

☞ *Complete list of W. R. Warner & Co.'s Phosphorus Pills mailed on application.*

HYPOPHOSPHITES

OF

LIME AND SODA

WITH

COD LIVER OIL.

This preparation represents in a convenient form one of the most efficient and popular remedies in cases of a **Pulmonary Character**, with tendency to Hemorrhage, **Loss of appetite, Cough** and especially when attended with Emaciation.

The **Hypophosphites** with **Cod Liver Oil**, may be given also with great advantage in **Anemia, Chlorosis**, to **Nursing Mothers**, and in all cases of **Nervous Exhaustion** and **General Debility.**

Since the first introduction of the "**Hypophosphites of Soda, Lime and Iron,**" separately or combined, in the treatment of the large class of wasting diseases, (of which consumption is the most prominent and familiar type). The confidence of the medical profession in these articles has steadily increased

Phosphorus itself, which theoretically is strongly indicated in these cases, as a stimulant to the nervous system, and thus indirectly as a promoter of nutrition, cannot be so disguised or sheathed with demulcents as to be tolerated by the stomachs of many patients who would otherwise be greatly benefitted by its use. It must be chemically combined, and introduced into the organism in such a form as to favor its absorption and assimilation. Precisely this is done when **Hypophosphorus** acid, with one or more of the alkaline bases above mentioned, is properly prepared. The stomach receives it without irritation; it is taken up along with other food and carried into the economy, to be there resolved, and to supply the waste which often constitutes the first link in a chain of morbid actions.

It is in cases of pulmonary disease, with emaciation, cough, debility, hemorrhage and the whole train of too-well known symptoms, that the benefits of this article are most manifest. In many other wasting disorders, both in children and adults, the same indications are presented.

The advantages derived from **Cod Liver Oil** in the same class of affections need hardly be dwelt upon. We use a strictly correct expression when we say that the tissues are "burning up" they are really being consumed to maintain the temperature—often much above the normal standard—of the body. **Cod Liver Oil** takes their place as a fuel. By its introduction into the economy, and its consumption there, the living elements of the organism are enabled to retain their structure, and restored to their proper nutrition and functions.

By combining the **Hypophosphites** with **Cod Liver Oil** the latter in a finely divided state, by our peculiar process of emulsifying, and so disguised as to be inoffensive to even a delicate stomach, we are enabled to afford at the same time a stimulant to the nervous system, and a promoter of nutrition, as well as a fuel which takes the place of the wasting tissues.

It would be easy to dwell at much greater length upon the claims of this valuable combination on the favor of the medical profession and the public; but we feel assured that the foregoing brief statement, founded upon physiological and chemical facts, and borne out by the constantly increasing testimony of experience, will commend itself to those who give it their unbiased consideration.

We would only say further, that this preparation, like every other bearing our name, is composed of the very best materials, and made up with the utmost care. We are, therefore confident that it will fully maintain our assertions in regard to it.

ADULT DOSE—One half to a tablespoonful three times a day. An hour before or after meals is the best time to take it.

Children may take one to two teaspoonsfull as often. For Infants decrease in proportion to age.

Each tablespoonful contains six grains of chemically pure **Hypophosphite Salts**, manufactured expressly for this preparation, with scrupulous care and combined at once to avoid any chemical change.

SHAKE THE BOTTLE WELL BEFORE USING.

JOHN WYETH & BROTHER,

CHEMISTS,

PHILADELPHIA.

TO PHYSICIANS AND DRUGGISTS.

Five Awards from the United States Centennial Commission.

We have for many years claimed superiority for the MEDICAL PREPARATIONS OF OUR MANUFACTURE, and the articles we control, over similar pharmaceutical products made by other houses.

It gives us great pleasure to announce to physicians and druggists, that the United States Centennial Commission, after CRITICAL ANALYSIS, EXAMINATION and comparison, have endorsed our claim to their "superiority," and have given us three awards, as follows:

(WE WILL GIVE FULL TEXT OF AWARDS AS SOON AS RECEIVED.)

For our PHARMACEUTICAL PREPARATIONS.—embracing ELIXIRS, SYRUPS, MEDICINAL WINES, Saccharated Pepsin, etc., etc. "These Elixirs, etc., etc., seem to be a REAL ADVANCE in pharmacy, as they represent strength and virtues with comparatively much less disagreeable taste than the same ingredients, as usually made and extemporaneously prepared."

For our Compressed Pills.—"In our judgment, these Compressed Pills are, for above reasons, viz.: smaller size, absence of excipients and speedy solubility, superior to any other similar pills manufactured."

For our Papoma (Food for Infants and Invalids).—"The most nutritious, most easily digested and most strengthening food," etc.

For our Suppositories.—"For precision in admixture of drug, regularity in size of cone, and skill in incorporating the various ingredients, is worthy of special mention."

Two awards were also given to the manufacturers of the preparations for which we have the sole agency, and have met with such deserved favor from physicians, viz.: to Marvin Bros. & Bartlett, for their Pure Medicinal Cod Liver Oil.—"For freedom from disagreeable taste and odor, careful preparation, and representing in every respect the elements required in Cod Liver Oil."

To Ed. Loeflund, Stuttgart, Germany, for his Concentrated Extract of Malt.—"Its great richness in Sugar of Malt, complete absence of dregs and products of fermentation, such as alcohol and carbonic acid, and agreeable and pleasant taste."

MEDICINAL FLUID EXTRACTS

In compliance with a long-existing demand, we have made arrangements for the manufacture of a full line of

FLUID EXTRACTS,

which we are now prepared to furnish to the trade. Our list will include not only the officinal articles of this kind, but a number of others, not mentioned in the Pharmacopœia, whose recognized therapeutical value induces many physicians to employ them in their practice.

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

In order to fulfil this promise, we have secured supplies of crude material of the very best quality, obtained at the right season, from plants properly grown. This is of the highest importance in regard to plants indigenous to the United States. As to the narcotics, Hyoscyamus, Belladonna, Conium, Digitalis, Aconite, etc., we have entered into an agreement with one of the most reliable cultivators of medicinal plants in England, by which we secure an article in each case far superior to the ordinary commercial leaves and roots.

Our appliances for manufacture have been constructed without regard to first cost, this outlay being justified by the extent of our business. For completeness and economy of working, these arrangements cannot be excelled; and by means of them, with our experience in this branch of pharmacy, we are enabled to prepare fluid extracts of unsurpassed purity and reliable strength, at the most reasonable rates.

Our process of manufacture is in accordance with the most advanced science in regard to the properties of each drug. The crude material, selected with the before-mentioned precaution, is treated with the greatest care, with such menstrua as will secure all the available active principals, to the exclusion of inert matters.

We have, therefore, no hesitation in claiming for these preparations superiority to all others in the market in purity, activity and beauty; and feel confident that this claim will be sustained by the judgment of any unbiased expert.

The strength of our officinal fluid extract is always that prescribed in the United States Pharmacopœia. That of the unofficinal is uniformly one troy ounce of the drug to one fluid ounce of the extract.

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

BELLEVUE HOSPITAL MEDICAL COLLEGE.

CITY OF NEW YORK.

SESSIONS OF 1881-82.

At and after the Session of 1881-82, the College will return to its former requirements as regards fees and graduation; viz., those in force before the session of 1880-81.

THE COLLEGIATE YEAR in this Institution embraces the Regular Winter Session and a Spring Session.

THE REGULAR SESSION will begin on Wednesday, September 21, 1881, and end about the middle of March, 1882. During this Session, in addition to four didactic lectures on every weekday except Saturday, two or three hours are daily allotted to clinical instruction. Attendance upon two courses of lectures is required for graduation.

THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins about the middle of March and continues until the middle of June. During this Session, daily recitations in all the departments are held by a corps of Examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

Faculty.

ISAAC E. TAYLOR, M.D., Emeritus Professor of Obstetrics and diseases of Women and Children, and President of the Faculty.
JAMES R. WOOD, M.D., LL.D., Emeritus Professor of Surgery.
FORDYCE BARKER, M.D., LL.D., Professor of Clinical Midwifery and Diseases of Women.
BENJAMIN W. McCREADY, M.D., Emeritus Professor of Materia Medica and Therapeutics, and Prof. of Clinical Medicine.
AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine, and Clinical Medicine.
W. H. VAN BUREN, M.D., LL.D., Prof. of Principles and Practice of Surgery, Diseases of Genito-Urinary System, and Clinical Surgery.
LEWIS A. SAYRE, M.D., Professor of Orthopœdic Surgery and Clinical Surgery.
ALEXANDER B. MOTT, M.D., Professor of Clinical and Operative Surgery.
WILLIAM T. LUSK, M.D., Professor of Obstetrics and Diseases of Women and Children, and Clinical Midwifery.
A. A. SMITH, M.D., Professor of Materia Medica and Therapeutics, and Clinical Medicine.
AUSTIN FLINT, JR., M.D., Professor of Physiology and Physiological Anatomy, and Secretary of the Faculty.
JOSEPH D. BRYANT, M.D., Professor of General, Descriptive and Surgical Anatomy.
R. OGDEN DOREMUS, M.D., LL.D., Professor of Chemistry and Toxicology.
EDWARD G. JANEWAY, M.D., Prof. of Pathological Anatomy and Histology, Diseases of the Nervous System, and Clin. Medicine.

PROFESSORS OF SPECIAL DEPARTMENTS, ETC.

HENRY D. NOYES, M.D., Professor of Ophthalmology and Otology.
J. LEWIS SMITH, M.D., Clinical Professor of Diseases of Children.
EDWARD L. KEYES, M.D., Professor of Dermatology, and Adjunct to the Chair of Principles of Surgery.
JOHN P. GRAY, M.D., LL.D., Professor of Psychological Medicine and Medical Jurisprudence.
ERSKINE MASON, M.D., Clinical Professor of Surgery.
JOSEPH W. HOWE, M.D., Clinical Professor of Surgery.
LEROY MILTON YALE, M.D., Lecturer Adjunct on Orthopœdic Surgery.
BEVERLY ROBINSON, M.D., Lecturer on Clinical Medicine.
FRANK H. BOSWORTH, M.D., Lecturer on Diseases of the Throat.
CHARLES A. DOREMUS, M.D., PH. D., Lecturer on Practical Chemistry and Toxicology, and Adjunct to the Chair of Chemistry and Toxicology.
FREDERICK S. DENNIS, M.D., M.R.C.S., WILLIAM H. WELCH, M.D., } Demonstrators of Anatomy.

FACULTY FOR THE SPRING SESSION.

FREDERICK A. CASTLE, M.D., Lecturer on Pharmacology.
WILLIAM H. WELCH, M.D., Lecturer on Pathological Histology.
CHARLES A. DOREMUS, M.D., PH.D., Lecturer on Animal Chemistry.
T. HERRING BURCHARD, M.D., Lecturer on Surgical Emergencies.
ANDREW R. ROBINSON, M.D., L.R.C.P. & S., Edin., Lecturer on Normal Histology.
CHARLES S. BULL, M.D., Lecturer on Ophthalmology and Otology.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures, Clinical and Didactic	140 00
Fees for Students who have attended two full courses at other Medical Colleges, and for Graduates of less than three years' standing of other Medical Colleges	70 00
Matriculation Fee	5 00
Dissection Fee (including material for dissection)	10 00
Graduation Fee	30 00

No fees for Lectures are required of Graduates of three years' standing, or of third-course Students who have attended their second course at the Bellevue Hospital Medical College.

FEES FOR THE SPRING SESSION.

Matriculation (Ticket valid for the following Winter)	$ 5 00
Recitations, Clinics, and Lectures	35 00
Dissection (Ticket valid for the following Winter)	10 00

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

PROF. AUSTIN FLINT, JR.,
SECRETARY BELLEVUE HOSPITAL MEDICAL COLLEGE.

tains may be absorbed by the system. With the lean of animal food this change is effected in the stomach by the action of the gastric juice, but when this juice is deficient in quality, or quantity, it is incapable of affecting the centre of the morsels of food presented to it, and they in this unprepared state leave the stomach, bearing with them the causes of dyspepsia and its train of concomitant evils.

The theory of [illegible] has however solved the hitherto insurmountable difficulty, and furnishes all the desirable results of meat diet to those who are otherwise unable to digest animal food. In its manufacture the albumen and fibrine (or rather the entire lean of beef) is by a special process dessicated and mechanically pulverised to such a minute degree of subdivision that it is almost imperceptible in water. By this means the entire surface of every microscopic atom is presented to the direct action of the solvent juice, which, acting chemically and in combination with the digestive properties of meat essence, at once prepares the food for assimilation, and with the least possible expenditure of vital force, furnishes to the blood all that is necessary to impart tone to the nerves and substantial food for brain, bone and muscle.

CHEMICAL ANALYSIS.

By WM. HARKNESS, F.C.S., L., Analytical Chemist to the British Government.—Laboratory, Somerset House. London, England.—I have made a very careful chemical analysis and microscopical examination of Johnston's Fluid Beef, and find it to contain in every 100 parts:

Albumen and Gelatine - - -	21·81	Ash or Mineral Matter -	14·57
Fibrine in a readily soluble form -	37·48 } Flesh-forming Food.	Moisture - - - -	26·14

The mineral matter is rich in phosphates. The microscopical examination shows the Fluid Beef to contain good, sound beef, ground to a very fine powder. There is not the slightest trace of fungus, spores, or any other organism which would tend to produce decomposition. I consider this a most valuable preparation, combining as it does, a concentrated extract of beef with the solid beef itself, the latter being in a form easily digested. It is also free from the burnt flavor so much objected to in ordinary extracts of meat. IT IS ONE OF THE MOST PERFECT FOODS I HAVE EVER EXAMINED.

By Dr. J. BAKER EDWARDS, Ph. D., S.C., L.; F.C.S., Professor of Chemistry and Inland Revenue Food Analyst, Montreal—I, hereby certify that I have made a careful analysis of the proximate constituents of "Johnston's Fluid Beef," and find it to contain:

Salts of Flesh and Moisture, Beef Tea Food -	33·70	Fibrin or Meat Food - - -	35·50
Albumen or Egg Food - - - - -	9·50	Mineral or Bone Food - - -	1·70

I consider this an invaluable preparation, containing as it does, in addition to the well-known Liebig's Extract—which has been aptly named "Wine of Meat," the nutritive value of EGG diet and MEAT diet in a form readily soluble in the gastric juice. It is therefore a more complete and perfect food for children and invalids than Meat Extract alone; and moreover, having inspected the process of manufacture, I am satisfied that it may be relied upon as a uniform and very superior preparation.

By STEVENSON MACADAM, Ph. D., F.R.S.C., F.C.S., Lecturer on Chemistry. Analytical Laboratory, Surgeons' Hall, Edinburgh, 6th March, 1873. I have made a careful chemical analysis of a sample of Beef Powder, manufactured by J. L. Johnston, and find it contains as follows:

Albuminous or Flesh Matter -	63·38	Moisture - - - - - -	13·23
Ash or Saline Matter - - - -	10·62	Oils and Fatty Matter - - -	12·77

This is a highly nutritious article of diet, contains all the elements of Flesh Food in a concentrated form, is very palatable and easily digested, and is eminently suited for dietetic purposes, especially for invalids.

Extract from "Papers on Health," by Professor KIRK, Edinburgh.—"Suppose we take such a substance as Johnston's Fluid Beef, which we feel sure must become a most popular food for invalids. This readily passes into the circulation, and is changed into the actual living substances that make up the body of man. It does not cause accumulation of fat, for instance. Those who, to our knowledge, have been strengthened by its use, have got firm in muscle and nerve, but less stout than before they used it.

Dr. NICHOLS, 631 Spruce Street, Philadelphia, says:—"I have used it in a case of a child suffering from extreme debility after an attack of cholera infantum, the child began to improve immediately, and is still taking the Fluid Beef. I find it very palatable and nourishing, easily digested, and am satisfied that the contained fibrine is perfectly assimilated by the tissues of the body, as shown by a great gain of strength, &c. I feel assured it will meet with general favor."

SIR THOMAS WATSON, QUEEN VICTORIA'S PHYSICIAN,

PRESCRIBES JOHNSTON'S FLUID BEEF.

Dr. NOLAN, of the Academy of Natural Sciences of Philadelphia, says:—"Johnston's Fluid Beef has given entire satisfaction."

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"The great trouble with most of our text-books on physiology, is that their authors, as a rule, have been at the same time investigators and, sometimes only in their own opinion, and sometimes also in that of others, discoverers as well, and with such there is the natural tendency to give undue prominence, both in place and space, to their own labors or theories. This fault cannot be laid at the door of Dr. Fulton; if he has any hobby or pet-ism, no hint thereof is to be found in his book, and he has evidently borne constantly in mind that he was writing to convey instruction, and not to advance his private opinion. His method is clear and logical. * * * In fact, the work, as a whole, answers more nearly than any book which we have met with, the desideratum of a well-digested text-book of physiology."—*Hospital Gazette, New York.*

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It is difficult in a text-book to preserve a due proportion between the more and the less important subjects, but this Dr. Fulton has fairly succeeded in accomplishing, and we consider the work to be a good introduction to the larger treatises and to contain enough to render any student who thoroughly masters its contents, a sound practitioner so far as practice is founded on a theoretical knowledge of physiology."—*London Lancet.*

[Prom the College and Clinical Record, Philadelphia, May, 1881.]

THE Relation of Pharmacy to Medicine.

NEW YORK, April 15th, 1881.

To The College and Clinical Record:

The relation of the drug trade to the medical profession is one of the questions of the day, and any new thing in reference to this subject is, therefore, of interest. Especially is this true during the present transition state; and, when a move in the direction of a higher stand upon the part of pharmacy is taken, it becomes of importance as well. I therefore take the liberty of sending you the following as a communication to your interesting journal, hoping that similar communications may be received by you from other pharmacists of like mind, and that the example thus set may be of influence in settling the much vexed question at issue.

I herewith enclose the business platform adopted by a firm of well known manufacturing pharmacists in defence of the position which they occupy in relation to the profession.

Very respectfully yours,
F. E. STEWART.

To The Medical Profession:

GENTLEMEN—We respectfully beg leave to call your attention to the following circular, which explains the relations which we occupy to the profession as manufacturers and dealers in pharmaceutical preparations:

Our business consists in the choice, preservation, preparation and combination of medicines. We are merchants, in that we buy and sell; manufacturers, in that we deal in our own productions. On a trade basis only do we present ourselves, and to the rules of trade do we conform.

Drugs are tools in the hands of the physician, as surgical instruments in the hands of the surgeon. The knowledge of knife making does not qualify for the use of the knife, neither can a knowledge of drugs, without a knowledge of disease, justify their use in the treatment of the sick. We do not, therefore, attempt to usurp the prerogatives of the physician by advertising to cure the sick, or by proclaiming ourselves original investigators in therapeutics.

We practice pharmacy, not on a professional but on a trade basis. For this reason we do not write works on pharmacy, or make known our trade secrets for the benefit of our competitors. We invent new processes and machinery, and exercise exclusive control over them, but we do not patent drugs, or combinations of drugs, for these we do not look upon as proper objects for protection by patent; neither do we patent forms of medicinal preparations, or seek to gain control of the same by secret formulæ. An exclusive right to the sale of a drug, or a combination of drugs, is injurious to trade, as it prevents legitimate competition, which is the life of trade. It is unfair to the consumer, as it enhances price without a just equivalent. It has a tendency to deteriorate quality, also, and it enables unscrupulous manufacturers to create an artificial demand by advertising fictitious values.

The only trade-mark which we possess is our name and reputation, and it is of value to us but to the extent that we make it so by business enterprise and integrity. The trade-mark system, as at present constituted, is no guarantee whatever as to the quality of manufacture, and therefore, not a protection to the profession and the public.

Our relations to the war waged at the present time upon "trade-mark pharmaceuticals," has been entirely under the leadership and direction of Dr. F. E. Stewart, of New York City, and, while Dr. Stewart has appeared as the champion of the medical profession and legitimate pharmacy, as well as in the interests of trade, our action has been taken from a trade basis purely.

New Drugs.—It has always been our desire to promote the advance of scientific progress, recognizing that trade, in every department, is directly dependent upon increase in knowledge. Though not original investigators in therapeutics ourselves, and being outside the province of trade, we do all in our power to favor therapeutical investigation. For this reason we take great pains to secure new drugs, and all information possible concerning them, for the purpose of presenting the same to the profession for scientific examination. From the great variety presented to our notice by trade, we select a few, which we are led to believe are of sufficient worth to justify our action from a therapeutical point of view, and after first submitting them to test, that we may determine more definitely their value before risking our capital, present them to the profession for trial; these trials we guarantee to publish, good, bad or indifferent, and if we have made an error in judgment in our selection of the drug, the loss is ours. If on the contrary, the drug prove to be a valuable one, we have added the scientific knowledge, and thus conferred a benefit upon humanity, the medical profession, and also upon the trade.

Literature.—Practical medicine is largely empirical, and is likely to remain so, at least until physiolygy and pathology throw greater light upon the action of drugs in health and disease. The literature of therapeuties is, therefore, in a great measure, but the history of inconclusive experimentation. In the study of the literature pertaining to the action of drugs, three things should be taken into account. First, the ability and reliability of the experimenter; second, the nature and number of experiments sufficient for verification; the results of the well observed and substantiated experiments. The unsupported testimony of the most caretul and conscientious scientific investigator cannot be accepted as conclusive evidence; but the accumulated results of the extended experience of many competent observers is the only safe criterion to guide the physician in the treatment of the sick. If the profession had waited for an accumulation of this kind, however, before employing new drugs, the properties of rhubarb, cinchona and opium would never have been known. It should be the purpose, therefore, of trade, as well as science, to do all in her power to facilitate experimentation for the purpose of clearing up all representation regarding new drugs, and coining it, as far as possible, into a definite scientific literature! With this intent we have adopted the following plan, suggested by Dr. Stewart, and recognizing the benefit its adoption must be to trade by increasing the demand for new drugs, we offer our aid to the profession in carrying it out.

The plan suggested is to treat the patients in the numerous hospitals and dispensaries throughout the country with drugs which have proved themselves of value, and report the results to the medical press. The collection of these reports would furnish, in a short time, as much material as procured by older methods in a century, and from them could soon be compiled a valuable literature. Though these reports benefit us only indirectly, and to the extent that we are identified with the introduction of the drug or its sale, we offer to the hospitals gratuitously, drugs for this test, and we do not even request that our names shall be used in the journals in connection with the work.

And, finally, it is to be hoped that the medical profession will give us credit for the sincerity of our motives in the introduction of new remedies from the platform on which we stand, and because of the methods which we have adopted.