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

Vol. XIII }
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TORONTO, AUGUST 1, 1881.

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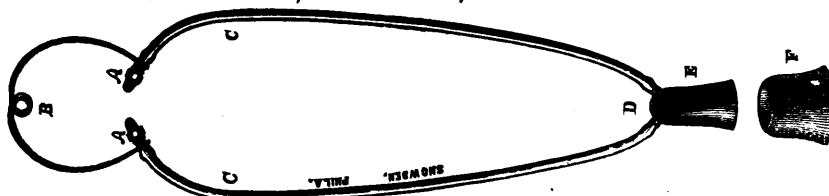
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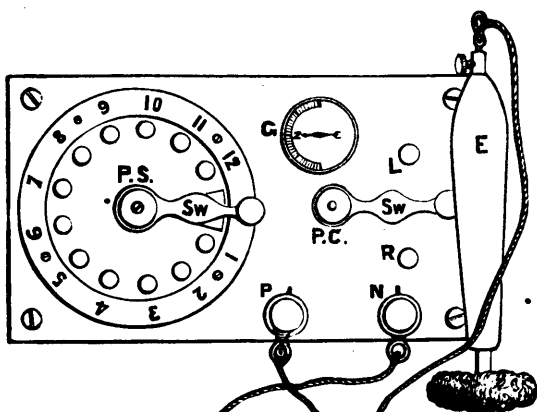
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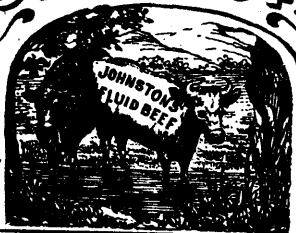
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OR, THE SCIENTIFIC PREPARATION OF FOOD

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

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

In the paper read by Dr. EDWARD SMITH before the British Association, August, 1863, he says of Meat Extract: "When, therefore, you have excluded fat, fibrine,

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

The "London Examiner" says: "In making up the International Scientific Series, Dr. Edward Smith was selected as the ablest man in England to treat the important subject of foods." In his treatise on food, page 88, Dr. Edward Smith says:—"There is but little left in the extract to nourish the body, and the elements which it really possesses are salts and the flavor of meat which disguises the real poverty of the substance. If it then be asked why so much of the flesh is thus unused, we answer that only the soluble parts of the meat could be obtained in this form, whilst the insoluble but most nutritious parts are left behind, and only such of the soluble parts are retained as do not put on the putrefactive process, and hence nearly all nutritious matters are excluded. If it be further asked whether the popular belief in the value of this food is altogether based upon fallacy, we answer no, for it is a valuable addition to other foods, since it yields an agreeable flavor, which leads to the inference, however incorrect, that meat is present. If, however, it be relied upon as a principal article of food for the sick, it will prove a broken staff. ALL that is required for nutrition should be added to it. Liebig, in a letter to the "Times," stated that it is not nutriment in the ordinary sense, and Prof. Almen has shown the small nutritive value of this substance in the Transactions of the Medical Society of Upsala, in 1882. "USED ALONE FOR THE TEA IT IS A DELUSION."—Page 89.

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

In the "Lancet" of November 11, 1885, Baron Liebig says:—"Were it possible to furnish the market at a reasonable price with a preparation of meat combining in itself the albuminous together with the extractive principles, such a preparation would have to be preferred to the "Extractum Carnis," for it would contain ALL the nutritive constituents of meat." Again:—"I have before stated that in preparing the Extract of Meat the albuminous principles remain in the residue; they are lost to nutrition; and this is certainly a great disadvantage."

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

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

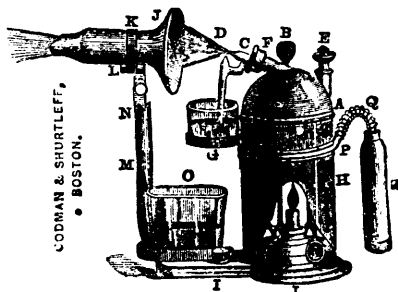
The "Christian Union," Glasgow, Sept., 1878, says:—"Some time ago a leading London Journal threw out the suggestion that it would be a good thing if some practical analyst, or somebody else, would discover an extract of unusual strength-renewing property to resuscitate the enfeebled constitution of those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

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

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

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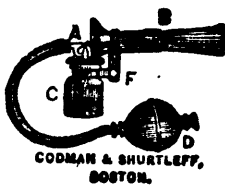
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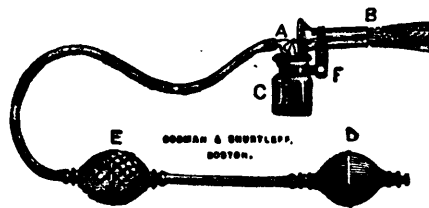


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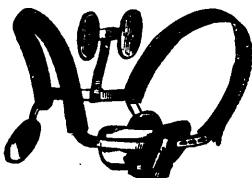
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FIG. 3.



ABDOMINAL AND SPINAL SHOULDER AND LUNG BRACE.
FIG. 8.

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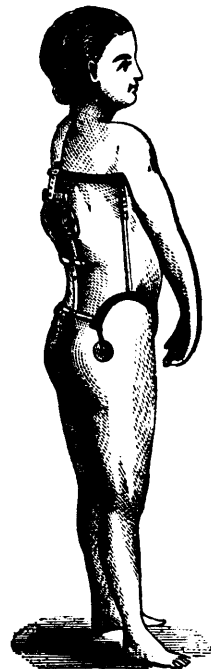
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FIG. 19.



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MEDICAL AND SURGICAL SCIENCE.

VOL. XIII. TORONTO, AUG. 1ST, 1881. No. 12.

Original Communications.

RENAL CIRRHOSIS—WITH SPECIAL REFERENCE TO ITS LATENCY AND TO SUDDEN, FATAL MANIFESTATIONS OCCURRING IN ITS COURSE.

Being a Clinical Lecture delivered May 28th, 1881, in the Summer Session Course, by WILLIAM OSLER, M.D., M.R.C.P. Lond., Professor of the Institutes of Medicine, McGill University; Physician and Pathologist to the Gen. Hospital, Montreal.

Stenographical Report by S. A. Abbott, Esq., of the "Hansard" Staff.

GENTLEMEN,—I speak to you to-day upon renal cirrhosis, or chronic interstitial nephritis.

The various modes of onset of disease constitute an exceedingly important and interesting subject of study. You know that one of the very first questions we ask a patient is, how did the disease begin? The answers got to this question are very varied. One patient will say, it began suddenly; I was feeling quite well; it came on with a headache; I got feverish; I had a pain in my back; I was taken with vomiting; and various other answers, all of you have, no doubt, received in ascertaining the clinical history of cases. In another set of answers the patient will tell you that he cannot fix definitely the commencement of the disease; that he has not been feeling very well, but cannot state the precise time at which the failing health began.

Now I wish to call your attention in this particular affection to its remarkably stealthy method of onset. There is no disease with which we are acquainted which comes on so insidiously and so stealthily. Indeed, its victim may know nothing whatever of the existence of any grave disease until he is prostrated by one of its severe accidents to which I shall shortly refer. It is this insidious course which makes it at once an exceedingly for-

midable affection and one worthy of your closest attention.

The patient before you offers a very good example of the disease in question, and has many of its most characteristic symptoms. I will read to you a concise clinical history of his case as obtained by Mr. R. J. B. Howard:—

E. L., æt. 31, sailor, large, strongly built man, admitted May 18th, with headache, vomiting, and partial blindness. Has been a healthy man; a beer drinker and has occasionally gone on "sprees." Has had bubo; no evidence of secondary syphilis. Two years ago lost his nose from frost-bite.

When coming across on his last voyage, about 12 days ago, had a slight pulmonary disorder; the doctor called it inflammation. A week ago he had swelling and inflammation at inner canthus of right eye from lachrymal abscess. During these attacks he had headache, and latterly the feet have been swollen. On the 17th, the headache became much worse and partial blindness came on. Vomiting had been present for several days.

Condition on examination was as follows:— Well nourished man, good complexion, complains of headache and blindness, cannot see fingers six inches in front of the eye. Has perception of light. Pupils of medium size, respond to light, but there is a peculiar dull look about the eyes. Dr. Buller reports, "optic discs somewhat hyperæmic and indistinct at margins, nothing abnormal, retina present. Headache is general. Vomited last night and this morning. Bowels are freely opened. Tongue a little furred. Temperature normal. Chest well formed; apex beat half an inch outside the nipple line; impulse slow, heaving and forcible. Pulsations 60 per minute. Heart's dulness slightly increased. On auscultation, no murmur; sounds loud and distinct. There was nothing of special note in lungs. Examination of abdominal organs negative. Urine clear, light colored, sp. grav. 1.009, acid, contains a moderate amount of albumen and numerous pale casts. Radial artery feels firm, pulse hard and strong, tension greatly increased."

The patient improved very rapidly. On the 20th he could count fingers, but could not see to read. The amount of urine passed has been estimated, and found to be about 100 ozs. daily. Urea diminished, only 299 grains for the 24 hours. The headache has gradually disappeared and the

vomiting is now checked. The feet are not swollen. The state of the urine remains unchanged. The circulatory symptoms persist; the high degree of arterial tension which exists is well shown by this sphygmographic tracing which I hand round.

Summing up the chief symptoms which this man had, they were: headache, vomiting, and disturbance of vision. These were the symptoms he complained of; but the symptoms which we discovered, and of which he had no knowledge, were—that he was passing nearly double the normal quantity of urine, that it was albuminous and contained hyaline and finely granular casts; that his heart was hypertrophied; that he had increased arterial tension, and that there was slight dropsy of the feet.

This latter group of symptoms which I have mentioned, excluding altogether those he complained of when he came in, is alone sufficient to enable you to frame your diagnosis of the disease, particularly if they occur in connection with slight degrees of dropsy. There may be exceptions, but in the great majority of cases they will be sufficient for your purpose. The affection which is indicated by them is one of the forms of chronic Bright's disease. The three varieties of this disease, characterized according to the special morbid condition of the kidneys, are: first, that associated with the large white kidney; second, the form associated with the waxy kidney; and third, the form associated with the contracted kidney. It is the latter which this man suffers from.

Now in this disease the condition of the kidney is shown in the description of these organs from the girl who died in the hospital ten days ago, and the post mortem on whom most of you saw. Firstly, the kidneys are reduced in size. Secondly, on stripping off the capsule, you find it is thickened and opaque. Thirdly, the surface of the organ, instead of being smooth, presents a number of irregular nodular projections, or granules, large and small,—hence the term granular kidney. In stripping off the capsule, portions of the kidney substance adhere to it. Fourthly, on section, the organ cuts with great resistance, and it feels tough and hard. Fifthly, on examining the organ, you find that the cortical substance is greatly reduced, forming a very narrow zone above the pyramids. In some places the pyramids approach to within a line or a line and a half of the surface. Sixthly, the arteries are noticed to be unusually distinct,

particularly those at the bases of the pyramids, and they often project above the level of the substance. Small cysts are also common, but they are not seen in this specimen. The color of the organ, in this special instance, was pale and not reddish. The pyramids were reddish, but the general color of the organ was pale grey. These are the coarse features of the kidney in this form of Bright's disease.

Microscopically, as you will see in a section taken from this organ, the chief characteristic is an enormous increase in the fibroid elements of the organ. In a healthy kidney there is only a very small amount of fibrous tissue between the tubules, around the Malpighian tufts, and about the arteries of the organ. The amount is so small that Dr. Beale, one of the leading histologists in England, denies the presence of a special fibroid framework of the kidney. But in this affection you will see that between the tubules, there is a large amount of a new growth of fibrous tissue. The tubuli uriniferi, instead of being in close apposition, are separated from each other by distinct zones of fibrous tissue, and the Malpighian bodies are also surrounded with the new growth. The arteries are much thickened, both in the adventitia and in the muscularis. The condition of the renal epithelium in the tubes varies a good deal. In some tubules you will find it healthy looking, in others it is degenerated, granular and fatty; so that in reality the essence of the process is, just as in the case of the fibroid lung of which I spoke to you the other day, and as in the case of the fibroid liver, an overgrowth of the connective tissue of the organ. This produces atrophy of the secreting structure, and impairment of the function of the gland.

Associated with the small, contracted kidneys you have a remarkable condition of the circulatory system. The arteries of the body are thicker and firmer than is natural, particularly the smaller ones. There is usually atheroma in the larger vessels. With reference to the special change which goes on in the smaller vessels, there is still a great deal of dispute. Drs. Gull and Sutton believe that the change is chiefly in the outer coat. They call this degeneration arterio-capillary fibrosis, a fibroid change in the small arteries and capillaries. Dr. Johnson believes that the change is chiefly in the middle coat, resulting in hypertrophy of the muscular elements. Drs. Gull and Sutton hold that

the changes in the arteries and the changes in the kidneys go on simultaneously, and are both the expression of a common cause; whereas other writers think that the changes in the arteries are secondary to the changes in the kidney. In addition to these muscular changes, the heart is found hypertrophied, more particularly the left ventricle. It is increased in thickness and the muscular walls are hypertrophied. Thus, cirrhosis of the kidney, arterial degeneration, and hypertrophy of the heart, are the three main pathological features of this form of Bright's disease which you meet with in a post mortem.

The hypertrophy of the heart, which is a very constant symptom, is supposed by Traube to be due to the increased difficulty with which the blood circulates through the kidney, owing to the destruction of a large number of Malpighian tufts. It is, according to this view, a compensating hypertrophy, that is to say, hypertrophy makes up for the destruction of a considerable vascular area in the kidneys. Others think that the hypertrophy is the result of chronic changes in the arteries, in which the arteries of the kidney participate. Bright's view with reference to the hypertrophy of the heart was, that the blood in kidney disease not being so pure as in health, did not circulate through the capillaries of the body with the same facility; hence the need of the heart to increase its force of contraction in order to propel the blood.

A knowledge of the condition of the heart and arteries is a key to explain many of the symptoms of this form of kidney disease. Thus, one of the remarkable features of this disease, remarkable in contrast to the other varieties of Bright's disease, is the large amount of urine secreted. This man has been secreting double the normal amount of urine. This would appear to be due to the hypertrophy of the left ventricle, and to the increased blood pressure within the arteries. You know how much the watery part of the urine depends upon vascular pressure. As a rule, the greater the blood pressure within the renal vessels, the greater the amount of water which is filtered through the Malpighian tufts. Though there is a great destruction of these tufts in renal cirrhosis, still the compensating hypertrophy of the heart is not only sufficient to counterbalance their loss, but even so to increase the pressure in the remaining tufts that a larger amount of urine is filtered off. That this is the

case is shown by several circumstances. In the first place, if you keep a patient with this form of kidney disease absolutely at rest the amount of urine diminishes. This fact has been established by Bartels after several very careful observations. At rest the blood pressure is not so great as when the patient is moving about, as the pulsations of the heart are not so forcible. Then, so soon as hypertrophy of the left ventricle begins to fail, when degeneration comes on, the amount of urine diminishes while its specific gravity increases.

Among the most remarkable symptoms of chronic Bright's disease, are those which come under the heading of *uræmia*. This term was first used when the symptoms grouped under it were all believed to be due to the poisoning of the blood with urea. That view has now been considerably modified, but the old term which embraces these symptoms is still retained. I shall not speak fully with reference to the supposed causes of *uræmia* further than to mention that some still suppose it to be caused by the retention of urea; others, that it is due to the presence of carbonate of ammonia in the blood. A third view is that it is neither of these substances, but those bodies which we call the antecedents of urea, creatinin, tyrosin, &c., the various nitrogenous excreta, or the products of the waste of the tissues. A fourth view is that these symptoms of *uræmia* are due to œdema of the brain.

Now, among these manifestations of *uræmia* some are trifling and others are exceedingly grave. Among the minor manifestations may be mentioned those which this patient has suffered from—headache, vomiting and impairment of vision. The more severe symptoms are convulsions, delirium, coma, sudden œdema of the lungs or of the glottis, inflammation of a serous membrane, pleurisy, pericarditis and meningitis. This patient before you has only suffered from the minor manifestations of *uræmia*, but I would like you all to have this case fully impressed upon your minds, particularly with reference to what I am going to tell you later as to the insidious nature of this disease. You remember that when we first saw this man we did not think of any kidney trouble, but from his symptoms and appearance that he most probably had some cerebral disease. When I first saw him on the day of his admission my first thought was that he had probably cerebral syphilis, mistaking the ragged condition of his nose for an effect of

lues. He had the vomiting, the headache, and the disturbance of vision, three important symptoms of intra-cranial mischief. I would direct your attention specially to the disturbance of vision inasmuch as it is an important symptom, and you will probably not see this form of visual disturbance for some time again. It is what is known as *uræmic amaurosis*. I mention it because I wish you to distinguish it carefully from another form of impaired vision common in chronic Bright's disease, viz., *retinitis albuminurica*. In uræmic amaurosis the cause of the impairment of vision is cerebral. The examination of the retina is negative. Its clinical features may be briefly summed up in the rapidity of its onset, the shortness of its duration, and the quickness of its departure. It rarely lasts any length of time—in this man only three days—whereas in the retinitis albuminurica, the impairment of vision comes on slowly, the cause is peripheral, and there is a definite lesion in the retina, chiefly seen about the macula, in the form of small hemorrhages, and with these there is usually some swelling of the disc. In this form the impairment of vision comes on slowly and is rarely so severe as in the uræmic amaurosis.

But that to which I wish specially to call your attention to-day—and I am sorry to have had to take up so much time in clearing the ground—is the fact that *these severe symptoms of renal cirrhosis may break out in all their violence in an individual who may consider himself in perfect health, and who may be so considered by his friends, and even by his medical adviser, if the latter has not carefully examined into his case.* The case of the patient who was admitted under my care on the 7th of May, and who died after a residence of two days in the hospital, has directed my attention to certain points in connection with the insidious course of cirrhosis of the kidney.

The first manifestation of the disease may be the onset of severe cerebral symptoms, convulsions, delirium or coma.

Cases in point are as follows:—A friend of mine, aged 30, a fellow student, and a man whom I had known since 1863, a graduate of McGill College, a strong healthy man, and in active practice, was suddenly seized with convulsions which came on at night with few, if any, premonitions. The day previous to their onset he had done his work as usual and appeared to be, as his wife expressed it,

“in radiant health.” The examination of his urine by the attending physician showed the presence of albumen and tube casts, and the diagnosis of chronic Bright's disease was made. He became comatose and died in a few days. I saw him a few months before his death and he looked in his usual vigor. He made no complaints of failing health nor were any alterations perceptible on his countenance. Six or eight months before he had had considerable domestic and mental trouble, owing to the sudden death of his father, and he had not been well for several weeks at that time, but apparently had recovered completely. He had no idea whatever that he was in this dangerous condition. It is to be noted that prior to this attack he was a good deal worried and anxious about his children who were ill.

The first manifestation may be delirium passing on to coma. That was seen in the patient named Weir who was admitted on the 7th of May. I will briefly call your attention to the main features of his case.

This patient was a vigorous and healthy man, aged 44, a foreman in G. T. R. employ. Habits temperate for past ten years, previously had been a drinker. Had been in usual health, but had complained of headache, and his wife stated that he had passed water more frequently of late. On May 6th he was admitted with an active delirium which had come on suddenly 36 hours before. Urine found to be albuminous and contained granular casts. The symptoms were regarded as uræmic. He became comatose on the 7th, and he died at 2 a.m. on the 8th, after an illness of a little over three days. A point to be noted in connection with this case was that the patient had had a great deal of mental worry at the time as a strike was going on. The *post mortem* did not reveal extensive renal cirrhosis, as was anticipated, for the kidneys, as you see, are not reduced in size and do not present the external characteristics of interstitial nephritis, but they were firm, and on microscopical examination there is evidence of a chronic nephritis. The arteries are thickened, some of the Malpighian tufts are degenerated, and there is an increase in the fibrous tissue about the capsules. A fact to be learned from this case is that severe uræmic symptoms may develop at a very early stage in renal cirrhosis, even before the characteristic contraction of the

organ occurs. This is, of course, very uncommon, but that it does take place is evident from this case.

The third case illustrating the suddenness of the onset of cerebral symptoms in this disease was that of the girl who died about ten days ago, and from whom these kidneys were taken. She was 26 years of age, and up to the time of her admission to the hospital had not suffered from special symptoms of kidney disease. She came in suffering from headache, vomiting, and hæmorrhage from the nose, uterus and navel. She got dizzy, had convulsions, became comatose and died. The urine was albuminous and contained casts. The condition of the kidneys was as you now see in these specimens. The occurrence of hæmorrhage is worthy of your attention, as it is occasionally seen as one of the severe symptoms in Bright's disease. In the case of this patient it is also worthy of remark that she was friendless and had been ill-treated for years. These three cases will serve very well to illustrate the fact which I wish particularly to impress upon you, namely, that severe uræmic symptoms may be the very first manifestations to the patient, to his friends, or his physician of the existence of kidney disease.

The importance of a knowledge of these facts is also very evident from a consideration of the medico-legal aspect of such cases. You may be called to attend a man in a profound coma, who has been stricken down suddenly without any premonition, and while attending to his business, and he even may die in three or five hours under circumstances at first suggesting narcotic poisoning.

The first manifestation may be an apoplectic seizure.

In October, 1879, one afternoon as I was going down stairs prior to my lecture at the College, one of the veterinary students, aged about 25, while coming in through the side entrance, was taken with apoplexy before my very eyes. He leaned against the wall and stated that he was powerless in his left side. We helped him into the waiting-room, and from the suddenness of the onset I supposed at once he must have heart disease and apoplexy. On placing my ear on his chest I perceived a pronounced, heaving impulse of the heart but no murmur. There was marked cardiac hypertrophy. By the time we got him to his boarding house the paralysis was complete on the left side; he had lost consciousness and was becoming comatose. He

was taken to the hospital and we examined his urine, which was clear, albuminous, and contained numerous casts. The arterial tension was increased. He died in 24 hours. That young man had never suffered from any special symptom pointing to renal disease. He had been attending to his work as usual, though he had never been very strong, and on several occasions I looked at him thinking he might have some constitutional disease. He did not look healthy, but the only things he had complained of, had been occasional headaches and palpitation of the heart, and so far as I remember he had not consulted a doctor.

Another case in which the first severe symptom of renal cirrhosis was apoplexy occurred under Dr. Ross' care two years ago in 23 Ward. A woman came in with hypertrophy of the heart, high arterial tension, albuminous urine, and casts, finely granular in character. Cirrhosis of the kidney was diagnosed, and she was placed under suitable treatment. Three days after admission to the hospital she died in two hours with an enormous apoplectic effusion into the brain.

The arterial degeneration in this affection renders the vessels fragile, and the powerful contraction of the hypertrophied left ventricle is a source of constant danger. A large proportion of all cases of apoplexy occur in connection with contracted kidneys, owing to the existence of these two factors.

A third way in which this disease may declare itself is by inflammation of some serous membrane, the pericardium, the pleura or the meninges of the brain.

A case which early called my attention to the insidious nature of this disease was the following:—A florid, full-blooded Englishman, an old sailor, aged 63 years, who had usually enjoyed excellent health, though he had occasionally, I believe, suffered twinges of gout, was suddenly seized with symptoms of an acute febrile affection, had high fever and considerable constitutional disturbance. To make a long story short, he died at the end of four days of acute sero-fibrinous pericarditis. He had a large exudation in the pericardium. The only other disease found in his body was fibroid kidneys, perhaps of gouty origin, as gout may be a very important factor in the production of this disease.

The fourth sudden manifestation in this disease to which I will direct your attention is œdema of the glottis, or more frequently of the lungs.

Three years ago an old man was brought from the House of Refuge to the Hospital, suffering from intense dyspnoea. On examination of the lungs hydro-thorax of the left side and œdema of the left lung were diagnosed. He refused all treatment, and died within 36 hours of his admission. The *post-mortem* revealed small contracted kidneys, intense œdema of the left lung and hydro-thorax of the opposite side. The effusion and transudation of serum takes place sometimes into the pleural cavity and sometimes into the lungs. In this case there were no adhesions on the left side, while in the other side there were extensive adhesions and the transudation took place into the lungs. There was no œdema of the legs in this instance. The urine was albuminous and there were casts.

An interesting point in connection with the occurrence of this œdematous effusion is the fact that Traube attributed the uræmic symptoms in this disease to the serous transudations, and the post mortem of the man Wier favors this view, as there was considerable œdema of the membranes of the brain and a good deal of moisture throughout the substance.

These are certain of the modes of termination of cirrhosis of the kidney with which you should be acquainted and which it is exceedingly important you should bear in mind.

Now, among other symptoms which I will only mention in connection with this chronic form of Bright's disease, there is the occurrence of a dyspnoea, uræmic asthma, without evidence of œdema of the lungs or chronic bronchitis, dependent upon cerebral causes. It is of rare occurrence, but it is a condition which you should bear in mind. The bronchitis, the vomiting, and diarrhoea are also symptoms to which I will not further refer.

The importance of a knowledge of these symptoms and these sudden manifestations in renal cirrhosis cannot be over-estimated. I have had two life insurance cases referred to me within the past few years, both of which bear directly upon this question. In one the patient had an Accident Insurance Policy. He fell on the ice and was stunned; felt unwell for some days, but did not see a doctor. Three or four months after, I forget the exact time, he was seized with apoplexy. The post mortem revealed contracted kidneys. The question was brought up as to the connection of

the accident with the subsequent event. My opinion was asked, as the friends had some idea of contesting the case in the courts, but the existence of renal cirrhosis was to my mind quite sufficient to account for the apoplexy.

In the other, a middle-aged man had insured his life about seven months before his death, which took place quite suddenly. The autopsy disclosed very great atrophy of one kidney and a large red state of the other. No very satisfactory report was obtained of the state of the other organs, and the actual cause of the sudden death remains doubtful. But I have no doubt whatever that it was connected with the condition of renal inadequacy. My opinion was asked as to the possibility or probability of this man not being aware that he was uninsured at the time of insuring. After the cases which I have narrated, illustrating the latency of chronic renal disease, you need not ask what my answer was. From the point of view of life insurance, there is no disease about which a company should be more on its guard. Its peculiar insidiousness will have become evident to you by the cases I have cited. The stealthy nature of the disease is increased by the fact, that albumen is not constantly present in the urine. A single examination is not sufficient to enable you to state positively upon its presence or absence, and it is often very slight in amount; and though you may examine for casts, you may go over a dozen slides before finding one.

A patient may come to you who is passing a large quantity of urine, so that he has to get up, perhaps, two or three times in the night (that may be what he comes to complain of); the urine is of low specific gravity and contains albumen—perhaps only in traces. The daily amount of urea is decreased. It deposits, not a thick heavy sediment, but a light cloudy one, which on examination is found to contain hyaline and finely granular casts. There may or may not be œdema of the ankles. If you also find on examination that his heart is hypertrophied, that the arterial tension is increased, you may be tolerably positive with reference to your diagnosis—the man has fibroid degeneration of the kidneys. To be forewarned in such a case is to be forearmed, and a knowledge of what you may expect in these cases will enable you to take measures for the prevention, if possible, of the severe manifestations of which I have spoken. If a patient comes before you with these

symptoms, you should see that the amount of his urine is kept up, and on no account allow it to diminish; that his pulse is kept thoroughly well regulated, and that he lives a quiet regular life and does not go to any excess in eating or drinking.

The treatment of the affection is in great measure a treatment of symptoms. Acting with cathartics upon the bowels and keeping the amount of urine up to the standard, are among the most important means to be taken.

NOTE.—June 7th. The patient who was shown to the class on the occasion of the above lecture was recently discharged, feeling as he expressed it quite well. He was still passing about 80 ounces of urine in the day, with albumen and a few casts. He looked well, fit for life insurance, and would pass in many examinations such as I have witnessed. Yet I know of no more likely candidate for sudden death than this same patient, who has the sword of Damocles hanging over his head, ready to fall with fatal effect when the tiny hair which suspends it is suddenly broken by the onset of convulsions, or one of the other accidents to which such patients are liable.

ELEPHANTIASIS.

BY T. T. S. HARRISON, M.D., SELKIRK, ONT.

(*Read before the Ontario Medical Association.*)

This case which I bring before you with some doubt and hesitation, I have called elephantiasis. It has this characteristic of that disease, that the affected limb is enormously enlarged. It differs, however, from the typical elephantiasis in the absence of the thickened, indurated tuberculated and cracked integument.

Patient, aged 20., Canadian, born of German parents. Parents, and brothers and sisters, healthy; the mother's family consumptive; the maternal grandmother died of cancer.

J. A., at birth was healthy; a very large, fine, child. At the age of two and half his mother noticed that one leg was growing faster than the other. I first saw the boy when about three years of age. I then found the left leg decidedly the longer. The right was normal in contour, while the left was not only longer, but larger and abnormal in shape; the skin hung loosely and it had a

soft, doughy feel, was largest at the ankle, and had no bulge or projection at the calf. I gave the opinion that there was arrest of growth in the right leg, but had to say that the left had some peculiar affection of the soft tissues at least. The mother said that other medical men had given the same opinion. The child was merely treated for his general health.

I saw the child occasionally as I attended other members of the family, for several years. The size and length of the limb increased so rapidly, that there was soon no doubt as to the abnormal growth of the tibia and fibula.

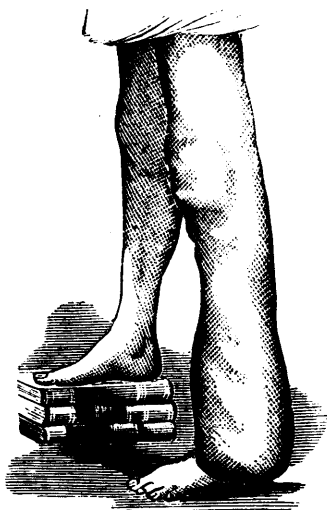
Some seven years ago, when about thirteen, I exhibited the boy at the meeting of the County of Haldimand Medical Association. At this time, the disease which at first was confined to the legs, had invaded the thighs; there was enlargement above the knee, and the femur was some $\frac{3}{4}$ of an inch longer than its fellow. The patella was broader, thinner, and flatter than natural.

Then the entire limb was, I think nearly, or quite five inches longer than the right. The weight of opinion was against surgical interference, though amputation, resection of the bones of the leg, ligation of the femoral artery, division of the nerves, etc., were mentioned. For some years, until he was about eighteen, the deformity increased, but the mother thinks it is now stationary; she, at least, has not to increase the size of his stockings since that period.

You see the state of the limb to-day. The enlargement has extended up the thigh. The femur is nearly two inches longer than its fellow. The circumference above the knee is four inches greater than that of the right, while the circumference at the ankle is 13 inches greater than that of its fellow (the right leg $8\frac{1}{2}$, left, $21\frac{1}{2}$ inches.) This size (at the ankle) would be increased, were he to keep long on his feet, and diminished after his night's rest.

In the cut you will observe the right foot rests on some books. These, though they do not bring it to a level, are $5\frac{7}{8}$ (five and seven-eighths inches high.) The femur is bowed, so as to take nearly, or quite an inch off its length. It is increased in size and altered in shape, the spine at the shin entirely absent. The skin is soft, and with the tissues it covers, has a soft, flabby feel. The hairs on the affected parts are very

much elongated, the skin in places dark coloured, and the inguinal glands on both sides, greatly enlarged. The eyes are rather prominent, and show a large amount of peculiarly white and glistening sclerotic.



The boy works on a farm, and though he tires rather easily, has never been seriously ill. It has been suggested that it might be of syphilitic origin. His parents are very quiet farmers, who, from extreme youth, have always resided in a rural township, where it would be almost impossible to find a case of syphilis in a generation. They never visit towns or cities, and I should feel safe in saying that if syphilis is a factor in the case that it was contracted as far back as the grandparents of the patient.

ON THE TREATMENT OF ASTHMA.

BY G. L. MACKELCAN, M.D., HAMILTON, ONT.

(Read before the Ontario Medical Association.)

This paper is written with the object of showing the beneficial effect of chloral hydrate in the treatment of asthma. Asthma is a disease marked always by a certain amount of periodicity in the attacks of dyspnoea, and may be divided into the three varieties of cardiac, dyspeptic, and bronchitic, the latter form being the most common.

Taking for a theoretical basis the idea that the attacks originate from some peripheral disturbance

of some branch or branches of the pneumogastric nerve, which is communicated to the nerve centre, and that the attack could be arrested by paralyzing the nerve centre, as it were, the paroxysm could be cut short, and if cut short, the habit would ultimately be broken up, I thought that chloral hydrate would have the desired effect. The first case that came under treatment was an old standing one of thirty years, of the cardiac variety. This old gentleman had been subject in the first years of the disease to violent periodical paroxysms, but latterly it had become almost continuous, so much so indeed, that he had not lain down in bed for some months. The remedy was given in 3i doses at first, as I presume it was by most of us, when it came into use. The dose was then gradually decreased until five grains, three times a day, were taken. The effect of the treatment was such, that in a very short time, he was greatly relieved of his asthma, and at the end of six months he was entirely free from it. He lived for ten years afterwards and never was troubled with it again, although living in the same neighbourhood. He told me that he gave my prescription to others suffering from the same disease in his locality, and that it entirely relieved them.

The next cases treated were four members of the same family. I had treated the father for some time on the old plan that I had been accustomed to, but with only temporary relief. As soon as he began the new treatment with chloral hydrate he began to improve, and after three months he had no return of the disease. Sometime afterwards the mother came for treatment for the same disease and in her case I believe she never had a subsequent attack. About two years after, the son and daughter came to be treated for the disease and were well enough to discontinue the remedy, one in three and the other in six months.

The next case was that of a lady whom I had treated for asthma for twelve years, with very unsatisfactory results. On commencing the treatment by the then new remedy, she obtained six or eight hours sleep, during which the breathing was tranquil; but as soon as she waked, the difficulty returned in full force. She continued the treatment for some years with the above-named effects, but ultimately died from the disease.

The next case was that of a middle-aged woman whose asthma was evidently due to dyspepsia. She

was always relieved at once of the attack, but some error in diet would bring on an attack at any time; as I lost sight of her I presume she was not cured.

Next comes the case of an elderly lady whom I saw in consultation. The same treatment relieved her entirely from the spasmodic attacks, but she never regained her normal breathing on account of extensive emphysema. In this case and subsequently the dose of the medicine was reduced to one scruple or ʒss, to be repeated if necessary.

Then comes the case of a young man, aged twenty-two, with his first attack which was fully established before treatment was commenced. In his next attack about three months after, it was broken up at once and he never had another, and that is two years ago.

Still another young man of twenty-three who had suffered from chronic bronchitis for a year, had a violent attack of asthma, which gave way to the treatment at once, and for a year he was free from both bronchitis and asthma. At the expiration of the year he had another paroxysm which was soon broken up and he has not had another since.

Again, with regard to the disease in young children, when the diagnosis is made out, which is not always easy, the effect of the treatment has been very remarkable. Four cases from three to ten years of age, treated by from six to twelve grains have been completely relieved from any further attacks. Asthma having been considered quite incurable from my own former experience and that of others, and all the known remedies appearing to give only partial and temporary relief, I was pleased at finding a majority of cases (11 in 14) cured, and the others relieved to a certain extent.

DISCUSSION.—Dr. Geo. Wright, Toronto, said he had become satisfied, from what he had seen himself, and what had occurred in the hands of other practitioners, that the drug was a very formidable one, and required extreme caution in its use. There might be some forms of asthma in which it would be useful, but in long-standing cases, where there was invariably some form of impaired heart action, he thought it very questionable practice to give chloral in doses as large as were recommended by the reader of the paper. He then referred to several cases in which comparatively small doses had produced fatal consequences, and expressed his belief that more than

15 grain doses were rarely safe, and said that, in many cases, he would not venture to give even so much. In reply to a question by Dr. Workman, as to the danger of acquiring the chloral habit he said he had no experience.

Dr. Oldright, Toronto, said that we had not been so heroic in Toronto as they had been in Hamilton, as we only gave 20 to 30 grains at first, so far as his observation had extended. He had found benefit from belladonna, ether, and ammonia, and possibly also from grindelia robusta, in asthma.

Dr. Madill, Alliston, thought that the remedy was a dangerous one, owing to the uncertainty of the strength of different preparations. He himself had been almost a victim to that uncertainty, and in country practice he would almost discard the use of the drug. He recognized its utility and power in certain cases, but thought that others would not meet with the same success that Dr. MacKelcan had done. He himself had found no difficulty in leaving off the drug.

Dr. Bowlby, Berlin, had followed this treatment with satisfaction and success. Dr. Geikie, of Toronto, approved of the treatment in certain cases. He had had some experience of the formation of the chloral habit, but thought the danger was not great.

Dr. Sloan, Blyth, remarked that a distinction ought to be made as to cases which were complicated with valvular insufficiency. Chloral was not likely to prove curative in those cases, although of great value as a palliative. For himself, there was no other drug in which he had the same confidence in asthmatic cases. As respects the chloral habit, he had seen cases using it one, two, and three years, and had no difficulty in discontinuing its use. With reference to Dr. Madill's remarks he would say, that he would as soon discontinue morphia, because some untoward results had followed its use, and that the physician who discards chloral, neglects a valuable remedy, for which in some clinical conditions it will be difficult to find a substitute.

LOCAL APPLICATION FOR CHILBLAINS :—

R. Acid carbol..... ʒi
 Tinct. iodini..... ʒij
 Acid tannici..... ʒij
 Cerat. simp..... ʒiv.

—*Med. Brief.*

ABSCESS OF THE MASTOID CELLS FROM THE USE OF THE NASAL DOUCHE.

BY A. M. ROSEBRUGH, M.D.,

Surgeon to the Toronto Eye and Ear Dispensary.

(Read before the Ontario Medical Association.)

(The patient was introduced, and an opening in the left mastoid bone was seen to communicate with the mastoid cells. Inflations of the Eustachian tube caused a suppurative discharge to make its appearance at the opening.)

The history of this case is briefly as follows:—Edward K., aged 19, has had chronic nasopharyngeal catarrh for four years. Two years ago he was advised by his physician to use the nasal douche. Since then he has used it occasionally—using about a teaspoonful of table salt to a pint of warm water. On the 21st of May last, while using the douche, he felt the solution enter his left ear. On the 22nd he felt very weak, but he had no pain. On the 23rd pain commenced in the left ear, and on the 25th spontaneous perforation of the drum membrane occurred, with copious discharge of a dark sticky fluid from the middle ear. The pain continued, however, notwithstanding a copious discharge, and extended over that side of the head, which was not relieved by leeching and hot fomentations. There was also vertigo and pain down the back and lower limbs. On the 28th there was some œdema of the lining of the external auditory canal, and on the 30th, slight tenderness over the mastoid bone. An operation was then decided upon, and on the evening of the same day, or nine days after the accident, he was placed under chloroform, a free vertical incision made about half-an-inch behind the auditory canal, and an opening about $\frac{1}{8}$ of an inch in diameter was made through the bone into the antrum by means of a drill. This gave exit to a large quantity of purulent fluid, and gave the patient immediate relief. This is the tenth day after the operation and the case, as you see, is now doing well.

The nasal douche, as you are aware, is very extensively used in the treatment of nasal catarrh, and I introduce this case for the purpose of calling attention to the need of greater care in its use. It is true that very few cases of abscess of the mastoid cells from the use of the nasal douche have been reported, but cases of suppurative inflammation of the middle ear from this cause are not un-

common. When a fluid under pressure enters one nostril, the soft palate is elevated by reflex action, and if there is no obstruction the fluid passes out of the opposite nostril. If the pressure is slight, there is very little danger to be apprehended; but if the hydrostatic pressure is considerable, as is the case when the reservoir containing the solution is higher than the head, and if there is also some obstruction to the free exit of the fluid there is great danger of the solution passing up the Eustachian tube into the ear, and perhaps also, as in this case, through the antrum into the mastoid cells.

Let me emphasize the precaution, that when the nasal douche is used, first, the forehead should not be inclined forward; second, the bottom of the reservoir should not be higher than the eyebrows; third, the orifice of the nose-piece should not be large, and fourth, special care should be taken to see that no obstruction exists in either nostril.

Reports of Societies.

NEWCASTLE AND TRENT MEDICAL ASSOCIATION.

The above-named Medical Association held its regular meeting at Campbellford on the 8th of June. The President, Dr. Burritt, of Peterboro, occupied the chair. The minutes of the previous meeting were read and confirmed.

Dr. Byam, of Campbellford, presented a patient with "Hemiplegia," an intemperate farmer, aged 35, who was otherwise well and had been in town the previous evening. Four weeks ago he felt a numbness over the left side, which deepened to complete one-sided palsy during the day. No known injury, although there may have been such. There was no impairment of consciousness at first nor since. He had aphasia for the first five days. The mouth was drawn up and the tongue protruded to the left side. The pupils were equal and not dilated; no ptosis. The left armpit was for the first three days one degree hotter than the right, which was normal. He has dysphagia, which is rather on the increase, and he complains that he cannot readily hawk mucus from the throat. There is no cough and no pain. The heart is normal. He has gradually improved under treatment until he can now almost walk alone. The leg has improved most. A discussion arose as to its origin, especially whether embolic or apoplectic. The latter opinion prevailed.

Dr. Byam also presented a case of "Sciatica" of eight years standing. The patient was 30 years of age, and had been under his treatment for ten months. The treatment had been very various. The results so far were not very encouraging. He is never free from pain, although almost so at times. After a turn of improvement the old pain would return violently and suddenly. The motions of the hip joint are perfect, but the pelvis of the side affected is tilted up so as to give the appearance that the limb of that side is shortened. There is a double curve in the spine which is not tender, and this curvature gives the trunk a distorted look when walking, which is managed with difficulty. When almost free from pain he walks perfectly well, and all deformity disappears to reappear with the recurrence of pain. His sister is similarly affected on the other side, and a half brother on the same side, but neither of these have much or any pain. Their common father is undoubtedly rheumatic. The actual cautery has been well applied over the sciatic nerve on two different occasions without any relief. The pain is worse at night, and is then in the region of the great trochanter. He requires an anodyne twice a day by the hypodermic method. Ether has also been injected. In the ensuing discussion suggestions were made of ammonia baths, nerve stretching, chloroform injections, alkalies and colchicum. Alkalies had been given a fair trial already. Dr. Byam also referred to a case of "Floating Kidney," which had come under his notice.

Dr. Ruttan, of Napanee, reported a case of fatal "Hepatic Colic," and exhibited one large and two small calculi. The large one, ovoid in shape, was five-eighths of an inch long and two-fifths of an inch in thickness.

Mr. H., druggist, æt. 40, had not consulted a medical man for 11 years prior to present illness, although he had frequent attacks of momentary pain; appetite and general health good. Between the 1st of January and middle of June he had four or five attacks of hepatic colic. He had a moderate attack on the morning of the first day of his last illness, but went down town, and had an unusually severe one that evening, the pain being referred to the region of the liver and back. Vomiting occurred freely but the egesta did not contain bile. Anodynes gave him perfect relief. The first decided relief from pain followed the swallowing of half

a teaspoonful of chloroform in water. The matter vomited later contained bile. He was apparently much better the following day, due to gangrene as was shown *post mortem*. His illness was of only four days duration. It is believed that a large gallstone obstructed the common duct in the earlier days of illness, which sometime before death had escaped into the intestines and so allowed of vomiting of bilious matter. Such stone was not found, but the intestines were not searched with care. A calculus was found in the cystic duct, and many from the size of a pin's head upward, were found in the gall-bladder. Nearly the whole duodenum and under surface of liver, but especially the liver tissue around the common duct were gangrenous. In such cases Dr. R. would rely on opium, hot baths and chloroform. Dr. Burritt would bleed. He had seen prompt relief from venesection in several cases.

Dr. Hamilton, Port Hope, presented three specimens of gall-stones from three cases. One of them was obtained *post mortem*. The other two were from cases still living. One was the size of a small pigeon's egg, of stoney hardness and glistening structure. The patient had died of a disease not at all or very remotely connected with the calculus. A second was the size of a small pea, as hard and pearly white as a small tooth. The third was mahogany colored, weighed 35 grains, of light density, and presented five facets. A discussion as to their frequency of occurrence and significance ensued.

Dr. Bogart, Campbellford, gave details of a case in which there was a double placenta but only one child. There was a single cord which branched, a separate branch going to each placenta. One branch was eight inches long, the other three. He thought care should be exercised in removing the placenta, and that such a condition be not overlooked as it might otherwise prove fatal.

Dr. Bell, Peterboro', reported a case in which a midwife had imprudently torn the cord across. Rapid bleeding ensued. Before a doctor could be sent for, and brought eleven miles, the woman was so bloodless as to live only a few minutes after his arrival.

Dr. Burritt reported a consultation case of delivery at full term, in which the attending physician is confident no placenta was ever expelled. The

membranes seemed certainly to be retained and considerable placental matter was adherent over the usual breadth of surface. There was hour-glass contraction. There was no hemorrhage at all. The child was living. He advised non-interference. A fetid discharge followed for six weeks. The recovery was good.

Dr. Richards, Warkworth, reported an interesting case of apoplexy.

Dr. Pettigrew, Campbellford, reported a case of congenital absence of the brain,

Dr. Ruttan, Napanee, reported a cure of spina bifida by operation, giving particulars of his mode of proceeding.

Dr. Sinclair, Hastings, reported a case in practice.

Dr. Byam, Campbellford, promised to open a discussion on "Leucorrhœa" at next meeting, and Dr. Burritt to give the history of a case of uterine hydatis.

An excursion and dinner concluded the proceedings, and the Association adjourned to meet at Napanee, in October.

Selected Articles.

TREATMENT OF ANEURISM BY THE ELASTIC BANDAGE.

The case reported by Surgeon Reid, of the English Navy, in which a popliteal aneurism was cured by Esmarch's bandage, followed by compression of the femoral artery, has attracted considerable attention since its publication in 1875. Dr. Lewis A. Stimson, Surgeon to the Presbyterian and Bellevue Hospitals, New York, has communicated, in the *American Journal of the Medical Sciences*, for April, 1881, a series of sixty-two cases, in which the bandage or the rubber tubing, or both together have been thus used for the cure of aneurism, collocated from various sources. Excepting one example each, of axillary, internal circumflex, and anterior tibial the aneurisms were all of the femoral or popliteal arteries, the great majority being the latter. In two cases in which death followed the employment of the method, the sac and tributary artery were found filled with recent clot. In the successful cases, pulsation was felt in the tumor upon removing the bandage, but remained permanently absent if digital or instrumental compression was continued for several hours subsequently. In a large proportion of cases this treatment was eminently successful. Dr. Stimson concludes that

we have in the elastic bandage an efficient means for safely shortening the duration of the treatment by compression of popliteal and some femoral aneurisms, and lays particular stress upon careful attention to the details of the method, by the application of which a successful result may be hoped for. The greater efficiency and the more speedy action of the method are apparently due mainly, if not entirely, to the arrest of the circulation through the collateral channels as well as through the main artery, thus securing the absolute stagnation of the contents of the sac.—*Med. Gazette*, April 23.

EPITHELIOMA OF THE TONGUE.

M. Le Dentu, at a recent meeting of the Société de Chirurgie, Paris, reported several cases of *epithelioma of the tongue* which had been under his own care, and introduced an interesting discussion as to treatment. In his first case, the return was almost immediate, and death followed in two months; and a second patient was carried off by a severe hæmorrhage. A third was attacked with an epithelioma with very fetid discharge, having every appearance of an ulcerated gumma, which rapidly involved the anterior two-thirds of the organ, without any appearance of enlargement of the ganglia. In this case, the tongue and the anterior pillars of the fauces were removed, and the operation succeeded remarkably well, but there was a return of the disease in the neighboring ganglia in four months. In another case the patient suffered from both lingual and buccal psoriasis, and at the same time from a true epithelioma beginning on the right side, one centimeter from the tip, and ending two centimetres from the base. For this, the patient had been submitted to a thorough anti-syphilitic treatment. The tongue was removed with Paquelin's cautery. The operation was done in 1876, and up to the present time there had been no return. The diagnosis was confirmed by many, among them M. Verneuil. In the hands of M. Le Dentu, the operation has always had one result, to render life more supportable, to do away with the intolerable pain, and to prolong life generally for about one year. M. Perrin had removed six epitheliomata of the tongue during the preceding eleven years. In all, the disease had been circumscribed, limited to one border, and without glandular involvement. The operations had always been through the mouth, sometimes with the écraseur, sometimes with Paquelin's or the galvanic battery. The result had generally been good, and in some cases the relief had extended over two or three years. In one case he had seen a psoriasis change into an epithelioma. He made it a rule not to operate when there was any enlargement of the ganglia, and in those cases where the disease

was superficial and not interstitial. He operated through the mouth, and preferred the *écraseur* to the cautery. M. Desprès believed that the cases in which life was prolonged for any great length of time were exceptional, and had found no instrument which equalled the *écraseur* of Chassaignac. For passing the cord he had found nothing better than ordinary trocar and canula, with which he transfixed the organ, taking care not to wound the vault of the palate. M. Télet believed that a long period of immunity might be gained, and referred to eleven cases in which the disease had not returned for three years, which time had been passed by the patient in comfort. M. Verneuil thought the question, whether an operation might be attempted when the ganglia were involved, depended for an answer on the location of the glands. For example, if the whole cervical chain were affected the operation would be useless, but in most other cases the surgeon should operate. In the same manner as operations were done in cancers of the breast with involvement of the ganglia as a palliative measure, so they might be done in cancer of the tongue. It was true also that most cancers of the tongue might be removed through the mouth, and, if he (Verneuil) preferred the supra-hyoid incision, it was only because it furnished greater facilities for reaching and removing the affected ganglia.—*N. Y. Med. Jour.*, May.

CROUP TREATED BY PASSING CATHETERS INTO THE TRACHEA BY THE MOUTH.

In the *British Medical Journal* for July 24th and 31st, 1880, are two papers by Dr. Macewen, on the Value of Tracheal Tubes introduced by the Mouth in Oedema Glottidis, etc. The cases he records are all in adults. I am not aware that this treatment has been used in children; but its simplicity and advantages are so great, that a few notes of a case of croup in which catheters were used may be interesting.

H. J., aged three years and ten months, had measles, the rash appearing on February 15th, 1881. On the disappearance of the rash, a hard cough supervened, which gradually increased in severity till March 1st.

On this date, I found him, at 1.30 a.m., suffering from intense dyspnoea, quite unable to speak, and his lips of a dark livid colour. His cough was constant, brassy, and without expectoration. The respirations were thirty-five per minute, the cartilages of the ribs and sternum being drawn in at every effort to breathe, and crepitation existing over both lungs. The fauces were healthy. The pulse was 144, very weak.

Having a No. 11 prostatic catheter with me, I determined to pass it into the trachea instead of

performing tracheotomy. Watching an opportunity, while the tongue was depressed with a spoon, the catheter, curved a little more than usual, was passed into the trachea, during an attempted inspiration, and without the slightest difficulty. A severe struggle followed, lasting perhaps a minute or two, the face becoming purple, and the eyes starting with fully dilated pupils. The paroxysmal efforts to expel the tube being unsuccessful, a pretty full inspiration, partly through the tube and partly through the larynx, followed; about two ounces of frothy, bloody, and purulent mucus were ejected by the tube and the mouth; the lived colour disappeared, and he lay down breathing easily through the tube. The presence of the tube did not prevent his swallowing milk, although sometimes a little of this was ejected from it during a cough. The tube was retained *in situ* by a strip of plaster; and the teeth were prevented from closing on it by means of a pear-shaped piece of hard wood.

Sir hours afterwards, he was much easier, and could say "Yes" and "No" distinctly. The cough continued at intervals of ten minutes, and did not seem altered in character by the presence of the tube. Crepitation still existed over both lungs, an abundant muco-purulent secretion being passed both by the tube and the mouth. Hitherto he had been kept in a warm room; but now a bronchitis-kettle maintained a moist temperature of 70° Fahr. The tube was removed without any inconvenience after it had been in the trachea for eleven hours, as he had bitten it, and no air was passing through it. Shortly after its removal, symptoms of obstruction gradually reappeared. During the same evening, another ordinary gum-elastic catheter No. 12 was introduced, only a slight momentary struggle and cough supervening. The presence of the tube led again to a very free expectoration of mucus. In the course of a few hours, the respirations and pulse became lower, and crepitation and dyspnoea ceased. When the tube had been in for forty-eight hours and a half, it was removed, and not again introduced. On March 8th, the voice and chest sounds were normal; and he was not seen after the 10th.

This case was a severe one, and would soon have ended fatally, had no operation been performed. Tracheotomy seemed inadmissible, neither the case nor the surroundings being favourable for it. *Prima facie*, it would be expected that the introduction of a tube into the trachea of a child against its will would not be so easy as in a consenting adult. That may be so; but it is certain that the operation is extremely easy and simple, and does not take more than two or three seconds from touching the tongue with the spoon till the tube is in the trachea. Had tracheotomy been performed successfully, when would the child have been out of danger? Certainly not so soon as here recorded; for, at the end of the third day, the

child was so well as to be able to breathe freely without the tube, and was quite well before the tenth day after the operation.—*Dr. Paton, Brit. Med. Jour.*

CRIMINAL ABORTION—FÆTUS CUT UP IN UTERO.

A fine young woman, aged nineteen, consulted a Cambridge chemist named Ransome, and his wife, a professed midwife, and took medicine with intent to produce abortion, but without the desired effect. On Sunday, December 5th, 1880, she was induced by the Ransomes to submit to an operation at the hands of a man named Lepper, who came from London. After payment of £10, he passed up "a silver hook" which "hurt her very much," and blood came away. No witnesses were present. Another similar operation was performed a few hours later, causing great pain, and some loss of blood. On both occasions, she walked a distance of more than a mile to the chemist's shop where the operation was performed.

On the following day, December 6th, I saw her. She had great pain in the abdomen, which was very tender and tympanitic; constant retching; pulse 120; temperature, 102.05°; with other signs of peritonitis. The os uteri was small, within easy reach of the finger. Blood passed in small quantities.

On December 7th, the symptoms were very urgent, and Professor Humphry saw the case with me. In the evening, parts of a fœtus passed from her, consisting of the extremities and trunk; the head came away an hour or so afterwards. There was no decomposition; the skin was rosy and firm. The legs were separated from the trunk and upper extremities, and the head severed from the body. The fœtus was about three months old; the head was large; there were indications of the eyelids; the membrana pupillaris was visible; the mouth was open, showing the tongue. The toes and fingers were nearly separate; nails were commencing. The cartilaginous arches of the upper dorsal vertebræ were closed.

On December 8th, there was no improvement in her condition. Vomiting and retching continued as before. Pulse 124; temperature 100.5°. Dr. Humphry again saw her and removed the placenta.

December 9th. Pain was very severe. Vomiting and retching continued. The abdomen was tender and tympanitic. Pulse 120; temperature, 101.5°. She had a great pain in the right elbow and forearm.

December 11th. She was so very ill that, by my advice, her depositions were taken by the magistrates.

December 14th. The symptoms had continued,

without any improvement. A red flush like erysipelas, appeared about the umbilical scar of the swollen abdomen.

December 15th. She kept down a little milk and port wine. The redness was spreading over the abdomen.

December 16th. The symptoms were as before; hiccough was troublesome; loose stools, with very foul smell, passed from her. There was rather less distension of the abdomen.

December 18th. She was still very ill; and suffering as before. She had rapid breathing, cough and expectorations; there were *rales* at both bases of the lungs, and slight dulness.

The symptoms continued until the end of December, with the addition of pelvic pains, tenderness over the uterus, and dulness on percussion. The stools were still very foul. She then began slowly to mend, and in spite of one or two relapses, was able to leave her bed eight weeks after the operation, and can now walk slowly. In relapses, a large quantity of matter and blood passed from the uterus. The treatment consisted in the diet of milk and beef-tea, port wine, milk, and soda water ice. Opium was not kept down, and did not relieve. Morphia injections were used with best effect, and the patient was under the influence of morphia for more than five weeks. Diarrhoea, with foul-smelling stools, occurred now and then. Constipation was relieved by injections, and later on, by castor oil and tincture of belladonna.

REMARKS.—This is of some interest as a medico-legal case. The fœtus having been cut up into pieces *in utero* at such a period of pregnancy is extraordinary. The symptoms which followed are best explained by supposing that the instrument used perforated the uterine wall, and so caused peritonitis. The girl was unable to appear when the prisoners were brought up for trial; and in consequence of some legal flaw, the depositions of the patient herself were not admissible as evidence, and the case rested on the medical opinion that nothing but instrumental interference could have cut up the healthy fœtus in the uterus. Lepper and the Ransomes were convicted, and each sentenced to five year's penal servitude.—*Dr. Wherry, British Med. Journal.*

CASE OF ABSCESS OF THE LIVER —ASPIRATION—RECOVERY.

Dr. George F. Duffey detailed the case of a man, aged 39, who had been invalided from the Royal Artillery for deafness in 1878, after nineteen and a half years' service, fourteen of which were passed in India. While there, he drank freely, chiefly rum; had attacks of "fever and ague"

every hot season; and occasionally suffered from dysentery. He returned to England from India in December, 1873, and for the following year drank very hard. In 1875, he was for about one month in his regimental hospital, with symptoms of hepatitis. He had never felt any pain in the region of the liver until then. Since his discharge from the army, he has been employed in a cutler's establishment making wooden handles for "slash hooks." His health had been good, and his habits, he stated, moderately temperate. He denied ever having had syphilis. On admission to Mercer's Hospital, Dublin, on July 10th, 1880, the patient, like most men who had been many years in India, presented the characteristic appearance of malarial cachexia. He complained of severe pain about the epigastric region, which commenced suddenly, and without any apparent cause, as far as he knew, seven days prior to admission. The day following this sudden access of pain, he noticed that there was a slight swelling where the pain was situated. On examination, the right hypochondriac region was seen to be evidently enlarged; and a small, and well-defined prominent tumour, about the size of a pigeon's egg, was observed in the epigastric region, one inch to the right of the mesial line. Pressure on this tumour, or the act of coughing, aggravated the pain. The edge of the liver—which organ extended three inches in the right mammary line below the ribs, and was extremely sensitive to the touch—could just be felt below the tumour. The latter moved with the liver on inspiration and expiration, and had a slight visible pulsation, communicated apparently to it. He was kept awake at night by the pain of the tumour, and was thirsty. He complained of a feeling of weight and heaviness in the right hypochondrium, and was unable to lie on his left side; no pain in the right shoulder-tip. The apex-beat of the heart was in the fifth intercostal space, and almost in the nipple line, the area of cardiac dulness extending outwards to a corresponding situation. No cardiac murmur was detected; pulse normal; temperature 99°; urine acid, loaded with urates, specific gravity, 1025, no albumen; tongue coated; appetite poor; bowels confined; no rigors, vomiting or jaundice; no splenic enlargement. No fluctuation was detected in the tumour; the skin over it was not discoloured or œdematous, and there was but slight tension of the rectus muscle. Six days after admission, obscure fluctuation was detected in the tumor; and on July 20th (ten days after his admission), an exploratory puncture was made with the needle of a hypodermic syringe into the most prominent portion of the swelling; the integument being first drawn downwards, and a small quantity of yellowish "laudable" pus withdrawn. He slept well that night; and on the following day, half an ounce of similar pus was withdrawn by means of an aspirator. A very small canula was used, and

its becoming clogged prevented a larger quantity of pus from being removed. Nevertheless, the patient felt much relieved; he passed a good night without either chloral or morphia, which he previously was obliged to take to procure sleep. There was no rise of temperature after either paracentesis. The puncture in both cases was simply dressed by applying over it a piece of lint, dipped in carbolic oil, underneath a pad and bandage. Three days after the second puncture, an ounce of pus was removed by aspiration. From this time he improved rapidly, and was discharged on August 7th, 1880.—Dr. Finney mentioned a case, in which a hepatic abscess had been successfully tapped in in the City of Dublin Hospital.—Dr. Quinlan said that a very simple plan of ascertaining whether purulent matter was hepatic or not, had been suggested by Dr. MacMunn, of Wolverhampton; namely, by spectroscopic examination. Dr. Kennedy detailed a case, where hydatid disease of the liver had been followed by abscess, in a woman aged 45, rupture of the abscess sac into the pleura through the diaphragm causing death. Surgeon-Major Jackson said, that a couple of years ago, he aspirated a man at Shorncliffe for a large abscess of the liver, but he died a couple of days afterwards. In cases of this kind, the thermometer was of very little use. Enormous deposits of pus were often formed in the liver, and scarcely any indication of it would be given by the thermometer.—*British Medical Journal*.

DIAGNOSIS OF A SINGULAR CASE.

At the celebration in Boston, of the centennial anniversary of the Massachusetts Medical Society, (*Boston Med. Journal*) the Rev. Dr. Geo. E. Ellis, on being called upon after the dinner, delivered an address, in the course of which he said that at Roxbury, on the church records of the revered old Indian apostle and pastor, John Eliot, he had found this entry under date of 1632:

Marv Chase, the wife of William Chase, had a paralitick humor wh. fell into her backbone, so that she could not stir her body but as she was lifted, and filled her with great torture, & caused her back to goe out of joynt, & bunch out from ye beginning to the end; of wh. infirmity she lay 4 years & a half, & a greater part of the time a sad spectacle of misery. But it pleased God to raise her again, and she bore children after it.

Dr. Ellis said that he had submitted this case professionally to Dr. Wendell Holmes, from whom he had received the following letter in reply, which he read:

BOSTON, June 3rd, 1881.

MY DEAR DR. ELLIS,—A consultation without seeing the patient is like a murder-trial without the

corpus delicti being in evidence. You remember the story of Mr. Jeremiah Mason and the witness who had had a vision in which the angel Gabriel informed him of some important facts: "Subpoena the angel Gabriel. So I should say, carry us to the bedside of Mary Chase; but she has been under the green bedclothes so long that I am afraid she would be hard to wake up.

We must guess as well as we can under the circumstances. The question is whether she had angular curvature, lateral curvature, or no curvature at all. If the first—angular curvature—you must consult such authorities as Bryan, Dewitt, and the rest. If you are not satisfied with these modern writers, all I have to say is, as I have said before when asked whom to consult in such cases, Go to *Pott*, to Percival Pott, the famous surgeon of the last century, from whom this affection has received the name by which it is still well known, of "Pott's disease;" for if a doctor has the luck to find out a new malady it is tied to his name like a tin kettle to a dog's tail, and he goes clattering down the highway of fame to posterity with his æolian attachment following at his heels.

As for lateral curvature, if that existed, it seems as if the Apostle Eliot would have said she bulged sideways, or something like that, instead of saying the backbone bunched out from beginning to end. Besides, I doubt if lateral curvature is apt to cause paralysis. Crooked backs are everywhere, as tailors and dressmakers know, and nobody expects to be palsied because one shoulder is higher than the other—as Alexander the Great's was, and Alexander Pope's also.

I doubt whether Mary Chase had any real curvature at all. Her case looks to me like one of those mimoses, as Marshall Hall called certain forms of hysteria which imitate different diseases, among the rest paralysis. The body of an hysterical patient will take on the look of all sorts of more serious affections. As for mental and moral manifestations, an hysterical girl will lie so that Saphira would blush for her, and she could give lessons to a professional pickpocket in the art of stealing. Hysteria might well be described as possession—possession by seven devils, except that this number is quite insufficient to account for all the pranks played by the subjects of this extraordinary malady.

I do not want to say anything against Mary Chase, but I suspect that, getting nervous and tired and hysterical, she got into bed, which she found rather agreeable after too much housework, and perhaps too much going to meeting, liked it better and better, curled herself up into a bunch which made her look as if her back was really distorted, found she was cosseted and posseted and prayed over and made of, and so lay quiet until a false paralysis caught hold of her legs and held her there. If some one had "hollered" fire, it is not

unlikely that she would have jumped out of bed, as many other paralytics have done under such circumstances. She could have moved, probably enough, if any one could have made her believe that she had the power of doing it. *Possumus quai posse videmur*. She had played *possum* so long that at last it became *non possum*.

Yours, &c.,

O. W. HOLMES.

NOTEWORTHY MALPRACTICE DECISIONS

A suit brought by a patient of the New York Eye and Ear Infirmary, who charged that the surgeon, by using a brush infected by the discharge of gonorrhœal ophthalmia from some eye on which it had previously been used, had destroyed the sight of both his eyes, has reached final decision in the Court of Appeals. The suit attracted much attention at the time of its trial, three or four years ago, when it resulted in a verdict for the institution. This result has now been confirmed. From the rather meagre account given of the opinions of the judges, they seem to have held that, to establish a claim in such a case, the injured patient must show, not only that an improper brush was used, but also that the surgeon was negligent; that is to say, was lacking in ordinary care in taking precautions to avoid a brush which had been dangerously infected. And they considered the jury warranted in reaching the conclusion that such negligence had not been shown by the plaintiff.

The Rhode Island Hospital was sued by a paying patient to recover damages for a dangerous hæmorrhage, which he attributed to unskillful treatment by a surgical *interne* of the hospital, who assumed to treat a wound beyond his skill, instead of sending for the attending surgeon as he should have done, the results of which were gangrene and amputation of an arm. The suit called for a statement of the legal rules governing the responsibility of an incorporated hospital for its medical attendants. These two are declared: 1. A hospital is not exempt from liability for unskillfulness or neglect, but is responsible for the exercise of reasonable care by the governing authorities in selecting physicians, surgeons and *internes*; and if incompetent persons are appointed, is responsible for the results of their neglect or want of skill. 2. If the rules of the hospital require that in specified cases an *interne* shall summon an attending surgeon, and the *interne* fails to do so, the corporation may be liable for the consequences of his neglect.

The right to exhume a corpse for the determination of medico-legal questions has been presented in two instances: In one, a child nearly a year

FOR CONSUMPTION AND WASTING DISEASES
HYDROLEINE.
 ("HYDRATED OIL")

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

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

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

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

Very respectfully,

HAZEN MORSE.

57 Front Street East, Toronto.

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

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

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

MALTOPEPSYN.

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

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

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LA GAUCHÈTÈRE STREET, MONTREAL, NOV. 24, 1880.

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J. J. DUGDALE, M. D.

32 BEAVER HALL, MONTREAL, May 15, 1880.

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

E. H. TRENHOLME, M. D.

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

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

DRS. CLARK & O'GORMAN.

RICHMOND, ONT., Nov. 25, 1880.

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

D. BEATTY, M. D.

MONTREAL, Aug. 12, 1880.

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

E. H. TRENHOLME, M. D.

FREELTON, Dec. 17, 1880.

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

GEO. METHERELL, M. D.

HASTINGS, Dec. 6, 1880.

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

DRS. CLARK & O'GORMAN.

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

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

LEWIS E. SHEPHERD, M. D.

LONDON, ONT., Dec. 7, 1880.

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

H. W. LLOYD, M. D.

CANNINGTON, Dec. 22, 1880.

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

J. M. HART, M. D.

NEUCHÂT, Dec. 21, 1880.

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

T. C. SPENGE, M. D.

GAINSBURY, Dec. 27, 1880.

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

R. A. ALEXANDER, M. D.

CREDIT, ONT.

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

DR. DIXIE.

DUNDALK, Jan. 13, 1881.

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

JAS. McWILLIAM.

CLINTON, Jan. 4, 1881

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

A. WORTHINGTON, M. D.

MALTOPEPSYN.

BRUSSELS, T., June 28, 1880.

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

WILLIAM GRAHAM, M. D.

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

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

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

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

Z. W. KEMPTON, M. D.

ATHLONE, ONT., Jan. 20, 1880,

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

C. McKENNA, M. D.

GEORGETOWN, ONT., Dec. 17, 1880.

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

WM. J. ROE, M. D.

MIDLAND, ONT., Dec. 24, 1880.

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

P. E. KIDD, M. D.

CAMBRAY, ONT., Jan., 1881.

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

T. W. READE, M. D.

ATHLONE, ONT., Dec. 30, 1880.

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

R. HAMILTON, M. D.

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

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

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

ELMVALE, ONT., Dec. 30, 1880.

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

GEORGE BROWN, M. D.

DOWMANVILLE, ONT., Dec. 31, 1880.

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

W. H. LAW, M. D.

OPINIONS OF THE MEDICAL PRESS.

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

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

FROM LEADING CHEMISTS AND DRUGGISTS.

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

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

HENRY R. GRAY, Chemist.

YORKVILLE, ONT., July 21, 1880.

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

WM. S. ROBINSON, Chemist.

WALKERTON, ONT., Oct. 27, 1880.

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

W. A. GREEN, Chemist.

TORONTO, July 1st, 1880.

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

EDWIN A. SMITH, City Pharmacy.

PRICE LIST.

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

EXPRESS CHARGES PREPAID.

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

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

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

HAZEN MORSE,
57 FRONT STREET EAST,

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

TORONTO.

and a half old sustained a fracture of the thigh, for which she was treated. She died about sixteen months afterward; whether from the fracture, from maltreatment, or from other causes, was disputed. The surgeon sued the father of the child for his fees; and this suit was defended on the ground of alleged malpractice in his treatment. To prove this malpractice, the father by advice of his counsel, employed another physician to ex-hume the body and remove the fractured bone for examination, which was done. The surgeon against whom the charge of malpractice was pending, then instituted a prosecution against the one concerned in the post-mortem, contending that the latter had been guilty of a violation of the statute which punishes "every person who shall remove the dead body of any human being from the grave . . . for the purpose of dissection." The New York Supreme Court decided, in effect, that there was no warrant in the facts for the prosecution. The purpose of the examination, and the consent of the father, showed that the case was not within the intention of the statute, which is to forbid disinterments to obtain material for dissection in the ordinary sense of the term.

In the other instance, which arose in Mississippi in a controversy over a life insurance policy, it appeared that the insurance company when the policy was applied for, required the applicant to state whether he had ever received any serious injury, and he made answer that he had not: but, after his death, information reached them that, when the insured was young, his skull was fractured, and he was treated by trephining. To make proof of this, which would relieve them from payment of the insurance money, they asked the court to make an order that the corpse should be exhumed and the skull examined. The court refused, saying that such an order might be made where there was strong reason to believe that without such examination a fraud was likely to be accomplished; but, as the proceeding was very objectionable, it ought only to be allowed on proof that the company had exhausted every other means of obtaining evidence.—*N. Y. Medical Journal*.

The *Medical Record* also gives the particulars of an action for damages to the extent of \$25,000 against Dr. Lewis H. Sayre, for prescribing an overdose of nux vomica which it was alleged impaired the young lady's health. The Doctor prescribed pills containing three grains of aloes, one grain of extract of hyoscyamus, and one grain of nux vomica, one to be taken, and repeated in four hours if necessary. She took four pills at one dose, after which she was seized with what she supposed were symptoms of poisoning, but what the physicians called in, attributed to hysteria. The case was a weak one, inasmuch as the patient violated the directions, and the jury gave a verdict to the defendant, with an allowance to him of \$1250.

A TRIUMPH OF MODERN SURGERY.

At a recent meeting of the Royal Society in London, Dr. MacEwen gave a detailed account of a very remarkable case of the transplantation of bone in the human subject. It is of special interest as being the first instance in which this osseous transfer has been successfully effected. We take the following abstract of Dr. MacEwen's paper from one of our English exchanges:—

In 1878 a child of three years was admitted into the Glasgow Infirmary for necrosis of the right humerus, the shaft of which was already separated from its head at the epiphysial junction. Fifteen months after the necrosed portion had been removed, there had been no bone formation of any account, and over two-thirds of the shaft was wanting. A first transplant of bone was then performed. In making the sulcus for the reception of the graft, reliance had to be placed on anatomical relations as to correct position, as there was no trace of periosteum or fibrous structure to indicate the former location of the bone. Portions of human bone were transplanted on three different occasions, the grafts being obtained from patients affected with anterior tibial curves, from whom wedges of bone had to be removed for the purpose of straightening their limbs. These osseous wedges were each divided into many small pieces, which were immediately placed in the sulcus in the boy's arm. The fragments united together as well as adhered to the head of the humerus above and to the condyles below, ultimately forming a solid rod only half an inch shorter than the humerus on the opposite or left side. This transplantation of bone converted a useless arm into a thoroughly useful one. Great stress was laid by the operator upon the subdivision of the transplanted bone into fragments, as thereby greater nourishment is able to be conveyed from the surrounding flesh to the osseous formation. The conclusions arrived at are that transplanted bone is capable of living and growing, and that such transplants are capable of being put to practical uses beneficial to mankind; but that to insure success the transplantation must be conducted antiseptically.—*Boston Journal of Chemistry*.

T. Gaillard Thomas opposes the use of *direct applications to the interior of the body of the uterus*, except in rare and exceptional cases, on the ground that they very generally fail to cure the disease, and are by no means void of danger. In their stead, he recommends for chronic corporeal endometritis, careful attention to the general state, removal of displacements, cure of laceration of the cervix, extirpation, if possible, of any existing neoplasm, and if uterine enlargement exist, the free use of ergot.

OINTMENT FOR ITCH:—

R	Balsam of Peru.....	ʒj
	Benzoic acid.....	gr. cx.
	Oil cloves.....	gtt. xl.
	Alcohol.....	f.ʒijss
	Simple cerate.....	ʒvij.

Dissolve the essential oil and the benzoic acid in the alcohol, and mix them with the cerate; lastly, add the balsam of Peru.

It is said to effect a cure in twenty-four hours.—*Canada Med. Record.*

POST-PARTUM HEMORRHAGE.—THOMAS.—Dr. T. G. Thomas, of New York, in concluding a discussion on this subject (*Proceedings King's Co. Medical Society*) said that in the treatment of post-partum hemorrhage the rule should be this:

If the hemorrhage is slight, and for good reasons you do not wish to pass the hand into the uterine cavity, try the hypodermic use of ergot; apply excessive cold or excessive heat to the fundus, force the uterus into firm contraction under your hand, and never let go of it until the woman stops bleeding. How long shall you hold the uterus? I have repeatedly held it, under such circumstances, for 12 hours.

But suppose it fails and the hemorrhage continues. Then wash the hand and arm thoroughly with soap and water, use a nail brush thoroughly, dip the hand and arm in warm, strong, carbolyzed water, and, without wiping them, carry the hand up to the fundus uteri, sweep everything out, and keep the hand there until the uterus contracts. Pass the pulp of the fingers up and down the sides of the uterus in any direction, and at the same time make counter-pressure from the outside with the other hand upon the wall of the abdomen.

If you fail with this, what next? It is a bad case, and you may resort to anything which produces a decided shock to the nervous system; give hypodermic of ergot, brandy and ether hypodermically, and, lastly, give a fair trial to the Faradic current.

PERINEAL LACERATIONS.—I have not referred to the primary treatment of *perineal lacerations*, that is, their treatment immediately upon the conclusion of the labour during which they have occurred. This subject concerns the obstetrician as much as it does the gynecologist. On the one hand we have physicians who think the introduction of sutures at this time inadvisable, and on the other hand, those who declare that the neglect to do this is reprehensible. The following, is, I think, a fair general statement of the matter: In the great majority of cases sutures introduced with skill immediately after the injury has occurred, keeping the torn surfaces in apposition, will give the woman comfort, and increase the chances of a

good union, although of course, it may not take place. In many cases where the sutures are used they are used with such want of skill and in such bungling manner that they fail to insure apposition of the parts, in fact act merely as setons to increase inflammatory action, and, if a good union is obtained, it is not because of the sutures, but in spite of them. In certain cases, owing to the condition of the puerperal woman, it may be bad practice to attempt the primary treatment of the lesion. Such cases are exceptional, however. The "diminution of the chances of septicæmia" by the closing of ("even slight") perineal wounds, which has been much dwelt upon, of late, would seem to have been much exaggerated.—*Clifton Wing, M.D.*

AN EXHILARATING MIXTURE.—M. Luton discovered by accident the effects of the following exhilarating mixture. Tincture of ergot of rye, five grammes (gr. 75); solution of phosphate of sodium (10 per cent.), 15 grammes (ʒ ss). Mix in a quarter of a glass of sweetened water, and give at one dose on an empty stomach. In very susceptible excitable people, a condition is produced resembling that following the inhalation of nitrous oxide gas; they laugh excessively, feel slight dizziness on attempting to walk; and in many ways suggest alcoholic intoxication. In those who are more sedate and imperturbable, a condition of mild exhilaration merely is induced; the cutaneous circulation is improved, a feeling of buoyancy and cheerfulness develops itself, and lasts for several hours, the patients being agreeably conscious of mental and physical stimulation. The author has verified these observations in so many cases that they must be considered established. He has found different individuals equally susceptible, but has been able to assure himself that there is always some effect. As might be expected, men are less affected than women; in no case has any unpleasant result been observed. The author feels himself justified in recommending his discovery to the profession, although compelled to do so on a purely empirical basis, having arrived at no satisfactory explanation of the action of the mixture. He especially advised its use in cases of melancholia, hysteria, chlorosis, and the various conditions in which languor and depression of spirits are present. The patients to whom he has given it were sufficiently convinced of the efficacy of his prescription to ask for its repetition, assuring him of the benefit they derived from its use.—*N. Y. Med. Four.*

CASTRATION FOR DEMENTIA FROM MASTURBATION.—Dr. N. L. Folsom, of Portsmouth, N. H., writes: "In 1843 Dr. Josiah Crosby, then at Laconia, N. H., and later at Manchester, N. H., (and brother of the late Prof. Dixi Crosby, at Hanover, N. H.) with the assistance of myself and

another medical student of his, castrated (with the consent of the patient and his father) an intelligent young man, a school teacher in the country, for approaching dementia from masturbation. The operation completely cured and restored him to usefulness and to society. He had ceased to leave his house, or to mix with any society, and did not wish to see any one. This young man, twenty-two years old, I think, had been medically treated by other persons until his father had given up all hope of recovery for a long time. In my opinion no other treatment, not even the *porte caustic*, (and Dr. Crosby had that instrument,) would have saved him from complete dementia. I have looked upon the cure of this young man through my whole professional career, as a wonderful achievement. He became afterwards an active business man, such as a clerk in a postoffice, selling goods, etc., etc. There are thousands of just such cases throughout the land, who, by this treatment and by no other, can be cured, but no one dares to prescribe this and execute it, for fear of his reputation, and possibly a prosecution by some of his nearer relatives, and perhaps by himself, put up to it by some briefless and unprincipled lawyer or meddling doctor. Extreme cases of this kind are incurable by any other treatment. I think that superintendents of insane asylums should, by the consent of the man's friends and others, castrate hopeless cases of dementia from masturbation. Other treatment for a reasonable time should be tried.—*Mich. Med. News.*

ARTIFICIAL HUMAN MILK.—I should like to direct the attention of practitioners to the artificial human milk now prepared by the Aylesbury Dairy Company, at a cost little over that of the best nursery milk. This valuable method of treating cow's milk was first brought under my notice, some years ago by Dr. Frankland, the eminent chemist, who devised it for one of his own children who was ill; and I have since used it extensively in my practice. Its composition is absolutely identical with that of human milk; and under its use the risks and disadvantages of the bottle-feeding of infants are reduced to a minimum. I have been in the habit of instructing nurses how to prepare it at home from Dr. Frankland's recipe, but the trouble and difficulty of making it stood seriously in the way of its general adoption; and, unless the nurse happened to be exceptionally intelligent, failure very frequently followed. For this reason I suggested its manufacture to the Aylesbury Dairy Company, and the specimens with which they have since supplied me have been perfectly satisfactory, and require no further treatment than heating to the proper temperature. I look upon it as immeasurably superior to asses' milk, than which it is much cheaper; and if this valuable preparation were more generally known and used,

much illness, in the case of children who cannot be brought up at the breast, would be avoided.—*Dr. W. S. Playfair, Brit. Med. Journal.*

VOLKMAN'S OPERATION FOR HYDROCELE.—Wm. Gardner reports three successful cases in which he performed this operation for radical cure. Operating under carbolic spray, he made an incision the whole length of the scrotum through all the tissues to the tunica vaginalis, which he then opened and divided to the same extent with probe-pointed scissors. The tunica vaginalis was then stitched to the skin by several points of interrupted suture, and after the insertion of a drainage tube at the lower angle, the whole was brought together with deep wire sutures. Antiseptic dressings were applied, and in a few days the wounds were healed.

He says that the advantages of the operation are: "1st. The absolute certainty of cure within a fortnight, if antiseptic precautions are observed. 2nd. The smallness of the risk, as evidenced by Volkmann's list of seventy cases without a death. 3rd. The simplicity of the operation. 4th. So far as at present known, the operation is never followed by orchitis, as has been the case with the injection treatment. 5th. This advantage has been pointed out by Mr. MacCormack in the following words: 'That a diagnosis in doubtful cases is thereby made easy, and a tumor of the testicle, of which the hydrocele is a symptom, may be thus examined, and perhaps, in some cases, treated by immediate removal, or in others by incision.'"—*Australian Med. Journal, January, 1881.*

CONSTIPATION.—Dr. S. H. Price (*Medical Brief, March, 1881*) says the following combination has never failed to relieve constipation, in his experience, when the person is otherwise healthy:—

R. Ext. cascara sagrada, fl.,.....f.ʒj
Tr. nuc. vom.....f.ʒij
Ext. belladon., fl.....f.ʒss
Glycerine.....f.ʒj.

SIG.—Teaspoonful night and morning, as necessary.

He has used this in all ages, from the three weeks' infant to the octogenarian, changing dose to suit age.

LUMBAGO.—This affection is usually promptly cured by galvanization of the affected muscles. In my experience in this class of cases, strong currents are most beneficial; attacks resisting the current from 15 to 20 cups of Siemens and Halske have promptly yielded to 40 to 60. The applications should be made twice a day or the first few days, and afterwards daily until a cure is effected. Immediate relief is afforded by the passage of a current, the patient being able to straighten himself at once without pain, but in the intervals

he lapses back into his former condition, nearly; but the repetition of the applications is followed by an increasing duration of the relief. Recent cases are sometimes cured by a single application. The best results are obtained by transverse currents.—*Bartholow's Medical Electricity*.

SMELL OF DEATH.—Professor A. B. Isham, of Cincinnati, draws attention to a peculiar characteristic odor emanating from the bodies of persons in the act of dying. It somewhat resembles musk. Of two cases cited, in one it was observed 33 hours before death, in the other 1½ hours. He attributes the odor to the liberation of ammonia and a volatile oil from the blood.—*Am. Journ. Med. Sci.*, April, 1881.

GONORRHOEA.—Dr. A. V. Barnes (*Medical Brief*) has found the following injection, used four or five times after urinating, very valuable in the sub-acute stage of gonorrhœa:—

R.	Plumbi acetat.....	℥j	
	Zinci acetat.....	℥j	
	Morph. acetat.....	℥j	
	Acid acetic.....	f ʒss	
	Aquæ.....	f. ʒvj.	M.

With this he gives, internally—

R.	Potas. bicarb.....	ʒijj	
	Tr. columb.....	f. ʒv.	M.
	Aq. dest.....	f. ʒj	

SIG.—Desertspoonful four or five times daily.

The question of Nurses v. Physicians at Guy's Hospital, London, Eng., has been settled, by the adoption by the governors, of a series of regulations for nurses such as the staff can heartily endorse. Under these, the nurses are to be under the control of the medical staff, all that was asked by the staff. It is too bad that the governors of the hospital could not have reached this conclusion earlier.

NITRATE OF SILVER FOR WORMS.—Dr. M. P. Greensword (*Medical Summary*) was accidentally led to regard nitrate of silver as a remedy for worms. Further use of this drug has convinced him that it is one of the most potent agents we have for the destruction and expulsion of worms. He gives a teaspoonful three times a day, of a solution of five grains of nitrate silver in six ounces of rain water.

A French court has decided that promises made to a doctor by a sick person are not valid at law. The ground for this is the fact, that the patient is no longer master of his will, and any agreement entered into must be under the influence of either fear or necessity.

Dr. Hammond, of New York, uses instead of bromides, a teaspoonful, well diluted, of a mixture of one dram of bromine in eight ounces of water. Results are like those of the alkaline bromides, barring the acne and ulcers that sometimes attend the latter.

The *Boston Med. Journal* says:—From the medical point of view there is one thing which the recent sad and criminal calamity at Washington—the shooting of President Garfield—does emphasize, and that is the great importance of restraining those of ill-balanced minds, the insane, before they proclaim their disease by extreme acts. At present the expert is hooted at if he advises early restraint to anticipate mischief, and hooted at just as much if he raises his voice against society's cry for the protection sought in vengeance.

Skoda's independence is well illustrated by the following anecdote about him, which was current in Vienna: He was summoned to the empress in his professional capacity, and when he arrived at the palace objection was raised by the attendants to admitting him to her majesty's presence, on the ground that his coat was shabby or unsuitable; thereupon the professor simply said, "If her majesty desires to see my coat I will go home, but if she desires to see me she will see me as I am." It is scarcely necessary to say that the doors were then thrown open.

FATAL RESULT FROM THE APPLICATION OF SAYRE'S JACKET.—The patient, a child, suffered from a considerable kyphosis at about the junction of the dorsal and cervical vertebræ. It was restless during the suspension; suddenly the breathing stopped. Immediately tracheotomy showed the trachea free down to its bifurcation, but consciousness could not be restored. The breathing was stertorous, and the child died one and a half hours after the suspension. The autopsy revealed a very marked angular curvature of the spine, and a very large abscess reaching to the mediastinum.—*Proceedings of German Surg. Society; Deutsche Med. Wochenschrift; Maryland Med. Journal*.

EXTREME ANTISEPTIC PRECAUTIONS.—Extract from *Lyon Medicale*: In a duel lately, just after the principals had crossed swords, a voice was heard, "Stop a moment, gentlemen." They lowered their weapons, rather hoping that the seconds had agreed upon some plan of healing their wounded honor without the necessity of fighting. But alas! it was only the surgeon, who, being one of the advanced school, carefully took from his pocket a bottle containing a solution of carbolic acid and wet the points of the swords with it. Then, with the air of a man who had done his whole duty he said, "Now, gentlemen, proceed; you may kill each other, but you run no risk of blood-poisoning."

THE CANADA LANCET.

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TORONTO, AUGUST 1, 1881.

ONTARIO MEDICAL COUNCIL VS. MEDICAL STUDENTS.

The controversy between the Ontario Medical Council and the rejected medical students at the late examination still continues to attract some degree of attention. In our last issue we stated that the students having withdrawn the charges against the examiner, with the understanding that some measure of relief would be accorded them, should have been treated more generously. In reply to this statement Dr. McDonald of Hamilton sends the following letter:

SIR,—In your editorial notice of the proceedings of the Ontario Medical Council, in last month's issue of the LANCET, you say that the unsuccessful students who petitioned the Council withdrew their petition "with the understanding that some measure of relief would be accorded them," and that "they should in all fairness have been treated more generously." This looks like saying that those students were trapped into consenting to abandon the ground which they had taken up, and which, I know, they thought was a position which afforded them a great advantage.

The recommendation to the students to withdraw their petition originated with myself alone; it was made openly on the floor of the Council, where the reason for it was plainly given, namely, my conviction that the allegations which the petition contained, and on which it was based, were incapable of being substantiated, and that if they were insisted on the only result would be that "the petitioners would be put to confusion." Neither by myself, nor by any other member of the council to my knowledge, was such an understanding as you suppose attempted. The petitioning students expressed to myself several times, and to others in my hearing, their desire to obtain

a guarantee of the favourable consideration of their petition by the Council, and they were informed, with perfect distinctness, that no assurance such as they required could be given. I was surprised to see, in the *Globe* newspaper, a letter, to which the names of those gentlemen were appended, in which it was asserted that they were misled into the belief that, on their withdrawing their petition, the Council would, in consideration of this act on their part, grant them the license of the College. This is a bargain which, I am happy to say, I heard nothing of during my attendance at the Medical Council. Such a bargain I should have regarded as most improper, and one never to be helped on by a motion on my part. It seems to me to be one thing to openly propose to grant the license of the College for reasons assigned, but quite another thing to make it contingent upon a covert agreement. Farther, the proposed special examination appeared to me to be a most unsatisfactory procedure. If the resolution with regard to it had carried in the Council, it would have been well understood on all hands that the result was to have been a foregone conclusion. I would not like to have been a party to what I regarded as a deception. On this principle I voted against holding a special examination; and besides, the signers of the petition had informed me, of their own free will, that they did not wish an examination.

In conclusion, may I venture to express the opinion that it would have been better for the signers of the petition if their document had run somewhat in the line of my motion. They might easily have asked for all they desired without making attacks on any one. Unfortunately, they tried to blacken grievously the character of a man who is held in high esteem where he is best known, being uniformly respected by his professional brethren, and acknowledged by them to possess a high degree of professional spirit. It was a bad attempt to be made by those who were themselves asking consideration, and it was not the less offensive in that it was gratuitous. What seems to be deemed by the unsuccessful students, and by their friends, as the strong point in their contention, has more relation to the acts of the Medical Council than to those of Dr. Sullivan.

Yours, etc.,

J. D. MACDONALD.

Hamilton, July 13, 1881.

With reference to the above, we would say that while we fully believe that no definite statement was made by Dr. McDonald—either in open council or in private, to the effect that relief was contingent upon the students' withdrawal of the petition, yet the understanding was general enough that a motion would be proposed to the Council, which

if carried would afford the desired relief. This was understood not only by the students, but by outsiders who were watching the proceedings carefully. The students themselves who signed the letter of withdrawal, when asked if they had withdrawn the petition, and why, said "we have withdrawn to win." How they arrived at this conclusion we do not know, and should be very sorry to say that they were entrapped by the Council, or by any individual member of that body. A motion for the purpose of affording relief was proposed, and for reasons expressed in our last issue, we regret very much that it did not carry, as was confidently expected. With regard to legal procedure which was contemplated by the students, we are informed that the counsel consulted in the matter does not hold out sufficient encouragement to warrant them in proceeding.

COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

The semi-annual meeting of the Governors of this College was held in Montreal on the 11th of May, 1881—the President Dr. R. P. Howard in the chair. The resignation of Dr. David on account of ill-health, referred to in our last issue, was accepted, and Dr. Kennedy of Bishop's College his successor, was introduced and took his seat.

The following gentlemen were reported as having successfully passed the preliminary examination in medicine:—W. G. Johnston, M. Brophy, E. Labonte, H. T. Hardman, H. Gaudreau, D. B. Darby, H. H. Smith, C. Bussiere, B. Smith, W. H. Leonard, F. Simard, P. Morin, J. C. Blanchet, F. Jeannotte, J. O. Lambert, A. Lamothe, C. Prevost, N. Tessier and A. Gaboury. Twelve of the candidates were remanded for a supplementary examination, twenty-four failed to obtain the requisite number of marks, and three were rejected for copying. The by-laws were amended by providing that the assessors shall attend during the entire medical examination, instead of three days only as heretofore, and report within eight days to the secretary of the college, the remuneration to be, in addition to travelling expenses, ten dollars per day for the first three days and five dollars each additional day, the whole not to exceed fifty dollars. Arrangements were made to continue the services of M.

Lamirande the prosecuting officer of the College, and the Board engaged to pay him a bonus of \$20 for each conviction against an unlicensed practitioner, or \$25 when the individual is too poor to pay the fine and goes to prison.

When the list of candidates for license was read, a discussion took place in reference to a protest against granting licenses to graduates of Laval University in Montreal, but it was decided that pending adverse decision in the courts, the college should continue to grant the license to all such holders of Diplomas.

The following gentlemen received Licenses:—Drs. J. Pelletier, A. F. Poulin, J. W. H. Blagdon, A. Gaboury, J. A. Cardinal, A. Savard, J. H. B. Jeannotte, R. Tranchemontagne, E. Poirier, W. C. McGillis, E. Quinones, G. W. Gernon, J. C. Shanks, W. A. Shufelt, J. W. Ross, H. Lunam, F. Mewburn, R. T. McDonald, T. L. Brown, H. E. Poole, F. Church, H. Legault, A. J. Prieur, J. Asselin, E. Fournier, A. Martin, P. E. Marier, E. Lalonde, G. L. Laforest, J. O. Soulard, N. Beaudet, J. G. Leduc, J. L. Carignan, E. Voisart, T. Hamelin, C. Fauteaux, S. E. Bergeron, C. S. Fenwick and E. Tremblay. The license was also granted to Dr. J. Irwin of Pembroke on his English diploma, (M.R.C.S., Eng.) and Dr. A. M. Gibson, of Massawippi, Que., on his Scotch qualifications (L.R.C.P. & S., Edin.) It was unanimously resolved that in regard to private Bills introduced into the Legislature, authorizing the board to admit certain persons to practice, they should first be submitted and recommended by the Board of Governors of this college. A college announcement containing list of text-books, regulations as to curriculum, fees, time and place of holding examinations, etc., was ordered to be prepared for the guidance of medical students and others. The salary of the Registrar was fixed at \$300 a year.

Dr. Rodger brought under the notice of the college the fact that large quantities of obscene medical literature were being circulated through the Province of Quebec by Dr. A. M. Ross, a licentiate of the college, and a committee was appointed to enquire into the facts, and also to report whether the college has power to remedy such misconduct, and if not, whether the criminal law affords any punishment for such offence.

Dr. F. W. Campbell moved for a committee, which was carried, to report with regard to the legality of the fourth year of medical study being passed with a medical practitioner after the student has passed all the examinations for his degree.

A PLAN FOR ORGANIZING MEDICAL SOCIETIES.

In the number of the *Medical and Surgical Recorder*, Phila., for July 2nd, 1881, will be found an article on the above subject, which in our opinion is worthy of careful consideration. We give below the gist of the article, which we hope the profession in Canada will ponder over, and give us the benefit of their opinion. At first blush it strikes us not only as a most feasible plan, but also one well calculated to advance the best interests of the profession at large, and promote a greater interest in medical associations generally. The prevailing idea in the proposed plan is centralization, which is in itself the watchword of the present day in all phases of society, ecclesiastical and secular. The object of the plan is to concentrate the power and influence of the medical profession, so that it may be able to exercise the most potent influence in moulding and crystallizing public opinion in regard to sanitary and other necessary legislation. The plan suggested is as follows:

"Let the State Medical Society of every State be no longer merely a State society, but avowedly and distinctly the State branch of the American Medical Association, and be so called, as "the Georgia Branch" or "the Illinois Branch of the American Medical Association." Further, still, let every county society be recognized as "the _____ county chapter of the State branch of the American Medical Association," or by some shorter title of equal purport. Let it be understood that every member of a county medical society or chapter is, *ipso facto*, a member of his State Society and also of the American Medical Association; and as it is well known that honours and privileges which cost nothing are counted as nothing, let a uniform fee be established for every county society throughout the United States, say of three dollars, one dollar to be retained by the treasurer of the county society, one to be forwarded to the treasurer of the State society, and one to the treasurer of the American Medical Association, to be expended for the objects of the Association."

By such an organization as this, an *esprit de corps* will be fostered, a living interest in organization be created, and a centralized power be established which can be wielded effectually for the good of the profession and the public. The de-

tails of the plan could easily be carried out, and a unity of action would be gained which would be respected by legislators, because it could make itself felt. More ample funds would be placed in the hands of the Provincial and Dominion Societies for carrying out their purposes; and a regular and fixed income, increasing year by year, would guarantee them prosperity and influence. Without pursuing the subject further at this time, we would urge our readers in all parts of the country to take the matter under thoughtful consideration, and we will open our columns to a full discussion of the subject.

SCIENTIFIC MEDICINE.

We are glad to notice the constant progress which is being made in the scientific branches of medicine, and to see that liberal provision is being made in the leading medical schools of Canada for special courses and complete instruction in some scientific departments which have hitherto been neglected in consequence of the immense cost necessary to furnish appliances for a practical course in these subjects. We refer more especially to the subject of physiology, and to the institutions which have lately been making provision for its practical study, notably Trinity Medical School. The corporation of this institution is not only to be congratulated upon the choice of the professor of physiology, but also upon the determination to so equip the physiological laboratory that students may know that physiological deductions are based upon physiological facts. We are also pleased to learn that the authorities of this school have been enabled to associate themselves with the "Scientific Instrument Co." of the University of Cambridge—the first in Canada to do so,—so that the newest apparatus and instruments of interest to scientific medicine will be forwarded directly to Canada, and be in the hands of teachers of medicine here, as soon as manufactured in Cambridge.

Prof. Sheard has brought with him copies of the plans of arrangement of the laboratories of Ludwig, Reindfleisch, and Foster; and the corporation of Trinity Medical School purpose making arrangements at an early date, for another new building, for the special working of physiology and pathology, to be constructed on these plans, where students will be provided each with a separate cloister and

laboratory, arranged so as to open directly into a large amphitheatre, where the lectures on physiology and pathology are to be given. We wish Dr. Sheard every success in his undertakings, and trust that he may be enabled to do as much for scientific medicine in Trinity Medical College, Toronto, as has been done in Europe by his illustrious preceptor, Prof. Foster, of Trinity College, Cambridge.

VIN-SANTE.—For physicians to be enabled intelligently to treat their patients, they should be thoroughly informed not only of the therapeutic and physiological action of the drugs, in their judgment best suited for the particular case they have to deal with, but also with the method of preparation. The profession is under deep obligation to pharmacutists for many modern elegant and attractive preparations, and not infrequently have conferred on their patients great advantages by prescribing for them many of these improved forms of medicine; but, as has been recently pointed out in a paper by Dr. Stewart, of New York, trade has so affected pharmacy by patent rights, trade marks, and secret formulæ, that without some knowledge of the exact working formulæ, physicians are restrained by the ethics of the profession from recommending any that do not emanate from firms of the highest character. Messrs. H. Sugden Evans & Co., Liverpool, London and Montreal, have recently favoured us with a couple of bottles of their Vin Santé, certainly the most elegant preparation of the Hypophosphites of Iron, Lime, Soda and Potash ever offered to fastidious invalids suffering from pure exhaustion, and equally to be recommended as a sparkling exhilarating pure non-alcoholic summer drink, possessing the creaminess and colour of champagne. The very excellent preparation of the Hypophosphites by Fellows in the estimation of capricious invalids would come under the category of physic, and as such after a time be repellant to their palled palates; but this preparation of Evans' coming under the guise of an effervescing French wine, minus even the small percentage of alcohol in the vintage of the South, is likely long to come into favour with chronic invalids, and also with the growing number of total abstainers.

ANOTHER MEDICAL SCHOOL IN ONTARIO.—A

new Medical School has been recently organized in London, Ont., under the auspices of the Western University. The following are the names of the members of the Faculty:—Dr. Moore, sr., Dean and Prof. of Surgery; Dr. Frazer, Medicine; Dr. Moore, jr., Midwifery; Dr. Eccles, Physiology; Dr. Jones, Jurisprudence; Dr. Stevenson, Diagnosis and Therapeutics; Dr. Waugh, Anatomy; Dr. Bucke, Nervous Diseases and Diseases of the Mind; Dr. Burgess, Botany; Dr. Moorhouse, Histology and Etiology; Dr. Fenwick, Sanitary Science; Dr. Niven, Clinical Surgery; Dr. Arnott, Clinical Medicine; Wm. Saunders, Materia Medica; Jno. Bowman, Prof. in the Arts Course, Chemistry. Although the multiplication of small medical schools, like the multiplication of medical journals, does not meet with our unqualified approbation, yet we cannot but congratulate our friends upon the success which has attended their organization thus far. The most serious drawback, we apprehend, likely to beset the new school will be the dearth of clinical material in the city of London. In regard to its financial success, much will depend upon the support it will receive from the University with which it is connected. If this be liberal, the faculty will indeed be fortunate; if the reverse, we pity their lot. They will find in it, however, no bed of roses (even under the most favorable circumstances), no sinecure, no crown of glory; but plenty of drudgery, and very little for it. We speak from nearly twenty years' experience in connection with a comparatively successful medical school. It will be uphill work for many years to come, but will no doubt eventually be worth all the labor bestowed upon it, to those who may come after.

HOSPITAL CLINICS.—We are pleased to announce that arrangements have been recently made for the delivery of daily clinics in the forenoon at the Toronto General Hospital by the respective professors of medicine and surgery of both schools, in addition to the usual clinics from 1 to 3 p.m. See announcement of Trinity Medical School, in our advertising pages.

CAUSES OF CONSUMPTION.—In reference to the questions touching the causes of tubercular consumption, which Dr. Playter is sending on for replies to those who have well marked cases on hand, the Doctor says he is getting returns from

a much larger number of medical men in the United States than from Canada. Most practitioners in Canada, doubtless, have cases of this disease almost constantly under treatment, and they would do well to respond. Too much cannot be learned in relation to the causes of this most common and fatal disease.

BRITISH MEDICAL ASSOCIATION.—The forty-ninth annual meeting of the British Medical Association will be held at Ryde, Isle of Wight, August 9th to 12th, under the presidency of Dr. Barrow, of that place. The address in medicine will be delivered by Dr. Bristowe, and that in surgery by Mr. Jonathan Hutchinson.

APPOINTMENTS.—Dr. Jas. Kerr, has been appointed a member of the Hospital Board, Winnipeg, Man. Dr. Carbert, of Orangeville, has been appointed Jail Surgeon, County of Dufferin, Ont. Dr. W. Dougan, of St. Catharines, has been appointed Surgeon to the Lincoln Battalion of Infantry, *vice* Dr. Jukes, retired, and Dr. F. S. Greenwood, assistant surgeon. Dr. R. A. Kennedy, of Montreal, has been appointed one of the governors of the College of Physicians and Surgeons, Que., in the room of Dr. David, who has been compelled to resign through ill-health.

CARD OF THANKS.—The latest advertising dodge is "the card of thanks." An eminent surgeon in Western Ontario, recently performed a successful operation for the removal of stone in the bladder, and his grateful patient rewards his skill and kindness by handicapping him with a vulgar "card of thanks," in the advertising columns of a local newspaper, cheek by jowl with the "celebrated" Dr. M. H. Williams, of the "Throat and Lung Institute" notoriety.

L. R. C. P. & S., EDIN.—Dr. James A. Hunter, of Newcastle, Ont., received the double qualification of the Royal College of Physicians and Surgeons of Edinburgh, in April last.

REMOVALS.—Dr. Going, of London, Ont., is about to settle in Toronto, to pursue the practice of his profession.

Dr. Martin, of Oshawa, has also determined to cast in his lot with the profession in this city.

The death of Prof. Skoda, of Vienna, is announced in our exchanges.

Books and Pamphlets.

SUPPLEMENT TO ZIEMMSEN'S CYCLOPEDIA OF THE PRACTICE OF MEDICINE. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

We feel great pleasure in bringing before the notice of our readers the supplement to this great work, commenced some six years ago. The contributors to this supplement include many of the best authorities in New York, Boston, Philadelphia, Cincinnati and Chicago. The object of the book is to give a concise account of the progress made in the various departments of medicine during the time that has elapsed since the several volumes of the Cyclopaedia were published, each of the subjects treated being brought up to the date of the present volume. The nature and multifarious contents of this Cyclopaedia have been reviewed in this journal since the first volume was issued in 1875; it is only necessary to say that the supplement like the work itself embraces too many subjects to permit of an analytical review; there is no doubt that it will be, from its succinctness one of the most popular of the series, and not less popular than useful. In dismissing this work of Ziemmsen, we are taking leave of one, the perusal of which has afforded us during the last six years, great pleasure. Unqualified praise or censure belongs to comparatively few books. The only objection that can possibly be urged is its vastness, cost, and occasional prolixity. We have little doubt, however, that it will obtain a very wide circulation, and attentive perusal, as a work of reference.

BENEDIKT ON BRAINS OF CRIMINALS, Translated and edited by E. P. Fowler, M.D. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This book has been born a century or two before its term of natural gestation. Its industrious author may have conceived that he had realized in the brains examined by him, of some two and twenty noted criminals, numerous important structural deviations, which have appeared to him adequately explanatory of the abnormal morality of their owners. We are, however, inclined to doubt whether a goodly portion of these deviations might not be discovered in the brains of men of a very different order of moral attributes. If we are to

accept as canonical anatomical fact, the theory of Benedikt, that the brains of great criminals stand in close structural affinity, as regards the arrangement and number of their convolutions, fissures, etc., etc., with those of some lower animals, as the bear, the fox, the horse, etc., we can hardly refuse to concur in the author's dictum, that "*criminals are to be viewed as an anthropological variety of their species, at least amongst the cultured races.*"

But if such unfortunate brain owners be verily "an anthropological variety of their species," and if, in evolutionary progression, varieties tend, not merely to perpetuation as such, but in time to pass over into new species, we fail to understand how, adopting the words of the translator in his preface: "This little work may help towards bringing the more lowly organized mass (*sic*) of the human race up to the higher estate of noble manhood." If a man becomes a criminal because he has in his frontal brain lobe four convolutions instead of three, the fissure of Rolando too far forward, or backward, that of Sylvius with too few, or too many, branchings, will his nature and his moral qualities be changed by reading, (supposing such men would read) Dr. Benedikt's book, or any number of other books, even the best that may be put in his hands? The truth is, if Dr. B's theory be a matter of fact, great criminals are criminal,—or rather they are not criminal at all,—because their acts are the natural outcome of their organization. We do not call a cat criminal, because she kills mice and birds, a fox criminal, because he steals hens and ducks; or a swallow criminal because it destroys myriads of insects. These animals obey the laws of their being, and these laws are the dicta of their respective organizations. If we would save the lives of mice and birds, we must exterminate or banish cats; if we would protect poultry, we must banish foxes; if we prefer insects to swallows, we must put a shot gun into every boy's hands; and exactly so must it be done towards Dr. Benedikt's "*anthropological variety*," in the event of his theory becoming a verified anatomical reality. The variety must be prevented from perpetuation and multiplication. If "by taking thought," we "cannot make one hair black or white," nor "add one cubit to our stature," how are men so to think as to reduce four frontal brain convolutions down to three,—nay, how are organized criminal men to begin at all to think of the work?

To all those who are curious in studies of the sort, Dr. B's book may afford some measure of gratification. We wish we could award to the plates of brains presented, the same commendations as the translator has vouchsafed to them. He says they are "nearly, if not quite, as perfect as the original photographs, and *much more plainly lettered.*" If this commendation be well founded, we have merely to say, we have no desire to view the photographs. Had the translator said his plates were very richly *littered*, he would not have strayed far from the truth. We would trust, however, that the copy which has fallen into our hands is an exceptionally blurred one.

PHOTOGRAPHIC ILLUSTRATIONS OF CUTANEOUS SYPHILIS. By Geo. Henry Fox, A.M., M.D., clinical lecturer on Diseases of the Skin, Coll. Phys. and Surgs., New York. New York: E. B. Treat & Co. Toronto: Willing & Williamson.

We have received parts VII., VIII. and IX. of this excellent work on syphilitic skin diseases. The author's former work on non-syphilitic affections has been most favorably received by the profession at home and abroad, and the one now passing through the press is of fully equal merit. The work is well gotten up, and the illustrations exceedingly well executed.

ACUTE TONSILLITIS.—We extract from article in Western *Lancet* the following: "I cannot too earnestly impress upon you the value of free scarification in cases of this kind. It is a simple procedure which at once relieves the dangerous congestion and inflammation, and affords the patient decided comfort. All that is necessary to be done is to take a sharp-pointed instrument, like a tenotome or bistoury, and puncture the parts or make a few superficial incisions. Having depleted the parts thoroughly, we then make free use of ice, both internally and externally."

Births, Marriages and Deaths.

On the 26th of June, Dr. A. W. Herrington, of Carman City, Man., formerly of Ameliasburgh, Ont.

In Amherstburg, on the 27th of June, Dr. Walter Lambert, in the 49th year of his age.

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

SCOTT'S EMULSION

PURE COD LIVER OIL,

With HYPOPHOSPHITES of LIME and SODA, PERFECT, PERMANENT, PALATABLE.

The high character, and wide reputation **Scott's Emulsion** has attained through the agency of the Medical Profession, and the hearty support they have given it since its first introduction, is a sufficient guarantee of its superior virtues. The claims we have made as to its permanency—perfection and palatableness—we believe have been fully sustained, and we can positively assure the profession that its high standard of excellence will be fully maintained. We believe the profession will bear us out in the statement that no combination has produced as good results in the wasting disorders, incident to childhood; in the latter as well as the incipient stages of Phthisis, and in Scrofula, Anemia and General Debility. We would respectfully ask the profession for a continuance of their patronage, and those who have not prescribed it to give it a trial. Samples will be furnished free upon application.

FORMULA.—50 per cent. of pure Cod Liver Oil, 6 grs. of the Hypophosphite of Lime, and 3 grs. of the Hypophosphite of Soda to a fluid ounce.

SEE TESTIMONIALS OF PHYSICIANS.

Messrs. SCOTT & BOWNE: I have prescribed your emulsion of Cod Liver Oil with Hypophosphites for the past two years, and found it more agreeable to the stomach, and have better results from its use than from any other preparation of the kind I have tried.
Halifax, N.S., Nov. 19, 1880.
W. M. CAMERON, M.D.

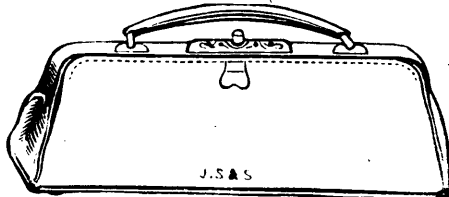
Messrs. SCOTT & BOWNE: Gentlemen—After three years experience, I consider your Emulsion one of the very best in the market.
Truro, N.S., Nov. 15, 1880.
W. S. MUIR, M.D., L.R.C.P. & S., Ed.

Messrs. SCOTT & BOWNE: I have much pleasure in stating that for the last three years I have used your Emulsion of Cod Liver Oil and Hypophosphites in my practice, in cases of Phthisis, Nervous Prostration and Anemia, and always derived marked benefit from its use. That it does not decompose, is very palatable, and remains in the most fastidious stomach, are some of its greatest merits.
I have the honor to be, yours truly,
St. John, N.B. T. J. O. EARLE, M.D.

Messrs. SCOTT & BOWNE: I have used for some time, and prescribed Scott's Emulsion of Cod Liver Oil, and find it an excellent fixed preparation, agreeing well with the stomach, easily taken, and its continued use adding greatly to the strength and comfort of the patient.
Petitcodiac, N.B., Nov. 5, 1880.
A. H. PECK, M.D., Penn. Med. Co lege.

SCOTT & BOWNE, Manufacturing Chemists, New York.

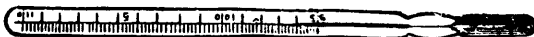
The Practitioners' Obstetric Bag John Reynders & Co.,



15 inches long, 6 inches high, containing Barnee's Craniotomy Forceps, Midwifery Forceps, Perforators, Frenum Scissors, Blunt Hook and Crochet, Catheter, 4 Stopped Bottles, 1 Chloroform Drop Bottle. Price \$26.

Bag only, Superior Morocco, Gilt Fittings, \$6.00
do. do. Plain Fittings, \$4.50
Lined with Chamois Leather \$4.50

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The mercury is easily seen, and there being no air space, the liability to loose the registering needle is obviated, should by any accident the whole of the mercury be shaken into the cup it will register the next time it is driven up by the temperature.

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UNDER THE COLLEGE OF PHYSICIANS AND SURGEONS,

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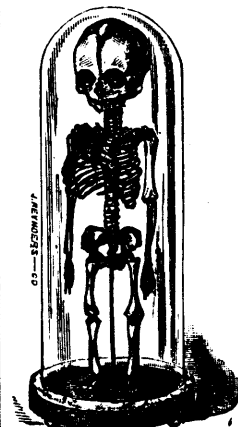
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ORIGINAL AND ONLY GENUINE

CHLORODYNE.

COUGHS,
COLDS,
ASTHMA,
BRONCHITIS.

DR. J. COLLIS BROWNE'S CHLORODYNE. This wonderful remedy was discovered by Dr. J. Collis Browne, and the word Chlorodyne coined by him expressly to designate it. There never has been a remedy so vastly beneficial to suffering humanity, and it is a subject of deep concern to the public that they should not be imposed upon by having imitations pressed upon them on account of cheapness, and as being the same thing. Dr. J. Collis Browne's Chlorodyne is a totally distinct thing from the spurious compounds called Chlorodyne, the use of which only ends in disappointment and failure.

DR. J. COLLIS BROWNE'S CHLORODYNE.—Vice Chancellor Sir W. Page Wood Stated Publicly in Court that Dr. J. Collis Browne was Undoubtedly the Inventor of Chlorodyne, that the whole story of the defendant was deliberately untrue, and he regretted to say it had been sworn to.—See THE TIMES, July 13th, 1864.

DR. J. COLLIS BROWNE'S CHLORODYNE is a Liquid Medicine, which Assuages Pain of Every Kind, affords a calm, refreshing sleep Without Headache, and Invigorates the Nervous System when exhausted.

DR. J. COLLIS BROWNE'S CHLORODYNE is the GREAT SPECIFIC for CHOLERA, DYSENTERY DIARRHŒA.

The General Board of Health, London, Report that it Acts as a Charm, one dose generally sufficient.

Dr. Gibbon, Army Medical Staff, Calcutta, states:—"Two Doses Completely Cured Me of Diarrhœa."

DR. J. COLLIS BROWNE'S CHLORODYNE rapidly cures short all attacks of

EPILEPSY, SPASMS, COLIC, PALPITATION, HYSTERIA

From Symes & Co., Pharmaceutical Chemists, Medical Hall, Simla.—*January 5, 1880.*

To J. T. Davenport, Esq., 33 Great Russell Street, Bloomsbury, London.

"DEAR SIR,—Have the goodness to furnish us with your best quotations for Dr. J. Collis Browne's Chlorodyne, as, being large buyers, we would much prefer doing business with you direct than through the wholesale houses. We embrace this opportunity of congratulating you upon the wide-spread reputation this justly-esteemed medicine has earned for itself, not only in Hindostan, but all over the East. As a remedy of general utility, we much question whether a better is imported into the country, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances *ad infinitum* of the extraordinary efficacy of Dr. Collis Browne's Chlorodyne in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power. We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best, and also from a sense of duty we owe to the profession and the public, as we are of the opinion that

the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.

We are, sir, faithfully yours,

SYMES & CO.,
Members of the Pharm. Society of Great Britain, His Excellency the Viceroy's Chemists.

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

IMPORTANT CAUTION.

The IMMENSE SALE of this REMEDY has given rise to many UNSCRUPULOUS IMITATIONS.

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BELLEVUE HOSPITAL MEDICAL COLLEGE. CITY OF NEW YORK.

SESSIONS OF 1881-82.

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

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

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

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

Faculty.

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

PROFESSORS OF SPECIAL DEPARTMENTS, ETC.

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

FACULTY FOR THE SPRING SESSION.

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

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures, Clinical and Didactic.....	140 00
Fees for Students who have attended two full courses at other Medical Colleges, } and for Graduates of less than three years' standing of other Medical Colleges }	70 00
Matriculation Fee	5 00
Dissection Fee (including material for dissection).....	10 00
Graduation Fee	30 00
No fees for Lectures are required of Graduates of three years' standing, or of third-course Students who have attended their second course at the Bellevue Hospital Medical College.	

FEES FOR THE SPRING SESSION.

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

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

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SECRETARY BELLEVUE HOSPITAL MEDICAL COLLEGE.

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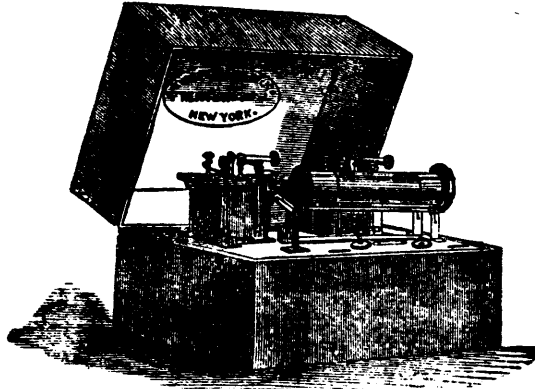
Prof. N. S. Davis, M.D.
Prof. James S. Jewell, M.D.

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Prof. Theo. A. McGraw, M.D.
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Prof. Leartus Connor, M.D.

ST. LOUIS.

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



NEW YORK CITY.

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

PHILADELPHIA.

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

CANADA.

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

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DR. WHEELER'S

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LACTO-PHOSPHATES prepared from the formula of Dr. DUSART, of Paris.

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

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

In the various forms of Dyspepsia, resulting in impoverished blood and depraved nutrition, in convalescing from the Zymotic Fevers (Typhus, Typhoid, Diphtheria, Small-pox, Scarlatina Measles) in nervous prostration from mental and physical exertion, dissipation and vicious habits, in chlorotic anemic women, and in the strumous diathesis in adults and children it is a combination of great efficacy and reliability, and being very acceptable to the most fastidious it may be taken for an indefinite period without becoming repugnant to the patient. When Strychnine is indicated the official solution of the Pharmacopoeia may be added, each fluid draohm making the 64th of a grain to a half fluid ounce of the Elixir,—a valuable combination in dyspepsia with constipation and headaches. This compound is prepared with great care, and will be maintained of standard purity and strength.

Dose.—For an adult, one table-spoonful three times a day, after eating; from seven to twelve, one dessert-spoonful; from two to seven, one tea-spoonful.

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FIRST PRIZE FOR ARTIFICIAL LIMBS

AND

SURGICAL APPLIANCES.



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

JAMES AUTHORS,
16 King Street East, Toronto.

TORONTO, Sept. 17, 1874.

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

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

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

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

CHEMICAL ANALYSES.

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

Albumen and Gelatine	21.81	Flesh-forming Food.	Ash or Mineral Matter	14.57
Fibrine in a readily soluble form	37.46		Moisture	26.14

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

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

Salts of Flesh and Moisture, Beef Tea Food	33.30	Fibrin or Meat Food	35.50
Albumen or Egg Food	37.50	Mineral or Bone Food	1.70

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

By STEVENSON MACADAM, Ph. D., F.R.S.C., F.C.S., Lecturer on Chemistry.—Analytical Laboratory, Surgeons' Hall, Edinburgh, 6th March, 1878. I have made a careful chemical analysis of a sample of Beef Powder, manufactured by J. L. Johnston, and find it contains as follows:

Albuminous or Flesh Matter	63.36	Moisture	13.73
Ash or Saline Matter	10.62	Oils and Fatty Matter	12.77

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

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

In submitting the following extracts from the letters of our leading local physicians, we feel justified in stating that few if any of the gentlemen named have ever before given a certificate for any proprietary article. Unsolicited testimonials from medical men reach us daily.

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

SIR THOMAS WATSON, QUEEN VICTORIA'S PHYSICIAN,
PRESCRIBES JOHNSTON'S FLUID BEEF.

- Dr. NOLAN, of the Academy of Natural Sciences of Philadelphia, says:—"Johnston's Fluid Beef has given entire satisfaction."
- JAMES TYSON, M.D., Professor of Gen. Pathology, Morbid Anatomy, in the University of Pennsylvania, says:—"I am using Johnston's Fluid Beef with a confidence which I have in no other preparation."
- Dr. MALCOLM MACFARLANE, 1806 Chestnut Street, says:—"It is with unusual pleasure and confidence that I give my recommendation to Johnston's Fluid Beef. It is in the best form and the best preparation with which I am acquainted or have used."
- Dr. LEONARDO JUDD, of Philadelphia, says:—"I can endorse thoroughly all that is claimed for Johnston's Fluid Beef, and am delighted with its superior excellence."
- Dr. HORNER, of Philadelphia, says:—"It is the most elegant preparation of the kind in the market."
- Dr. SAMUEL ASHHURST, 1425 Walnut Street, Philadelphia, says:—"I have tested Johnston's Fluid Beef and find it to be strictly what it is represented. I prefer it very much to any extract of beef with which I am acquainted, and unhesitatingly recommend it as a most desirable preparation."
- Dr. C. S. MIDDLETON, of Philadelphia, says:—"Johnston's Fluid Beef has given me the most satisfaction of any article of the kind heretofore brought to my notice."
- Dr. DANIEL KARSNER, 4845 Girard Ave., Philadelphia, says:—"I have pleasure in confirming manufacturer's statements concerning its excellent and substantial food properties. It is exceedingly pleasant to the taste, and is in my opinion of incalculable value to the invalid."
- Dr. JOSEPH KLAPP, 622 Spruce Street, Philadelphia, says:—"I feel assured that invalids and delicate persons in search of strength need only to use it in order to be convinced of the great advantages it possesses for that purpose."
- Dr. S. R. SKILLEREN, 190 South 31st Street Philadelphia, says:—"It is the only preparation of beef that I have come across in which I have confidence, and I am sure its merits will recommend it wherever it is introduced."
- Professor G. P. GIRDWOOD, McGill University, Montreal, says:—"I can strongly recommend its use to the public as supplying in the most easily digested form all the materials necessary for renewing the tissues wasted by disease."
- Dr. ROSE, Montreal General Hospital, says:—"I believe it to be a most excellent nutrient for invalids and delicate persons."
- Professor CHARLES CAMERON, Dublin, says:—"I can very strongly recommend Johnston's Fluid Beef."
- Dr. MILLER, Edinburgh, says:—"It is a great boon to the invalid and to the public."
- Dr. SMART, Edinburgh, says:—"I fully expect that it will ere long take precedence, both in professional and public favor, of all articles of a like kind, as it possesses qualities superior to all of them."
- Dr. C. H. F. ROUTH, Senior, Physician to the Samaritan Hospital, London, says:—"It seems to me to fulfil a desideratum long sought for, and will prove of the greatest value in the treatment of disease."
- Dr. DUNCAN, Surgeon, Alians S.S. "Polynesian," says:—"Patients suffering from vomiting in sea-sickness seem to retain it much better than any other preparation I have ever tried, and do not complain of the nauseous taste so often objected to in some other preparations."
- Dr. JOHN RUSSELL, Surgeon to the Newcastle-upon-Tyne Infirmary, says:—"The theory of its manufacture appeals to one's idea of what PERFECT BEEF TEA ought to be."
- Dr. S. FRED. PEARSE, South Kensington, London, says:—"I find your preparation of Fluid Beef the best in every respect I have ever met with."
- Dr. E. CLARK NEWTON, Surgeon to the Newcastle Lying-in Hospital, says:—"Johnston's Fluid Beef contains 50 per cent of nitrogenous or flesh-forming material. All other Extracts of Beef I have seen may be looked upon as stimulants only, and I have always deplored the confidence in their nutritive powers placed by invalids and the public."

JOHNSTON'S FLUID BEEF is now extensively used in British and Continental institutions, Hospitals and Asylums, and is prescribed by the medical faculty wherever it has been introduced.

Its adaptability is general to the invalid, the convalescent and the vigorous. To children it secures a strong muscular development, and for maternal nursing, imperfect mastication, athletic training, physical exhaustion, indigestion or mental overstrain, it is the perfection of known food.

DIRECTIONS FOR USE.—Add a small teaspoonful to a cup of boiling water and season to taste; or as a sandwich paste it may be used on toast, with or without butter. The can may remain open for weeks without detriment to the contents.

Sold by Druggists and Leading Grocers. Price 35c, 60c, & \$1.

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DETROIT MEDICAL COLLEGE.

(Member of the American Medical College Association.)

SESSIONS OF 1880-81.

FACULTY.

<p>JAMES F. NOYES, M.D., Emeritus Professor of Ophthalmology and Otology.</p> <p>THEO. A. MCGRAW, M.D., PRESIDENT, Professor of Principles and Practice of Surgery and Clinical Surgery.</p> <p>GEO. P. ANDREWS, M.D., Professor of Principles and Practice of Medicine and Clinical Medicine.</p> <p>C. B. GILBERT, M.D., Professor of Obstetrics and Diseases of Women and Children.</p> <p>N. W. WEBBER, M.D., Professor of Principles and Practice of Surgery and Clinical Surgery.</p> <p>SAMUEL P. DUFFIELD, PH. D., M.D., Professor of Toxicology and Medical Jurisprudence.</p> <p>J. H. CARSTENS, M.D., Assistant Clinical Professor of Clin. Gynaecology,</p> <p>F. A. SPALDING, M.D., Assistant Clinical Professor of Obstetrics.</p> <p>J. G. JOHNSON, M.D., Lecturer on Diseases of Mind and Nervous System.</p> <p>E. A. CHAPOTON, M.D., Lecturer on Pathology and Morbid Anatomy.</p> <p>DAVID INGLIS, M.D., Instructor in Practice of Medicine.</p> <p>F. H. KNICKERBOCKER, M.D., Curator of Museum and Librarian.</p>	<p>ALBERT B. LYONS, M.D., Professor of Chemistry and Director of the Chemical Laboratory.</p> <p>LEARTUS CONNOR, M.D., SECRETARY, Professor of Ophthalmology and Otology.</p> <p>H. O. WALKER, M.D., Professor of Anatomy and Diseases of Genito-Urinary System.</p> <p>E. L. SHURLY, M.D., Professor of Materia Medica, Therapeutics and Laryngology.</p> <p>HAL. C. WYMAN, M.D., Professor of Physiology, and Director of the Physiological Laboratory.</p> <p>J. W. ROBERTSON, M.D., Instructor in Practice of Medicine.</p> <p>A. E. CARRIER, M.D., Instructor and Demonstrator of Anatomy,</p> <p>MORSE STEWART, JR., M.D., Instructor in Materia Medica and Therapeutics.</p> <p>A. B. STEVENS, PH. C., Instructor in Pharmacy.</p> <p>CHAS. G. JENNINGS, M.D., Instructor in Chemistry.</p>
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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:

PRELIMINARY 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 relations 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 in 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.

McGILL UNIVERSITY, MONTREAL,

FACULTY OF MEDICINE.

FORTY-NINTH SESSION, 1881-82.

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

The Winter Session of 1881-82 will begin with a general introductory lecture at 11 a.m., October 1st.

FACULTY:

GEORGE W. CAMPBELL, A.M., M.D., LL.D., Emeritus Professor of Surgery, and Dean of the Faculty.	G. P. GIRDWOOD, M.D., Professor of Chemistry.
WILLIAM E. SCOTT, M.D., Professor of Anatomy.	GEORGE ROSS, A.M., M.D., Professor of Clinical Medicine.
WILLIAM WIRGHT, M.D., Professor of Materia Medica and Therapeutics.	WILLIAM OSLER, M.D., Professor of the Institutes of Medicine.
ROBERT P. HOWARD, M.D., Professor of the Theory and Practice of Medicine.	THOMAS G. RODDICK, M.D., Professor of Clinical Surgery.
DUNCAN C. MCCALLUM, M.D., Professor of Midwifery and the Diseases of Women and Children.	WILLIAM GARDNER, M.D., Professor of Medical Jurisprudence and Hygiene.
J. W. DAWSON, LL.D., F.R.S., Professor of Botany and Zoology.	FRANK BULLER, M.D., Lecturer on Ophthalmology.
ROBERT CRAIK, M.D., Emeritus Professor.	FRANCIS J. SHEPHERD, M.D., Demonstrator of Anatomy.
G. E. FENWICK, M.D., Professor of Surgery.	RICHARD L. MACDONNELL, B.A., M.D., Assistant Demonstrator.
JOSEPH MORLEY DRAKE, M.D., Emeritus Professor.	

MATRICULATION.—Students from Ontario and Quebec are advised to pass the Matriculation Examination of the Medical Councils of their respective Provinces before entering upon their studies. Students from the United States and Maritime Provinces must present themselves for the Matriculation Examination of the University, on the first Saturday of October, or the last Saturday of March.

LECTURES.—Five Lectures a week are given in the seven principal branches of Medicine. Oral examinations are held weekly, and written ones at various times throughout the Session.

HOSPITALS.—The Montreal General Hospital has an average number of 150 patients in the wards, the majority of whom are affected with diseases of an acute character. The shipping and large manufactories contribute a great many examples of accidents and surgical cases. In the out-door department there is a daily attendance of between 75 and 100 patients, which affords excellent instruction in minor surgery, routine medical practice, venereal diseases, and the diseases of children. Clinical clerkships and dresserships can be obtained on application to the members of the hospital staff.

UNIVERSITY DISPENSARY.—This was established three years ago for the purpose of affording to senior students practical instruction in diseases of women, and has proved very successful. This year two other special departments have been added, viz.: diseases of children and diseases of the skin.

CLINICS.—The clinical teaching is conducted in the wards and theatre of the General Hospital, daily, throughout the Session. Ample opportunities are afforded to the Student to investigate the cases, medical and surgical.

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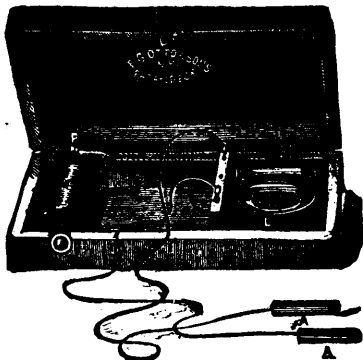
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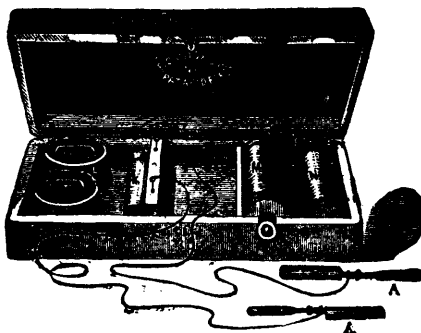
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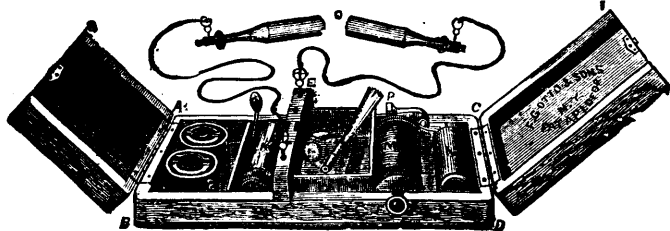
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