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THE

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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 a 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 Diastase, Albuminoids and phosphates, according to careful analysis, it aids in digesting farinaceous food, while in itself it is a brain, nerve and muscle producer.

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---

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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 patient'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.

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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.

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Professor of Chemistry and Toxicology, Rush Medical College, Chicago.

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Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

CITY OF NEW YORK.

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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.

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"A great misconception as to the real characteristics of a true pancreatic emulsion has been entertained by many, and but few appear to have studied the different aspects presented by such an emulsion as is produced on fat by the energetic action of pure soluble pancreatin, as contrasted with the coarse mechanical mixtures of oil or fat and water, which are commonly supposed to represent this function of fermentative digestion.

Some seem to think that if a bottle of oil is shaken up with the compounds sold as the active principle of the pancreas, and a yellowish cloud is diffused for a time through the oil, an emulsion has been obtained. So it has, but not the true pancreatic emulsion, which forms an integral portion of the process by which fats are digested and assimilated. From the unvarying result of many hundred trials with the pure, active principles of healthy pancreatic fluid, taken at the time of digestion, I am perfectly convinced that no valuable result has been attained, unless the emulsion formed is as highly refractive of light as milk. The color may vary, according to the oil or fat used, from a far whiter fluid than the densest milk to the opacity and color of Devonshire cream, but unless at least the equivalent of the density of the best milk is produced in oil, when a third of water is held in suspension, no real pancreatic emulsion has been formed.

The mere mechanical mixture formed by common pancreatin is rarely better or more persistent than may be produced by rubbing up oil or fat with a solution of mucilage, or by a warm application of dissolved gelatin, shaken with oil until it becomes cold.

The first essential towards the digestion of fats or oils in the human body is that it shall assume the state of the very finest and most permanent emulsion, and this is only known to be attained when the oil and water is perfectly opaque, from the minuteness of the globules. This is the first function of the pancreatic emulsifying principle, and by this alone can we be certain that it possesses its proper fermentative activity."—*Prof. Bartlett's Treatise.*

(HYDRATED OIL)

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The efficacy of this Preparation is **NOT CONFINED** to cases of **CONSUMPTION,** as from its valuable tonic effect on the nervous system, in addition to its special stimulating action on the organs concerned in the production of Fat in the body, *it causes marked increase in weight in persons of naturally thin habit, who do not present any evidence of disease.*

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Pure Oil	80 *m* (drops.)
Distilled Water	35 "
Soluble Pancreatin	5 grains.
Soda	½ "
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Hyocholic Acid	1-20 "

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

Unlike the ordinary preparation of Cod-Liver Oil, it produces no unpleasant eructation or sense of nausea, and should be taken in such very much smaller doses, according to the directions, as will insure its complete assimilation; this, at the same time, renders its use economical in the highest degree.

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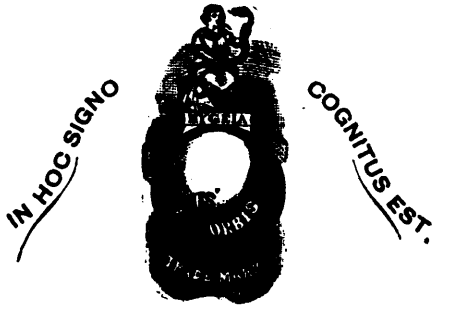

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Original Communications.

CANADIAN STUDENTS AND BRITISH HOSPITALS.

BY ALEX. DAVIDSON, M.B., M.R.C.S.E., TORONTO.

As our Canadian students are yearly making their way to the old country, for the purpose of advancing their knowledge in the various branches which belong to the study of medicine, and knowing how anxious the student is to obtain information regarding the schools and hospitals on the other side of the Atlantic, I have thought it might not come amiss to your readers, were I permitted the privilege, through the LANCET, of offering a few remarks upon the subject.

There are three leading questions which, let it be supposed, occupy the mind of the student before visiting the European hospitals, viz.: 1st. Should he go to the old country for the purpose of attending the hospitals there? 2nd. What is the best time to go? and, 3rd. What is he to do when he gets there?

There can be little doubt but that the first of these questions should be answered in the affirmative. True, the want of means in some cases, forms an insurmountable barrier to the young man's ambition; but I will venture to say that, if it can be managed at all, a year spent in London, with close attention to duty, will never be a source of regret to any one. The theoretical teaching at our Canadian schools of medicine is undoubtedly good, but the practical experience gained at our hospitals is vastly inferior to that of the British hospitals; and this, after all, is the backbone of medical teaching. The great number and variety of cases seen at the London hospitals and the repetition of the same class of cases so often, can scarcely fail to imprint the characters of the different diseases upon the student's mind, that is, granted he applies himself sufficiently.

Take for example the London Hospital, Mile End, whose in-patients alone number 800, with a correspondingly large out-patient clinic. This hospital has its own departments of medicine, surgery, obstetrics, and diseases of the eye and ear. Dental surgery is also taught within its walls. St. Thomas', Guy's and St. Bartholomew's are also about equal in size to the London, while the Westminster, Charing Cross and St. George's are smaller. But as my headquarters were the London Hospital, and as I believe it to be the hospital at which the best advantages are offered, especially to the Canadian student, my references shall be principally in regard to it. Here we have two great factors necessary to make an institution of this kind commend itself to the student, viz., the eminence of its teachers and the abundance of clinical material; for when we remember that we have connected with this institution such gentlemen as Mr. Jonathan Hutchinson, Dr. Sutton, Dr. Hughlings Jackson, Mr. James Adams, Dr. Stephen McKenzie, Mr. Warren Tay and others, one cannot but regard this institution as highly favored.

Permit me now to go a little more into detail about the work done in the institution. On the surgical side of the house each dresser is appointed for three months, and during this period he will not have less than from fifteen to twenty cases under his care at one time, consisting of cases of the more serious accidents and cases of idiopathic diseases, of which he has to take the history, daily notation, and do the dressing. When operations are performed he will have to assist, and he will also be required to go around the wards, twice a-week, with the surgeon under whom he is dressing. During the surgeon's "take-in week," which occurs about three times in the three months, he is required to pay special attention to all the accidents which come in, and with this he will find his hands full, for their name is legion. During one of the weeks in which I acted as resident dresser, we saw and attended to some 300 cases, consisting of accidents of all degrees of severity. Besides all this, the student will have the opportunity of attending the out-patients' clinic for three days in the week, and at each clinic he will see from 50 to 75 cases.

Now turn to the medical side and see what goes on there. Here also each clinical clerk is appointed for three months and has from fifteen to

twenty cases allotted to his charge, of which he is required to take the history and daily notations. He is also required to go around the wards two or three times in the week with the physician under whom he is clerking. Such a number of medical cases involves a great deal of work, as a detailed history (past and present) of each case has to be written out. The clinical clerk has also the privilege of going to the medical out-patients' clinic, where he can have the opportunity of seeing and examining as many as from 50 to 75 patients daily, under the direction of the physician in attendance.

Let it not be understood that the dresser or clinical clerk has always the same cases under his care for the period of three months, for as some get better and others die their beds are soon re-occupied by others. The dresser or clinical clerk, besides having his own in-patients which he is bound to attend to, can also have the opportunity of taking observations on any case he may desire in the institution.

In regard to the other branches taught in the institution, abundant facilities are afforded. In the maternity department, during a period of three or four weeks, as many as thirty cases of labor may be attended by the student himself at the patients' own homes, and when any great difficulty arises, the resident accoucheur or obstetric physician can be immediately summoned to the student's assistance.

A great number of cases of eye diseases are also to be seen. Out-patients are seen two days in the week, and on each of these days one may have the opportunity of seeing from 70 to 80 cases. There are also two or three wards set apart for eye cases only.

Wednesday is the day at the London Hospital for the out-patients' clinic on diseases of the skin, and on each day 75 to 100 cases may be seen. I have endeavored to give some idea of what the inducements are for Canadian students to visit the old country, and trust that I have contributed something which will assist them in forming an opinion of the advantages of a trip across the Atlantic. I have here merely referred to the practice at one of the large general hospitals of London; but there are other special hospitals, such as Moorfield's, for diseases of the eye; Soho Square, for diseases of women; the Golden Square, for diseases of the throat and chest, and Blackfriars', for diseases of the skin,—where the special branches can be studied to great perfection.

Now, as to the best time to go to the old country. I think there are many reasons why students should go as soon as they have taken their degrees here in the spring. In the first place the student is fresh from his studies, which will be so much in his favor if he intends to go up for any examinations while away. The London qualifications most frequently obtained by students who go from this country are the M.R.C.S. and L.R.C.P. In order to obtain the former, it is necessary to pass the primary as well as the final examination; so that the student who goes to the old country early in the spring, will have plenty of time to get up the work for the primary examination, pass it, and be able to go on with the hospital work in the fall; for the student who is preparing for a primary examination which is to take place say in three months, will not find it to his advantage to attend the hospitals much, while in preparing for his final examination, the very opposite holds good. I would also strongly advise students who are preparing for the primary examination, to take a "coacher."

In regard to those who may not care to go up for any examination, they will find it to their advantage to be in London early, in order to reconnoitre, and learn about the various hospitals, before commencing clinical work. During autumn and winter the teaching is carried on to the best advantage in the hospitals, for during the summer months most of the principal men have gone to the country.

Now, then, as to what the student is to do when he gets there? This question involves another, viz., How long does the student think he can spend abroad? If he can spend but a short time, say six or nine months, I would advise him to go to London and take a dressership for three months, a clinical clerkship for three months, spend two or three weeks in the maternity department, and endeavor at the same time to see as much of the special departments as he can. A person with such limited time at command as I have above mentioned, would not I think find it to his advantage to go up for the M.R.C.S. qualification, that is, unless he were able to go up for his primary immediately on his arrival in London; but not being able to do this and at the same time anxious

to take a qualification, the L.R.C.P. would I think be the most favorable for him.

If the student can spend a year or longer away, he would I think find it to his advantage to spend at least three months at the Royal Infirmary, Edinburgh, for here the system of teaching is very thorough. The systematic way in which cases are examined, and the accuracy with which each point in the case is determined, commend themselves highly to the student as a basis upon which to frame a method of examining cases; but the great drawbacks which the Edinburgh school presents to the Canadian student are the great number of students and the insufficiency in the number of cases. One branch of the science which I would recommend the student to pay special attention to while he is in Edinburgh, is gynæcology, where, thanks to the labors of Sir James Simpson and Matthews Duncan, this branch of the science is taught with a great deal more care and system than any place in London, excepting, it may be, at St. Bartholomew's Hospital, where students now enjoy the benefit of Dr. Duncan's teaching. The student having spent sufficient time in Edinburgh, could then proceed to London, and after having spent a week or two in looking about and selecting the hospital he considers it to his advantage to make his headquarters, let him proceed to work. If he elects to go up for an examination in which there is a primary, he will find it to his advantage to devote his time specially to preparing for this examination, and then having accomplished this, he can with greater ease turn his attention to the work in the wards, viz., the dressing and clinical clerking, which will always be preparing him for his final examination. If the student should decide to go up for an examination in which there is a final only, he could then proceed at once to the work in the wards. Having accomplished his examinations and his work in the wards, he should turn his attention to the hospitals for the treatment of the special diseases to which reference has already been made; after this, if circumstances will permit and if he has acquired a sufficient number of good testimonials, there are many appointments in the metropolis and in the provinces which he may be able to obtain, and which from the great experience and confidence they give one, will be found of the highest value, for when holding an appointment of House Physician or House Surgeon as the case may be, one is thrown much more on their own responsibility than when acting as a dresser or a clinical clerk.

ON DELAYED RESOLUTION IN PNEUMONIA.

BY WILLIAM OSLER, M.D., M.R.C.P., LOND.

Professor of the Institutes of Medicine, McGill University, and Physician to the General Hospital, Montreal.

(Read before the Medico-Chirurgical Society of Montreal.)

There is no disease which we are called upon to treat to which the term 'self-limited' can more appropriately be applied than to pneumonia. It runs such a definite course, uninfluenced, to any material extent, by medicines, and terminates by crisis from the 5th to the 10th day, and in ordinary cases convalescence is complete, in from 15 to 20 days. So uniformly does this happen in uncomplicated cases, that any delay in convalescence or persistance of the physical signs is a cause of considerable anxiety on the part of the physician. I wish to call your attention this evening to two cases illustrating retarded resolution in this disease.

But first let me say a few words on the anatomical condition of the lungs. The stages of the disease are engorgement, red-hepatization, grey-hepatization and resolution. The essence of the process is an acute inflammation of the walls of the air-cells, accompanied by a free exudation into the alveoli and finer bronchi. In the stage of red-hepatization we find the air cells filled with a coagulated fibrinous exudation, enclosing in its meshes many red-blood corpuscles, leucocytes and granular epithelial cells. The affected part is firm, section dry, reddish in colour, and the granular plugs filling the air cells are very distinct. In the stage of grey-hepatization, the air cells are crowded with leucocytes and epithelial products, the extravasated blood corpuscles have lost their colouring matter and the pressure of the exudation has caused anæmia of the alveolar walls, hence the lung is pale or grey. The cut surface may be simply moist or it may be bathed with a quantity of a pus-like fluid, which seems to infiltrate the affected parenchyma and has given the name of purulent infiltration to this stage. We lack satisfactory information of the condition of the lung in resolution and of the details of the process.

Doubtless, fatty degeneration and liquefaction of the exudate occur and it is rapidly removed by absorption and expectoration. When we consider the amount of solid exudation in an inflamed lung, often amounting to several pounds, and the comparatively scanty expectoration frequently seen during the stage of resolution, we must conclude that the process is effected chiefly by absorption. Among the terminations of pneumonia, gangrene, abscess, caseation and fibroid induration are spoken of, but it is still regarded as an open question by some pathologists, whether true sthenic, fibrinous pneumonia ever terminates in these conditions. I have seen instances of both gangrene and abscess in undoubted lobar pneumonia. Indeed, I have often wondered, on the inspection of inflamed lungs in the third stage, soaked in a purulent exudation, the whole tissue swarming with pus corpuscles, that 'breaking' of the lung and formation of abscess did not more frequently occur. Caseation as a sequence of hepatization is perhaps still more rare. That it does not occur is probably due to the integrity and permeability of the blood-vessels of the alveoli. A case occurred two years ago in the General Hospital, in which caseation of the entire lung appeared to have followed a pneumonia, but the man was not under observation from the commencement, and there is room for doubt whether it was a true fibrinous pneumonia (vide Mont. Gen. Hosp. Reports, vol. I.. p. 295). Even greater uncertainty prevails as to the termination of a simple pneumonia in fibroid induration, the chronic or interstitial pneumonia of some authors. Occasionally cases are met with in which, without any obvious cause, resolution of the inflammation does not take place, the physical signs persisting for weeks or even months. This occurs more frequently in children than in adults, in whom it is very exceptional. Leyden has recently called attention to this condition in an article in the *Berliner Klin. Wochenschrift;* he believes that two of the most important factors in its production are enfeeblement of the circulation by the fever, and unusual density of the exudation.

The following instances of this condition have come under my observation, and I have deemed them to be of sufficient interest to bring before you, as they illustrate recovery after persistence of the consolidation for several weeks :

CASE I.* APEX PNEUMONIA. RESOLUTION IN THE 4TH WEEK.

W. S., aged 33, plumber, of average size, was admitted to the General Hospital April 15th, '79. Nothing of special note in the family history. Has been a healthy man. Is not intemperate. On April 5th got heated shovelling snow, and lay down on a sofa near an open window. In about an hour he awoke and immediately had a severe chill, lasting about 20 minutes. Became feverish during the night, had severe pain in the right side, got very hoarse and began to cough. Has been in bed ever since suffering with shortness of breath, fever and cough.

April 16th, 12th day of illness. T. 103°, P. 102. Pulse-respiration ratio 1 to 3.5. Face is pale and distressed looking. On examination, chest well formed, deficient expansion on right side; percussion reveals dulness on right side in front as low as the angle of the scapula, in axilla to 4th rib; blowing breathing and sub-crepitant râles over dull regions, tactile and vocal fremitus increased. Heart action strong, sounds clear. Nothing special in examination of other organs. Cough is very troublesome, short and hacking; expectoration, viscid and rusty colored; bowels are relaxed; urine about 40 ozs, high colored, chlorides present, no albumen. Ordered the Hospital acute pectoral mixture and linseed poultice to the chest.

The condition on the 13th, 14th and 15th days remained the same. T. ranged from 102° in the morning to 104° in the evening. Respirations about 40; pulse 110 to 120; bowels moved two or three times in the day; has been taking quinine, 10 grs. per diem.

16th day, seems better. Morning T. 100°, P. 84, R. 28, cough less troublesome, expectoration viscid but not so rusty. No change in the physical signs in front, behind the dulness appears clearing a little at angle of scapula and there are some fine sibilant râles in this region.

17th day. T. morning 99°; evening 100°, P. 81, R. 28; cough not so worrying; expectoration muco-purulent, very slightly tinged; urine more abundant, 50 ozs., not so high colored.

18th day, marked improvement in patient's condition; feels easier than on any day since the attack. T. morning 98°; evening 101°; R. 28, P.

* Reported by Mr. Emdon Fritz.

24. Dulness is diminishing behind, but is still very marked in the inter and upper-scapular regions. The râles are coarser and the breathing is less bronchial. In front dulness is scarcely so intense, auscultatory signs persist.

21st day, patient continues to improve. T. 100° on previous evening, normal this morning; pulse 80, R. 26; expectoration less abundant. In front the dulness is much less intense; breathing still bronchial in character; râles very numerous at end of inspiration and becoming more liquid in character. Behind the note is much clearer, the breathing is becoming more natural and the râles not so abundant.

24th day, very little difference in the percussion note at apices behind; in front a shade of dulness persists, and on deep inspiration a few râles. Expiration is considerably prolonged and hollow. Temperature 99°. Cough has ceased to be troublesome; expectoration scanty.

26th day (April 30th), temperature normal, feels much better and was allowed to get up for a short time. Râles have disappeared. The prolonged and hollow character of expiration very marked.

From this time patient gained strength steadily and was discharged on the 14th of May. The marked prolongation of the expiratory murmur at right apex persisted.

The treatment throughout was restorative; nourishing food, six ounces of wine and from 5 to 10 grs. of quinine per diem.

CASE II* LOBAR PNEUMONIA OF THE RIGHT LUNG. RESOLUTION IN 8TH WEEK.

F. S., aged 42, a well built man, was admitted to the General Hospital on May 10th, 1880. Served in the army for 21 years, has been a healthy man, had gonorrhœa and a bubo. Is not a hard drinker.

Initial chill on Monday, May 3rd, followed by fever, cough and pain in right side, which have persisted. On admission face suffused, anxious-looking. T. 102°, P. 117, of fair volume, R. 36, and shallow. Short cough with rusty sputa; complains of pain in region of right nipple. On examination, expansion deficient on right side. Dulness over whole of this side behind and extending well into axilla. In front dull beneath clavicle and for a finger's breadth below it. Blowing breathing, fine râles and exaggerated fremitus over dull areas. Bowels open, urine high colored, chlorides present. On the 11th and 12th the temperature kept about 103°, respirations 35-40, P. 112 to 125. There was considerable distress, and troublesome cough. On the night of the 12th was delirious, and appeared a good deal worse in the morning. At the mid-day visit on 13th the dulness in front was found to have extended as low as 3rd intercostal space. T. 102°, R. 64, P. 120, and smaller in volume. Is slightly cyanotic in face and finger tips. Ordered the stimulants to be increased.

At 10 p.m I went to the Hospital, as I felt uneasy about patient's condition. Found him dozing. R. 66 P. 130, small and weaker than in the morning. Face more cyanotic; finger tips blue. Feeling convinced that the patient was gradually dying of suffocation I ordered him to be bled, and the House Surgeon abstracted xviii ozs. of blood from the arm. Fifteen minutes after, patient expressed himself as much relieved. Respirations 52, P. 106, and of much better volume. In the morning (14th) P. 106, R. 40, T. 101. Had a better night, not so delirious. Face still suffused, but not cyanotic.

May 15th (12th day of illness). Feels better. P. 87, R. 30, T. 101-5°; expectoration abundant; rusty colored; cough troublesome. Physical signs persist unchanged with the exception of the râles, which are not so fine as they were. For the next five days the temperature did not rise above 100°, and his general condition improved. Expectoration abundant, less viscid and not so blood-stained; no essential change in physical signs. On the 20th temperature began to rise, and on the evening of the 21st reached 102.5°. The respirations and pulse also increased slightly in frequency, but examination of the chest did not reveal any extension of the inflammation. On the morning of the 22nd T. was normal, rose to 101° in the evening and until the 29th kept between 101° and 103°, there being no regularity in the exacerbations; on the 23 and 24th evenings exacerations of 3° took place. During this period the cough has been rather more troublesome, expectoration abundant, less viscid, but still rusty. Note as to condition of lung on the 29th is:—Dulness persists in front to lower border of 3rd rib, and behind from apex to base. In front, inspiration blowing and at the termination here are sub-crepitant râles; in 2nd space it is s-inctly wavy. Expiration loud, coarse and pro-

* Reported by Mr. J. C. Shanks.

longed. Behind bronchial breathing with râles over whole surface, at extreme base the breath sounds are less intense.

From the 31st the temperature remained, with the exception of the morning of the 4th of June, below 100°, the morning record being 97°, and the evening between 98° and 99°.

June 5th (34th day of disease). General condition is improving, cough less troublesome, expectoration more liquid with small yellowish-brown bits scattered through it. Appetite is good and he sleeps well; bowels are freely moved about every second day; amount of urine averaged about 45 ozs; respirations 20 to 25 per minute; pulse 80. Note of this date on the physical signs is :—Dulness unchanged; subcrepitant râles in front; wavy inspiration persists in 2nd space; in quiet inspiration no râles heard behind, only the bronchial breathing, which is in marked contrast to the normal sounds of the opposite side; on deep inspiration, very fine small crackles at the end of the act; vocal and tactile fremitus increased.

13th. The past week has made very little change in the condition of the lung, physical signs absolutely the same; was weighed on the 8th, turned the scale at 120 lbs.; normal weight over 145 lbs.; expectoration not so abundant, half of a pint in 24 hours, is more tenacious; pulse ranges about 76; respiration about 20. Measurement of chest gave 16⅜ inches for left side, 15¾ for the right.

16th—(45th day of the disease)—Dulness not so marked from the angle of scapula down, and the note here is rather tubular in character. The râles are more abundant, particularly in superior axillary region; at the base the breath sounds are feebler than in other parts, but have the same bronchial character. Patient gets up for a little while each day, but feels very weak.

19th. Was weighed; has gained 5½ lbs. since the 8th.

22nd. In front the dull note is not so marked; breathing still hollow, and expiration is much prolonged, râles not numerous. The posterior part is also clearing a little, breathing harsh and bronchial, râles scarcely to be heard, except at outer border of scapula. From this date resolution proceeded rapidly.

25th—(54th day)—Dulness in front has almost disappeared; breath sounds coarse, expiration prolonged. Behind there is only a slight difference to be noticed in the percussion note in the scapular and inter-scapular areas. Two fingers breadth below the angle of scapula the note is decidedly tympanitic. The breathing is coarse and rough, compared with the left side; râles only at outer border of scapula; tactile and vocal fremitus still a little exaggerated. General condition is very good; has scarcely any cough, no fever, and has a ravenous appetite.

Improvement in condition of lung continued and on the 28th he was discharged, the dulness having entirely disappeared, except a shade at the right base; breath sounds somewhat coarser and expiration prolonged, particularly noticable in front.

July 8th, 10 days after discharge, reported himself for examination; weight 137 lbs; looks much better; examination of the chest showed expansion to be still a little defective on right side, particularly at the base. Scarcely any difference in the character of the breath sounds on the two sides, except at the extreme right base where the respiration is weaker, and there is still a shade of dulness.

The treatment consisted in full stimulation in the early and active stage of the disease, poultices to the chest, moderate doses of quinine, and the iodide and acetate of potash on the supposition that they might favour resolution.

It is difficult to understand how a solid exudation can remain for weeks in the air cells without permanently damaging them, but that it may do so is evident from these and other cases. The lung appears to alter but little, maintaining the features of hepatization. Grisolle gives a case in which death occurred on the 60th day, and yet the affected part looked not unlike the acute stage of the disease.

On July 20th, 1877, I performed a post-mortem on a man who was stated to have been ill with Pneumonia for between two and three months. The whole of the left lung was solidified, in a state of grey-hepatization, and the note made at the time was: "resists the knife on section, as if there was hypertrophy of the connective tissue; lobular division of the lung obliterated." The granular condition was still visible. In this case there was a gangrenous cavity at the posterior part of the organ.

It is not easy to see the reasons for retardation of resolution in these two cases. The situation of

the consolidation in Case I. may have had some influence. Of 150 cases of simple pneumonia reported by Bleuler, in 7 resolution was delayed beyond the 20th day, and in three of these the right upper lobe was affected. Huss, and several other writers have noticed the same thing in apex pneumonia. In Case II. the fact of the man having been a soldier for 21 years is rather against soundness of constitution; though there were no evident signs of degeneration, and he denied excessive use of alcohol. Chomel calls attention to excessive bleeding as a cause of protracted resolution; but the amount abstracted in this instance was scarcely sufficient to have had any such effect.

I think we can learn from these cases not to be over-anxious about delayed resolution in ordinary pneumonia, so long as the patient's condition keeps up and the constitutional disturbance is slight.

FIBROID DEGENERATION OF THE PYLORUS.

BY L. D. HEALY, M.D., BRANTFORD, ONT.

As this disease is looked upon as a rarity, the following case may be of interest. The method of alimentation used is one recently introduced to notice, and I hope that those who may find it desirable to use nutritive enemata will give this a trial and give the profession the result of their experience.

In this case death evidently was due to inanition, and not directly to the diseased obstruction, for had the proper elements of nutrition been supplied to the blood, life might have been prolonged.

J. M. F., Physician, æt. 58 yrs. Had been dyspeptic nearly all his life, but unusually so troubled for five or six months, when one day he went beyond his usual dinner hour and then partook of a hasty meal, which he very soon afterwards vomited. For upwards of nine weeks he continued to attend to his practice, which considerably broke in upon his rest and sleep. During all this time nothing was retained on his stomach—everything being ejected as a rule, shortly after it was taken. He tried various remedies with no other effect that that of aggravating his symptoms.

On being called, June 27th, I found him so weak that he was unable to walk across the room, or to get out and in bed without assistance. Throughout his illness he had a good appetite. He had no difficulty in swallowing, no fever, no pain, no tenderness, nor could any tumor be felt; his skin had a healthy, natural appearance, and as time advanced became unusually clear for a person of his age. Pulse normal, tongue clean and moist and otherwise natural in appearance, bowels costive, urine normal, intellect clear, and slept well. To effect a movement of his bowels he had to take a good dose of blue pill, which formerly was known to act freely—at this time it was without effect. A couple of days afterwards a dose of magnes. sulph. produced a copious watery evacuation with very little fæcal matter. The vomiting was regurgitation rather than emesis, the contents coming up without any effort. In this way he raised in excess of the quantity taken, the excess consisting principally of viscid mucus. At one time he had been able to retain food for 36 hrs., when it returned as usual. On examination, the stomach was found somewhat dilated with the products of fermentation.

In view of nothing passing into the bowel as the symptoms would indicate, and of the persistent vomiting, the absence of any pain, tenderness or other symptom of ulcer or acute disease, it seemed natural to conclude that there must be obstruction to the food from escaping from the stomach since he had no dysphagia and had taken food in considerable quantity and retained it on one or two occasions for a whole day or more. There was nothing to lead one to suppose any disease of the head of the pancreas, beyond that of a strong desire for food. Where cancer affects the head of the pancreas so as to lead to intestinal obstruction we have jaundice and a tumor can be felt. I inferred therefore that the seat of the obstruction was most likely at the pylorus itself, and the large quantity of viscid mucus expelled, showing that there was considerable irritation, at least, at that point, tended to strengthen this view.

If this diagnosis be correct, the prognosis must be necessarily grave, and a palliative and nutritive treatment the only one offering any prospect of success. To conserve the vital forces by quiet of body and mind, to supply the waste by nutritive enemata, and to allay the irritated mucous membrane seemed to me the indications. Accordingly he was directed to maintain perfect quietude. Nutritive enemata passed well up the bowel by means of a No. 12 gum elastic catheter attached to an ordinary enema syringe was used morning and

evening. After the first five days the enemata consisted of defibrinated beef blood—6 ozs. being the quantity used at a time. This was generally retained. To shield the irritated mucous membrane subnitrate of bismuth was given at intervals, and as a rule nothing else was taken.

On my second visit, three days after the first, he appeared stronger. The morning after I first saw him he vomited two or three times, but not since. The flatulence showed that there was still fermentative matter present. Having provided myself with a stomach-pump I used it and removed about three pints of dark acid liquid mixed with a large quantity of viscid mucus. I then washed out the stomach till the water came away clear. He was now allowed a tablespoonful of milk, with a like quantity of lime-water every hour. After two days I saw him again. There had been no vomiting, and on using the stomach pump found that nearly all the milk and lime-water had passed the pylorus. He was consequently much stronger, and could walk across the room unassisted. The mucus had very considerably dimished in quantity. The milk and lime-water were increased to one and a half tablespoonfuls each.

Without my knowledge, the following two days —Saturday and Sunday—he was disturbed a good deal by callers. I afterwards learned that he also had been in different apartments of the house, and even up-stairs—all unassisted—showing that he was deriving strength from the food passing into the bowel and being assimilated. There had been no vomiting for an entire week, the mucus had disappeared from the washings of the stomach and he appeared to be improving nicely, when, from some cause—I fancied possibly from undue exertion—a relapse and vomiting set in again. From this time all efforts were unavailing, and he gradually weakened and died, notwithstanding rectal alimentation and greater quietude, after I had been attending him about six weeks, making in all fifteen weeks of illness and almost constant vomiting from the time it began.

Inspection was made sixteen hours after death, in which I was assisted by Dr. Bown, of Brantford. On opening the abdomen the stomach was seen to contain about a quart of liquid. The pyloric end was much thickened—was non-adherent to the ad joining structures and presented some biliary staining on its posterior aspect; the pylorus was so completely closed that its contents could not pass—although by inserting the nozzle of a syringe into the entrance of the pylorus water could be passed through. The thickening, about the consistence of an unimpregnated uterus, was wholly on the stomach side of the pylorus and of $2\frac{1}{2}$ inches in length, gradually diminishing to the normal thickness. It was annular, but thicker behind than in front. There was no affection of any of the adjoining glands or other structures. The omentum was almost entirely absorbed, the intestines contained only gas; gall bladder full; liver normal and post-mortem infiltration of bile on its under surface. On opening the stomach no trace of any lesion of any blood-vessel, or ulceration, or softening of mucous membrane could be found. A singular feature in this case was that the commencement of the rectum and sigmoid flexure of the colon were on the right side. On microscopical examination the non-malignant character of the growth was well shown—true cancerous structures were absent, the thickening consisting of fibrous tissue passing between the involuntary muscular fibre. Neither the peritoneal nor mucous coverings were abnormal beyond a scarcely appreciable thickening of the mucous membrane — the diseased condition apparently arising from fibroid degeneration of the submucous and submuscular tissues followed by hypertrophy of the muscular coat.

Of the blood that had been injected the liquid portion had been absorbed, the corpuscles remaining and filling the colon even to the ileo-cæcal valve. Dr. A. H Smith, of New York, in speaking of rectal alimentation refers to defibrinated beef-blood being used, and says that three to four ounces of blood administered at night would be so completely absorbed in the course of 8 to 10 hrs. that no trace could be found in the morning evacuations. This induced me to try it.

If absorbed it would directly enter the circulation as blood and supply reparative material and food for the tissues at once without any further development as required of other nutritives. In this way we might obtain all the advantages of transfusion and avoid all its risks. Moreover, it seems reasonable to suppose that the elements of the blood—the corpuscles and serum—should be more readily absorbed than any other nutritive, let it be digested ever so perfectly.

About once every 4 to 6 days there was a move-

ment of the bowels. I was told that the contents passed were regular fæcal matter together with a portion of the blood just injected. I did not question the statement, and consequently did not examine it, and supposed that all parts of the blood were being absorbed. It was only on post-mortem examination that I learned to the contrary. I have no explanation to offer why the corpuscles were unabsorbed, whilst serum was absorbed. We know that the mucous fluids of the rectum are alkaline in reaction, and that to promote rapid and perfect osmosis of the ordinary enemata we must render the latter acid. Whether rendering the blood enemata acid would induce complete absorption remains to be found out by experience.

In this, the above case is of interest, as it may institute inquiry. It also illustrates how there may be apparently complete pyloric obstruction, but where *positive* symptoms of cancer are absent—by rest and rectal alimentation much benefit may be derived, and possibly if taken sufficiently early a passage may be obtained and life prolonged for a considerable period, if diet be properly selected and regulated and exercise not inconsiderately indulged in. But, however much we may gain we need not expect that our patient can ever be as regardless of his manner of living as before. At best, we can hope only to arrest, not to remove the difficulty.

Another interesting feature was the peculiar situation of the rectum and sigmoid flexure of the colon. It also illustrates the value of the stomach-pump in treating cases attended with indigestion as well as dilated stomach.

MEMOIR OF PAUL BROCA.

BY JOSEPH WORKMAN, M.D., TORONTO.

We extract from the *Circulo Medico Argentino* of September, the following memoir of the career of the above named distinguished French surgeon, which, we feel assured, will be read with deep interest by every member of our profession who has learned to appreciate the extent of our indebtedness to the eminent masters of the French school, among whom few have ever attained to a more elevated and honorable position than Paul Broca:

"Paul Broca was born in Sainte Foy la Grande, a small town in la Gironde, in the year 1824, where his father was a practising physician. The youth Broca was sent to study in Paris. At the age of 17 he obtained the Bachelorate, and purposed entering the polytechnic school, with a view to qualify for a military life, which was his own first idea; but his father, on learning his project, induced him to desist, and to enter on the study of medicine, a science which was destined to become to him prolific of triumphs. According to his own confession he felt no special call to any course of life, believing that every man may select, at hazard, his vocation, and achieve success according to his efforts. (*Querer es poder.*)—(To will is to win).

His first triumph in medical life was in his 20th year, when he obtained by *concours* the position of *interne* in the Hospitals of Paris. He was in succession nominated Assistant in Anatomy, Laureate of the Hospitals, Prosector in the faculty of Medicine, and finally he acquired the title of Doctor in 1848. At this time his father invited him to return to his little native town to practise his profession, but he tenaciously refused, declaring that it was his intention to remain in Paris. In 1852, after a brilliant competition, he obtained the position of substitute professor of the Faculty in Paris, and in 1853 that of surgeon of the Hospitals. In 1854 he substituted Professor Gerdy in the Faculty during the winter, and Professor Laugier as surgeon in the Hotel Dieu during the spring. In 1858 he substituted also Professor Joubert de Lamballe in the Hotel Dieu. From this time onward his ascent was gradual, as is usual in the Hospitals in Paris, until 1868, when he replaced the great surgeon Nelaton, as professor of clinical surgery, the highest distinction among the professors of the Faculty.

He published innumerable memoirs and original articles, in which he, on several occasions, made known his discoveries on matters of supreme interest in medical science. In 1850 he published a memoir on the pathological anatomy of cancer, for which he obtained the *Portal* prize of the Academy of Medicine. The most salient feature in this work is the anatomical diagnosis according to the characters visible at simple sight; in this manner the histological classification is presented as sanctioned by ordinary pathological anatomy. The greater part of this memoir is devoted to the study of cancerous tumors properly so-called; beyond limiting himself to the description of the elements and textures of these tumours, M. Broca studied the diverse phases of their evolution, taking

the cancerous tumor in its commencement, and following it up to the period of general infection of the economy. He demonstrated that all the grades of its evolution, increase, propagation, softening, ulceration, invasion of the lymphatic ganglions, etc., etc., are the direct consequence of the multiplication of its microscopic elements. At a later date he, in collaboration with MM Beau and Bonamy, published the grand Atlas of Descriptive Anatomy. The explanatory text pertained *in toto* to Broca, and formed the third volume of this important work. In this work we meet with newly bestowed labors, among which may chiefly be mentioned his description of the gingival arterial arches, the discovery of the muscle amigdalo-glossus, the study of the tumors of the stomach, and on the liver and spleen, etc.

In 1858 he published his beautiful and incomparable Treatise on Aneurisms, which was rewarded by the Academy of Sciences. The first part of this work includes a chapter completely new, on the pathological physiology of aneurisms. M. Broca describes the circulatory phenomena, both in the aneurismal tumor and the arteries situated beneath the sac; he studies the favorable conditions in which active and passive coagula are formed, and the phonemena which are the consequence of the formation of these two species of coagula.

The second part comprehends the history, emuneration and valuation of each of the methods proposed for the cure of aneurisms, and the different processes. The author has not feared to enter into historical and critical enquiries, with the twofold intention of doing justice to those who had specially occupied themselves with this most interesting subject of external pathology, and of acquiring from the study of the past the knowledge of facts that may be instructive for the present and the future. For the description and appreciation of all the curative methods of this affection he had at his disposal more than eleven hundred observations, with the aid of which he was able clearly to exhibit the very erroneous opinions of the ancients, and he has done all possible for determining the mode of action of each of the methods. Finally, M. Broca has bestowed upon us, in a chapter devoted to galvano-puncture, the discoveries made by him, in company with Professor Regnault, on the coagulating action of the galvanic currents.

In 1863 he published his famous Treatise on Tumours. This work, which might be sufficient to render illustrious the life of a man who had reached the end of his career, was the fruit of 15 years of study and discoveries on one of the most difficult and most discussed questions of pathology.

Convinced that well observed facts should not stand in contradiction to each other, M. Broca had already demonstrated in previous labours, that the distinctions established by the microscope coincide with the anatomical differences appreciable by the simple sight; hence, in his work on tumors he proposed to prove these anatomical differences of properties, and that they give place to clinical differences more or less exactly defined, but always true.

At a later period he published a memoir on resuscitant animals; another on general instructions in Anthropology, and subsequently his memoirs on Anthopology. He afterwards gave to light a work on the Brain, in which a multitude of discoveries are presented. In these memoirs, in which numerous articles attract attention, we meet with valuable investigations on Ethnology in France, in which, after an historical discussion on the ethnological origins of the people of France, he proves that the characteristics of the two great races of the Gauls, although predominating in the two respective regions occupied by them in the time of Julsus Cæsar, have been, in almost all parts, modified by crossings. He shows the durable influence which these different crossings have exercised on the characteristics of the existing populations, and in particular on their stature. He next studies the differences in height, in France, basing his observations on information derived from councils of revision, and he clearly demonstrates that ethnological origins alone can explain the details of the distribution. The map, with four different colors, which the author annexes to his work and which represents the variations of height in the different departments, is divided by colored lines into two grand regions, exactly corresponding to the Belgic and Celtic Gauls of Julius Cæsar.

Another book, extremely interesting, by this savant, is that regarding the relative weight of the brain of the French and the Germans, in which M. Broca points out the causes of the error of Huschke, who compared the brain of the Germans with that of the French, by taking as his average

the brains of primitive Germans, a collection in which a great many suicides and executed persons are embraced. The brain in disease wastes like other organs, as has been shown by Malgaigne, who with reason adds that the brains of those dying suddenly are on the average heavier. Besides, crime and suicide may almost always be attributed to mental alienation, and it is known that in the non-paralytic insane the weight of the brain is ordinarily increased (?)

Suicides and criminals constitute a particular category, and for this reason M. Broca has withdrawn them from the statistics of Huschke, and thus he has succeeded in proving that the brains of Germans do not, on the average, differ from those of the French.

Another study, no less curious, made by this distinguished anthropologist and surgeon, was that of the capacity of crania of Parisiens, in different epochs. This memoir includes the result of his studies on 384 crania deposited by him in the Museum of the Anthropological Society, by which institution provision was made for the excavations at Paris. The crania are divided into three series, more or less equal, the first corresponding to the epochs prior to Philip Augustus, the second to the 16th century, and the third to the 19th. The medium capacity of the cranium has been augmented, in the course of six or seven centuries, by more than 35 cubic centimetres, and this increase is found particularly in the anterior region. The 125 crania of the series of the 19th century are divided into two classes, one comprising those procured from distinct graves, and the other from the common fossa, which in this age receives only the bodies of the lowest class, and of those legally disinherited. The measurements of the crania of these two classes have shown a difference of 80 cubic centimetres in favor of the well-to-do class. The study of the crania of the middle ages has given results interesting as regards the cephalic types of the Parisian population in this epoch, when the mixture of the Gaul and German races was less advanced than it now is. The 125 crania of the middle age series consist of a nearly equal number of dolico-cephalic and brachy-cephalic crania, of forms intermediate, resulting from the mixture of the races. The brachy-cephalic type is that of the autochthones prior to the first invasion of the Indo-European people, who were subdued by the Celts, who opposed to stone implements of war, those of metal; the brachy-cephalic autochthones had been regarded as a race inferior to their conquerors; M. Broca has however established that the capacity of the cranium was greater in the conquered than in their conquerors.

It is to M. Broca that is due the glory of having studied, with exactitude, Aphasia, the convolutions, a part of the cerebral localizations, and particularly that of speech, which is found to occupy the third frontal convolution, or, as now called, that of Broca. Finally it may be said, without fear of dispute, that there is not a point in Pathology, Anatomy, or Anthropology, to the aggrandizement and advancement of which Broca has not powerfully contributed. He was an indefatigable worker, and according to him a minute ought not to be lost; he was a beloved professor, a pure writer, an independent liberal, the most popular of the Professors of the Faculty of Paris, an official of the Legion of Honor, honorary Secretary and founder of the Institute of Anthropology, of Paris, a member of almost every learned society in Europe, and an immovable senator. Ah, well! this great man whose biography we have just been tracing in broken outline, is now no more; all the journals of Paris have largely eulogised him, and some in far distant Buenos Aires have given the details of his final exit.

On Wednesday, the 7th of July, he rose very early, as was his custom, without feeling the slightest illness, and he went to his service at the Hospital Neckar, as he was that day to perform an operation with his honorable colleague, Professor Guyon. On alighting from his carriage he felt a slight indisposition, probably the same as we sometimes saw him suffer under when attending his clinics, and which he was wont to designate intercostal neuralgia. How singular! the author of the best book on aneurisms, the physician who had seen many affected with the disease, was completely ignorant that he had the same ailment, and that it was soon to terminate his existence. In spite of feeling himself unwell, he made his accustomed visitation; he returned to his house to take a short repose, and then to go to the Senate, intending to dine with his friend, Victor Hugo. In the middle of the sitting his neuralgia returned, with intense pains in the precordial region, radiating down the left arm; these pains were so acute down to the elbow, that syncope appeared imminent; after a

brief repose all seemed to have passed off, and he was seen in free conversation with his colleagues on the subject of the amnesty. Feeling again ill, he retired after pledging himself not to be absent on the day of the vote. Having stepped aside to salute M. Leon Say, that gentleman said, "do not forget to come to-morrow;" to which Broca replied, "I shall take good care—*au revoir.*" Having reached home he again felt some disturbance, and some friends who had heard of his illness came to visit him; with his wonted amiability he said to them he was a little indisposed, but not sick.

At eleven of the night he went to bed, probably the first time in his life at so early an hour, for it was his custom to work till 3 or 4 of the morning. His wife accompanied him; he took some drops of laudanum, he became calm and slept; an hour had not passed when a peculiar noise aroused his wife, she called him, took his hand, all power had fled, he was dead.

NOTE—Happy Broca! whom aneurism rescued from insanity and paralysis. Had his heart been stronger, his brain must have yielded to the *over-work* imposed on it.)—*Translator.*

Here is the announcement of his last exequies, which we have read in the journals of Paris :—

"This day will take place the funeral of M. Broca, the honorable Senator and liberal thinker. His sons will head the mourning cortege; behind them will come the Deputation from the Senate, and the members of the Faculty of Medicine; the cords of the pall will be borne by the seigneures, Eugene Pelletan (Senator), Jules Ferry (Minister of Public Instruction), Vulpian (Dean of the Faculty of Medicine), Roger (President of the Academy of Medicine), Louha (President of the Institute of Anthropology), Guerin (Surgeon of the Hospitals), and Olivier and Gariel (Professors of the Faculty of Paris), Gazot (Grand Chancellor of France), Charles Quenten (Director of Public Assistance), Spuller (Deputy), and the Doctors, Professors of the Faculty; Trelat, Charcot, Bergeron, Wurtz, de Bauvais, etc., etc.

SALIVARY CALCULUS AND ENCYSTED HYDROCELE.

BY JAMES SKIRVING, M.R.C.S., ENG., TAVISTOCK, ONT.

I had rather an interesting case lately under my care which may not be unworthy your notice, firstly on account of the rarity of its occurrence, and secondly on account of the complications and difficulty of diagnosis.

Mrs. H., æt. 52, has been for several years noticing an enlargement at the angle of the lower jaw, but for the last three years this enlargement has assumed greater dimensions, till now—July 5th—it extends nearly to the clavicle. On examining the tumour I found it semi-fluctuant (patient had just breakfasted). On examining the interior of the mouth I found the whole course of the Whartonian duct tumefied, and to the right side of the frænum linguæ I detected a hard round substance, which I diagnosed to be a salivary calculus.

The symptoms the patient complained of at first, were the unsightliness of the growth and the sensation of pressure after food. She had been under the treatment of several different medical men, who gave medicines, embrocations, etc., etc., together with general treatment. The patient was thus kept in good physical health; but now the tumour has become enlarged to such an extent as to cause considerable neuralgic pain and vomiting, or an inclination to vomit after eating. The recumbent position, with the tumour tightly bound up seemed to be the most comfortable. I concluded therefore that the symptoms were reflex, and caused by pressure on the vagus or recurrent laryngeal nerve, or both.

Treatment—On July 7th, assisted by Dr. Rankin, the patient being under chloroform I made an incision over what I thought to be a calculus and extracted one weighing 6 grains, length ¾ of an inch, circumference ⅞. I endeavored to pass a fine probe into the Whartonian duct, but failed. So, determined to wait a few days, but finding no natural discharge of saliva, on the 9th of July, chloroform being again administered by Dr. Rankin, I dissected the tumefied tissue as far back as possible. There was still no diminution of the tumour, so on the 11th I aspirated, drawing away two and a half ounces of fluid, which was nearly all pure albumen. I again aspirated on the 13th, drawing off two ounces, greatly to the patient's relief; on the 15th aspirated again and injected a solution of iodine, iodide of potassium and glycerine. There has been no need of a second injection, and the patient is entirely cured.

Deductions—Most probably the nucleus of this calculus was a piece of consolidated mucus around

which earthy salts were deposited. The duct being thus obstructed subacute inflammation set in eventually occluding the whole duct; the gland continuing its function saliva was secreted, but not evacuated, and from constant irritation an exudate of liquor sanguinis or hydrocele fluid was thrown out, causing the goitrous appearance. The treatment being analagous to that for the radical cure of hydrocele, and being perfectly successful would lead to that belief.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—In the *Canada Lancet* for this month is a communication, originally published in the *London Lancet* of the 18th September by Dr. Kennedy, of Bath, Ont., upon the effects of large doses of olive oil in the solution and expulsion of biliary calculi, which, I think, under the circumstances hereafter to be noted requires from me some comment. If I understand Dr. Kennedy aright he has endeavoured to convey the idea, that the use of olive oil administered in large doses to patients in whom there were symptoms of the passage of biliary calculi from the gall ducts, has not hitherto attracted the attention of the profession, otherwise I do not understand what object he could have in view in publishing his cases in the *London Lancet*. The statements contained in his communication, however, brought out the following incisive criticism from Dr. James B. Ball, of Brixton, which appeared in the *London Lancet* of the 25th of the same month.

"Dr. Roderick Kennedy's communication on this subject, which appears in to-day's *Lancet* deserves some comment. Dr. Kennedy states that in every case in which gall-stones were proved or presumed to be the cause of periodic suffering, and in some instances in which there was merely obstruction to the proper flow of bile, the administration of large doses of olive oil was followed by prompt and painless expulsion of a surprising number of gall-stones. It is probable that Dr. Kennedy might have obtained equally surprising results if he had administered similar doses of oil to persons who had no liver symptoms whatever. Dr. Kennedy has offered no satisfactory proof that these bodies which were expelled in such a wholesale and painless manner were really gall-stones. A reference will be found in Flint's Practice of Medicine, fourth edition, page 460, to cases where enormous numbers of fatty concretions were passed after administration of large doses of olive oil given with a view to expel gall-stones. At all events a treatment followed by such tangible results must needs be very comforting to the patient's feelings."

The first case reported by Dr. Kennedy is that of an aged farmer Robert C——, of Adolphustown. Up to the time Dr. Kennedy visited him he had been under my charge, and I had been in the habit of attending the family for the last twenty-five years. I visited him for the first time in the illness referred to, on the 1st Dec. 1878, and at stated intervals up to the 20th day of the same month. He had during this period many severe attacks presenting all the usual symptoms of the passage of gall-stones. I treated each attack with hot fomentations applied outwardly, together with opium, belladonna, ether and chloroform. He was also ordered an alkaline mixture to be taken at stated intervals daily. As the attacks became less frequent and severe, and as my patient lived twelve miles out of town, I deemed it advisable to furnish his attendants with all necessary information and instructions what to do to relieve him of his sufferings in the event of a renewed attack, which did not occur more frequently than once in a week or ten days. Such was the condition of the patient when he was visited by Dr. Kennedy. The sequel which followed the administration of large doses of olive oil has been fully set forth in his printed report in the *Lancet*. It was accompanied we are told by the discharge of a surprising number of gall-stones in the evacuations. Some specimens were brought to me by members of the household, with an apology that they would have had more of them only they nearly all melted away within an hour or two after being evacuated. Those that reached me in fairest condition were partly composed of small round bodies described by Prof. Taylor, as "not unlike those which are characteristic of the evacuations of the sheep or goat," and may be produced by the administration of large doses of olive oil in healthy persons; some had the waxy appearance described by Dunglison, and although not of "sufficient consistence to bear being cut with a knife like wax,"

possessed considerable firmness. These bodies, says Dr. Dunglison, may be seen in the evacuations of patients when large doses of olive oil have been administered.

I do not for a moment doubt that Dr. Kennedy is honest in his convictions, that he had added something to medical therapeutics, as it would be difficult to account upon any other hypothesis how it came to pass that Robt. C—— fully believes he passed several hundred gall-stones, and that he was cured by large doses of olive oil; that the Dr. had "discovered a new remedy for the solution and expulsion of gall-stone that was unknown to the medical profession," and that the number of cases of gall-stone and their successful treatment with this remedy had increased of late very remarkably in Dr. Kennedy's practice in Bath and its neighborhood.

Yours, sincerely,

A. RUTTAN, M.D.

Napanee, Nov. 16th, 1880.

ORGANIZATION OF A BLOOD CLOT.

To the Editor of THE CANADA LANCET.

SIR,—At the late meeting of the Canada Medical Association held in Ottawa, Dr. Hingston, of Montreal read a paper on the "Treatment of Surgical Wounds." In the discussion which followed I made reference to the fact that a blood clot becomes organized in a wound which is treated with proper antiseptic precautions (Listerism.) Dr. Canniff in his remarks said that when a clot did become organized, "it was not blood but fibrine colored by hæmatine." In the Oct. number of the *Canada Medical Record* he again makes this statement, but on neither occasion has he furnished any proof of its truth.

A blood clot is composed of fibrine and corpuscles. In order that the latter should be displaced by hæmatine, it is necessary that the hæmoglobin contained in the corpuscles should undergo decomposition and the only agents capable of effecting this* are warmth (140 to 180° F), acids and caustic alkalies. Now as none of these forces are at work in a wound, it follows that there is no such combination as "fibrine colored by hæmatine." If Dr. Canniff means hæmoglobin when he refers to hæmatine, he will have to show how it is that the red corpuscles are destroyed and their hæmoglobin separated from the albuminous stroma. It is not my intention at present to say anything about Listerism in general, but would simply say in conclusion that to characterize as a "hocus pocus proceeding" what has done so much for humanity, in the way of preventing death and alleviating pain, is surely a very ungenerous statement, coming as it does from the President elect of the Canada Medical Association.

Yours, etc.,

J. STEWART.

Brucefield, Nov. 15th, 1880.

*Foster's Text Book of Physiology 3rd ed. p. 321. Carpenter's physiology 8th ed. p. 246.

ONTARIO MEDICAL ASSOCIATION.

To the Editor of the CANADA LANCET.

SIR:—In your last issue, you call attention to the formation of a Medical Association for Ontario. I feel confident the medical profession of Ontario earnestly desire such an Association, and will respond to your suggestions.

The Dominion Medical Association is an important; useful and necessary body; it has done well in the past, and the promises for the future are excellent. Let honor be given to the able men who organized and sustained it so well. This national assembly will always command a strong contingent from this Province. The magnificent proportions of our country present a great number of busy practitioners from attending, so that the few only receive the benefits required by the many. This deficiency can only be overcome by the formation of an Association for Ontario. The profession is losing a great amount of most valuable practical knowledge for the want of collecting it—a large harvest ungarnered. Our "Division Medical Associations" are useful, but too often, petty jealousies are allowed to mar their influence or destroy them altogether. The repeated births and deaths of these bodies are not complimentary to those connected with them. This difficulty is not likely to occur in an association of much broader basis. Much has been said and written about professional etiquette and it is well that this should be so; but when medical men know each other better, they will appreciate one another more and create a feeling within that shall prompt

pure professional conduct where the first written rule is unknown.

It is our bounden duty to carefully guard the professional status we now enjoy, and no less important to steadily improve our position. At present we are almost powerless, drifting about at the mercy of circumstances. United we can propose and carefully mature any measures necessary for our welfare, and then with confidence ask, and support necessary legislation. We are justly proud of the means of education in our public schools and colleges; but it must be confessed that the position we take with reference to State or Preventive Medicine is not consistent with the knowledge we possess. Ontario urgently requires a system of State Medicine. A powerful and intelligent body of medical men is necessary to devise such a system, cause it to be made law, and see that it is effectually executed, as it now is in many neighboring States.

A minor consideration is, shall its meetings be fixed or perambulating? Either mode will be beneficial, but a permanent central place will be the best. Toronto will fill all the conditions of a suitable point. Once a year, and a session of two days in the summer season, will meet the views of a large majority. May 1881 witness the advent of the Ontario Medical Association.

GEO. A. TYE.

Thamesville, 13th Nov., 1880.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

Sep 23rd.—The President called the meeting to order at 8.20 p.m. The minutes of the last meeting were read and adopted, after which Dr. Davidson was elected a member of the society.

Dr. Graham read the following notes of a case which was under his care at the General Hospital: W. S., æt. 20, farm labourer, admitted Sept. 10, 1880, in a semi-comatose condition. All the information which could be acquired concerning him was, that about four months ago he had had ague for which he had taken arsenic and improved. He had been ill, off and on, until ten days ago when he was notably stupid and had some mental aberration. On admission he was semi-comatose a good deal of fluid in the abdomen, some albumen in the urine, and passing large quantities of urine. His temperature fluctuated between 103° and 95°. Pulse rapid and irregular, a heart murmur could be heard which was taken for a hæmic murmur. His blood was examined on several occasions and found to contain an increase of white corpuscles. He was taking strychnine, iron and phosphorus—on the 18th he died. The post mortem showed kidneys enlarged, pale; spleen 16 oz.; heart with large vegetations attached to the tricuspid valves. Dr. Zimmerman showed the specimens. Dr. Graham's opinion of the case halted between leucocythemia and pernicious anæmia.

Dr. Oldright wished to know if the condition of the thymus gland had been observed.

Dr. Cameron in regard to the murmur which had been taken for a hæmic murmur, drew attention to a case reported lately by Garel to the Lyon Medical Society, in which a large tumour of the tricuspid valve was found p. m., which had, during life, betrayed its presence by no abnormal sound, only by jugular pulsation. He wished to know in regard to the blood, if Dr. Graham had found a relative or actual increase of the white blood corpuscles.

Dr. Graham replied that he thought there was an actual increase of the white corpuscles.

Dr. White thought the case would be classed in malarial districts amongst the pernicious intermittent cases.

Dr. Zimmerman exhibited a tumour of the testicle weighing 3 lbs. 3 oz., which he had removed from a subject of whom he had no history except that he had been in the hospital for about one year. The abdomen was apparently full of diseased structures also, but he had been unable to proceed in the examination any further. The man was apparently about 30 years of age.

Dr. McPhedran exhibited a portion of oyster shell measuring an inch and a quarter in its longest diameter, sharp on its edges, which had been swallowed by a patient of his on Monday. The shell stuck in the lower part of the pharynx. It could not be felt with the finger; a probang was passed down and the object pushed into the stomach. It was passed per anum to-day. The patient on going to stool felt something which he could not force out, and so passed his finger into the rectum and easily hooked it out without causing any pain.

Dr. Oldright mentioned a case in which a plate, containing some false teeth, had been swallowed,

and he had directed plasterers hairs in thick porridge to be eaten ; in a few days the plate passed well wrapped around with the hair.

Dr. Palmer said that he would have had great hesitation in passing a probang down the throat in a case in which the object swallowed might be supposed to have cutting edges. He should prefer to make the extraction upwards with forceps, and he thought that in addition to the danger of lacerating the œsophagus, danger was to be apprehended of the anus being fissured.

Dr. Graham reported the case of a young man whom he had seen about a week before his admission to the hospital with some inflammation of the throat with great pain and hardness, although accompanied by no serious symptoms. He entered the hospital on Saturday, and on Sunday fluctuation could be made out and one soft spot could be felt, although the pus was evidently very deep. As he seemed in every way so much easier and better, the opening was deferred until the next day. But before noon on Monday he was dead. The abscess had opened into the trachea causing suffocation. In the future Dr. Graham said that his prognosis would in similar cases be more guarded and he would open early.

Dr. Cameron remarked that Dr. Marshall in a paper on Angina Ludovici, which appeared in the *Lancet*, advised the early opening of deep cervical abscesses in the median line. If the pus came to the surface at other points, he let it out there, but also found that it was sure to require opening in the median line subsequently, as the pus drained down the fascial planes which were attached to the hyoid bone. Even if no pus appeared at the opening thus made, by carefully inserting a pair of forceps or a director he worked his way between the tissue until it was reached and free exit given to it.

Dr. Oldright stated that a case of vesico-intestinal fistula, which had been reported to the society some time ago, in which gas and tomato seeds had been passed per urethram, had terminated about two months ago by death. The post-mortem revealed a cancerous tumour of the rectum implicating the bladder. A fæcal fistula had previously formed in the left inguinal region.

Dr. Macdonald exhibited a calculus which he had extracted from a man aged 53, who had come to him in January last complaining of symptoms of stricture and cystitis. The presence of the calculus was first detected in May. Attempts were made to crush it, but did not succeed. The lateral operation was then performed Three days after the operation profuse hemorrhage set in, the wound was plugged. Symptoms of collapse came on and the patient appeared sinking. Two injections of ʒss. sulph. ether were made hypodermically ; reaction set in almost immediately. Both injections were followed by rather large abscesses.

Dr. Reeve read a paper on "Diseases of the Naso-pharynx, Tympanum and Mastoid cells." After giving a minute description of the parts he showed how the middle ear from its anatomical relations and nervous connections was liable to suffer from diseases affecting the pharnyx and nasal cavity. He dwelt at some length upon chronic coryza or naso-pharyngeal catarrh, deprecated the neglect which the colds and sore-throats of children received, stating that many of the bad cases of catarrh and deafness in after life primarily arose from this neglect. He then proceeded to speak of the various growths which may appear in the naso-pharynx, showing specimens of polypi which he had extracted. He said that poylpi were as a rule light coloured and not red, he advised the douche not to be used in cases where both nostrils were not free. He considered the wire snare the best for the extraction of polypi, but at times by grasping the growths with curved vulsella forceps, by traction and torsion he succeeded where the snare was impracticable. He apologized for the unfinished character of his paper and asked leave to complete it at some future meeting. The meeting then adjourned.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the LANCET).

The regular quarterly meeting of this Board was held in Lansing, on the 12th ult. All the members were present.

Dr. Kellogg completed his paper on contamination of water by decaying wood, and mentioned in that connection some observations of his in regard to ice being contaminated by decaying sawdust and other impurities. He showed the fallacy of the popular belief that ice freezes pure, and said that it incloses all organic impurities that float. He described a water-cooler which was designed to avoid contamination of the water by the ice, as

CANADA PRICE LIST.

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GELATINE-COATED

PILLS

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Oct. 1st, 1880.

	Bottles 100 pills	Bottles 500 pills
ACID, SALICYLIC, See Salicylic Acid.		
ACONITIA, 1-60 gr.	75	3 50
ALOES, U. S., 4 grs.	50	2 25
ALOES AND ASSAFŒTIDA, U. S., 4 grs.	50	2 25
ALOES AND IRON, 3 grs.	50	2 25
{ Pulv. Aloes Soc., Extract Conii, *aa*, 1-2 gr. }		
{ Ferri Sulph., Exsic., Pulv. Zingib. Jam., *aa*, 1 gr. }		
ALOES AND MASTIC (Diamer, Lady Webster's).	60	2 75
ALOES AND MYRRH, U. S.	60	2 75
ALOES AND NUX VOMICA, 2 grs.	75	3 50
{ Pulv. Aloes Soc., 1 1-2 grs. }		
{ Ext. Nucis Vom., 1-2 gr. }		
ALOIN, 1-10 and 1-5 gr.	50	2 25
ALOIN, 1 gr.	1 50	7 25
	75	3 50
ALTERATIVE.		
{ Pulv. Opii, Pulv. Ipecac., *aa* 1-8 gr. }		
{ Pil. Hydrarg., 1 gr. }		
AMMONIUM, BENZOATE, 3 grs.	60	2 75
AMMONIUM, MURIATE, COMPOUND.	1 50	7 25
{ Ammonii, Murias, 1 gr. }		
{ Pulv. Opii, Acid. Benzoici, *aa* 1-32 gr. }		
{ Ext., Glycyrrhizæ, Pulv. Acaciæ, *aa* 1 3-4 grs. }		
{ Camphora, 1-80 gr., Ol. Anisi, 1-32 m. }		
{ Antim. et Pot. Tart., 1-60 gr. }		
This is the Brown Mixture of the U. S. P. with the addition of 1 gr. Ammonium Murias.		
AMMONIUM, VALERIANATE, 1 gr.	1 00	4 75
ANTHELMINTIC, See Santonin and Calomel.	1 25	6 00
ANTI-BILIOUS.	75	3 50
{ Ext. Coloc. Comp., 2 1-2 grs. }		
{ Res. Podophylli, 1-4 gr. }		
ANTI-CHILL.	1 00	4 75
{ Chinoidine, Ferri Ferrocyanidum, }		
{ Ol. Piper. Nig., *aa*, 1 gr. }		
{ Acid. Arseniosum, 1-20 gr. }		
ANTI-DYSPEPTIC, 4 grs.	1 00	4 75
{ Strychnia, 1-40 gr. }		
{ Ext. Belladonnæ, Pulv. Ipecacuanhæ, *aa* 1-10 gr. }		
{ Pil. Hydrarg., Ext. Colocy. Co., pulv., *aa* 2 grs. }		
ANTI-PERIODIC.	1 00	4 75
{ Cinchonidiæ Sulph., 1 gr. }		
{ Ferri Sulph., Exsic. 1-2 gr. }		
{ Res. Podophylli, Gelsemin, *aa*, 1-20 gr. }		
{ Strychnia Sulph., 1-32 gr. }		
{ Oleoresina Capsici, 1-10 gtt. }		
APERIENT.	1 00	4 75
{ Ext. Nucis Vom., 1-3 gr. }		
{ Ext. Hyoscyami, 1-2 gr. }		
{ Ext. Coloc. Comp., 2 grs. }		
APHRODISIAC,	1 85	9 00
{ Ext. Turneræ Aphrodisiacæ, 2 grs. }		
{ Phosphorus, 1-100 gr. }		
{ Ext. Nucis Vomicæ, 1-3 gr. }		
ARSENIOUS ACID, 1-50, 1-40, 1-30 & 1-20 gr.	50	2 25
ASSAFŒTIDA, 2 grs.	50	2 25
{ Assafœtida, 1 1-2 grs., Pulv. Saponis, 1-2 gr. }		
ASSAFŒTIDA, U. S., 4 grs.	50	2 25
{ Assafœtida, 3 grs., Pulv. Saponis, 1-2 gr. }		
ASSAFŒTIDA COMPOUND. 3 grs.	50	2 25
{ Assafœtida, 2 grs. }		
{ Ferri Sulph. Exsic., 1 gr. }		
ASSAFŒTIDA AND NUX VOMICA.	75	3 50
{ Assafœtida 3 grs. }		
{ Ext. Nucis Vom., 1-4 gr. }		
ATROPIA, 1-120 gr.	75	3 50
ATROPIA, 1-60 gr.	1 00	4 75
BELLADONNA EXTRACT, 1-20, 1-8, 1-4, 1-2 gr.	50	2 25
BISMUTH, SUBNITRATE, 3 grs.	1 00	4 75
BISMUTH, SUBNITRATE, 5 grs.	1 50	7 25
BLUE PILL, U. S., 1-2, 1 and 2 grs.	50	2 25
BLUE PILL, U. S., 5 grs.	60	2 75
BLUE PILL COMPOUND.	75	3 50
{ Pil. Hydrarg., 1 gr., Pulv. Opii, 1-2 gr. }		
{ Pulv. Ipecac, 1-4 gr. }		
CAFFEIA, CITRATE, 1 gr.	3 75	18 50

	Bottles 100 pills	Bottles 500 pills
CALCIUM, SULPHIDE, 1-10, 1-4, 1-2 & 1 gr.	75	3 50
CALOMEL, 1-10, 1-2, 1, 2 and 3 grs.	50	2 25
CALOMEL, 5 grs.	60	2 75
CALOMEL COMPOUND. 2 grs.	60	2 75
{ Antim. Sulph., Hydrarg. Chlor. Mite, *aa* 1-2 gr. }		
{ Resina Guaiaci, 1 gr. }		
CALOMEL AND OPIUM, 3 grs.	60	3 75
{ Hydrarg. Chlor. Mite, 2 grs., Opii, pulv., 1 gr }		
CAMPHOR AND HENBANE, 2 grs.	60	2 75
{ Camphora, 1 gr., Ext. Hyoscyami, 1 gr. }		
CAMPHOR, HENBANE and VALERIAN, 2 1-2 grs.	60	2 75
{ Camphora, Pulv., Ext. Hyoscyami. Alc., *aa* 1 gr. }		
{ Ext. Valerianæ, 1-2 gr. }		
CAMPHOR, MONO-BROMATED, 2 grs.	1 25	6 00
CAMPHOR, MONO-BROMATED, 3 grs.	1 55	7 50
CAMPHOR, MONO-BROMATED, 5 grs.	1 85	9 00
CANNABIS INDICA EXTRACT, 1-2 gr.	1 25	6 00
CANNABIS INDICA EXTRACT, 1 gr.	1 75	9 50
CATHARTIC COMPOUND, U. S.	60	2 75
CATHARTIC IMPROVED.	60	2 75
{ Ext. Colocynth. Comp. pulv., 1 gr. }		
{ Jalapæ pulv., Res. Leptand., *aa* 1-2 gr. }		
{ Ext. Hyoscyami, Ext. Taraxici, *aa* 1-4 gr. }		
{ Res. Podoph., 1-4 gr. Ol. Menthæ Pip. }		
CATHARTIC VEGETABLE, 3 grs.	60	2 75
{ Ext. Col. Comp., pulv., 1 1-2 grs. }		
{ Res. Podophylli, 3-8 gr. }		
{ Res. Leptandræ, 1-8 gr. }		
{ Jalapæ pulv., 1-4 gr. }		
{ Aloes, Socotrin pulv., 1-2 gr. }		
{ Ext. Hyoscyami, 1-4 gr. }		
{ Ol. Menthæ Pip. }		
CERIUM, OXALATE, 1 gr.	1 00	4 75
CERIUM, OXALATE, 2 grs.	1 50	7 25
CHARCOAL, WILLOW, 3 grs.	60	2 75
CHINOIDINE, 1-2 and 1 gr.	60	2 75
CHINOIDINE, 2 grs.	75	3 50
CHINOIDINE, POWDERED, PURIFIED, 1 gr.	60	2 75
CHINOIDINE, POWDERED, PURIFIED, 2 grs.	75	3 50
CHINOIDINE, POWDERED, PURIFIED, 3 grs.	1 00	4 75
CHINOIDINE, POWDERED, PURIFIED, 5 grs.	1 50	7 25
CINCHONA BARK ALKALOIDS, See Quinine List.		
CINCHONIDIA (ALKALOID), See Quinine List.		
CINCHONIA, SULPHATE, See Quinine List.		
CINCHONIDIA, SULPHATE, See Quinine List.		
COCA EXTRACT, 1 gr.	65	3 00
COCA EXTRACT, 2 grs.	95	4 50
COCA EXTRACT, 3 grs.	1 25	6 00
CODEIA, 1-16 gr.	1 75	8 50
CODEIA, 1-4 gr.	2 50	12 25
CODEIA, 1-2 gr.	3 50	17 25
COLOCYNTH COMP. EXTRACT, 3 grs.	1 00	4 75
COLOCYNTH, IPECAC AND BLUE.	1 00	4 75
{ Pil. Hydrarg., Ext. Coloc. Comp., pulv., *aa* 2 grs. }		
{ Pulv. Ipecacuanhæ, 1-6 gr. }		
COOK'S, 3 grs.	60	2 75
{ Pulv. Rhei, Pulv. Aloes Soc., *aa*, 1 gr. }		
{ Hydrarg., Chlor., Mite, 3-4 gr. }		
{ Pulv. Saponis, 1-4 gr. }		
COPAIBA, 3 grs.	75	3 50
COPAIBA AND OLEO-RESIN CUBEB, 3 grs.	75	3 50
{ Pil. Copaibæ, 2 grs. }		
{ Oleo-Resina Cubebæ, 1 gr. }		
COPAIBA AND OLEO-RESIN CUBEB, 5 grs.	1 25	6 00
{ Pil. Copaibæ, 3 grs. }		
{ Oleo-Resina Cubebæ, 2 grs. } [1-20 gr.	50	2 25
CORROSIVE SUBLIMATE, 1-100, 1-40, 1-20 &		
CROTON OIL, 1-2 gr.	1 00	4 75
DAMIANA EXTRACT, 2 grs.	1 25	6 00
DANDELION EXTRACT, 3 grs.	50	2 25
DIGITALIA, PURE, 1-60 gr.	75	3 50
DINNER (CHAPMAN'S), 4 grs.	60	2 75
{ Pulv. Aloes Soc., Pulv. Mastiches, *aa* 1 1-2 grs. }		
{ Pulv. Ipecacuanhæ, 1 gr., Ol. Fœniculi. }		

A full line kept in stock by E. B. SHUTTLEWORTH, Toronto.

McKESSON & ROBBINS' GELATINE-COATED PILLS.—PRICE LIST CONTINUED.

	Bottles 100 pills	Bottles 500 pills
DINNER (COLE'S). { Pil. Hydrarg., Pulv. Aloes Soc. *aa*, 1 1-5 grs. / Pulv. Jalapæ, 1 1-5 grs. / Ant. et Pot., Tart., 1-50 gr. }	60	2 75
DINNER (LADY WEBSTER'S), 2 grs. { Pulv. Aloes. Soc., 1 4-5 grs. / Pulv. Mastiches, Pulv. Rosæ Gallicæ, *aa*, 3-5 gr. }	60	2 75
ELATERIUM (GLUTTERBUCK'S), 1-10 gr.	1 00	4 75
EMMENAGOGUE. { Ergotin, Extract. Helleb. Niger, *aa* 1 gr. / Ferri Sulph. Exsic., Pulv. Aloes Soc., *aa* 1 gr. / Ol. Sabinæ, 1-4 gr. }	1 35	6 50
ERGOTIN (Each pill—20 grs. Ergot), 2 grs.	2 00	9 75
EUCALYPTUS EXTRACT, 2 grs.	95	4 50
FERRUGINOUS (BLAUD'S), 2 and 3 grs. Ferri Sulphas, Potassæ Carb., P. Æ.	1 00	4 75
FUCUS VESICULOSUS EXTRACT, 2 grs.	1 00	4 75
GELSEMIUM EXTRACT, 1 gr.	75	3 50
GONOSHŒA, 5 grs. { Cubebæ, pulv., 2 grs. / Pil. Copaibæ, 1 gr. / Ferri Sulph. Exsic., 1-2 gr. / Terebinth., Venet., 1 1-2 grs. }	60	2 75
GRINDELIA ROBUSTA EXTRACT, 2 grs.	1 00	4 75
GUARANA EXTRACT (PAULLINIA), 2 grs.	2 00	9 75
HENBANE EXTRACT, 1 gr.	60	2 75
HEPATIC. { Pil. Hydrarg., 3 grs. Ext. Bellad., 1-4 gr. / Ext. Colocynthis Comp., 2 grs. }	1 00	4 75
HOOPER'S, 2 1-2 grs.	50	2 25
"HOSPITAL QUININE," see Quinine list.		
HYDRASTIA (WHITE ALKALOID), 1-2 gr.	2 50	12 25
HYDRASTIA (WHITE ALKALOID), 1 gr.	4 00	19 75
HYDRASTIN and PODOPHYLLIN, { Hydrastin Phosphas., 1-4 gr. / Podophyllin, 1-20 gr. }	1 00	4 75
HYOSCYAMIA (ALKALOID), 1-50 gr.	5 00	24 75
HYOSCYAMINE (RESINOID), 1-4 gr.	1 00	4 75
HYPOPHOSPHITES, COMPOUND. { Calcii Hypophos., 1 gr. / Sodii " 3-4 gr. / Potassii " 1-2 gr. / Ferri " 1-4 gr. }	1 50	7 25
IODOFORM, 1 gr.	1 25	6 00
IODOFORM AND IRON, 2 grs. Iodoform, Ferri Redact., P. Æ.	1 55	7 50
IPECAC AND OPIUM (DOVER, U. S.), 2 1-2 grs.	60	2 75
IPECAC AND OPIUM (DOVER, U. S.) 5 grs.	1 00	4 75
IRON BY HYDROGEN (QUEVENNE'S), 1 gr.	50	2 25
IRON BY HYDROGEN (QUEVENNE'S), 2 & 4 grs.	75	3 50
IRON, "BLAUD'S," See Ferruginous.		
IRON, BROMIDE, 2 grs.	1 50	7 25
IRON, CITRATE & CINCHONIDIA, Quinine List.		
IRON, CITRATE AND QUININE, see Quinine List.		
IRON, CITRATE & STRYCHNINE. { Ferri Citras, 1 gr., Strychnia, 1-50 gr. }	75	3 50
IRON, DIALYSED (SCALES), 2 grs.	1 50	7 25
IRON, FERROCYANIDE, 2 grs.	60	2 75
IRON, IODIDE OF (Blancard's Form.), 1 gr.	75	3 50
IRON, LACTATE, 1 gr.	60	2 75
IRON, PHOSPHATE AND STRYCHNINE. { Ferri Phosphas, 2 grs. / Strychniæ pulv., 1-60 gr. }	1 00	4 75
IRON, PROTO-CARB. (VALLET'S), 2 and 3 grs.	50	2 25
IRON, PROTO-CARB. (VALLET'S MASS), 5 grs.	60	2 75
IRON, VALERIANATE, 1 gr.	1 25	6 00
JABORANDI EXTRACT, 2 grs.	1 50	7 25
LAXATIVE (COLE'S). { Res. Podophylli, 1-10 gr. / Hydrarg. Chlor. Mite, 1 gr. / Ext. Colocy. Comp. Pulv., 3 grs. }	60	2 75
LEPTANDRIN, 1-4 gr.	60	2 75
LEPTANDRIN, 1-2 and 1 gr.	70	3 25
LIME, LACTO-PHOSPHATE, 5 grs.	2 00	9 75
LUPULIN, 2 grs.	50	2 25
MERCURY, BIN-IODIDE, 1-40, 1-25 & 1-16 gr.	50	2 25
MERCURY, CYANIDE, 1-20 gr.	50	2 25
MERCURY, PROTO-IODIDE, 1-5, 1-4 & 1-2 gr.	50	2 25
MORPHINE, ACETATE, 1-8 gr.	75	3 50
MORPHINE, ACETATE, 1-4 gr.	1 00	4 75
MORPHINE, MURIATE, 1-8 gr.	75	3 50
MORPHINE, SULPHATE, 1-16, 1-10 & 1-8 gr.	75	3 50
MORPHINE, SULPHATE, 1-6 gr.	80	3 75
MORPHINE, SULPHATE, 1-4 gr.	1 00	4 75
MORPHINE, VALERIANATE, 1-8 gr.	1 25	6 00
NEURALGIA (BROWN-SEQUARD). { Ext. Hyoscyami, 2-3 gr. / " Conii, 2-3 gr. / " Ignatii Amaræ, 1-2 gr. / " Opii, 1-2 gr. / " Aconiti, 1-3 gr. / " Cannab. Indicæ, 1-4 gr. / " Stramonii, 1-5 gr. / " Belladonnæ, 1-6 gr. }	2 60	9 75
NEURALGIA, (BROWN-SEQUARD), as above, without Ext. Ignatiæ.	2 90	9 75
NEURALGIA (DR. GROSS); See Quinine list.		
NUX VOMICA EXTRACT, 1-4 and 1-2 gr.	50	2 25
OPIUM, U. S., 1 gr.	75	3 50
OPIUM EXTRACT, 1-4 gr.	75	3 50
OPIUM EXTRACT, 1-2 gr.	1 00	4 75
OPIUM EXTRACT, 1 gr.	1 50	7 25
OPIUM AND ACETATE OF LEAD, No. 1, 2 grs. { Opii Pulv., Plumbi Acet., *aa* 1 gr. }	75	3 50
OPIUM AND ACETATE OF LEAD, No. 2. ½ grs. { Opii Pulv., 1-2 gr. Plumbi Acet., 1 1-2 grs. }	60	2 75
OPIUM AND CAMPHOR. 2 grs. { Opii Pulv., 1 gr. Camphora, 2 grs. }	75	3 50
OX GALL, 2 grs. { Fel Bovin. dep., 2 grs. Pulv. Zingiber, 1 gr. }	60	2 75
PEPSIN, 5 grs.	1 00	4 75
PEPSIN, (PURE, CONCENTRATED) 1-2 gr. Equal to 5 grs Saccharated Pepsin.	1 00	4 75
PEPSIN AND BISMUTH, 5 grs. { Pepsin, grs. Bismuth Subnit., 3grs. }	1 50	7 25
PEPSIN, BISMUTH AND STRYCHNINE, ½ grs. { Pepsin, Bismuth Subnit., *aa*, 2 1-2 grs. / Strychnia, 1-60 gr. }	1 75	8 50
PHOSPHATES IRON, QUININE & STRYCHNINE; See Quinine list.		
PHOSPHORUS, 1-100, 1-50, 1-20, 1-20 & 1-12 gr.	1 00	4 75
PHOSPHORUS COMPOUND, No. 1. { Phosphorus, 1-100 gr. / Ext. Nucis Vomicæ, 1-4 gr. }	1 25	6 00
PHOSPHORUS COMPOUND, No. 2. { Phosphorus, 1-60 gr. / Ext. Nucis Vomicæ, 1-4 gr. }		
PHOSPHORUS COMPOUND, No. 3. { Phosphorus, 1-50 gr. / Ext. Nucis Vomicæ, 1-8 gr. }	1 25	6 00
PHOSPHORUS COMPOUND AND IRON. { Phosphorus, 1-100 gr. / Ferri Phosphas, 1-2 gr. / Ext. Nucis Vomicæ, 1-8 gr. }	1 25	6 00
PHOSPHORUS AND QUININE COMPOUNDS; See Quinine list.	1 25	6 00
PHOSPHORUS AND EXTRACT ACONITE. { Phosphorus, 1-50 gr. / Ext. Aconiti Alc., 1-16 gr. }	1 25	6 00
PHOSPHORUS AND EXT. CANNABIS INDICA. { Phosphorus, 1-50 gr. / Ext. Cannab. Ind., 1-4 gr. }	1 25	6 00
PHOSPHORUS AND IRON, { Phosphorus, 1-50 gr. / Ferrum Redactum, 2 grs. }	1 25	6 00
PHOSPHORUS AND STRYCHNIA. { Phosphorus, 1-50 gr., Strychnia, 1-60 gr. }	1 25	6 00
PHOSPHORUS, DIGITALIS & EXT. HYOSCYAMUS { Phosphorus, 1-50 gr. / Pulv. Digitalis, 1 gr. / Ext. Hyoscyami, 1 gr. }	1 25	6 00
PHOSPHORUS, EXT. NUX VOM. & EXT. ALOES. { Phosphorus, 1-50 gr. / Ext. Nucis Vomicæ, 1-4 gr. / Ext. Aloes Soc., 1-2 gr. }	1 25	6 00
PHOSPHORUS, EXT. NUX VOM. & CARB. IRON. { Phosphorus, 1-50 gr. / Ext. Nucis Vomicæ, 1-4 gr. / Ferri Carb., 1 gr. }	1 25	6 00
PHOSPHORUS, IRON AND ALOES. { Phosphorus, 1-50 gr. / Ferri Sulph. Exsic., 1 1-2 grs. / Ext. Aloes Soc., 1 gr. }	1 25	6 00
PHOSPHORUS, MORPHIA AND VALER. ZINC. { Phosphorus, 1-50 gr. / Morphiæ Sulph., 1-12 gr. / Zinci Valerianas, 1 gr. }	1 75	8 50
PHOSPHORUS, NUX VOMICA & CANTHARIDES. { Phosphorus, 1-50 gr. / Pulv. Nucis Vomicæ, 1 gr. / Tinct. Canthar. Conc., 1 minim. }	1 25	6 50
PHOSPHORUS, SULPH. ZINC AND LUPULIN. { Phosphorus, 1-50 gr. / Zinci Sulphas, 1 gr. / Lupulina, 1 gr. }	1 25	6 50
PIPERIN COMPOUND. { Piperin, 1-4 gr. / Hydr. Chlor. Mite., 1-4 gr. }	75	3 50
PLUMMER'S (see Calomel Compound).		
PODOPHYLLIN, 1-20, 1-8 and 1-4 gr.	60	2 75
PODOPHYLLIN, 1-2 and 1 gr.	50	2 25
PODOPHYLLIN AND BLUE. { Podophyllin, 1-2 gr. / Pil. Hydrarg., 2 1-2 grs. }	60	2 75
PODOPHYLLIN AND LEPTANDRIN. { Podophyllin, 1-2 gr. / Leptandrin, 1 gr. }	1 00	4 75
PODOPHYLLIN, CAPSICUM AND BELLADONNA. { Podophyllin, 1-4 gr. / Ext. Bellad. Alc., 1-8 gr. / Pulv., Capsici, 1-2 gr. }	1 00	4 75
PODOPHYLLIN, COLOC., HENBANE & CALOMEL. { Res. Podophylli, 1-4 gr. / Ext. Col. Comp. Pulv., 1 gr. / Ext. Hyoscyami, 1-4 gr. / Hydrarg. Chlor. Mite, 1 gr. }	1 00	4 75
PODOPHYLLIN COMPOUND. { Podophyllin, 1-2 gr. / Ext. Hyoscyami, 1-8 gr. / Ext. Nucis Vomicæ, 1-16 gr. }	1 00	4 75
PODOPHYLLIN COMPOUND (ECLECTIC), { Podophyllin, 1-8 gr. / Leptandrin, Juglandin, *aa*, 1-16 gr. / Macrotin, 1-32 gr., Ol. Capsici. }	1 00	4 75
PODOPHYLLIN, EXT. COLOC. & BELLADONNA. { Podophyllin, 1-2 gr. / Ext. Coloc. Comp., 2 grs. / Ext. Bellad., 1-4 gr. }	1 00	4 75
POKE ROOT COMPOUND. { Ext. Phytolaccæ, Alc., 2 grs. / Ext. Stillingiæ, " 1 gr. / Ext. Stramonii, " 1-8 gr. }	1 00	4 75
POTASSIUM, BROMIDE, 2 grs.	1 00	4 75
POTASSIUM, BROMIDE, 5 grs.	1 50	7 25
QUINIDIA SULPHATE, See Quinine List.		
QUININE, BI-SULPHATE, SULPHATE AND COMPOUNDS OF QUININE, see Quinine list.		
QUININE, CARBOLATE, see Quinine List.		
QUININE, SALICYLATE, see Quinine List.		
QUININE, SULPHO-CARBOLATE, see Quinine List.		
QUININE, VALERIANATE, see Quinine List.		
RHEUMATIC. { Ext. Coloc. Comp., 1 1-2 grs. / Ext. Colch. Acet., 1 gr. / Ext. Hyoscyami, 1-3 gr. / Hydr. Chlor. Mite, 1-3 gr. }	1 25	6 00
RHUBARB, U. S.	75	3 50
RHUBARB COMPOUND, U. S.	75	3 50
RHUBARB COMPOUND AND CALOMEL. { Pil. Rhei. Comp., 1 1-2 grs. / Hydrarg. Chlor. Mite, 1 gr. }	75	3 50
SALICIN, 2 1-2 grs.	1 25	6 00

BE CAREFUL TO SPECIFY McKESSON & ROBBINS'.

McKESSON & ROBBINS' GELATINE-COATED PILLS.—PRICE LIST CONTINUED.

	Bottles 100 Pills	Bottles 500 Pills
SALICIN, 5 grs.	2 00	9 75
SALICYLIC ACID, 2 1-2 grs.	75	3 50
SALICYLIC ACID, 5 grs.	1 25	6 00
SALICYLIC ACID WITH MORPHINE. { Acid. Salicylicum, 2 1-2 grs. / Morphiæ Sulphas, 1-12 gr. }	1 25	6 00
SALICYLIC ACID WITH MORPHINE. { Acid. Salicylicum, 5 grs. / Morphiæ Sulphas, 1-8 gr. }	2 00	9 75
SANDAL WOOD EXTRACT (McK. & R.), 1 gr.	2 00	9 75
SANDAL WOOD EXTRACT " 2 grs.	3 00	14 75
SANTONIN, 1 gr.	1 00	4 75
SANTONIN AND CALOMEL. { Santonin, Hydrarg. Chlor. Mite, aa, 1-2 gr. / Theobroma Cacao. }	1 25	6 00
SQUILL COMPOUND, U. S.		
STRYCHNINE, 1-100, 1-60, 1-40 & 1-30 gr.	50	2 75
STRYCHNINE COMPOUND. { Strychnia, 1-100 gr. / Phosphorus, 1-100 gr. / Ext. Cannab. Indic., 1-16 gr. / Ginseng, 1 gr. / Ferri Carb., 1 gr. }	50	2 25
SULPHUR IODIDE, 1-35 and 1-10 gr.	1 00	4 75
SUMBUL EXTRACT, 1 gr.	50	2 25
SYPHILITIC (RICORD'S, MODIFIED). { Hydr. Iodidum Vir. 1-2 gr. / Lactucarium, 1-2 gr. / Ext. Opii, 1-10 gr. / Ext. Cicutæ, 1 1-2 grs. }	3 00	14 75
TARTAR EMETIC, 1-100, 1-30 and 1-4 gr.	1 50	7 25
TONIC (DR. AIKEN'S). See Quinine List.		
TRIPLEX. { Ext. Aloes, 2 grs. Pil. Hydrarg., 1 gr. / Podophyllin, 1-4 gr. }	50	2 25
TRIPLEX (DR. FRANCIS). { Pulv. Aloes Soc. Pil. Hydrarg. / Pulv. Scammonii. Ol. Tigli. / Pulv. Myrrhæ. Ol. Carui. }	1 00	4 75
VALERIAN EXTRACT, 2 grs.	1 00	4 75
ZINC, OXIDE, 1-2 gr.	60	2 75
ZINC, PHOSPHIDE, 1-8 and 1-4 gr.	75	3 50
ZINC, PHOSPHIDE, 1-2 gr.	1 00	4 75
ZINC, PHOSPHIDE & EXT. NUX VOMICA. { Zinci Phosphidum, 1-10 gr. / Ext. Nucis Vomicæ, 1-4 gr. }	1 00	4 75
ZINC, VALERIANATE, 1 gr.	95	4 50

Our Pills are procurable from all respectable Druggists, or sent by mail direct from New York, in Boxes of 100 and 500, upon receipt of list price, whenever it is impossible to obtain McKesson & Robbins' at your Druggists'.

Private formulas of 3,000, or over, made and coated to order.

	Bottles 100 pills	Bottles 500 pills
CINCHONA BARK ALKALOIDS. { Quiniæ Sulph., 1-2 gr. / Cinchonidiæ Sulph., 1-2 gr. / Cinchoniæ Sulph., 1-2 gr. / Cinchonidiæ Sulph., 1-2 gr. }	1 90	9 25
CINCHONIA, SULPHATE, 2 grs.	95	4 50
CINCHONIA, SULPHATE, 3 grs.	1 35	6 50
CINCHONIDIA (ALKALOID), 1 gr.	95	4 50
CINCHONIDIA (ALKALOID), 2 grs.	1 55	7 50
CINCHONIDIA (ALKALOID), 3 grs.	2 05	10 00
CINCHONIDIA, SULPHATE, 1 gr.	80	3 75
CINCHONIDIA, SULPHATE, 2 grs.	1 35	6 50
CINCHONIDIA, SULPHATE, 3 grs.	2 00	9 75
CINCHONIDIA, SULPHATE, 4 grs.	2 50	12 25
CINCHONIDIA, SULPHATE, 5 grs.	3 00	14 75
"HOSPITAL QUININE," 1-4 gr.	75	3 50
"HOSPITAL QUININE," 1-2 gr.	80	3 75
"HOSPITAL QUININE," 1 gr.	1 25	6 00
"HOSPITAL QUININE," 1 1-2 grs.	1 95	9 50
"HOSPITAL QUININE," 2 grs.	2 50	12 25
"HOSPITAL QUININE," 3 grs.	3 75	18 50
"HOSPITAL QUININE," 4 grs.	5 00	24 75
"HOSPITAL QUININE," 5 grs.	6 25	31 00
The unbleached, crystallized, combined alkaloids of Cinchona bark, (Cinchonia alone separated) containing fifty per cent. pure Quinia Sulph.		
IRON & CINCHONIDIA, CITRATE, 2 grs.	75	3 50
IRON & CINCHONIDIA. CITRATE, 3 grs.	1 10	5 25
IRON & QUININE, CITRATE, 1 gr.	95	4 50
IRON & QUININE, CITRATE, 2 grs.	1 35	6 50
IRON & QUININE, CITRATE, 3 grs.	1 90	9 25
IRON, QUININE AND STRYCHNINE. { Ferrum Redactum, 1 gr. / Quiniæ Sulphas, 1 gr. / Strychnia, 1-60 gr. }	1 90	9 25
NEURALGIA, (DR. GROSS'). { Quiniæ Sulphas, 2 grs. / Morphiæ Sulphas, 1-20 gr. / Strychnia, 1-30 gr. / Acid. Arseniosum, 1-20 gr. / Ext. Aconiti, 1-2 gr. }	3 75	18 50
NEURALGIA (GROSS), as above, without Morphine	3 50	17 25
PHOSPHATES IRON, QUININE & STRYCHNINE. { Ferri Phosphas, 2 grs. / Quiniæ Phosphas, 1 gr. / Strychniæ Phosphas, 1-60 gr. }	1 90	9 25
PHOSPHORUS AND QUININE. { Phosphorus, 1-60 gr. / Quiniæ Sulph., 1 gr. }	2 25	11 00
PHOSPHORUS, IRON AND QUININE. { Phosphorus, 1-100 gr. / Ferri Carb. (Vallet's), 1 gr. / Quiniæ Sulph., 1 gr. }	2 50	12 25
PHOSPHORUS, IRON, QUININE & NUX VOM. { Phosphorus, 1-100 gr. / Ferri Carb. (Vallet's), 1 gr. / Quiniæ Sulph., 1 gr. / Ext. Nucis Vomicæ, 1-2 gr. }	2 50	12 25
PHOSPHORUS, QUINIA, IRON AND STRYCHNIA. { Phosphorus, 1-100 gr. Ferri Redact., 1 gr. / Quiniæ Sulph., 1 gr. Strychnia, 1-60 gr. }	2 50	12 25
QUINIDIA, SULPHATE, 1 gr.	1 00	4 75
QUINIDIA, SULPHATE, 2 grs.	1 90	9 25
QUINIDIA, SULPHATE, 3 grs.	2 50	12 25
QUININE, BI-SULPHATE, same sizes and prices as Sulphate, see below.		
QUININE BROMIDE, 1 gr.	3 15	15 50
QUININE BROMIDE, 2 grs.	4 50	22 25
QUININE BROMIDE, 3 grs.	6 25	31 00
QUININE, CARBOLATE, 1 gr.	3 15	15 50
QUININE, SALICYLATE, 1 gr.	3 15	15 50
QUININE, SULPHATE, 1-4 gr.	85	4 00
QUININE, SULPHATE. 1-2 gr.	1 05	5 00
QUININE, SULPHATE, 1 gr.	1 80	8 75
QUININE, SULPHATE, 1 1-2 grs.	2 80	13 75
QUININE, SULPHATE, 2 grs.	3 45	17 00
QUININE, SULPHATE, 3 grs.	5 15	25 50
QUININE, SULPHATE, 4 grs.	6 90	34 25
QUININE, SULPHATE, 5 grs.	8 60	42 75
QUININE, SULPHO-CARBOLATE, 1 gr.	3 15	15 50
QUININE, SULPHO-CARBOLATE, 2 grs.	3 75	18 50
QUININE, SULPHO-CARBOLATE, 3 grs.	6 50	32 25
QUININE, SULPHO-CARBOLATE, 5 grs.	10 25	51 00
QUININE, VALERIANATE, 1-2 gr.	1 90	9 25
QUININE AND ALOES, 1 gr. { Quiniæ Sulphas, 3-4 gr. / Pulv. Aloes Soc., 1-4 gr. }	1 80	7 75
QUININE AND ARSENIC, { Quiniæ Sulphas, 1 gr. / Acid. Arseniosum, 1-30 gr. }	1 90	9 25
QUININE AND CAPSICUM. { Quiniæ Sulph., 1 gr. / Pulv. Capsici., 1-4 gr. }	1 90	9 25
QUININE AND IRON BY HYDROGEN. { Quiniæ Sulphas, 1 gr. / Ferrum Redactum, 1 gr. }	1 90	9 25
QUININE AND IRON, CARBONATE. [Quiniæ Sulphas, 1 gr. Ferri Subcarb., 2 grs.]	1 90	9 25
QUININE AND IRON, IODIDE. { Quiniæ Sulph., 1-2 gr. / Ferri Iodidum, 1 gr. }	1 35	6 50
QUININE AND STRYCHNINE. { Quiniæ Sulphas., 1 gr. / Strychnia, 1-60 gr. }	1 90	9 25
QUININE, ARSENIC AND NUX VOMICA. { Quiniæ Sulphas, 1 gr. / Acid. Arseniosum, 1-60 gr. / Ext. Nucis Vomicæ, 1-4 gr. }	1 90	9 25
QUININE COMPOUND. { Quiniæ Sulphas., 1 gr. / Ferrum Redact., 1 gr. / Acid. Arseniosum, 1-32 gr. }	1 90	9 25
QUININE COMPOUND AND EXT. DANDELION. { Quiniæ Bi-Sulph., 1 1-4 grs. / Ferri Sulph., Exsic., 2 grs. / Acid. Arseniosum, 1-64 gr. / Extract Taraxici, 1 1-4 grs. }	2 25	11 00
QUININE COMPOUND AND STRYCHNINE. { Quiniæ Sulphas, 1 gr. / Ferrum Redactum, 1 gr. / Strychnia, 1-20 gr. / Acid. Arseniosum, 1-20 gr. }	1 90	9 25
QUININE, IRON AND NUX VOMICA. { Quiniæ Sulph., 1 gr. / Ferri Carb. (Vallet's), 2 grs. / Ext. Nucis Vomicæ, 1-4 gr. }	1 90	9 25
QUININE, PHOSPHORUS AND IRON. See Phosphorus, Iron, &c., above.		
QUININE, PHOSPHORUS AND NUX VOMICA. { Quiniæ Sulphas, 1 gr. / Phosphorus, 1-60 gr. / Ext. Nucis Vomicæ, 1-60 gr. }	2 50	12 25
QUININE, PHOSPHORUS AND NUX VOMICA. { Quiniæ Sulphas, 1 gr / Phosphorus, 1-60 gr. / Ext. Nucis Vomicæ, 1-4 gr. }	2 50	12 25
QUININE, QUASSIA AND NUX VOMICA. { Quiniæ Sulph., 1 gr. / Ext. Quassiæ, 1 gr. / Ext. Nucis Vomicæ, 1-4 gr. }	2 25	11 00
TONIC (DR. AIKEN'S). { Quiniæ Sulph., 1 gr. / Acid. Arseniosum, 1-50 gr. / Ferrum Redactum, 2-3 gr. / Strychnia, 1-50 gr. }	1 90	9 25

NOTE.—The **advantages** of a **perfect coating of Gelatine** are so obvious that many imitations of our Pills have been placed upon the market and called by different names, calculated to deceive the Profession as to their merits. We would call the attention of Physicians and Druggists to this fact, and **request them to specify McK. & R.'s in their prescriptions and orders.**

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CAUTION. SPECIFY McK. & R.

GELATINE-COATED PILLS.

Full list of all our Pills and our Sixth edition Formula Book furnished upon application.

Some of our Recent Additions.

We are continually making additions to our list of Gelatine-Coated Pills, both for the convenience of the medical profession and for experimental test of "new" remedies. Below we give a few of the latest:

Galbanum Compound.

{Galbani pulv., Assafœtida purif., Ferri Sulph. Exsic., Myrrhæ pulv., Tr. Canthar., *aa*, gr. 3-5.}

Galbanum Compound, B. P.

{Galbani pulv., Myrrhæ pulv., Assafœtida purif., *aa*, gr. 1 1-4.}

Iodoform, Iron & Quinine, No. 1.

{Iodoformum, 1 gr. Ferri Protocarb., 2 grs. Quiniæ Sulph., 1-2 gr.}

Iodoform, Iron & Quinine, No. 2.

{Iodoformum, 1-2 gr. Ferri Protocarb., 1 gr. Quiniæ Sulph., 1-4 gr.}

Iron, Citrate & Cinchonidia, 2 & 3 grs.

Neuralgia, Brown Sequard, Without Ignatia Amara.

Pepsin, Pure Concen., 1-2 gr.

Each pill equal to 5 grains Saccharated Pepsin.

Leptandrin, 1-4, 1-2 & 1 gr.

Made only of the best resin, and may be relied upon.

Notes on some Important Pills.

Sulphide of Calcium, 1-10, 1-4, 1-2 & 1 gr.

We are now making the above sizes of this important pill, which we introduced to the profession about two years ago. The pill appears to be much esteemed, and our sales have been very large in consequence. It is a remedy of great importance in scrofula, glandular enlargements and diseases of a kindred nature, such as boils, eruptions of the skin, etc. Lately we receive accounts of its being of great value in the cure of Diabetes.

Aloin, 1-10, 1-5 & 1 gr.

The active principle of Aloes. This article appears to be growing in favor; it may be given whenever aloes is indicated. It resembles the gum in effect, but is free from the tendency to gripe.

Bi-Sulphate Quinine, 1-4, 1-2, 1, 1 1-2, 2, 3, 4 & 5 grs.

Recommended for their ready solubility. It is an attested fact that Bi-Sulphate Quinine dissolves in one-seventieth part of as much water as the Sulphate requires, which renders it much the more desirable salt in important cases. We offer the pills at the same prices as the ordinary sulphate.

would happen if the ice were placed directly in the water. A cylinder containing ice was placed in the centre of the cooler, allowing the water to come in contact with this cold cylinder without touching the ice. He also reported progress in studies relative to the work of the new committee to which he was appointed,—"The Relations of Preventable Sickness to Taxation."

Dr. Baker made a report of the work in the Secretary's office. He stated in reference to the proposed regulation of medical practice, that he had prepared a paper and a form for a Bill. He submitted an outline of it to the Board. He had done this partly because he feared the State Board of Health would be made the examining board, and its usefulness for other important work impaired. The following resolutions were adopted by the Board :—

Resolved,—That there should be required of all who are to begin the practice of medicine in this State, an examination as to their qualifications.

Resolved,—That such examinations by the State should be restricted to questions in demonstrable knowledge as distinguished from questions of mere opinion.

Resolved,—That, as a public health measure, a committee, consisting of Drs. Lyster and Baker and Rev. Dr. Jacokes, be appointed to prepare and report at the next meeting of the Board, a plan for furthering the objects stated in the preceding resolutions.

The annual report of the Secretary showed that the total expenditure of the Board for the fiscal year was $3,650. The Secretary reported that Dr. M. Veenboer, of Grand Rapids, and Henry B. Baker, M.D., of Lansing, the applicants for examination in Sanitary Science by this Board, July 14, both passed the examination, and the Board had since voted to grant them certificates.

It was voted to hold two Sanitary Conventions, for the reading of papers, discussion of sanitary topics, and the exhibition of sanitary appliances, during the coming winter, and a committee was appointed to make arrangements for the Conventions. Prof. Strong said the Convention at Grand Rapids last winter had greatly stimulated public health work in that city.

The Secretary was directed to investigate the hog cholera now prevailing in the southwestern part of the State, and find if possible any relation between that and any sickness in the human species.

Dr. Baker presented specimens of pine infected with a fungus which had completely destroyed the floors of several rooms, constructed of that wood, in a new building. The fungus seemed to grow most where the floor was covered, as with oil-cloth or by boxes resting on the floor; and in one room the decayed floor corresponded with the portion not exposed to light, though that case may be explained by a greater amount of moisture in that part of the room, because of dampness underneath. The odor in the room was that mouldy or musty odor not infrequently met with in close rooms. It caused frontal headache, and a person engaged in repairing the floor had spells of sneezing on two occasions, some months apart, while thus employed.

Dr. Henry B. Baker was appointed a delegate to the meeting of the American Public Health Association, at New Orleans, in December.

The next regular meeting of the Board will be in January, 1881.

CANADA MEDICAL ASSOCIATION.

REPORT OF THE COMMITTEE ON NECROLOGY.*

GENTLEMEN :—With the annually recurring meeting and festivities of this association it becomes our duty to pay our respects to the departed brethren in the profession, by an annual roll-call of the honored dead. Some of the members who joined us in our meeting in London last year have since been called to their fathers, and it may be that some who meet together to-day in such health and buoyancy of spirits, meet for the last time on earth. These are solemn warnings which we do well occasionally to recall to mind. We are continually reminded that life is short, and the thread soon runs out. The span of our earthly existence at best is narrow, and we know not how soon it may be crossed. The destroying angel has been busy among our ranks since last we met together. Our list contains *thirty* names, but there are no doubt many more whose names have not been handed in. Among those we have, are to be found both *young* and *old*, but those of middle life are most numerous. A few have lived to a green old age, and, ripe in experience and full of

*In the absence of the Chairman the report was prepared by Dr. Fulton a member of the Committee.

honors, have gone done to the grave lamented. Some have been cut off ere they had yet entered the threshold of professional life, but by far the greater number have been taken away in the prime of life, in the vigor of manhood, and in the midst of active professional duties. The list is as follows :—

Dr. R. W. W. Carroll, Barkery, B.C.
Dr. E. L. Hopkins, Hamilton.
Dr. J. Garvey, Ottawa.
Dr. W. A. Doupe, Zurich.
Dr. O. Rupert, Maple.
Dr. J. Clarke, Pugwash, N.S.
Dr. James Bovell, Toronto.
Dr. J. R. Ash, Centreville.
Dr. A. Higinbotham, Belleville.
Dr. R. N. Burnham, Port Hope.
Dr. Chas. F. A. Locke, Hamilton.
Dr. J. R. Phillips, Galt.
Dr. R. S. Campbell, Dartmouth, N.S.
Dr. J. Demers, St. Jean, Que.
Dr. C. B. Hall, Toronto.
Dr. J. Struthers, Kentville, N.S.
Dr. S. G. Rutherford, Newry, Ont.
Dr. J. Cook, Sault St Marie.
Dr. J. McGrath, Bothwell.
Dr. J. Turquand, Woodstock, Ont.
Dr. W. R. Rose, Newcastle.
Dr. W. J. Gracey, Comber, Ont.
Dr. Herriman, Port Hope, Ont.
Dr. Thomas White, Hamilton.
Dr. W. N. Campbell, Wellington, Ont.
Dr. P. W. Smith, Digby, N.S.
Dr. J. M. Fowler, Burford.
Dr. Thos. P. Eckhardt, Unionville, Ont.
Dr. H. W. Rath, Toronto.
Dr. J. A. Wolfe, Ottawa.

Two of the above were cases of accidental poisoning, viz., Drs. Gracey and Clarke, and one a sad case of drowning, Dr. Doupe, on the ill-fated Steamer Waubuno.

Selected Articles.

PRESERVATION OF THE MALAR BONE IN REMOVAL OF THE UPPER JAW.

BY PROF. W. H. PANCOAST, PHILADELPHIA HOSP.

The patient was a young lady, fourteen years of age, Miss Mamie Alexand. The right cheek was very much swollen, so as to nearly close the right eye. The tumor was considered to be a sarcoma, apt to return, and required a very thorough removal. The patient believed the tumor to be the result of a blow upon the cheek, from a ball, received some months past.

For the successful extirpation of the tumor, the lecturer said it would be necessary to remove the whole upper jaw. The operation is a serious one, and must be carefully performed, to avoid hemorrhage from the internal maxillary artery, or its branches. If bleeding should occur, ligate the bleeding vessels, if possible, in the wound, and it is well not to close the wound immediately, so as to avoid secondary hemorrhage. If secondary hemorrhage should occnr, it is better to tie the external carotid artery in the middle triangle of the neck, than to reopen the face and give an additional shock to the patient ; and even before closing the wound, if the hemorrhage cannot be successfully controlled, it may become necessary to ligate the external carotid. In the five cases of exsection of the upper jaw that Prof. Pancoast had performed, he said he had secondary hemorrhage in only one. The patient was a gentleman from Kentucky, who had violent hemmorrhage from the tumor previous to the operation. The blood flowed freely from the mouth and the nose, and twice his life was in great danger. The wound was not closed for about four hours, but hemorrhage recommenced, flowing mostly from the mouth, and at midnight the lecturer was obliged to ligate the external carotid artery in the middle triangle, successfully checking the bleeding. The lecturer spoke of another case where he removed the left superior maxillary bone, for sarcoma, in a lady seven months gone with pregnancy. The tumor was growing so rapidly that he feared it would kill the patient before she came to term, yet he dreaded that the shock of an operation might produce an abortion. He induced the patient to consult Prof. Gross and Emeritus Prof. Pancoast. They also feared that an abortion might be the result of the shock, but believed the operation was justifiable. Prof. Pancoast said he performed the operation, and it was not followed by any untoward symptom. The operation was performed under ether, and the deep parts of the wound were seared with the hot iron. No uterine pains occurred, no suppositories of opium were required. The wound healed quickly and completely in ten days, when the patient was discharged from treatment and went home. The lady went her full time and was delivered of a healthy boy.

It is necessary to understand the anatomical construction, to properly comprehend the operation. In consequence of the attachments of the upper maxillary, the disarticulation of the bone has been accompanied with that of the malar bone ; the chisel and hammer, or the long cutting forceps, being applied first upon the nasal process of the bone, then to the external or frontal process, and then to the thin zygomatic process of the malar, at its junction with the zygomatic process of the temporal. The bone is then cut from its fellow, pried down from the orbit, cutting with

curved scissors, or the chisel, the superior maxillary nerve, where it enters the infra-orbital canal. Prying still further, or pulling with strong forceps, the bone is separated from, or brings it a portion of the palate bone, and the exsection is finished.

Years ago, in demonstrating this anatomy, I was always struck with the solidity of the malar bone, in contrast with the other bones of the face. This is a practical anatomical point, showing the evidence of design in forming the skeleton. As the malar bone is the prominent bone, making the support of the cheek, and exposed to blows, it is necessary and well that it should be a solid bone, well buttressed to the skull. If it were spongy, it might still support the cheek, but it would be frequently liable to fracture, and also to inflammation and caries. Again, I noticed in the operation in which it was removed, that, while the superior maxillary was a mere sponge, so broken down was it, yet the malar was solid and aparently unaffected by the disease.

In my second operation for the removal of the superior maxillary bone, for cancer, I decided that my patient should have the benefit of my observations. I had a big curved needle made, fashioning it on the skull so that it would readily pass through the anterior fissure, in the floor of the orbit, and present readily in the mouth, so that the ligature it carried could pull a chain saw easily through. This is the needle I show you. With the chain saw I readily severed the articulation of the superior maxillary from the malar. It takes but a little more time to do so, and the consequent gain of less disfigurement from the operation, by retaining the malar bone, is great, and not only pleasing to the operator, but very gratifying to the patient.

The operator chose a medium-sized well balanced scalpel, two tenacula, black silk ligatures, some fine and some very strong, dissecting forceps, a good, strong pair of cutting forceps, and the curved needle armed with a ligature tied to a chain saw.

The patient was placed upright in a chair, so that the blood would flow readily out of the mouth, and not down the throat.

The knife was entered deeply, a half inch behind the external angular process of the frontal bone, and the incision swept down vertically and rapidly to the line of Stern's duct, then parallel with and above the duct, to the right ala of the nose, and then down vertically, completely through the upper lip, just in front of the angle of the mouth. The flaps were turned off the bones with careful and rapid touches of the knife, a coronary artery tied with a black silk ligature, the facial artery caught and held by a pair of arterial forceps, which were left hanging to it. The large curved needle was passed under the eyeball, on the floor of the orbit, and appeared in the buccal cavity; the chain saw followed it in a moment; the bone was sawed through, separating the superior maxillary bone from the malar. With the large cutting forceps, the nasal process of the bone was cut through, the right incisor tooth was pulled out, and the cutting forceps applied to the roof of the mouth, cutting through the hard palate. With his left hand the operator depressed the bone, and with a pair of curved scissors cut through the superior maxillary bone, or remains of it, broken down and mixed with the cancerous mass, making the tumor.

The operation was over within five minutes.

The lecturer now cleaned out the wound, tearing away and cutting off with curved scissors masses which he deemed unhealthy. The arterial forceps was removed, and a black silk ligature was applied on the artery. No other bleeding, except a slight ooze, existed. The wound was carefully examined by the operator and Dr. Janney and Dr. Welsh, who were present.

The wound was pronounced healthy looking, and the tumor considered to be thoroughly removed, by these gentlemen. The cavity was now filled with strips of patent lint soaked in aqua Pagliara in such a way as to leave the ends easily accessible, and the wound closed temporarily. The operator stated that this line of incision was original with him, as well as his method of leaving the malar bone. He has seen them nowhere mentioned, though as there is so little new, probably some other surgeon may also have thought of them.

The operator said he preferred this line of incision, this sweeping, curved incision, as it left as little deformity as possible. The paralysis of the face would become less when the divided nerves united, and this form of incision permitted the flaps to be very accurately united. He also stated that the exercise of the superior maxillary bone, together with the malar, is said to have been first performed in France, by Gensoul, and in England, by Lizars. Gensoul's line of operation makes an upper and a lower flap, and the description is not simple. Lizars made a triangular flap, one incision extending down vertically through the nose and the upper lip. Cutting through the nostril is not necessary, and is an additional disfigurement. Ferguson made a V shaped flap. Warren, Velpeau, Professor Gross and others prefer a semilunar flap. The incision extends from near the zygomatic process of the malar, in a curvilinear direction, to the angle of the mouth. The one just performed more certainly avoids Steno's duct, and, the operator thought, injures fewer branches of the portio dura.

Some three or four hours after the clinic was over, and the patient had thoroughly reacted, the temporary dressing was removed, the flaps opened, the lint withdrawn and the wound found dry. No subsequent hemorrhage had occurred. The wound

was examined carefully, and looked healthy, clean and dry. Lint soaked in the aqua Pagliara was again gently introduced, for astringent effect and support to the flaps. These were then neatly and carefully drawn together by interrupted black silk sutures, angle to angle, curve to curve. Only three steel toilet pins were used, one at the upper angle of the wound, one at the ala of the nose, and one through the lip, the oval suture. The incision was closely and completely united, great care being taken to unite the mucous membrane of the lip neatly and accurately. Then very fine black silk sutures were applied on the inside also, the lip being everted during the sewing, and the mucous membrane of the inside as neatly united as on the outside. The operator closed the wound up thus perfectly, to favor union by first intention, as the drainage was free, by the mouth. The line of incision externally was carefully covered by patent lint, saturated with carbolized oil, retained by two broad strips of adhesive plaster. The cheek was ordered to be covered with a solution of lead water and laudanum, and the eye with a weak solution of sulphate of zinc. A hypodermic injection of one-third of a grain of sulphate of morphia was given, and the patient, in a very good condition after such a serious operation was placed in bed.

NOTE.—Two weeks after the operation the patient walked into the amphitheatre, looking well and cheerful. The sutures had all been removed. The wound was thoroughly united and there was remarkably little deformity. Some suspicious points were removed with scissors and touched with crystals of chloride of zinc.—*Med. and Surg. Reporter.*

MEDICAL ACT FOR THE STATE OF NEW YORK.

The following act entitled "An act to regulate the licensing of physicians and surgeons.," was passed May 29th, 1880.

SECTION 1. A person shall not practice physic or surgery within the state unless he is twenty-one years of age, and either has been heretofore authorized so to do, pursuant to the laws in force at the time of his authorization, or is hereafter authorized so to do, as prescribed by chapter seven hundred and forty six of the laws of eighteen hundred and seventy-two, or by subsequent sections of this act.

SEC. 2. Every person now lawfully engaged in the practice of physic and surgery within the state shall, on or before the first day of October, eighteen hundred and eighty, and every person hereafter duly authorised to practice physic and surgery shall, before commencing to practice, register in the clerk's office of the county where he is practicing, or intends to commence the practice of physic and surgery, in a book to be kept by said clerk, his name, residence and place of birth, together wtth his authority for so practicing physic and surgery as prescribed in this act. The person so registering shall subscribe and verify by oath or affirmation, before a person duly qualified to administer oaths under the laws ot the state, an affidavit containing such facts, and whether such authority is by diploma or license, and the date of the same, and by whom granted; which, if willfully false, shall subject the affiant to conviction and punishment for perjury. The county clerk to receive a fee of twenty-five cents for such registration, to be paid by the person so registering.

SEC. 3. A person who violates either of the two preceding sections of this act, or who shall practice physic or surgery under cover of a diploma illegally obtained, shall be deemed to be guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than fifty dollars nor more than two hundred dollars for the first offence, and for each subsequent offence by a fine of not less than one hundred dollars nor more than five hundred dollars, or by imprisonment for not less than thirty days nor more than ninety days, or both. The fine when collected shall be paid, the one-half to the person or corporation making the complaint, the other half into the county treasury.

SEC. 4. A person coming to the state from without the state, may be licensed to practice physic and surgery, or either, within the state, in the following manner: If he has a diploma conferring upon him the degree of doctor of medicine, issued by an incorporated university, medical college, or medical school without the state, he shall exhibit the same to the faculty of some incorporated medical college or medical school of this state, with satisfactory evidence of his good moral character, and such other evidence, if any, of his qualifications as a physician or surgeon, as said faculty may require. If his diploma and qualifications are approved by them, then they shall indorse said diploma, which shall make it for the purpose of his license to practice medicine and surgery within this state the same as if issued by them. The applicant shall pay to the dean of said faculty the sum of twenty dollars for such examination and indorsement. This indorsed diploma shall authorize him to practise physic and surgery within the state upon his complying with the provisions of section two of this act.

SEC. 5. The degree of doctor of medicine lawfully confsrred by any incorporated medical college or university in this state shall be a licence to practice physic and surgery within the state, after the person to whom it is granted shall have complied with section two of this act.

SEC. 6. Nothing in this act shall apply to com-

missioned medical officers of the United States army or navy, or of the United States marine hospital service. Nor shall it apply to any person who has practised medicine and surgery for ten years last past, and who is now pnrsuing the study of medicine and surgery in any legally incorporated medical college within this state, and who shall graduate from and receive a diploma within two years from the passage of this act.

SEC. 7. All acts, or parts of acts, inconsistent with the provisions of this act are hereby repealed.

PRIMARY AND SECONDARY AMPUTATION.—Prof. Richet, in a letter delivered at the Hotel-Dieu (*Union Méd.*, July 8), made the following observations on the question of primary amputation, etc.: "I think I ought to acquaint you with the reasons which determine me only very rarely to practise amputation immediately after great injuries, and only when my hand is forced. At all epochs surgeons have been divided in opinion as to which of these two procedures it is most advantageous to have recourse. As far as I am concerned, during the first third of my career I was a convinced partisan of the necessity of immediate amputation, and cannot therefore blame those who practise it at the present time with a conviction as strong as that which I then entertained. But I have gradually become converted to secondary amputation, and am now one of its most earnest defenders. The theory of immediate amputation appears, indeed at first sight, very seducing. It would seem that a patient in whom a violent injury had torn the muscles and crushed the bones could only be the gainer by substituting for this tearing and crushing a clean and regular wound—in one word a surgical wound. Unfortunately, the practical results do not agree with the theoretical view and reasoning. In the different hospitals in which I practised surgery at the beginning of my career—at the St. Antoine as well as at the St. Lewis—I found the patients on whom I had performed amputation succumbing within the forty-eight hours. Malgaigne, to whom I communicated my want of success, told me one day that he had gone through the same experience, and this it was which determined him to investigate the results of these immediate amputations. He avowed that the statistics were frightful, and that the mortality attained the figure of 86 per cent. So elevated a mortality seems of itself sufficient to prevent a surgeon following this practice; but it is of interest to seek for its reasons.

"When an individual has undergone a violent injury, his nervous system is greatly shaken by it, his pulse is depressed, and his temperature notably lowered—in a word, he is suffering from what is known as traumatic shock. Not only is the temperature lowered, but the circulation is delayed to such a point that the soft parts should assume a violaceous color, and then become gangrenous, at least in places. Soon there supervene intramuscular tumefactions and subcutaneous emphysema, the precursor of sphacelus. There already exists in all these cases manifest disturbance in the two greatest apparatus of the economy—functional disturbance of the nervous system and of the circulatory system—and all of a sudden is added to these pre-existing disturbances the new shock of a mutilation. It is certain that a considerable moral depression, caused by the loss of a limb, is added to the physical depression; and this moral depression should be largely taken into account owing to the chances of the failure of the operation. But this is not all. It will happen—not in hospitals, in which usually but slight resistance is made to the propositions of the surgeon, but in private practice—that we meet with a refusal when we have declared that immediate amputation is necessary. What happens then? If the patient dies, it will be said that he must have died under any circumstances, and would have done so more quickly under the operation. But if he recovers—escapes, as it is called—which is not rarely the case, the surgeon and surgery will both become the objects of serious and painful blame, which is also a grievous thing. Even when the patient, as is sometimes the case, does not succumb very soon after the operation, you must still not think that he will be preserved from all consecutive danger. He will continue exposed to those purulent burrowings which so frequently follow the intramuscular sanguineous effusions. Then there are the muscular retractions aad conical stump. Suppose, on the other hand, you decide for abstention, there will be necessarily a considerable number of cases prove fatal; but you may feel assured that these belong to the class of those whom immediate amputation would certainly not have proved of avail. Others, fewest in number, will traverse the first accidents with success. The nervous system recovers itself little by little, the circulation regains strength, and the temperature rises; and, as a consequence, two or three days afterwards, normal inflammatory phenomena begin to appear. Is this, then, the moment at which the amputation will have the *greatest chance* of success? Not yet. Such, at least, was the opinion of Velpeau and of Roux, with which I entirely coincide. They never operated before the fifth or sixth day, and this also is my habit of proceeding. I may finish with an anecdote which may impress this practice on your memory. Questioned one day by a *confrère*, who asked me, pointing to a patient upon whom I was delaying the operation, 'What is your object in waiting in this case?' 'I am waiting,' I replied, 'until he asks me himself to operate; and that will not be very long, for he accustoms himself to

the idea on seeing that it is no longer possible to save the limb. The operation will then become a deliverance, instead of a sacrifice—a sacrificc on which he would now not decide without repugnance.'"—*Med. Times and Gaz.*, August 21.

REMOVAL OF EHE TONGUE BY MEDIAN DIVISION OR SPLITTING.—Mr. Morrant Baker, of London, recommends a method of removing the tongue for disease, which seems to possess some advantages. The operation is thus described in the *Lancet*, April 10, 1880: "After the introduction of a suitable gag, and the removal of any sharp or jagged teeth which might be in the way of the operator, two threads are passed through the tongue about an inch behind the tip, and half an inch on each side of the middle line. The tongue being now drawn forward and upward the frænum, and, as far as it may seem necessary, some of the muscular attachments of the tongue to the lower jaw in front, are now snipped through with strong, rather curved, scissors, and the scissors are then run along the floor of the mouth at the side, beneath tne mucous membrane, as far back as may seem requisite. keeping close to the lower jaw, both for the avoidance of hemmorrhage and for the sake of being clear of the disease. The operator, now with his forefinger, clears the tongue in front and at the sides, and drawing it well forward again, and giving one thread to his assistant while he holds the other himself, he cuts steadily along the middle line of the tongue from the tip backward, and furthest along the mucous membrane. On the withdrawal of the knife, the finger is again introduced, and it will be found quite easy to complete with it the median division of the tongue, by a little tearing or splitting between the two halves. The only part which cannot be torn is the mucous membrane of the dorsum. Hence the advice just given, to divide this with the knife as far as may seem necessary for getting beyond the level of the disease. The ecraseur is now slipped over the diseased body of the tongue, the assistant turning the screw while the operator keeps the loop as far behind the disease as possible. This is, of course, one of the most important parts of the operation; any want of care at this stage being shown afterward by the narrow margin of healthy tissue, or by none at all, left attached to the diseased mass. The insertion of curved needles behind the disease, in order to ensure the the division by the ecraseur of healthy tissue, is often advisable, but, for the reasons previously given, must not be considered a sufficient safeguard in the absence of free separation of the tongue's attachments in front and at the sides."

Mr. Baker finds this method good not only in cases of partial removal of the tongue, but of the whale organ also. The two halves are more completely under control than the tongue as a whole; and by working with two ecraseurs simultaneously no time is lost.—(*Med. and Surg. Reporter.*)

TREATMENT OF ABORTION.—Dr. Parvin, writing upon the treatment of abortion states his belief that ergot is a hindrance rather than a help in securing complete evacuation of the uterus in early abortions. The tampon, however, especially if introduced into the cervical canal, assists to procure dilatation, and while restraining the loss of blood, causes what little escape of blood takes place above it to aid in separating the ovum from its attachments to the uterus. So long as the ovum is entire (and its integrity should be scrupuously preserved), we may hope for its complete expulsion, and should usually abstain from active interference. When the sac is broken, we should empty the uterus artificially, if, after removing a tampon that has been applied a few hours, the hæmorrhage is at all profuse and the ovum is not expelled at once. This should be done with the finger; and, instead of drawing the uterus down within reach of one finger, as recommended by Simpson, of Edinburgh. it is better to follow the practice of Mauriceau—introduce the hand into vagina (under anæsthesia), and use two fingers within the uterus, "as crabs do when they grip anything with one of their forked claws." When immediate evacuation of the uterus is demanded, on account of dangerous hæmorrhage or an offensive discharge, announcing the possibility of septicæmia, there is a still better way to proceed: "Let the patient lie on her back upon a hard bed, her hips brought to its edge, lower limbs strongly flexed; then introduce Naugabauer's speculum, and bring the os fairly in view; now catch the anterior lip with a simple tenaculum, or, better, with Nott's tenaculum-forceps, and then, if there be any flexion—and it is not uncommon in cases of spontaneous abortion to observe this—use gentle traction to straighten the bent canal; at any rate, fix the uterus by the instrument. Now, take a pair of curved polypus-forceps of suitable size, or, better still, Emmet's curette-forceps, and gently introduce the closed blades into the uterine cavity, open them slightly, then close them and withdraw, when the fragments of membranes can be removed, and the instrument reintroduced. Repeat this three or four times if necessary. The uterus should then be swabbed out with Churchill's tincture of iodine by means of an applicator. Finally, ten or fifteen grains of quinine should be given, and it will be very rarely indeed that convalescence will not be prompt and perfect.—*N. Y. Medical Journal.*

PROVINCE OF QUEBEC MEDICAL TARIFF.—The Governors of the College of Physicians and Surgeons of Quebec, representing the medical pro-

fession have unanimously adopted the following Tariff of fees :—

Visits from 8 a.m. to 9 p.m., not exceeding half a mile	$ 2 00
Visits from 9 p.m. to 8 a.m., not exceeding half a mile. Not to exceed	4 00
Each additional mile in day time 50c. at night	1 00
Detention a whole day $20 ; a whole night	25 00
Ordinary office consultation with prescription	2 00
do do do do do at night	3 00
Consultation with special examination	5 00
do with a practitioner	5 00
do by letter between practitioners	10 00
Ordinary certificate of health	5 00
Special do attested with report	8 00
Certificate, with report on disease and death	5 00
Post-mortem examination external	5 00
do do with sectio cadaveris	10 00
Ordinary case of midwifery (subsequent attendance extra)	15 00
Turning, application of forceps, extraction of Placenta, (Subsequent attendance extra)	30 00
Miscarriage, premature confinement (subsequent attendance extra)	15 00
Catheterism, ordinary cases	3 00
do each subsequent operation	1 00
Vaccination, Bleeding, Extraction of teeth, Hypodermic Injection, etc., etc	1 00
Introduction of stomach pump	5 00
Application of cupping glasses, leeches, setons, moxa, plugging, etc., etc	5 00
Chloroformization or other anæsthetics	5 00
Setting fracture of the thigh	25 00
do do do leg or arm	20 00
Reducing dislocation of the thigh	50 00
do do do leg or arm	25 00
Amputation of the thigh	100 00
do do leg or arm	50 00
Operation for strangulated hernia	100 00
Reduction of hernia by taxis	25 00
Lithotomy or lithotripsy	200 00
Ovariotomy	500 00
Tracheotomy	50 00
Operation for cataract	100 00
Extirpation of the breast	50 00
Do of a tonsil	10 00
Amputation of fingers or toes	10 00
Capital operations not already specified	100 00
Minor do do do do	25 00

The above charges for surgical operations are for the operation only, subsequent attendance and services are extra.

FOR MEDICINES AND DRUGS.

Mixtures and draughts, up to two ounces	15
Do do do 4 do	50
Do do do 8 do	1 00
Powders from one to six (1 to 6)	25
Do do six to twelve (6 to 12)	50
Pills per box of one dozen	50
Do for each additional dozen	25
Lotions, Injections, etc., etc., 4 to 16 ounces	50 to $1
Blisters and plasters, according to size	50 to $1
Ointments per ounce box	25 to 50c.

When costly drugs and medicines are used the charge to be augmented according to value.

CÆSAREAN SECTION WITH EXTIRPATION OF UTERUS, AS PERFORMED BY PROF. CARL V. BRAUN OF VIENNA.—The operation after Porro's method is performed in a well ventilated room, which has been previously cleansed and disinfected, and in which after heating to 22° (C.) the carbolized spray is worked, and continued during the entire operation. The abdomen, and genitalia are then washed with carbolized water, after which the incision is made in the Linea Alba, extending from 2 Ctm. above the symphysis to four or five above navel, passing to left of same. The incision is carried as far as the peritoneum, then, with a pair of forceps, this is raised and snipped, from which point it is slit upwards and downwards. During the cutting, carbolized sponges are kept on edges of wound to absorb all blood. The middle of the body of the uterus is now brought into the opening ; and while the assistants press the edges of the wound firmly against the uterus, it is opened and the child extracted by the feet. By the force exerted in extracting the child, with the pressure of the assistants, the contracting uterus is drawn through the wound ; so soon as this is done, an ecraseur—(Billroths) is passed around the cervix and tightened, to check further bleeding. After placing sponges behind the uterus it is amputated with a knife about 2 Ctm. above the chain.

After removing all blood and water from Douglas cul-de-sac, and the vesico-uterine excavation, the wound is closed with deep and superficial stitches, the former including the peritoneum. During the sewing, sponges are placed on the intestines to absorb any blood that may come from this part of the operation, and drainage tubes are introduced before and behind the stump. A strong needle is now passed through the stump above the chain, and all superfluous tissue cut away. After all blood is washed off, and the body dried, the dressings are applied. On the stump is placed a small sac containing a mixture of gypsum and tar (Gypstheer) to hasten the shrinking and absorb all exudation, over this carbolized gauze is laid, and then the wound is dressed with carbolized gauze, after which the whole abdomen is covered with a binder consisting of eight layers of spermacetic gauze, and one layer of McIntosh. Every little hole is now stuffed with salicylic jute and finally over all a linen binder is secured comparatively tight, in order to facilitate the flow of exudation through the drainage tube. In an hour after the operation the dressings are examined, and if wet through, they are changed. In about fifteen days the needle and chain are removed, and after the burnt parts are trimmed off, the stump is dressed with carbolized glycerine, under which treatment it generally heals rapidly, and gradually sinks into the abdomen. — *Southern Practitioner.*

SLIGHT LACERATION OF THE PERINEUM.—We subscribe to the views of Dr. Lyman as to the importance of inspecting the perineum immediately

after delivery, and add that the husband should be advised of the exact condition of the perineum; in this way the force of the nurse's meddelsomeness will be greatly lessened when she tells her patient the following day how fearfully she is torn. The question of immediate closure should be decided for each case. We would not subject the woman to the pain incident to sewing up a tear which involved no more than the anterior half inch of the perineal body; believing that the irrigation twice daily of the vagina with chlorinated soda water will almost surely be followed by a rapid closure of such a tear and with no bad results. A deeper tear than this we would attempt to close immediately, although once in four times no union has resulted in the experience of the writer, and a secondary operation was required. Let no one deceive himself and patient, however, with the notion that the parts are so benumbed that the sti ching will be almost painless. The result of experience is greatly at variance with this statement. The recently delivered woman who has suffered a laceration, of even slight degree, can hardly endure the contact of the examiner's finger; she wants to be let alone, and is in no frame of mind or condition of body to have her discomfort increased by the introduction of sutures. Let the attendant look at this matter boldly and ask himself the question: Has this woman sufficient fortitude to endure the operation? If so, proceed at once; but we believe such instances rare. Usually we administer ether to the surgical degree and proceed in the operation with all the moderation desirable. The vaginal irrigations should be kept up and the silver sutures removed on the tenth day. The most important part of the whole question of laceration of the perineum relates to prevention of the accident. We believe that, under skilful management, the perineum in many cases may be protected from injury.—*Chicago Med. Gazette.*

THE IMMEDIATE TREATMENT OF STRICTURE OF THE URETHRA.—Mr. Barnard Holt writes to the British Medical Journal: Absence from England prevented my attending the meeting of the British Medical Association at Cambridge, or I should have availed myself of the opportunity of taking part in the discussion of Sir Henry Thompson's paper on Stricture, and could have given such testimony in favor of the immediate treatment as would have satisfied the most skeptical of the value of the operation and of its security and success. I never have replied to Mr. Teevan's criticisms, and I never intend to do so, simply from the fact that his experience of the operation being limited (as he informed me in a letter some time since) to four cases, I consider he is incompetent to form an opinion as to the value of the operation or its results. Mr. Wood, however, is reported to have stated that he had seen several fatal cases; and I therefore, on my return to London, wrote to that gentleman, asking for the number and particulars of the cases he alluded to. Mr. Wood, in his reply, informed me that the deaths, two in number, occurred in the practice of his colleagues at King's College Hospital, and, so far as he could remember, they were both operated upon by the late Mr. Partridge. Of one, Mr. Wood could not recollect any particulars, but in the other he remembers that the patient was the subject of albuminous urine, and correctly adds, "This, of course, was hardly a proper case for any operation of the kind." I therefore venture to affirm that, considering the large number of operations that have been and continue to be performed by surgeons at home and abroad, the fact of only two deaths having occurred, one in a patient who should never have been operated upon, speaks volumes in favor of the immediate plan and its eminently satisfactory results. In conclusion, I may add that I am as strongly in favor of the operation as I ever was, and that I have this day operated with the most perfect success on an unpromising and difficult case At the same time I warn those practitioners who are deficient in the manipulative skill required for the passage of the dilator to refrain from using an instrument with which they are practically unacquainted.

TO DISGUISE COD-LIVER OIL.—Dr. Peuteves, in the *France Médicale*, recommends, in order to render cod-liver oil tasteless, to mix a tablespoonful of it intimately with the yolk of an egg, add a few drops of essence of peppermint, and half a tumbler of sugared water, so as to obtain a *lait du poule* (Med. Press and Circular). By this means the taste and characteristic odor of the oil are entirely covered, and the patients take it without the slightest repugnance. Besides the oil being thus rendered miscible, as the water in all its proportions is in as complete state of emulsion as the fats at the moment they penetrate the chyle-vessels, consequently absorption is better assured.

SUBCUTANEOUS INJECTION OF ETHER IN SCIATICA. — Dr. Comegys, in *L'Union Médicale*, August 5th, 1880, recommends hypodermic injection of sulphuric ether for the treatment of sciatica. He cites two cases, one in detail, which he has cured by this plan. Three drops of ether are injected at intervals of twelve hours. The injection need not be a deep one; and though it causes a momentary sharp pain, it does not bring on any consecutive unpleasant effects. Dr. Comegys is inclined to think that the same injection might be successful in the case of tic-doloreux, for which Dr. Marino recommends hypodermic injection of ergotine.

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TORONTO, DEC. 1, 1880.

"IS THE PRACTICE OF MEDICINE A LUCRATIVE BUSINESS?"

Under the above caption we find in the *Revista Medico Quirurgica*, of Buenos Aires, copied from a Central American contemporary, the following rather sensible observations, which will, we should reasonably hope, be perused with some profit by the readers of the LANCET.

"In consideration of this subject we offer some facts which we believe are appropriate to the question, and which we trust will operate as a stimulus to those of our profession who give too little attention to the collection of their accounts, but may do well to turn a new leaf, and gather in their *honoraria* promptly. There can be no reason why the account presented by a medical man should remain unpaid longer than that of the grocer, the butcher, or the general store-keeper, and these in general are not allowed to run more than thirty days. A physician works 365 days in the year, and, on the average, he adds to this fifty nights. In other words, he labors a time equal to 415 days, or about one-third more than any business man, or any lawyer. He loses, at a medium calculation, three meals per week, or 150 in the year; hence it results that with six-sevenths of the aliment, and six-sevenths of the sleep enjoyed by persons in other occupations of life, he has 100 days more work to go through in the year. Is it any wonder then that the medical practitioner is shorter-lived than other men, and that he dies generally fifteen or twenty years earlier than the merchant?

Let us make a mercantile estimate of the matter. A physician who, on the average, earns from $2,000 to $3,000 a year, performs an additional work in charity equal to $1,000 to $2,000 more, of which he makes no entry whatever in his books. Then we have to take into account that of the $2,000 to $3,000 earned by him, at least a fourth part is never paid—say an average loss of $600. A similar loss would put the merchant into bad humor much of his time; and it is a fact that if any one is in want, the first person of whom he asks aid is the doctor, who generally opens his purse to the necessitous.

In order to formulate the problem clearly we put the figures thus:—Work in charity, $1,200; loss in collection of $3,000, $600; loss of sleep (nights), 50; loss of aliment (meals), 150; time of labor, including nights, 415 days; receipts $2,400. Out of this residue he has to pay the usual expenses of living, which are certainly not trivial; he has to buy instruments and books, and to pay out for periodicals from $10 to $50, and over and above he has to be one of the best contributors to all sorts of works of beneficence.

With the man of business, taking the same average of matters, the account would stand thus: Work in charity, none; loss on $3,000 income, 2½ % $90; loss of sleep (nights), 10; loss of aliment (meals), 25; time of work, including nights, 320 days; receipts $2,910.

The cost of living and the donations in charity of the business man we put as equal to those of the medical man. The current expenses of the store will not exceed the outlay of the physician on books, instruments, periodicals and office rent. Here we see a profit to the man in business of $510 over that of the medical man, and setting down 125 meals as equivalent to 5 days' work, he labors 100 days less than the doctor. We assume the capital of both to be equal, but the risk of life we know to be twice as great for the latter."

As it is probable there are some persons in Canada as forgetful of doctors' accounts as in Central America, we commend the above lines to our friends.

LISTER'S METHOD IN SURGERY.

Lister's method of treating wounds has now been before the profession for several years, and may be said to have received a fair trial; but as far as facts

and figures can be taken as a guide to the value of any new method of treatment it has not met with that success which was claimed for it. No doubt the advocates of Listerism will insist that the method has not been carried out in all its integrity in the unsuccessful cases, and while this may be true in some instances, it is undoubtedly a fact also, that any system which is so difficult of execution that only a few dexterous surgeons can properly apply it, must be practically useless. The followers of Lister even go so far sometimes, as to charge those who put his system into practice, according to the best of their ability, but without the abiding faith of a true disciple, as using it while they abuse it. This was the charge levelled against Mr. Lawson Tait, of Birmingham, by Mr. Knowsley Thornton, of London, in a recent discussion on the Listerian method in ovariotomy. Mr. Tait claims to have had an average of but two deaths in sixty ovariotomies performed without the carbolic acid spray, and declares that the recent reduction of the death rate in this operation is largely, if not entirely, due to the introduction of Mr. Keith's intra-peritoneal method. In an editorial on this subject in the *Louisville Med. News.* The writer says: "The majority of the profession throughout the world follows Lister; but we believe the majority of the profession in this instance, as in many others which medical history records, is wrong. In republics the power is with the majority; but scarcely more in science than in religion and politics do truth and right necessarily dwell with the largest number. The majority in medicine once bled all fever-patients with as little compunction as the maple-sugar makers tap their trees in the spring, and with equal confidence in the wisdom of the procedure. The majority in medicine used to regard salivation about as necessary to corporal salvation in serious sickness as the clergy tell us that "conviction and forgiveness of sin" are to the soul's eternal safety. If numbers prove a truth, then the Crusades were wise, Mohammedanism is right, and the opponents of Listerism are constructive homicides. Listerism is founded on the germ-theory, and this is based on the microscope and the imagination. The existence of the germs is beyond cavil. They may be found in earth, air, and water, in tissues healthy and diseased, in bodies living and dead; but that they are noxious is very far from being proved. Medical dogmas as plausible and as popular as Listerism have flourished and perished in the past, and we have little doubt that before the close of this century Listerites will be as rare as white crows, if not like the dodo, utterly extinct; and when discovered they will be looked on as a curious specimen of the nineteenth century's medical credulity." After Lister's visit to the United States in 1876, his practice was adopted in many of the hospitals in the large cities, but we are told by the *N. Y. Medical Record* that it is rapidly dying out. We have no doubt that Lister and his followers are perfectly honest in their convictions, and are doing what they conceive to be their duty in promulgating their views, and there can be no question also, that those who oppose both the theory on which the method is based, and the practice which it inculcates, are equally conscientious.

TRINITY MEDICAL COLLEGE ANNUAL DINNER.

The Fourth Annual Dinner of the above school was held at the Rossin House on the evening of the 26th ult., and was a grand success. Upwards of 150 persons sat down at the tables. Among the guests were: The Chancellor of the University of Trinity College Hon. Senator G. W. Allan; Prof. Goldwin Smith; Profs. Pernet and Pike, Toronto University; Revs. Principal Caven, Rainsford, Langtry, and H. M. Parsons; His Worship Mayor Beaty; Lieut.-Col. Otter; Drs. Allison, Burns, Clarke, Thorburn, C. & G. O'Reilly, A. H. Wright, W. H. Ellis, Starke, Spencer, A. J. Geikie; The Dean and Professors of Trinity Medical College; Messrs. Lauder, M.P.P., Vankoughnet, Manley, Gillespie, Hughes, W. S. Lee, and others. The Chairman and first and second Vice-Chairmen, respectively, were Messrs. J. Baugh, Frank Krauss, and E. B. O'Reilly. Letters of regret at unavoidable absence were read from his Excellency the Governor-General, the Lieutenant-Governor, the Bishop of Toronto, Very Rev. Dean Grasett, Sir John A. Macdonald, Hon. Edward Blake, and others.

The dinner was served in perfect style, the general effect being magnificent,—the best ever laid in the city, high though the compliment is. A bust of Hippocrates, set upon a pedestal, presided

over the central table, and was supported at intervals elsewhere by carefully-prepared centre-pieces and emblems of medical science, valuable both from artistic and edible considerations.

The Chairman in a few well-chosen words, welcomed the guests of the evening, dwelling upon the benefits likely to result from such social reunions between students and men eminent in every line in life. He pointed out that the life of the medical student was not, as was popularly supposed, a round of theatre-going, parties, and churches (laughter), but was as hard-worked a one as that of any young man, and, indeed, as a rule, far more severe in its demands. He referred to the standing of Trinity School and the cordial feeling now existing between it and its rivals, and concluded by speaking of the honorable history of the profession, its broad character, and the magnificent field open to those devoting their lives to it. He then gave the loyal toast, and "God save the Queen" was sung standing.

The "Governor-General" and "Lieutenant-Governor" were honored in succession.

After a song from Prof. Pernet, the Chairman gave the "Army and Navy," to which Lieut.-Col. Otter patriotically responded.

"The Dominion and Provincial Legislatures" followed.

Mr. Lauder, M.P.P., said that it was only appropriate that the Provincial Legislature, of which he had the honor to be a member, should be honored by such a gathering, for it had done its best to advance the interests of education. It was not very long ago since that Legislature had given a corporate existence to the school whose guest he and so many others were that night. At that time there was considerable bickering going on, and it was with the deepest pleasure that he had heard to-night, from the lips of the Chairman, of the cordial feeling existing between the medical schools.

The Hon. G. W. Allan responded on behalf of the Dominion Parliament. He said the Dominion Legislature had its own claim for regard in the rigor and efficiency with which it guarded the interests confided to its care. Among its members, in both Houses, were medical men eminent in every way, and holding positions secondary to none.

The Chairman then gave "The mayor and Corporation," remarking that the medical student's duty was not only to be civil to the civil authorities, but to be grateful to them in many ways.

Mayor Beaty responded in a humorous speech. He also said there was an important connection between the theory, at all events, of the medical profession, and that of municipal government, and he confessed his belief that not only did the Parliament of Canada and the Legislature of Ontario but also the city governments of the Province, neglect matters in connection with the health of the public, which was, he believed, the first consideration for all public bodies. He thought there was great neglect on the part of these legislative bodies in not making the necessary and proper provision, and seeking to call in the aid of medical skill to keep the people informed in reference to those sanitary measures which ought to be indicated as far as possible by public opinion. He advocated the establishment of bureaus for the collection of vital statistics relating to all matters pertaining to the general health of the country, and until these matters were attended to public health might not be what it ought to be."

Mr. Krauss, the first Vice-Chairman, in a most able speech proposed the toast of "The Universities," with which we are affiliated and Sister Institutions.

The Chancellor, Hon. G. W. Allan, said that there was nothing Canadians had a right to be more proud of than their educational advantages. As to Trinity school in particular, he congratulated it upon the increasing number sent up from it year by year to the universities. The profession was a noble one. There was no class in the world which had a greater power for good than the medical profession. He might, therefore, hope not only that medical men might perfect themselves in their own chosen calling, but also make themselves men of wide general culture, as were the majority of their co-workers in England, of which Sir Henry Holland was a shining example.

Prof. Pike in responding said that while everything was satisfactory in Canada as regarded educational facilities there was certainly a lack of that attention to athletics which marked the old country universities.

Dr. Thorburn also responded, and referred to the cordial feeling existing between the schools.

The first Vice-Chairman then proposed the toast of the evening, "Trinity Medical School, its Graduates and Undergraduates."

Dr. Geikie, Dean of the Faculty, in replying to the toast, expressed his great satisfaction at being present on the occasion. The faculty were glad thus to meet the guests who had honored with their presence the students, as well as many old graduates of the school and their friends. "It is," he continued, "a very great pleasure to have with us to-night a very considerable number of our old graduates who have lately returned from the Mother Country, bringing back with them laurels won in her time-honored institutions. It is a matter of great satisfaction to us all to know that the school is not only steadily but rapidly making progress, not alone in numbers, but in the hold it has on the confidence of the profession, and of the public through the country. After working hard for years to earn the confidence now shown

in our institution, it would be idle to disguise the pleasure which this affords us. We shall go on working no less assiduously in the future than in the past, endeavoring to leave nothing undone to give our students a sound and thorough medical professional training, and thus at once benefit the public and advance the interest of medical science. For these ends we will spare no pains, and shrink from no expense, deeming our labors rewarded and our money well spent, if we can send out year by year a class of candidates who become successful practitioners, and thus do credit alike to themselves, and to the school in which they were taught. It is one of our greatest aims to utilize the hospital as far as possible for the benefit of the students, and here I gladly say, that to all the public teaching in that institution, and there is a very great deal of it, every student of medicine in Toronto who takes the hospital ticket has free access. This is no more than fair, yet it gives Toronto a position as a city where a practical knowledge of medicine and surgery may be obtained not inferior to any city in the Dominion, and perhaps hardly equalled throughout its length and breadth. As regards our position, too, in relation to the Medical Council, we are gratified in knowing that our efforts to endeavor by every means in our power to make the Council popular with the profession, and with students, have been to a very considerable extent, crowned with success. Our wish has always been to see everything removed which was calculated to give offence to, and thus alienate it from, those on whose approval it has to depend for its continued existence, for while some speak and act as if a body once incorporated by Act of Parliament can do just what it pleases, no matter how obnoxious to many, or obviously unjust its doings may be, such a doctrine cannot be long carried out in Canada, and it is fortunate that it cannot. The new and excellent blood infused into the Council at the recent election has done wonders already, and will soon, it is hoped, leave nothing to be desired."

Dr. Stark of Hamilton, and Messrs. Ferguson and Kennedy also responded ably to the toast. Mr. Ferguson alluded to the fact that there were students in the class from all parts of the Dominion from Nova Scotia to Manitoba, and also from the United States. The toast of the "Learned Professions" was next proposed.

Mr. Goldwin Smith in response thanked his hosts for a very good dinner and a very pleasant evening. After a momentary reference to the friendly rivalry between the Toronto and Trinity schools, he continued that the only "learned profession" to which he could lay claim was that of a student. To medicine he could offer only the homage of a citizen and a man. In the past her calling had been to cure disease; in the future it might be to prevent it. We should look in the future to her for direction and guidance in every walk of life. Mr. Smith referred subsequently to friendships of his own with medical men, men who were in the best and truest sense religious and noble ones.

The Rev. Mr. Rainsford also responded and dwelt upon the advantages of physical culture, and general education.

"The College of Physicians and surgeons" was replied to by Drs. Allison and Burns.

"The Toronto General Hospital" was honored by Dr. O'Reilly and Mr. Gillespie, after which a quartette, "Bright sparkles in the Church Yard," was given by Messrs. Fairchild, Gaviller, Jenner, and Handbridge, who sang repeatedly during the evening. Dr. A. J. Geikie presided at the piano with his usual ability.

"The Ladies" and "The Press" brought the gathering to a close, and at an early hour closed one of the most successful re-unions of the year.

NOTE.—We have given considerable space this month to reports of the annual dinners of the Medical Schools of Toronto, inasmuch as these medical reunions are now looked forward to by the profession and others in Toronto as the events of the season.

ANNUAL DINNER TORONTO SCHOOL OF MEDICINE.

The Seventh Annual Dinner of the Toronto School of Medicine was held in the Rossin House, Toronto, on the 11th ult. Mr. A. C. Jones occupied the Chair and Messrs. Duncan and Sweetman the first and second Vice-Chairs respectively. Among those present besides the members of the Faculty were the Mayor, Hon. Justice Cameron, Rev. Principal Caven, Prof. Goldwin Smith, Prof. Pernet, Rev. Dr. Sutherland, Rev. Dr. Castle, Principal Cockburn, Drs. Allison, D. Clarke, Winstanley, Ross, Canniff, O'Reilly, Temple, Burns, O'Neil, McPhedran, Griffin, R. A. Pyne, G. B. Smith, J. Anderson, Messrs. A. McMurchy, P. Hughes, Manly. The chairman welcomed the company on behalf of the school. The list of toasts was as follows: "The Queen," "the Governor General and Lieut. Governor," "The Parliaments of Canada and Ontario." Dr. Anderson, of Hamilton, gave a recitation entitled "A Maiden Speech in Parliament," which was well received.

The toast of "The Mayor and Corporation" was responded to by Mayor Beatty. He said,

referring to sanitary matters and the Committee on Health in Toronto, he thought there should be a city physician attached to that Committee. While on this subject he wished to publicly acknowledge the generous assisstance which the authorities had always received from the doctors, and which was rendered gratuituously and cheerfully. After a humorous allusion to the quality of the water, which he noticed the medical men there considered good enough to drink without even a a "stick" in it—(laughter)—he concluded by expressing the hope that the city would continue in the condition described by physicians as "alarmingly healthy" whatever that meant.

The toast of the "Universities and Colleges" was next given.

Prof. Goldwin Smith said it was always pleasant to one connected with the old seats of learning to recognize the bond which united them to the learned professions. The University of Oxford which he represented was unfortunately divorced from the medical profession. For one he would be very anxious to restore that lost connection by providing a good preliminary training for medical men at Oxford. Culture could not make physicians. It could not give sagacity to detect disease, nor nerve, skill, and coolness in performing a difficult operation, but it could give elevation and dignity and scientific tone to the profession. It was noticed when the Bench in England was occupied by those who came straight from lawyer's offices, and not from Universities, that technical skill did not decline, but jurisprudence did. He cordially wished prosperity to the Medical Schools of Toronto; may their graduates often carry hope, comfort, and healing to the bed of sickness, and see the flickering flame of life revive. May they reap a harvest of golden fees, and gratitude which was better than gold. May they be worthy of their noble profession, and earn the blessings bestowed upon them by a suffering humanity.

Rev. Principal Caven also replied in a happy speech in the course of which he said he was not one of those theologians who feared science. If any dogma of theology was unable to bear comparison with other departments of truth, it would be doomed and would perish.

Rev. Dr. Sutherland also responded and Prof. Pernet favored the company with a song.

The toast of the "Learned Professions" was replied to by Mr. Justice Cameron in a humorous speech, Dr. Canniff responding for the medical and Rev. Dr. Castle for the clerical profession. Mr. Manley also responded.

Drs. Allison, Burns, and Clark acknowledged the toast of "the Medical Council," and Drs. Aikins and Richardson that of the "Toronto School of Medicine," Dr. Temple that of the "Sister Institutions," Dr. O'Reilly and Mr. Hughes that of "the General Hospital," and Dr. Anderson that of "the Graduates."

"The Graduating Class" was responded to by Mr. Sweetnam.

The "Freshmen," "Ladies" and the Press were suitably responded to. Several songs were sung by the students during the evening, and Donato's string band supplied music.

ROGERS' GROUPS OF STATUARY.—We give herewith a cut of what we consider one of Rogers' best productions in this style of art. It is beautifully conceived and executed in his very best style of workmanship. Any of his groups would make a most appropriate Xmas or wedding present, and could not fail to be highly prized as "a thing of

Height, 23 inches; length of base, 19½ inches—Price, $20.

beauty and a joy forever." The cut represents the trial scene from Shakespeare's play of the "Merchant of Venice." The stairs are supposed to lead to the seat of the Duke, who presides over the court, but is not represented in this group. Portia, disguised as a lawyer, has come to assist the Duke with her legal knowledge. She has the bond in her hand which Antonia had given, and by which he agreed that Shylock should have a pound of his flesh if he did not repay the money he had borrowed. He has failed to return it, and Portia has declared that the penalty is due. Antonio is therefore dropping off his cloak and opening his dress, as the flesh is to be cut from "nearest his heart." Bassanio, his friend, stands by him with a bag of gold in his hand, with which he has offered

to pay the bond, but Shylock has refused it. Portia is urging Shylock to have a surgeon by to check the blood, and he exclaims, "Is it so nominated in the bond?" Catalogues will be sent giving the prices of groups, which vary from $10 to $20, by addressing, John Rogers, 23 Union Square, New York.

HAMILTON MEDICAL ASSOCIATION.—A special meeting of this association was recently held for the purpose of considering the proposition to establish an Ontario Medical Association. Dr. Mullin was called to the chair and read a letter which had been received from the secretary of the Toronto committee, expressing an opinion favorable to the formation of such an association. After some discussion it was moved by Dr. Mullin, and seconded by Dr. Griffin, "That it is desirable that an Ontario Medical Association be formed, holding its meetings at such places and times as shall not interfere with the meeting of the Canada Medical Association; that it holds its meetings in localities successively; that delegates be appointed by this society to meet those of other societies for the purpose of making arrangements for constituting a Medical Association; and that Drs. Macdonald, Rosebrugh, Mackelcan, Wolverton and Kittson be the delegates.—Carried."

BANNING TRUSS AND BRACE CO. — This old established company is so well known in the United States and Canada, that any lengthy notice of their manufactures is almost unnecessary. We cannot, however, speak too strongly in reference to the great value of their spinal supports, and appliances for the correction of all kinds of deformities. They are light, easily borne by the patient, and what is of far more consequence, thoroughly efficacious. Whatever benefit may be derived from the plaster of Paris jacket, there are always cases in which it cannot be worn, or borne by the patient, and in all such cases the Banning support will be found to meet the indications in the most satisfactory manner. Those having troublesome cases would do well to correspond with the manufacturer.

EXPLANATION.—Dr Joseph Morrison, of Walkerton, writes to us complaining of the publication of his name as one of the bearers of a Philadelphia "bogus Diploma." The Dr. attended the University of Medicine and Surgery, Philadelphia, long before that institution fell into the hands of swindlers. At that time, and for several years afterwards, this College was among those American institutions recognized by Canadian Schools and Universities, and also by the Medical Council of Ontario. He cannot, therefore, be held in any way responsible for the disrepute into which it has since fallen. Besides, he subsequently passed an examination and obtained the degree of M.D. in the Toronto University.

ELGIN MEDICAL ASSOCIATION.—A meeting of the members of the medical profession in the County of Elgin was held at St. Thomas on the 29th Dec., when the following were elected officers:

President, Dr. F. B. Going, St. Thomas; *Vice-President*, Dr. Williams, Aylmer; *Secretary*, Dr. R. W. Bruce Smith, St. Thomas; *Treasurer*, Dr. Vanbuskirk, St. Thomas.

From the interest manifested in the meeting the success of the association promises to be great. An adjournment was made till Nov. 24th, for which arrangements were made and a suitable programme prepared.

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 convales ence 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.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.—The following officers have been elected for the ensuing year:—Dr. Hingston, *President;* Drs. Wilkins and Osler, *1st and 2nd Vice-Presidents*, respectively; Drs. Perrigo, Blackader and Shepherd, *Council;* Dr. O. C. Edwards, *Secretary;* Dr. W. A. Molson, *Treasurer;* Dr. James Bell, *Librarian*.

REMOVAL.—Dr. R. W. Bruce Smith of St. Thomas, has removed to Sparta, Ont., where he succeeds Dr. Boddington, who retires after practicing his profession in that place for fifteen years.

THE TORONTO GENERAL HOSPITAL. — The clinical teaching in this hospital is now second to none. Two clinics are delivered daily by certain members of the staff, an out-door clinic from 1 to 2, and an in-door clinic from 2 to 3 p.m. This arrangement has been found to work well and gives entire satisfaction to the students.

APPOINTMENTS, ETC.—Dr. James Anderson has been appointed House Surgeon to the Hamilton City Hospital. Dr. G. S. Ryerson, of Toronto, has been elected an original member of the Ophthalmological Society of Great Britain. Dr. Sweetland, of Ottawa, has been appointed Sheriff of the Co. of Carlton.

HALIFAX MEDICAL COLLEGE.—The opening of the fourteenth session of the Halifax College took place on the 4th ult., and was a most successful and promissing meeting. Addresses were delivered by Dr. R. S. Black, the President, Mr. Henry, Lecturer on Medical Jurisprudence, the Rev. Chancellor Hill of the University, Hon. Dr. Parker and others.

UNIVERSITY OF TRINITY COLLEGE.—At the Annual Convocation of the University of Trinity College, Toronto, the following degrees were conferred:—M.D., C.M.—J. N. Forbes, H. W. Smith, M. D. Stark and F. Bentley. C.M.—S. McArton and J. McIlhargey.

FIFTY YEARS IN PRACTICE.—Dr. Cattermole, one of the leading physicians of London, Ont., celebrated the fiftieth anniversary of his graduation on Friday evening the 5th ult. We congratulate the Dr. on his long and successful career in medicine.

PERSONAL.—The friends of Dr. Lambert of Amherstburgh, will be glad to learn that he has almost entirely recovered from his very severe illness.

The degree of M.B., Toronto University, was conferred upon Dr. Alex. Davidson of Toronto, at a meeting of the Senate held on the 23rd ult

DOUBLE QUALIFICATION.—The following gentlemen have passed the final examination and were admitted as licentiates of the Faculty of Physicians and Surgeons, Glasgow, and Royal College of Physicians, Edinburgh:—Drs. J. Ferguson, Toronto, C. McDonald, Tilsonburg; and N. McKechnie; London. John E. Shaw, M.B., Trinity Medical College, has successfully passed and obtained the degree of L.R.C.P. & S., Edinburgh.

Books and Pamphlets.

DISEASES OF THE PHARYNX, LARYNX AND TRACHEA. By Morell Mackenzie, M D., London. New York: William Wood & Co. Toronto: Willing & Williamson.

How multitudinous are "the ills that flesh is heir to!" Here is a book of over 450 solid pages, exclusively devoted to the diseases of some four or five inches in length, by less than two inches at its widest part in width, of a portion of the human frame, of whose morbid liabilities nineteen-twentieths of the community, in sound health, have neither any real conception nor any salutary apprehension. Verily, when one takes even but a running glance over Dr. Mackenzie's elaborate treatise, bristling as it is with instructive anatomical and pathological woodcuts and wonder-prompting delineations of specialistic equipments, it is almost enough to make poor humanity shake in its boots and ruminate as to the advisability of sewing up the mouth and plugging the nostrils, in order to exclude morbific agents. If we may judge from the long lists of authorities referred to by the author, at the foot of his pages, we must conclude that he has been an almost omnivorous student of the literature of his adopted specialty; and it would be by no means saying too much for him, to aver the belief that he has profitably digested all the aliment lighted on by him in his wide research. The book is one which may be read by the studious general practitioner with much advantage, whilst to the enterprising neophite, whose ingenuity may be puzzled in these tight times, to fish up some promising line of genteel practice, which may bring him more substantial and progressing pecuniary returns than he can hope for from the exhausting drudgery of general practice, it can hardly fail to prove one of the best investments he has ever made. The very armamentarium of the laryngoscopist, if skilfully exhibited, might be, to an eloquent youth, half a fortune; in the hands of an expert and skilful manipulator, they must be transcendentally effective.

The typography and paper are both commendable. If a little more attention had been bestowed

on the lettering of some of the woodcuts, the reader's eyes would be less worried in trying to hunt up letters which the engraver seems to have thought undeserving of his notice.

ATLAS OF SKIN DISEASES—By L. A. Duhring, M.D., University of Pennsylvania. Part VII. Philadelphia: J. B. Lippincott & Co. Toronto: Willing & Williamson.

We have on more than one occasion expressed our high appreciation of this most admirable work, and the present number maintains the excellent character of its predecessors. It is one of the best works of its kind ever published in America, and is fully equal to the best foreign. Part VII. embraces Eczema (Pustulosum); Impetigo Contagiosa; Syphiloderma (Papulosum); and Lupus Vulgaris. The plates are beautifully executed, true to nature, and not overdrawn. We commend the work most cordially to our professional brethren.

HANDBOOK OF MEDICAL CHEMISTRY, by W. H. Greene, M.D., Demonstrator of Chemistry, Medical Department, of the University of Pennsylvania. Philadelphia: H. C. Lea's Son & Co. Toronto: Willing & Williamson.

THE MOUTH AND THE TEETH, one of the series of American Health. primers, by J. W. White, M.D., D.D.S., Philadelphia. Lindsay & Blakiston, Publishers.

STUDENTS MANUAL OF VENEREAL DISEASES, by F. R. Sturgis, M.D., Medical Department of the University of New York. New York: Putnam's Sons, Toronto: Willing & Williamson.

ZELL'S CONDENSED CYCLOPÆDIA, BY J. M. MIGHT & CO., TORONTO.

The work of which this is an excellent condensation is well known to those who are compelled to frequently consult works of reference. It will prove still more useful even than the original to many because it is cheaper and more convenient. It is beautifully printed, well bound, comprises 1,000 pages, and contains a fund of useful and valuable information. It differs from most other Cyclopædias in being a dictionary as well. The definitions of words are appropriate, and the derivations and pronunciation are carefully prepared. In addition to the geographical information contained under the different names, there are several excellent maps scattered through the volume. It is also profusely illustrated with cuts of objects described in the letter-press. Medical men will find it an invaluable addition to their libraries.

THE POPULAR SCIENCE MONTHLY—Edited by E. L. & W. J. Youmans. New York: D. Appleton & Co.

This most interesting and valuable serial commenced its 18th volume in November. Its articles and abstracts of articles, original, selected, and illustrated, give accounts of all important discoveries and applications of science that are of general interest. A series of important articles by Herbert Spencer was commenced in the number for November on "The Development of Political Institutions." The Popular Science Monthly, while it is addressed to the intelligent classes of society, treats its topics in a popular style and is as free as possible from scientific technicalities. Its pages faithfully represent the progress of scientific questions. We commend it to the consideration of our readers. See commutation rates.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Washington, D.C. Vol I. A.—Berlinski.

Some idea of the extent of this work may be formed from the fact that this volume of 888 pages deals with the titles and authors from A. to Berlinski. At this rate of progress, it will require at least 10 volumes of the size of the present one to complete this index-catalogue. Dr. Billings deserves the thanks of the profession for his labors.

Births, Marriages and Deaths.

At Mount Pleasant, on the 18th ult., the wife of Dr. Marquis, of a daughter.

On the 17th ult., R. A. Pyne, M.D., Registrar of the College of Physicians and Surgeons of Ontario, to Mary Isabel, second daughter of Judge Macqueen, of Woodstock.

On the 16th ult., W. Cornell, M.D., of Thedford, Ont., to Annie Elizabeth, daughter of Mrs. A. Irving, of Bosanquet.

In Montreal, on the 4th ult., Dr. S. B. Schmidt, in the 55 year of his age.

On the 22nd of Oct., Dr. Edward Nesbitt of Sandwich, Ont., aged 40 years.

On the 4th ult., Dr. A. Stewart, of Woodhill, by being thrown out of his buggy.

On the 11th of Sept., Dr. H. Dawson of Newcastle, N.B., in the 24th year of his age.

On the 26th of Oct., Chas. C. Hamilton, M.D., of Cornwallis, N.S., aged about 70 years.

On the 21st ult., T. C. McConkey, M.D., of Barrie, in the 31st year of his age.

On the 24th ult., Dr. John Bentley of Newmarket, suddenly of heart disease, aged 61 years.

*** *The charge for notices of births, deaths and marriages is fifty cents, which should be forwarded in postage stamps with the communication.*

BEEF IRON AND WINE.

Extract of Beef, Citrate of Iron and Sherry Wine.

In this preparation are combined the stimulant properties of WINE and the nutriment of BEEF with the tonic powers of IRON, the effect of which on the blood is so justly valued. For many cases in which there is

Pallor, Weakness, Palpitation of the Heart,

with much nervous disturbance, as, for example, where there has been much loss of blood, or during the recovery from wasting fevers, this article will be found especially adapted. The peculiar feature of this combination is that it

COMBINES NUTRIMENT WITH STIMULUS.

In the majority of cases, along with failure of strength, and indeed as one cause of that failure, there is an inability to digest nourishing food. Hence it is very desirable to furnish nourishment in a form acceptable to the stomach, at the same time we excite this organ to do its duty. On the other hand, again, wine stimulus although needed, is ill borne if given by itself, producing headache, excitement, and other symptoms which may be avoided by the addition of nutritious substance, such as the ESSENCE OF BEEF.

Iron also can be taken in this way by the most delicate or sensitive woman or child, to whom it may be inadmissible as usually given. Prompt results will follow its use in cases of sudden exhaustion, arising either from acute or chronic diseases, and will prove a

Valuable Restorative for all Convalescents.

As a Nutritive Tonic it would be indicated in the treatment of impaired nutrition, impoverishment of the blood, and in all of the various forms of general debility. Each tablespoonful contains the Essence of one ounce of Beef, with two grains of Citrate of Iron, dissolved in Sherry Wine. With a view to making the article more palatable, a portion of the beef is in the first place partially roasted, as experience has shown that it is better borne by the stomach, and can be administered for a longer period when this is done.

Adult Dose:—One tablespoonful between meals, and when suffering from fatigue or exhaustion

Dose for Children should be reduced according to the age.

We trust physicians will be careful to direct *our manufacture of BEEF, IRON and WINE*, as numbers of persons make mixtures called by the same name, and claiming equal merit. We can only say the reputation of this medicine was created by OUR PREPARATION, and it is almost exclusively prescribed by our leading physicians.

JOHN WYETH & BROTHER,

CHEMISTS,

1412 Walnut St., Philadelphia.

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.

PEPTONIC PILLS.

Peptin, Pancreatin with Lacto-Phosphate of Lime and Lactic Acid.

(COPYRIGHT SECURED.)

This pill will give immediate relief in many forms of Dyspepsia and Indigestion, and will prove of permanent benefit in all cases of enfeebled digestion produced from want of proper secretion of the Gastric Juice. By supplementing the action of the stomach, and rendering the food capable of assimilation, they enable the organ to recover its healthy tone, and thus permanent relief is afforded. One great advantage of the mode of preparation of these pills is the absence of sugar, which is present in all the ordinary Pepsin and Pancreatin compounds—in this form the dose is much smaller, more pleasant to take, and is less apt to offend the already weak and irritable stomach.— The results of their use have been so abundantly satisfactory, that we are confident that further trial will secure for them the cordial approval of the Medical Profession and the favor of the general public.

Each pill contains one grain of pure PEPSIN, and one of pure PANCREATIN, which is equivalent to 10 grains of the ordinary or Saccharated usually prescribed and dispensed. Physicians will appreciate the great advantage of this mode of administration. The increased benefit to the Dyspeptic being due to a full and effective dose of each, freed from the unnecessary bulk, and really hurtful addition of sugar. A single pill will give immediate relief.

Directions.—Take one pill immediately after eating or when suffering from Indigestion, Lump in the Throat or Flatulence. For children, reduce the pill to powder and give a fourth or half, according to age.

JOHN WYETH & BROTHER,
CHEMISTS,
PHILADELPHIA.

COMPRESSED PILLS
OF
MURIATE OF AMMONIA.

The solvent and discutient, as well as antiphlogistic powers of this Salt are well known, and have led to its extensive employment, especially in Germany, in cases of Sore Throat, Bronchitis, etc., attended with abundant secretion of thick and tough mucus or phlegm.

The form in which it is now offered by us, in COMPRESSED PILLS, possesses great advantages over the mixtures with liquorice, gum and sugar, or other vehicles, in that it gives the immediate local effects of the remedy upon the disordered surfaces, and hence affords more speedy relief to the troublesome condition alluded to. Physicians will at once appreciate the great advantage to their Patients of the local effects of this Salt slowly dissolving and coming in direct contact with the inflamed surface while at the same time it exerts the usual Constitutional effects as resolvent, alterative and tonic. It at once mitigates the Cough or irritation, and lessens expectoration — we have known two or three of the pills to entirely cure coughs that have long resisted treatment with the ordinary remedies.

DIRECTIONS.—A pill should be held and allowed to dissolve in the back part of the mouth, to be repeated every two or three hours or when the irritation or tendency to cough is more decided. In many cases the dissolving of half a pill is sufficient at one time.

JOHN WYETH & BROTHEP
CHEMISTS,
PHILADELPHIA.

Compressed Tablets of
CHLORATE OF POTASH.

For Hoarseness, Bronchial Irritation, Sore Throat, Diphtheria, Croup, etc., etc.

(COPYRIGHT SECURED.)

Chlorate of Potash is a remedy of acknowledged value in cases of Diphtheritic Sore Throat, and in inflammation of the Mouth and Throat, induced by a depressed state of the system. In these instances as in the milder forms of Croup, it has, besides its depurative and detergent effects, a solvent action on the deposits characteristic of those troublesome and dangerous affections. It relieves Hoarseness; and in many cases of Fetid Breath from disordered secretions, it proves an efficient corrective. Its virtues in simple Angina, or ordinary Sore Throat, are recognized by many of the most eminent Physicians.

As the taste of this article is not disagreeable, we have prepared it in the form of Compressed Tablets, thus giving the patient the full benefit of its action, undiluted with Sugar, Gum or other vehicles, which would not only prevent its effects, but which sometimes themselves offend the stomach.

The Lozenges usually contain about twenty-five (25) grains of gum and sugar, with two grains of the Chlorate of Potash, while each of these Pills contains simply five grains of the Chlorate, all of which dissolved in the saliva, acts on the affected mucous membranes.

FOR SORE THROAT, HOARSENESS.

DIRECTIONS.—Adults should take one every hour or two until relieved, allowing it to dissolve slowly in the mouth. Children, half of one, as often.

For Offensive Breath, no remedy will give more certain relief.

Use one, two or three times a day.

For Diphtheria, Croup, and the more serious ailments, the Physician should direct.

JOHN WYETH & BRO., Philadelphia.

WYETH'S DIALYSED IRON.

(*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

JOHN WYETH & BRO.,

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.

PERRY DAVIS & SON & LAWRENCE,

General Agents for the Sale of

MESSRS. JOHN WYETH & BROTHER'S

ELEGANT PHARMACEUTICAL PREPARATIONS

In the Dominion of Canada.

FOR ADVERTISEMENT OF SEABURY & JOHNSON'S PLASTERS, SEE INSIDE PAGE.

Shuttleworth's Fluid Extracts

Guaranteed of Standard Strength and Quality.

FLUID EXTRACT OF ERGOT.

This most important preparation is made the subject of special care and attention, not only in regard to the details of manipulation but the quality of the crude drug, which is perhaps the most important consideration. The finest ergot obtainable is always employed, and physicians using this extract may rely on producing the specific effects of the drug,

NEW REMEDIES.

Preparations of New and Rare Drugs.

ALSTONIA, Dita Bark.
ARECA, Betel Nut.
AVA, Kava-kava Root.
BAEL, Bael Fruit.
BERBERIS AQUIFOLIUM.
COCA LEAVES.
DAMIANA LEAVES.
DROSERA, Sundew.
EVENING PRIMROSE.
EUCALYPTUS.
FUCUS VESICULOSUS.
GUARANA.
YERBA REUMA.
RUEBRACHO.
GOA POWDER. etc.

BOLDO, Peumus Boldo, Leaves.
CERCIS CANADENSIS.
CASCARA SAGRADA.
COTO, Coto Bark.
USTILAGO MAIDIS, Corn Ergot.
GRINDELIA ROBUSTA.
JABORANDI.
KOOSO.
MISTLETOE.
RHUS AROMATICA.
SANDAL WOOD.
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YERBA SANTA.
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CHAULMOOGRA OIL, etc.

Chemically pure CHLOROFORM, ETHER, and OL. TEREBINTH, for Anæsthetic purposes.

CANADIAN MALT EXTRACT.

This is made by a recently devised process by which the greater portion of the Diastase is retained in an active condition.

Several combinations are manufactured :—MALT with PHOSPHATES, MALT with COD-LIVER-OIL and PHOSPHATES, and MALT with HYPOPHOSPHITES.

B. P. PREPARATIONS.

All the Officinal Compounds kept in stock, also a full line of Pharmaceutical Preparations generally.

GELATINE-COATED PILLS.

A full supply in stock.

Price Lists Forwarded on Application

E. B. SHUTTLEWORTH,

MANUFACTURING CHEMIST,

53 Front Street, Toronto.

MALTOPEPSYN

(REGISTERED AT OTTAWA)

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 "

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

It is also exceedingly valuable as a relief for Vomiting in Pregnancy.

TO THE MEDICAL PROFESSION.

Having been employed in the manufacture of Pepsine, Pancreatine, etc., in the United States for the past seven years, and knowing that nine-tenths of the numerous brands of Pepsine and Combinations thereof, in the market to-day, are almost **worthless** and inert, and knowing further, that the few really good articles are absurdly **high priced**—one dollar per ounce and upwards—I have decided to offer to the profession, **Maltopepsyn**, an article **unequalled in quality** and **reasonable in price** (fifty cents per two ounce bottle, containing nearly one and one-half ounces of powder).

I will guarantee **Maltopepsyn** to be compounded exactly as per formula and **each ingredient** to be of the **best quality** possible to be made, and therefore I claim the following advantages over the ordinary preparations now dispensed, viz:—

First—The Saccharated Pepsine (Porci) is of a quality superior to any in the market, it is perfectly soluble, tasteless, odorless, very active, and, being saccharated, will preserve its qualities for years, while made in any different manner it will not. N.B. Pepsine is very difficult to procure free from Mucous Chriatine and the other impurities of the stomach, and is usually sold containing all these hurtful substances, which not only kill its digestive properties but give it a dark brownish color, disagreeable odor and acrid taste. Pure Pepsine should be light colored, nearly odorless and tasteless.

Second—The Pancreatine is fully equal to that made in London, England, the only Pancreatine in the market at all reliable, and that is so high priced ($3.00 per oz.) as to almost prohibit its use.

Third—The Exsiccated, or dry extract, is a more effective, palatable and convenient preparation of the nutritive article, Malt, than the liquid extracts usually dispensed.

Fourth—The Acid Lactophosphate of lime is carefully purified and of the best quality. Its therapeutic value is too well known to need further comment.

Upon application from any of the Medical Faculty, I will be pleased to forward samples, which will substantiate the claims made for Maltopepsyn, and I hope for your assistance in this my endeavour to introduce a good preparation at a low price.

HAZEN MORSE, 57 Front Street East, TORONTO.

MALTOPEPSYN

Combines all the digestive principles that act upon food, with the nutritive qualities of Extract of Malt and the brain food of the Acid Phosphates.

PRICE LIST.

Maltopepsyn, (2 oz. bottles, containing nearly 1½ ozs. powder), 50c. per bottle.
" " " $5 00 per dozen.
" in half pound bottles $5 00 per pound.

Less than half the price of any good preparation of Pepsine in the market, and guaranteed to excel the best in the results.

Nearly 2,000 bottles have been sold during the first five months of its introduction, entirely through physicians' prescriptions.

The following is a sample of the great number of testimonials I have received from medical men :—

BRUSSELS, JUNE 28th, 1880.

Hazen Morse, Esq.,

Dear Sir,—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.

Yours, etc., 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.

I will make the same offer to medical men on Maltopepsyn as I do on Hydrolemfe, viz: I will forward upon application, to physicians only, a full sized bottle of Maltopepsyn upon receipt of twenty-five cents, (half price). This offer only applies to the first bottle.

HAZEN MORSE, 57 Front Street East, TORONTO.

DETROIT MEDICAL COLLEGE.

(Member of the American Medical College Association.)

SESSION'S OF 1880-'81

FACULTY.

JAMES F. NOYES, M.D., Emeritus Professor of Ophthalmology and Otology.

THEO. A. McGRAW, M.D., PRESIDENT,
Professor of Principles and Practice of Surgery and Clinical Surgery.

GEO. P. ANDREWS, M.D.,
Professor of Principles and Practice of Medicine and Clinical Medicine.

C. B. GILBERT, M.D.,
Professor of Obstetrics and Diseases of Women and Children.

N. W. WEBBER, M.D.,
Professor of Principles and Practice of Surgery and Clinical Surgery.

SAMUEL P. DUFFIELD, PH. D., M.D.,
Professor of Toxicology and Medical Jurisprudence.

ALBERT B. LYONS, M.D.,
Professor of Chemistry and Director of the Chemical Laboratory.

LEARTUS CONNOR, M.D., SECRETARY,
Professor of Ophthalmology and Otology.

H. O. WALKER, M.D.,
Professor of Anatomy and Diseases of Genito-Urinary System.

E. L. SHURLY, M.D.,
Professor of Materia Medica, Therapeutics and Laryngology.

HAL. C. WYMAN, M.D.,
Professor of Physiology, and Director of the Physiological Laboratory.

J. H. CARSTENS, M.D.,
Assistant Clinical Professor of Clin. Gynæcology,

F. A. SPALDING, M.D.,
Assistant Clinical Professor of Obstetrics.

J. G. JOHNSON, M.D.,
Lecturer on Diseases of Mind and Nervous System.

E. A. CHAPOTON, M.D.,
Lecturer on Pathology and Morbid Anatomy.

DAVID INGLIS, M.D.,
Instructor in Practice of Medicine.

J. W. ROBERTSON, M.D.,
Instructor in Practice of Medicine.

A. E. CARRIER, M. D.,
Instructor and Demonstrator of Anatomy.

MORSE STEWART, JR., M.D.,
Instructor in Materia Medica and Therapeutics.

A. B. STEVENS, PH. C.,
Instructor in Pharmacy.

CHAS. G. JENNINGS, M, D.,
Instructor in Chemistry.

F. H. KNICKERBOCKER, M.D., Curator of Museum and Librarian.

The Collegiate Year is divided into two sessions.

THE REGULAR SESSION opens Wednesday, September 8th, 1880, and closes March 1881, (obligatory.)

THE SPRING SESSION opens March 15th, 1881, and closes June 23rd, (optional.)

All candidates for the degree of Doctor of Medicine at the DETROIT MEDICAL COLLEGE must successfully complete the following system of training:

PRELIMIARY EXAMINATION must be passed by all candidates for admission who cannot present satisfactory documentary evidence that their acquirements are equal, if not greater than the standard adopted. Date of Examination, September 6th and 7th, 1880.

GRADED COURSE covers three regular sessions of six months each. The course of instruction has been so arranged as to carry the student progressively and systematically, from one subject to another in a just and natural order.

DAILY PRACTICAL WORK in Anatomical, Chemical or Physiological Laboratories during the first two sessions.

DAILY CLINICAL LECTURES during the first two sessions.

DAILY CLINICAL WORK in the HOSPITAL WARDS or DISPENSARIES during the entire last session. For this purpose the Senior Class is divided into small sections, and each section placed in charge of a Clinical teacher for one month. Then the sections change teachers, so that during the session every member of the Senior Class is taught to do clinical work in Diseases of the Eye and Ear, in Diseases of the Larynx, in Diseases of Women, in General Medical Cases, in Surgical Cases, in Diseases of the Skin and in Diseases of the Nervous System and in Obstetrics. Thus the student makes, or assists in making, examinations and in carrying out treatment, writes prescriptions and histories of cases, dresses wounds, applies bandages, watches the progress of pathological processes internal or external, assists at operations, etc.

DAILY LECTURES AND RECITATIONS on the several scientific and practical branches of Medicine and Surgery during the entire three courses.

EXAMINATIONS at the end of each course on the studies of that course.

DIVISION OF STUDENTS.—The students are divided into three classes according to time of study and proficiency in study. Each class has its lectures, recitations, clinics, and Laboratory work distinct from the others. The small size of the several classes brings the student into intimate personal relations with his several teachers.

Three Hospitals—Harper's, St. Mary's and St. Luke's—with two large free Dispensaries, afford abundance of clinical material. All lectures are delivered on Hospital Grounds. The peculiar feature of this school is the intimate union between its Didactic, its Laboratory and its Clinical teaching.

FEES.—For Regular Session, Registration, (yearly)..... $ 5 00
Lecture Fees..... 75 00
Final Examination..... 30 00
Lecture Fees to Third Course Students..... 50 00
Hospital Tickets free to all who take out other tickets.

For Spring Session the fees are $10 to those who attend the Regular Course. All others are required to pay $25, but $15 of this will be credited on the fees of the next Regular Course attended. All fees payable before Matriculation Examination, to the Secretary, but are returned if the applicant fails to pass the examination.

Announcement and Catalogue, or more detailed account of the above can be promptly obtained by addressing the Secretary,

LEARTUS CONNOR, M.D., 92 Cass Street, DETROIT, Mich.

N.B.—Under no circumstances will there be any reduction or remission of any of the published requirements of the College.