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VOL. II.

TORONTO, AUGUST, 1877.

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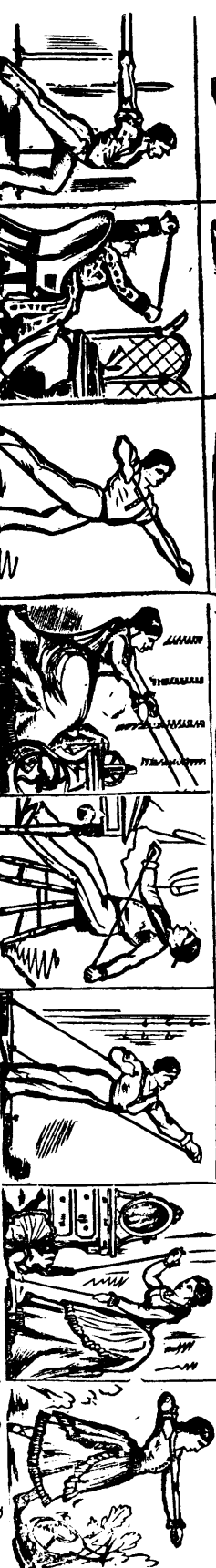
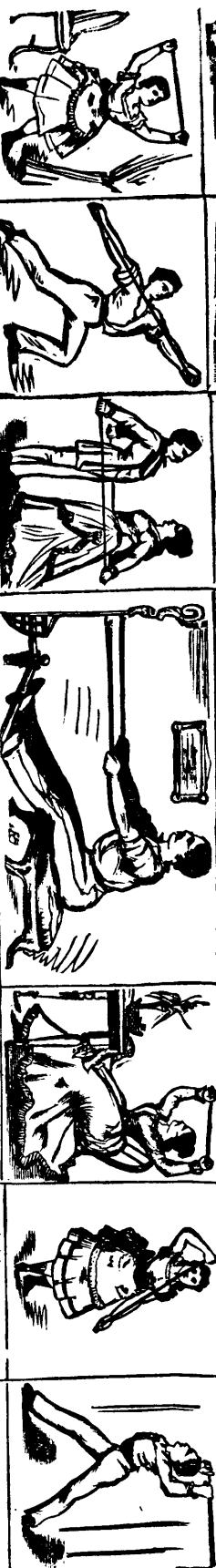
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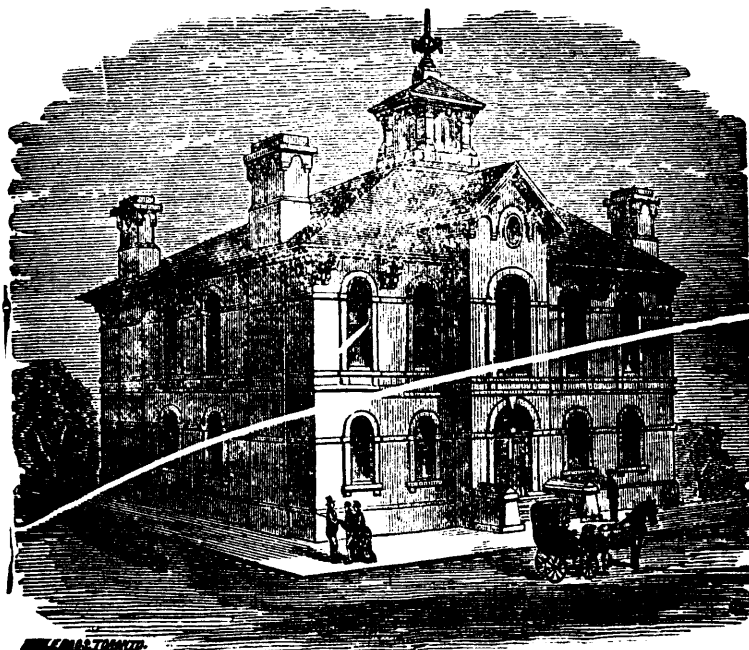


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The Spring Session consists chiefly of Recitations from Text-books. This term continues from the first of March to the first of June. During this Session daily recitations in all the departments are held by a corps of examiners appointed by the regular Faculty. Regular clinics are also given in the Hospital and College building.

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FEES FOR THE SPRING SESSION.

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Recitations, Clinics, and Lectures	35 00
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TORONTO, AUGUST, 1877.

Selections: Medicine.

THE MUSCULAR ARTERIOLES: THEIR STRUCTURE AND FUNCTION IN HEALTH AND IN CERTAIN MORBID STATES.

BY GEORGE JOHNSON, M.D., F.R.S.

LECTURE III.—*Concluded.*

There is good reason to believe that some of the more formidable *nervous symptoms*, which result from uræmia—in particular uræmic convulsions and a form of transient amaurosis—are directly due to cerebral anæmia consequent on sudden extreme contraction of the muscular arterioles.

There can, of course, be no question that uræmic convulsions are of an epileptic character. A large amount of evidence points to the conclusion that both the loss of consciousness and the convulsions of epilepsy are the results of sudden and extreme anæmia of the brain. In man, and in most, if not in all, warm-blooded animals, a rapid and very copious hæmorrhage usually causes convulsions. Kussmaul and Tenner state (*On the Nature and Origin of Epileptiform Convulsions caused by Profuse Bleeding*, New Sydenham Society, 1850) that in numerous cases of dogs, cats, and rabbits, they observed, without a single exception, violent and general convulsions preceding death by loss of blood. In order to produce this result, the hæmorrhage must be rapid. If it occur slowly, so that the vital powers are gradually exhausted, death then occurs with swooning, drowsiness, and delirium without convulsions.

The same experimenters found that an interruption of the supply of blood to the head of a rabbit, by ligature or compression of the arteries of the neck, produces epileptic convulsions as surely as hæmorrhage does. In about one hundred rabbits they ligatured or compressed the carotids and subclavians, from which, be it remembered, the vertebral arteries proceed; and in every case, except that of one very old animal lean and feeble, convulsions occurred.

In order to excite convulsions, they found it necessary to close all the four arteries which supply the brain. If but one carotid or one vertebral artery remained pervious, the animal was enfeebled and more or less paralysed, but not convulsed. And again, if, during the height of the convulsion, the ligature were removed from one carotid, the convulsions generally ceased immediately, and there was a sudden change from the most frightful spasm to complete relaxation of the muscles. The description of the convulsions thus artificially produced with, as it seems to me, needless reiteration, in the lower animals, shows that they were essentially the same as epileptic convulsions in the human subject. There was the dilated pupil, the tonic spasm, quickly followed by clonic convulsions so violent as to throw the animal forward to a distance of one or two feet, and sometimes even over the shoulders of the operator. The experiments obviously could not be performed on the human subject; but Drs. Kussmaul and Tenner approached as near to this as they dared by compressing the carotids of six men. The result was that in all the face turned pale; the pupils first contracted and then dilated; the respiration became slow, deep, and sighing; then there was giddiness,

staggering, and unconsciousness, and the men would have fallen if they had not been supported. They say that, "in two subjects of weak intellect and moderately anæmic, in whom, notwithstanding the above symptoms, the compression was continued, a choking sensation, attended by vomiting and general convulsions, came on, which, however, did not attain an aggravated form: for, on withholding the compression, they disappeared in a few seconds." (*Op. cit.*, page 28.) Compressing the carotids does not, of course, entirely cut off, but only greatly lessens the supply of arterial blood to the brain; but these experiments render it probable that sudden occlusion of all the arteries supplying the brain would as certainly excite epileptic convulsions in man as in the lower animals. And this conclusion is confirmed by observing the results of certain diseases and accidents in the human subject. Thus convulsions occur almost invariably as a result of sudden suffocation or acute apnoea. It has commonly been supposed that the convulsions thus occurring are caused by the noxious influence of black blood upon the brain. It is far more probable that they are caused by the sudden and extreme anæmia of the brain, consequent on the impeded flow of blood through the lungs into the systemic heart and arteries, as explained in my first lecture. The epileptiform convulsions, which often result from the inhalation of nitrous oxide gas, admit of the same explanation. It is quite certain that, in Kussmaul and Tenner's rabbits, with closed carotids and subclavians, no black blood could reach the brain, yet the convulsions were apparently identical with those which result from suddenly fatal apnoea, whether in the lower animals or in the human subject.

A few years since the following case came under the observation of my friend, Dr. Lavies, and myself. A gentleman, about sixty years of age, had been confined to his bed for three weeks with symptoms which pointed to great feebleness of the heart, and probably to fatty degeneration of its walls. There was dyspnoea on exertion, and sometimes on awaking after along sleep; the heart's impulse and the radial pulse were feeble; there was some œdema of the legs, and over the bases of the lungs there

were moist crepitating sounds, probably the result of œdema there. He awoke in the middle of one night, told the nurse that he felt quite comfortable, asked the time, and began to repeat her reply, "Oh, half-past —", when he suddenly stopped, and the nurse, turning to him immediately, saw that his face was livid and he was in strong convulsions. In a few seconds, and before anyone could answer her call for assistance, the patient was dead. The body was examined, in the presence of Dr. Lavies and myself, by my friend and former colleague, Dr. Kelly. The walls of the heart were thin, soft, and fat. The right ventricle was dilated, and contained firm dechlorized thrombus, extending from the apex of the ventricle through the tricuspid orifice into the auricle, to the outer wall of which it had evidently been attached and moulded, but, becoming separated from the auricular wall, it had fallen over the tricuspid orifice and completely closed it. Thus, the circulation must have been completely and instantaneously arrested. The result was lividity of the face from venous fulness, and epileptiform convulsions from cerebral arterial anæmia. In this case, as in the case of the rabbits with ligatured arteries, it is evident that the convulsions were caused not by black blood, but simply by the absence of circulating blood in the cerebral vessels.

When animals are killed by air being forcibly blown into a vein, the breathing becomes hurried, the animal suddenly falls down, and usually dies in convulsions; the contents of the bladder and rectum being frequently expelled at the time of death. Dr. John Reid states that, "in very few cases only is death from this cause not preceded by convulsions." (*Physiological, Anatomical, and Pathological Researches.*)

The immediate cause of death in these cases is the arrest of the frothy mixture of air and blood by the contraction of the pulmonary arterioles, the air seldom reaching the left side of the heart; and as a result of this arrest there is, of course, sudden extreme anæmia of the brain, and of every other organ supplied by the systemic arteries. In man, it appears that death from the accidental admission of atmospheric air into a vein during an operation, is

less frequently preceded by convulsions. Probably the chief reason of the less frequent occurrence of convulsions from this cause in the human subject is, that the amount of air accidentally admitted is less, and death consequently is less rapid than when air is forcibly blown into the vein of an animal. It would probably be found, on a careful inquiry, that the occurrence of convulsions in these cases depends upon the circulation being suddenly and completely arrested.

It has been noted, in some cases of suddenly fatal pulmonary embolism, that death has been preceded by convulsions; and Virchow observed, amongst the results of artificial embolism of the pulmonary artery in animals, convulsions and dilatation of the pupil. (*Des Embolies Pulmonaires*, par B. Ball, page 129.)

We find, then, a large amount of evidence pointing to the conclusion that sudden and extreme anæmia of the brain will cause epileptiform convulsions, and a theory of epilepsy has been framed in accordance with these facts; the theory being that the cerebral anæmia, which is the immediate cause of the convulsion, is the result of spasm of the cerebral arterioles. It may be said with truth that this is only one step towards an explanation of the phenomena, and that the cause of the arterial spasm remains to be determined. We will presently revert to this question.

It is, I think, pretty generally admitted that this theory of cerebral anæmia from arterial spasm is quite consistent with the phenomena of epilepsy. It is a matter of general observation that, at the very commencement of an epileptic fit, the face is pallid. There is obviously anæmia of the superficial vessels, and with this there is probably associated anæmia of the intracranial vessels which supply the brain itself. The pallor is in most cases soon succeeded by lividity, owing to the venous engorgement which results from impeded respiration and pulmonary circulation. It is very remarkable that, while the face is pallid, the heart is beating strongly and the carotids throbbing violently. These phenomena would be explained by extreme contraction of the muscular arterioles, resisting the escape of blood from the arterial trunks into the capillaries.

Kussmaul and Tenner endeavoured to support the theory of arterial spasm by experiment, and to some extent they succeeded. In each of two white rabbits they ligatured the two subclavians and one carotid; the cervical sympathetic, on the other side, was then exposed and galvanised, with a view to excite contraction of the arterioles by the stimulus conveyed through the vaso-motor nerves. In two animals no effect was produced; but in the third the background of the eye became completely pale; the pupil dilated, so that the iris could scarcely be seen; the neck was drawn back, and violent convulsions occurred. The electrodes being removed, the spasms ceased, the pupil contracted, and the background of the eye became red; but the animal continued in a swooning condition. After some minutes, electricity applied to the sympathetic nerve produced the same effect as at first. A third attempt to excite convulsion did not succeed.

The authors suggest that these experiments deserve repetition, with a view of rendering certain what at present is probable, namely, "that epileptic convulsions can be brought about by contraction of the blood-vessels induced by the vaso-motor nerves."

According to this theory, then, epilepsy is the result of sudden anæmia of the brain; and this anæmia, when not caused by a sudden and profuse hæmorrhage, or by some impediment to the circulation outside the cranium, is due to an extreme contraction of the muscular arterioles. This arterial contraction may be determined by two main classes of causes:

1. By a purely nervous reflex influence, such as, for example, may be excited by anger or terror, by the irritation of the gums during dentition, by a calculus in the kidney, the ureter, or the gall duct, or by worms in the intestines.

2. In the second class of cases, a blood-poison is the exciting cause of the arterial spasm and the resulting epileptic convulsion. This includes all cases in which convulsions result from retained excreta, of which uræmic convulsions are a typical example.

From the preceding narrative of facts, it appears to be highly probable that uræmic convulsions are directly due to a sudden and extreme anæmia of the brain, resulting from contraction of the cerebral arterioles, and that the arterial contraction is excited by the influence of impure blood upon the vaso-motor nerves and centre.

This theory, moreover, indicates two modes in which uræmic convulsions may be prevented, namely: first, by means directed towards removing the morbid quality of the blood; and, second, by remedies which lessen the reflex excitability of the nervous centre.

(To be continued.)

ON THE RESPIRATORY SOUND, NORMAL AND ABNORMAL.

MM. A. Bondet and A. Chauveau (*Revue Mensuelle de Médecine et de Chirurgie*, March, 1877) availed themselves of a somewhat rare opportunity of experimenting on a horse suffering from pneumonia; and they believe their experiments to possess especial interest, as demonstrating the fundamental principles upon which the explanations of the chief respiratory sounds heard over the walls of the chest rest.

The experiments were made in the Veterinary School at Lyons so long ago as 1862, but by some inexplicable oversight they are only now published. The subject was a young and vigorous mare attacked with pneumonia of the left side, attended with such alarming symptoms that death was thought imminent. All over the right side there was considerable increase of the natural respiratory murmur; no sound with expiration. On the left side, over the upper half, there was also exaggerated inspiratory murmur; over the lower half this murmur was completely abolished, and replaced by a double tubular blowing sound. The inspiratory part of the tubular sound was longer and softer than the expiratory portion, which was louder but shorter.

Auscultation of the trachea showed that the inspiratory and expiratory sounds heard over this tube, though louder, possessed exactly the same characters as the tubular sounds heard over the consolidated lung.

The experiment was commenced by making an incision in the trachea in the middle of the neck, about 20 centimetres long. The lips of this wound in the trachea could be separated by the index finger of each hand, so as to make a large opening in the tube, more than equal to its transverse diameter; this opening gave free passage to the air during inspiration and expiration, and allowed no air, or only an insignificant quantity, to pass by the larynx. The entrance of blood and mucus into the trachea and bronchi, as a consequence of this operation, and the distress of the animal, the convulsive efforts at breathing, the loud mixed râles which accompanied them, completely prevented the authors from continuing their intended com-

parison of the breath sounds before and after the operation. The next day, however, finding to their surprise the animal not only alive but better, and the physical signs precisely the same as before the operation, and uncomplicated by râles of any kind, they were able to go on with their experiments. 1. On listening over the hepatized portions of lung with the *trachea closed*, they heard the sounds already described; with the *trachea opened*, the inspiratory tubular sound disappeared, and the expiratory sound was much shorter and weaker. 2. Exactly the same phenomena were observed on auscultating the trachea below the incision, when this was *opened or closed*. 3. On auscultating the sound lung and the sound portions of the diseased one, no alteration was observed in the natural respiratory murmur, whether the trachea were opened or closed; if anything, the murmur was a little increased in intensity at the moment when the trachea was opened. 4. Sounds were artificially produced in the trachea by introducing into it a caoutchouc tube through the lips of the tracheal wound, and blowing through a membranous reed fixed to its free extremity, thus imitating, as near as possible, the conditions under which the voice is produced, with the view of comparing the conducting power of the healthy and the hepatized lung. Over the hepatized portion of the left lung, the sounds were heard with the greatest clearness. Over the healthy portions of lung, the transmission of the sounds was wholly arrested.

These experiments were several times repeated, with the same results. Subsequently, when there arose profuse bronchial secretion, the tracheal sounds would suddenly cease to be heard over the hepatized lung; at the same time, there would be noticed entire absence of the tubular or any breath sound; but if the animal coughed and expectorated, all the tracheo-pulmonary acoustic phenomena returned as clearly as before.

From these experiments MM. Bondet and Chauveau draw the following conclusions: 1. In the horse, healthy lung tissue is a very bad conductor of sound; it, indeed, completely interrupts the sounds produced in the trachea. 2. The normal inspiratory murmur originates in the lung-tissue itself; it arises where it is

heard. From other experiments, they conclude that it is caused by the entrance of air into the *infundibules*. 3. Hepatized lung-tissue is a good conductor of sound, since it brings clearly to the ear, applied to the chest, the sonorous vibrations artificially produced in the trachea. The mechanism of this conduction may be thus analyzed: 1. The vibrations are thus transmitted to the pulmonary parenchyma not by the walls of the air tubes, but by the air contained in them. 2. Arrived at the ultimate ramifications of the bronchia, these vibrations are conducted to the ear by the pulmonary tissue and the chest-wall. 3. The tubular sound heard over hepatized lung is a transmitted sound originating at a distance from the spot where it is heard. 4. The tubular breath-sounds of pneumonia and tracheal sounds are the same phenomena heard at different spots, and alike produced by the passage of air through the aperture of the glottis. The modified expiratory sound heard when the trachea is opened is produced at the lower orifice of that tube.—*London Medical Record*.

THE TREATMENT OF TAPEWORM.—Prof. Mosler has been advocating a system of treating tapeworm which, according to a Swiss medical journal, has been attended with remarkable success. Its chief characteristic is the injection of large quantities of warm water into the colon, after the administration of the anthelmintic. The diet is first regulated, food being given which is supposed to be distasteful to the tapeworm—bilberry tea, herrings, sour cucumber, salted meats. The intestine having been, as far as possible, emptied by laxatives, a dose of the extract of pomegranate bark is administered, prepared from the fresh bark, and then a large quantity of warm water is injected into the rectum. The theory is that the worm, previously brought down into the colon, is prevented by the water from attaching itself to the wall, and is brought away by the liquid on its escape. It is asserted that in every case in which this treatment was adopted the head of the worm was removed.—*London Lancet*.

CROTON CHLORAL IN PERTUSSIS.

To the Editor of THE LANCET.

SIR,—About a year ago I saw in your pages a letter urging the use of quinine in whooping cough; I tried it extensively, and in some cases it seemed to do good, but in those fully developed it was almost invariably vomited. Having then had some experience of croton chloral in various spasmodic and nervous diseases, I commenced giving it in this complaint, and have now treated between two and three hundred cases successfully with it.

It has lately been advocated once or twice in your columns, but, on making inquiries amongst medical men of my acquaintance, I find it is by no means in general use, and that some who have tried it have already relinquished it as useless.

From what they tell me, I think the causes of its failure in their hands are two: (1) Smallness of dose. Children tolerate it remarkably well, and a child a year old will take one grain every four hours. For older people the dose does not increase in the same ratio as the age, a child from six to twelve years requiring two-grain doses, and the adult seldom requiring more than four grains. (2) Want of regular administration. It should be specially impressed on parents and nurses that to do good it should at first be given every four hours, *night and day*, even should the patient require waking up. At the end of a week it need only be given every four hours during the day, and at night when the patient is awake.

The worst cases usually completely yield in a fortnight. The drug does not upset the digestive organs, and by lessening the frequency and duration of the paroxysms, puts an end to troublesome epistaxis and vomiting. Sometimes the first few doses produce a feeling of irritation about the throat and fauces, but this soon passes off. I usually give it dissolved in compound tincture of cardamom. and sweetened with glycerine.

I am, Sir, yours, &c.,

A. MILSON ROBERTS, L.K.Q.C.P.I.
Buckhurst-hill, Essex, June 19th, 1877.

NITRITE OF AMYL sometimes causes alarming symptoms. It should be used cautiously and in small quantity.

Surgery.

A CLINICAL LECTURE ON OVARIOTOMY.

Delivered in University College Hospital, London.

BY CHRISTOPHER HEATH, F.R.C.S.,
Holme Professor of Clinical Surgery, etc.

GENTLEMEN,—You have recently had under your notice a case of multilocular ovarian cyst, and have had the opportunity of seeing me remove it by the operation of ovariectomy, with, I am happy to say, complete success; and I propose now to make a few clinical remarks upon the subject. The patient was a married woman aged 29, and the mother of four children. In 1873, after a confinement, she noticed that her abdomen remained large. She was confined again in July, 1874, the enlargement still persisting, and she wore an abdominal belt for nine months. In the early part of 1876, she noticed a hard lump in the abdomen, and applied for advice at a special hospital, when she was told that she had a fibrous tumour of the uterus, and attended for some months without benefit. She was recommended to me by a medical friend, and was admitted here on December 2nd, 1876, when the following was her condition, as reported by Mr. Smith, the clinical clerk:

The abdomen is greatly distended and of conical shape, the apex being midway between the umbilicus and pubes. There is dulness over the front and sides of the belly, reaching three inches from the umbilicus on the right side, and almost to the flank on the left side, with tympanitic percussion above and to the sides of the dull area. The surface of the tumour, as a whole, is rounded, several sulci marking off distinct rounded portions; these are very tense and fluctuating, but there is no fluctuation from side to side of the whole tumour. Just to the right of the umbilicus, a flat and very hard lump is felt, about the size of an almond in its shell. The abdominal wall is marked with purple lines from stretching; it is thin and freely moveable over the tumour. *Per vaginam*, the uterus was found to be normal in size, but pushed over the left side; to the right and in front of it, rounded masses were to be felt through the vaginal wall.

Now, I beg you will understand that the diagnosis of abdominal tumours, presumably ovarian, is by no means easy, and that the most experienced ovariectomists are liable to mistakes. Thus, tumours of the uterus have been confounded with ovarian tumours, and, *vice versa*, cysts of the kidney and liver and enlarged spleens have all been taken for ovarian tumours; and, in fact, the late Mr. Baker Brown's *dictum* is undoubtedly true, that one cannot be certain about the nature of a given tumour until one's hand is actually upon it. Still, this was a remarkably easy case for diagnosis; the thin abdominal wall allowed the multiple cysts to be very distinctly felt, and the only unsolved question was whether the dulness in the left flank was due to some solid matter or, as it proved, to tightly packed cysts with viscid contents. Under these circumstances, a preliminary tapping could have been of no service, as it sometimes is in cases complicated with considerable ascites by which the tumour is obscured, or cases of one very large cyst, possibly in the broad ligament, where a single tapping will often cure the case altogether.

I, therefore, recommended the patient to undergo the operation of ovariectomy, putting the risks fairly before her and her husband; and, upon her assenting, had her transferred, with Dr. Graily Hewitt's kind consent, to the house close by, which is devoted to the treatment of such cases under his care. My reason for doing this was that undoubtedly cases of ovariectomy do not do well in the general wards of a hospital, and that the only single ward at my disposal is at the top of the general staircase, and liable, therefore, to have noxious matters carried into it from below. I do not believe that the patient would have sustained any harm whatever if I had operated in this theatre, provided she could have been placed in an isolated bed afterwards; but, this being practically impossible in our present building, you had to follow the patient over the way to witness the operation. Now, the operation was done on a Thursday; and, on the previous day, I had made my visit here as usual, and the only restriction I put upon those who attended the operation was that they should not be in actual attendance upon cases of contagious di-

ease. I learn from a paragraph in an American journal, that an eminent ovariologist requires all who witness his public operations to sign a paper certifying that they have not seen a dead body or an infectious living case for seven days; but such a sweeping precaution, even if it can really be enforced, seems to me uncalled for, when the operator must, in the ordinary course of practice, be daily placing his fingers in contact with discharges from the uterus quite as offensive, and probably as dangerous, as anything met with even in a *post-mortem* examination. I do not think anyone would be justified in making a *post-mortem* examination or going to an infectious case just before an ovariectomy; but I have great faith in a night's rest and a morning bath for removing all taint from the living body. Were it otherwise, indeed, I do not see how any one could practice his profession with safety, and the effect of such a regulation as that given above would be to confine ovariectomy to a very select circle of operators.

The operation was performed on December 6th, the patient being under the influence of ether. I made an incision exactly in the middle line, three inches and a-half long, beginning about midway between the umbilicus and pubes, and carrying it down towards the pubes. Having opened the peritoneum, I divided it to the same extent on a director, and the bluish cystic tumour at once came into view, there being no ascitic fluid. I then passed my hand in to make sure that there were no adhesions, and afterwards tapped the presenting cyst with a large trocar. Through this cyst, I tapped other cysts, but was unable to reach the large cysts in the left flank; and, therefore, having drawn the empty cysts forward, I tapped at a fresh spot. Having emptied two or three cysts through this opening, I was then able to draw the entire tumour out; Dr. Williams, who assisted me, carefully guarding against any prolapse of the intestines. The fluid of these cysts was thin, and ran readily through the canula; but not unfrequently one meets with such dense cyst-contents that it is necessary to scoop them out with the fingers, the aperture in the cyst being enlarged with scissors so as to admit the hand, and the greatest care being exercised to prevent any escape of the contents into the

peritoneum. The only adhesions were two of the omentum to the tumour, and these I tore through, afterwards putting fine silk sutures upon a couple of bleeding vessels.

Next came the important question of the treatment of the pedicle. Having tried all the modern plans, I gave the preference to that of "tying and dropping"; *i.e.*, I tied the pedicle with silk and cut the ligatures short, so that I might close the wound completely. In doing this, it is important that there should be no risk of the ligatures slipping, and the best way is to use a double ligature, passing it through the pedicle with a probe, and then tying the two halves separately; and then, as an extra precaution, one of the ligatures is made to encircle the entire pedicle again on the uterine side of the other ligatures. I then divided the pedicle half an inch beyond the ligatures, and removed the tumour, which weighed three pounds and three quarters after the removal of five pints of fluid by theappings. The tumour involved the left ovary; and I proceeded to examine the opposite one, and, finding cystic disease commencing there, I removed it with the same precaution. The edges of the incision were brought together with five silk sutures, which were passed deeply through the entire thickness of the abdominal wall, including the peritoneum. Mr. Spencer Wells settled the question of including the peritoneum by experiments on animals (the specimens from which are in the College of Surgeons' Museum), and showed that, if the edges of the peritoneum were brought together, they united rapidly by lymph, and thus effectually closed the peritoneal cavity again and prevented the access of inflammatory products. The same rule would hold good in cases of accidental wound of the peritoneum. No superficial sutures were used, but the abdomen was padded with cotton-wool and carefully strapped with plaster, so as to give support to the abdominal wall and contents, and thus to obviate vomiting to a great extent.

I need not trouble you with the details of the after-treatment, which consist simply in careful nursing, a dose or two of morphia to relieve pain, a simple injection on the fourth day, and a dose of castor-oil on the fifth day. The

sutures (one of which set up a little suppuration) were removed on the seventh day after the operation; and the patient went home on December 23rd, seventeen days after the operation, in order to spend Christmas with her family.

Although ovariectomy was first performed in 1809 by McDowell of Kentucky, who was a pupil of John Bell, the operation in modern times has been entirely of British cultivation. Mr. Lizars of Edinburgh was the first to attempt ovariectomy in this country, and by the long incision, *i.e.*, from the umbilicus to the pubes; his example was followed by a few other surgeons, and from time to time a success was recorded. The short incision, with withdrawal of the contents of the cyst, was adopted in 1836 by Mr. Jeaffreson of Framlingham, but the pedicle and ligatures were still allowed to hang out of the wound and to set up suppuration in the peritoneal cavity. The late Mr. Duffin, in 1850, first called attention to this danger, and proposed to keep the strangulated pedicle outside the peritoneum; and this method was improved upon in 1858 by Mr. Jonathan Hutchinson, who devised the clamp now in common use in some form. Mr. Spencer Wells, who has had the largest experience of any ovariectomist, had his first case in 1858; and since that time the operation has been performed by numerous surgeons, both in this and other countries, and is now a thoroughly established proceeding. My own experience has been comparatively small; the case you have seen being only my fifteenth; but the mortality has been small also, *viz.*, three deaths, or one in five cases—this being, I believe, about the rate in Mr. Wells' much larger number of cases. One of my deaths was accidental, *i.e.*, it resulted from slipping of the clamp some hours after the operation, when internal hæmorrhage occurred before the pedicle could be secured. On the other hand, I have never had occasion to abandon an operation, though one or two cases have been rather desperate ones, one case having been already attempted by another operator, who gave up and closed the wound successfully; and others having been already declined on account of adhesions. In the first of these, the parts were so matted together that

I, unawares, divided a coil of small intestine; but, by making an artificial anus, the patient recovered, and is now in perfect health, with only a small fecal fistula, which gives her no inconvenience. (The case is recorded in the Clinical Society's *Transactions*, vol. v).

The method of treating the pedicle I adopted in this case, *viz.*, "tying and dropping," was brought into practice by the late Dr. Tyler Smith, who had a series of most successful cases, and it appears to me to possess two great advantages—1. That it is applicable to all pedicles, whether long or short; and 2. That it admits of immediate closure of the wound in its whole length. My personal experience of the clamp is limited to the case already mentioned, in which a fatal result ensued from the slipping of the pedicle through the clamp, for I never again employed it; but I have seen it used frequently, and it does very well when the pedicle is long. But in many cases the pedicle is so short that very considerable traction upon the uterus is exercised in order to get the clamp outside the abdominal wall, thereby causing pain. Another objection is that the stump sometimes gives trouble if it become adherent to the cicatrix, a regular menstrual discharge taking place occasionally every month. Still, it is right that you should know that Mr. Wells has employed the clamp in the greater number of his cases. Mr. Baker Brown introduced the practice of dividing the pedicle with the actual cautery, and devised a cautery-clamp, which I show you here. I have employed it in several of my cases with good effect, but I do not think it so safe as the ligature; for, however careful you may be to cut the pedicle slowly with an iron not too hot, so as to sear the cut edges thoroughly, there is always the risk of some small vessel bleeding and requiring a ligature, and sometimes the burnt edges become separated and the bleeding is free. It is exactly the difference between applying torsion to a large artery and putting on a ligature; with the last, one feels perfectly safe, whilst with the former something *may* go wrong.

You may ask what becomes of the ligatures left in the abdomen. They become rapidly coated with lymph and buried completely, so that it is impossible to find them a few months afterwards. Possibly silk, being an animal product, may undergo partial absorption, as has been suggested; but twine ligatures do practically just as well, and are as completely hidden. —*British Medical Journal.*

ON THE BEST MEANS OF PROMOTING UNION BY FIRST INTENTION.

BY E. W. LEE, M.D., CHICAGO.

Ninety-nine practitioners out of a hundred will proceed to dress an incised or lacerated wound by bringing the edges together, and maintaining them in position—or trying to—by means of strips of adhesive plaster or interrupted sutures of silk. For several years I have been in the habit of using needle sutures for all wounds, varying the size and shape according to the location and depth of the wound. For all wounds not very deep, I use Sharp's No. 12 cambric needle. It is very small, and is easily introduced and extracted.

If plaster be used, no matter how carefully it may be applied, in a few hours it stretches, permitting the edges of the wound to gape, although the apposition was perfect when leaving the hands of the surgeon. If interrupted sutures of silk be used in the ordinary way, the edges of the wound are brought together, leaving underneath a cavity for the accumulation of discharges and subsequent suppuration; the silk causes more or less irritation immediately, it begins to cut, and unless taken out in twenty-four hours, leaves an ugly mark at the seat of the suture. In all wounds over one-third of an inch in length, I use these needle sutures. We all know what an unirritating substance steel is. Needles have entered the body and remained there for years, causing no inconvenience whatever, coming out in an entirely different location from where they had entered. Suppose we have a wound to dress, say one and a-half inches long, I proceed in the following manner: Carefully cleanse the part of all foreign matter, *and wait for hæmorrhage to cease*. Then if the location and depth of the wound be suitable, take a No. 12 cambric needle in a needle holder, insert it a proper distance from the edge of the wound, push it through at about half the depth of the wound, bring the point out about the same distance on the opposite side. Take now a piece of stout ligature silk or thread, and surround the transfixed tissue and draw the edges of the wound together. Put in as many sutures as may be necessary to secure perfect apposition, and the dressing is com-

plete. It is useless to put on plasters in addition; they stretch, they are unsightly and unclean. In dressing wounds by this method pressure can be made so as to bring the edges of the wound together *from top to bottom*; no space is left for secretions to accumulate; no chance is left for stretching, and for the edges of the wound to gape; the pressure being so equally distributed, the suture does not cut through as a silk one will. The only objection to allowing the sutures to remain for four or five days, is that after forty-eight hours they are difficult of extraction. This difficulty I have overcome by having the needles electroplated with silver. To extract the needle, I take the end in the needle-holder, gently turn it round in the wound once or twice, and then withdraw it. I do not cut the silk, it remains adherent, the blood and serum forming an incrustation, holding the silk in position; this I am careful not to disturb. I once dressed an incised wound twenty-four inches long, in the manner described. Between forty and fifty needles (No. 12) were used; every portion of the wound healed by first intention. The advantages of this plan do not by any means end here. Suppose the radial, temporal, or palmar arteries be wounded; many practitioners not expert will spend considerable valuable time in seeking and ligating any of these vessels, and consequently more loss of blood than need be is occasioned. Here the needle suture is not only the best means of bringing the edge of the wound together, but it is the quickest, easiest, and safest means of stopping hæmorrhage by acupressure. I have repeatedly adopted this plan in all the above-mentioned accidents, and always with the utmost satisfaction. Suppose union by first intention does not take place; then cut the silk, withdraw the needles, and the amount of retraction that takes place will not be nearly so great as it would had they not been used. I usually succeed in getting union by first intention, and when I have failed, it has been either from a faulty condition of the system, or from being too hasty in the application of the dressing. In incised wounds about the neck and face, where primary union is so desirable, this plan is peculiarly suitable. In scalp wounds, prudent practitioners hesitate to

use silk sutures, so apt are they to set up erysipelatous inflammation; to make plaster adhere, it is absolutely necessary to shave the scalp for a considerable space around the wound. Use needle sutures, and it is not necessary to remove any hair at all, and they may remain in the scalp as long as may be necessary with impunity. This may seem a very small matter to say so much about; but with most of us, dressing wounds is an every-day occurrence, and any improvement that may be introduced, however small, is of practical importance. I have tried this plan so long and thoroughly, and with so much gratification to myself and patients, that I feel it a duty to urge its substitution for silk and plaster entirely. It is not of course original with me, yet it is not adopted to any extent by the profession. I am confident that if the dressing be carefully done by those adopting this method, the attending success will be so uniform as to prohibit the employment of any other.—*Chicago Med. and Surg. Journal.*

SURGEON-MAJOR PORTER'S SAW-DUST PADS.

BY GEORGE W. CALLENDER, F.R.S., SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

Sir Joseph Fayrer having asked me to try the sawdust pads used by Surgeon-Major Porter as a dressing, where there is a discharge of pus, and that gentleman having been so good as to furnish me with samples of the dust from the Memel pine recommended by him, I was glad to employ the pads in such cases as seemed likely to put their utility to a fair test.

I will first say how the pads are made; secondly, relate the cases in which they were used; and thirdly, express my opinion as to their value in surgical practice.

The sawdust is obtained by preference from the Memel pine; that from red deal may also be used, either of these containing a large amount of terebine. The dust from hard wood will not answer, as Mr. Porter finds that it does not absorb freely. It has first of all to be well sifted, for, as supplied from the works, it often contains coarse fragments which would cause, under pressure, hurt or inconvenience. The

fine dust is then enclosed in muslin of such quality as will just prevent its escape. The bag, when made, is shaped for each case as may be required; when about three-fourths full it is closed, and is then quilted, otherwise the wood-dust will gravitate, or under pressure, will be displaced entirely from certain parts of the bag. As to the muslin, I have ventured to depart from Mr. Porter's practice in using ordinary instead of antiseptic gauze, no advantage being gained by the use of the latter. The pads thus made are applied either to side-splints, or to cover an ordinary back splint (as for a compound fracture of the leg), or over abscess wounds, or over suppurating surfaces, or over dying or dead tissues; they are used, in fact, either as pads or as the dressing over any part.

The following, amongst others, are cases in which they were employed:—

On April 26th, a male, aged sixty-seven, fell off the kerb, and was run over by a heavy van. He thus sustained a compound fracture of both bones of the right leg, the soft parts being severely damaged by the pressure of the wheels passing over them. The limb was supported on sawdust pads fitted to an ordinary back-splint, and the wound was covered with lint soaked in carbolized oil. When I saw the patient, it was evident that very extensive sloughing of the soft parts must ensue. The whole leg was therefore enveloped in lint soaked in carbolized oil and covered with gutta-percha tissue. Thus, and with the pads, which were saturated with discharge and required changing about every four or five days, the process of sloughing was passed through without any unpleasant odour and without constitutional disturbance. The utility of the pads in this severe case was marked, the discharge being fairly absorbed by them, and remaining inodorous. The patient is now—three weeks after the accident—well in himself; he has, however, to heal up an extensive surface left in a state of ulceration by separation of the sloughs, and it is more than doubtful if he will have the strength to do so.

A strumous lad, aged fourteen, was taken into the hospital with acute necrosis of the shaft of the tibia, involving also the lower epiphysis, and attended with destructive inflam-

mation of the ankle joint. The suppuration was profuse. The leg was swung in a sawdust bag, with great comfort to the patient, especially as it is now found to be necessary to change the supporting pad only once every ten days, instead of daily, as before its use. The relief to the patient is shown in the improvement of his health, he having increased ten pounds in weight since the greater ease and quiet thus gained for him during the last six weeks.

Apart from the question under consideration, these cases are of interest with reference to the results obtained in the treatment of severe wounds and extensive suppurations. As to the use of the pads, it may be said that they are approved by the sisters for their cleanliness, and for the manner in which they keep the bed-linen from being soiled by discharge of serum or of pus. They are easily made so as to fit as required, and they are inexpensive. When the quilting is properly attended to they are comfortable to the patient, readily yielding to such pressure as that, for instance, caused by the weight of the leg, and moulding so as to give equable support. Whilst they effectually absorb discharge, it is as well, when this is considerable, that the pad should be changed every two or three days, but when, in addition to the pad, carbolized oil dressing is used, they can be left for a longer period. Thus, in the case of the two amputations, the pads which supported the leg in one, and the thigh in the second, were not touched for three weeks, and for fourteen days respectively. I do not feel disposed to rely entirely upon these pads for keeping parts absolutely clean; but in conjunction with carbolized oil, or with some kindred dressing, they are amongst the best pads with which I am acquainted, and I consider that we are much indebted to Mr. Porter for giving us an appliance which is simple, inexpensive, and efficacious. I may add, that, mixed with shot, so as to give weight to the appliance, these pads may be used to make pressure, when such is desirable, as over some forms of abscess, to prevent re-distension from collection of pus in a sac which has been opened.—*London Lancet*.

Another death from chloroform occurred at the Blackburn Infirmary, death ensuing quickly on the stage of struggling.

NEW OPERATION FOR EXCISION OF THE KNEE-JOINT.

The May number, 1877, of the *New Orleans Med. and Surg. Journal* quotes a paper from the *British Medical Journal* describing a new operation for excision of the knee-joint which seems to have some advantages. The paper is by Wm. Knight Treves, F.R.C.S., Surgeon to the National Hospital for Scrofula, Margate.

The object of Treves' operation are to leave the tissues in front of the joint uninjured, to preserve the natural covering of the joint, and to keep intact the extensor tendon with its attachments. The bones are sawn *in situ*.

1. Make a semi-lunar incision about three inches long on each side of the joint, the lowest point of each incision being thoroughly dependent for the exit of pus or serum.

2. Divide the lateral ligaments on each side, and reflect the tissues till the synovial cavity in front is well opened. Divide any adhesions in front. Pass a wide director behind the joint in front of the posterior ligament, and divide with a narrow bistoury the crucial ligaments and any adhesions between the bones.

3. Insert a metal retractor in front of the bones to secure from injury the tissues in front, and the skin and tissues loosened from the sides, while the bones are being sawn. The blade of a butcher's saw, instead of a chain saw, is passed behind the joint; and this being connected with its frame, a thin slice is sawn from the joint ends of each bone. The sawn surface of this slice is the exact counterpart of the surface left behind; and if on examination, it appears to be healthy, pass on to the patella, which is left, if healthy, or sliced, if its cartilage be ulcerated.

The following are the chief advantages claimed for this operation:—

1. Decided improvement in the after appearance of the limb. The front view shows little difference from the other limb.

2. Greatly increased power of extension. After ordinary excision, extension is often feeble from the divided and shortened extensor tendon; the leg is inclined to drag, and the patient catches his toe in walking. With Treves' operation, the patient can lift his leg even before union is firm, and he gets increased

advantage from the additional power and handiness of the limb.

3. The extensor tendon being still attached to the tibia in front, whilst the posterior ligament is intact behind, the bones are not so loose, and the tibia is not so likely to become displaced.

4. This mode of operation partakes of the nature of a subcutaneous operation. The sawn surfaces are still left under their natural covering; they are not exposed under an extensive wound, which will sometimes gape in spite of care; but, being well protected, they unite, Dr. T. believes more kindly and readily than with the usual operation. This is, after a little practice, a very easy operation.—*Virginia Med. Monthly.*

CONTRIBUTION TO THE THERAPEUTIC APPLICATION OF THE POTASSIO-TARTRATE OF IRON.

BY DR. VINCENZO GOZZOTINO.

In this note the author takes up the consideration of the properties of this preparation as a topical medicament. After having quoted Ricord and others, who employed it as a modifying agent in superficial ulcers and indolent wounds, he states that he has found it most useful in cases of chancre (chancroid) of regular course, in which it acts beneficially as an antiphagedemic, and he likewise observes that under this method of treatment buboes are less frequently found by him than has happened when the sores were treated with caustics. He also lauds it as an antinecrotic, having arrested by means of the potassio-tartrate of iron, various gangrenous processes which had resisted the use of other remedies. He says that he has found it very useful in cases of old fistulae, injecting it within them; and he has found it suitable to cases of blenorrhœa, especially when of a torpid character, owing either to the individual constitution or to the condition in which the urethra was found. Lastly, he states that he has employed it with advantage for dressing a stump resulting from the disarticulation of a finger. Besides its efficacy in all these applications, he lauds the innocuousness of the potassio-tartrate of iron, which he insists has neither produced nor augmented any suffering on the part of the patient.—*Dr. P. Giorgi, Lo Sperimentale, from Il. Morgagni.*

Materia Medica.

OBSERVATIONS ON THE USE OF CHLORAL.

BY DR. OSCAR LIEBREICH.

Professor of Therapeutics, University of Berlin.

In consequence of the great interest which has been shown in the medicinal use of chloral, I beg to submit the following remarks:—

The recent death of Mr. F. M. Levison has, not unjustly, excited commotion in the medical world, and will give me an opportunity of communicating the view at which I have arrived from my own experience.

The normal dose of chloral hydrate in a case of simple insomnia should not exceed 1.25 to 2 grammes (19.3 to 30.8 grains). It is, however, of course, necessary to individualise. It will generally be observed, that persons who can take large quantities of alcohol in any form, or who are accustomed to its use, require a considerably larger dose; while for enfeebled and exhausted individuals, unaccustomed to alcohol, a smaller dose is sufficient. From my experience, I can assert that, even when chloral hydrate has been used for a year, the dose—provided that the patient's condition remains the same—does not require to be increased.

Chloral hydrate differs essentially from opium and its alkaloids, of which it may be asserted with certainty that, in order to produce the same effect on the organism during their continued use, the dose must be increased to an incredible amount. At the same time every observant physician will arrive at the conclusion that a patient never acquires the same tolerance of chloral hydrate as is characteristic of the use of opium and its alkaloids. A patient is not reminded of opium and morphia by want of sleep, but by a peculiar sensation which has been designated by the fairly appropriate name of "morphia-hunger"; it is not unlike the condition in which a smoker finds himself when longing for tobacco.

The amount of the dose for continued use varies according to the pathological conditions. For some persons one gramme is enough, others are only content with three grammes. The sudden production of dangerous symptoms by a normal

dose after chloral has been used for some time, has not been observed by me; and the statement as yet rests on no well-authenticated cases. I have already referred to this in my Treatise on Chloral Hydrate (third edition, Berlin), remarking that Crichton Browne's case (*The Lancet*, 1871, vol. i. p. 440) cannot be adduced as an instance of the injurious action of chloral. The patient, who was the subject of melancholia, took, for ten months, two-gramme doses of chloral, and then sudden death occurred after a dose of two grammes. How often does not sudden death occur in the insane without the cause being known? That death should occur suddenly after a single dose of two or three grammes may be explained by a fact which does not place the conscientiousness of the vendor in a very pleasant light. Before its introduction into practice, chloral was known to most chemists by name only, so that preparations were brought into the market which not only contained little chloral, but were loaded with noxious ingredients. I can here relate some facts showing how chloral hydrate completely fell into disuse in certain districts. In Bavaria, a patient of Dr. Siegmund, a Berlin physician, used no chloral, although suffering from severe insomnia, because it always made him ill; and he heard the same complaint from other persons. Dr. Siegmund repeated the experiment with another preparation of chloral, which at once produced the desired result; and from that time the patient has used this chloral without perceiving any bad result.

With such impure preparations it is impossible for the physician to learn the dose.

A case interesting in this respect has been described by a Bavarian physician, Dr. Mayer, in the *Correspondenzblatt der deutschen Gesellschaft für Psychiatrie und gerichtliche Psychologie*. A physician was obliged to administer to a female patient, on account of insomnia, six or seven grammes of chloral. After the administration of one of these doses, the physician was called to the patient, who was in a very deep sleep, which lasted forty hours. On inquiry, he found that the otherwise not very conscientious apothecary had brought a new preparation into use. In this case, the first preparation was fortunately only deficient in

chloral, without containing injurious substances. Other cases, however, may be related which cause suspicion.

In a hospital here chloral hydrate was used, and the physician came to me in a state of perplexity to describe the peculiar effect of the chloral. The patients did not obtain rest, but became delirious; their faces assumed a very red appearance, and their conjunctivæ were evidently injected. I had the chloral hydrate given to me, and now use it in demonstrating to my pupils the impurities, consisting of various products containing chlorine.

It is in America especially that a bad chloral hydrate is constantly supplied, and I am, therefore, not surprised that a dose of twenty grains should have produced a fatal result in a case reported there. Dr. E. F. Ingals relates, in the *Chicago Medical Journal and Examiner*, a case which Dr. Aschbough had seen in a friend's practice. This case is incapable of being analysed, as an exact description is not given, and I agree with the opinion expressed by the *Medical Examiner* that a case of this kind ought to be described clearly. Already before this, I believe, I was able to assert that a chloral or a commercial solution was in use, regarding which it was impossible to learn what material was employed in its manufacture.

From the first it has been my endeavour to furnish the manufacturers of chloral with complete details, so as to keep up a good preparation, and I have especially pointed out that the chloral hydrate in cakes must be purified from benzol by several crystallizations. There are then left dry crystals, very hard, with a slight odour permanently durable, in the place of cakes which contain a mass of impurities. These crystals can be kept for any time; they do not undergo decomposition, and are free from every impurity. As this operation is attended with greater labour, there is a slight increase in the price per pound. The result of this increase of price, however, is that the medicine is in the greatest danger as regards its employment, and the benefit which might be derived from it is almost entirely lost. As has already been observed, in nearly all America cakes are alone used, which, although perhaps good at first, are really decomposed. Of the

lozenges that are sold it is often alleged that they are made from the crystals. These have a bad effect, while the testing of chloral in solution cannot be carried out, since, in determining the chloral, the impurities undergo further decomposition.

As regards the dose, it is not possible to speak of a normal dose. I have already pointed out that ordinarily small doses aggravate the condition in trismus and tetanus. Here I have used as much as eight grammes with a good result. In the case of drunkards, however, I would recommend caution. It is also most advisable not to allow milk to be taken, as was done in the Balham case, since under its use the formation of chloroform goes on rapidly, and may occur in the stomach.

That exceptionally large doses of chloral may be taken by men is proved by the injection of chloral into the veins. An injection of 6.75 grammes of chloral produced in eleven minutes complete anæsthesia, and a sleep which lasted thirteen hours. I merely mention this fact, without entering on a criticism of the treatment.

From what has been adduced, it is evident that the first thing to be ascertained in any unfortunate case is whether the result is due to the chloral or to some other product accompanying it. According to my view all physicians should take especial care to use only pure crystals, or solutions regarding which there is good ground for trusting to the goodness of the material used by the manufacturers. When this is done it will be possible to speak of a sufficient dose, and to weigh equally the advantages and disadvantages of chloral against each other.

In my opinion coincident circumstances probably co-operated in the Balham case; they should not be overlooked, and, considering the novelty of the remedy, and the employment of a preparation recently brought into use for the first time, should not be charged as a subject of blame to the physician.—*London Lancet*.

T. R. Fraser, M.D., F.R.C.P.Ed., has been appointed Professor of Materia Medica in the University of Edinburgh, vice Sir Robert Christison, Bart., M.D., resigned.

USEFUL PRESCRIPTIONS.

BY J. LEWIS SMITH, M.D.

DYSPEPSIA.—The following treatment has, in my practice, probably relieved nine-tenths of those cases of dyspepsia which were not due to organic disease:

R. Bismuthi subcarbonatis... ʒij
Pepsini (vel Lactopepitini) ʒiiss. Misce.

Divide in crustulas, No. xij. Signe:—Take one wafer before each meal, and twenty drops of the following in wine or water after each meal.

R. Tincturæ nucis vomicæ,
Acidi muriatic; (dilut)... aa ʒj. Misce.

In cases attended by constipation and eructation of gas, the following will be found useful:

R. Pulveris carbon. ligni,
Magnes. calcinat..... aa ʒi
Pulveris rhei.....ʒij. ad ʒss. Misce.

S. Take half a teaspoonful to one teaspoonful in simple syrup or any convenient vehicle, three times daily. Of course, whatever the medicines employed, proper directions should be given in regard to the diet of dyspeptics.

The habitual constipation of infants is a common and troublesome complaint. It can sometimes be remedied when a wet nurse is employed, by the change from one nurse to another, and often by giving a little oatmeal one or more times daily. It is better to employ enemata of water, or water with sweet oil and molasses, for habitual use, than to employ the mildest preparations of those purgative drugs which are in ordinary use, and which produce catharsis by their stimulating or irritating effect upon the surface of the intestines, since the irritation which they cause is apt to impair the function of the gastro-intestinal mucous membrane; or the intestines may become so accustomed to them that it will be found necessary to increase the dose in order to obtain the desired result.

The treatment which I am at present employing for a decidedly strumous child, aged four years, in the New York Foundling Asylum, indicates the manner in which, in my opinion, the habitual constipation of young children can be best overcome. When I commenced attending in this institution in May of the present

year, I was informed that this child, who had scrofulous inflammation of one of the joints, and a greatly enlarged and pendulous abdomen, from a lack of tonic action in the muscular fibres, seldom had a stool without the use of a cathartic or a clyster. The circumference of the body, measured over the umbilicus, was twenty-three inches, and the abdomen was soft and painless on pressure. The following prescription was ordered :

R. Syr. calcis lactophosphat...1 part.
Olei morrhueæ.....2 parts. Misce.

S. Give two teaspoonfuls three times daily. Rub the abdominal surface three times daily with cod liver oil, making the inunction gently but firmly with the extended fingers.

From the day on which this treatment was commenced the abdominal protuberance began to subside, and stools have occurred regularly without further aid. In the ordinary habitual constipation of young children, I think that the muscular coat of the intestines needs stimulating to produce more active peristaltic and vermicular movements, and I know no safer and better way to produce this than by kneading and rubbing, just as we make the uterine fibres contract in parturient women. It insures more thorough manipulation if the nurse is directed to apply some kind of oil or other medication.

INFANTILE DIARRHŒA.—If a more active laxative is occasionally required I prefer the following :

R. Sodæ phosphatis.....ʒi.
Syr. calcis lactophosphatisʒiiss. Misce.

Give one teaspoonful, more or less, according to the age, as often as may be required. The two phosphatic salts, if properly prepared, dissolve without precipitation, and form a mixture, which is readily taken by the patient.

The treatment of this disease by small doses of calomel, combined with Dover's powder, has been very generally and properly discarded in New York.

R. Tinct. opii.....gtt. xvj.
Bismuth. subnitrat.....ʒij.
Syr. simplic.....ʒss.
Mistur. cretæ.....ʒss. Misce.

Give one teaspoonful every three hours to a child of one year.

R. Tinct. opii.....gtt. xvj.
Bismuth. subnitrat.....ʒij.
Pepsini (vel Lactopeptini)ʒiiss.
Syr. zingiberis,
Aq. menth peperitaa ʒi.

To be administered in the same dose as the foregoing. In severe cases the dose may be given for a time every two or two and a-half hours.

I have observed decided benefit from the use of $\frac{1}{10}$ th to $\frac{1}{8}$ th of a drop of tincture of ipæcacu-riha, given to the infant in a teaspoonful of cold water, every hour or second hour, till the nausea ceases.

In certain cases, in which the diarrhœa is not sufficiently controlled by medicines administered by the mouth, injections of $\frac{1}{10}$ th to $\frac{1}{8}$ th of a certain nitrate of silver, in each ounce of mucilage, will be found useful.—*Virg. Med. Monthly.*

TREATMENT OF MIGRAINE BY GUARANA.—True migraine, characterized by acute frontal pain commencing on one side, occasionally both, or going from one side to the other, usually lasting from twenty-four to forty-eight hours, with or without sickness, and relieved or cured by sleep, whether caused by wrong diet or not, will almost invariably yield to it. In young persons, not only does it cure each individual attack, but by persevering, the habit itself is broken. One cause of failure is the smallness of the dose, so that in many cases in which it has been tried before and failed, an increase of the dose has been followed by cure. Twenty-five grains for an adult female, thirty for a male, repeating in one or two hours, if necessary, is my usual dose.—*J. Hurd Wood, M.D., in British Medical Journal.*

ELECTRICITY IN INFLAMMATION.—G. E. Weissflog recommends the use of the fanadic current in the treatment of traumatic inflammation. It alleviates pain, lowers inflammation, and hastens absorption. The affected limb is placed in a water bath, into which one electrode is immersed, the other being applied to some healthy part of the body.

Translations.

DIGESTIVE PROPERTIES OF PANCREATINE.

Mrs. —, fifty-seven years of age, although of a good constitution, had been subject for a great many years to frequent attacks of erysipelas. The slightest cause was sufficient to bring on an attack. Various remedies, including the use of arsenic for more than a year, had given negative results. The condition of the patient was very miserable, for she was never certain, on retiring at night, that she would not awake in the morning with a face red, burning and swollen. It was remarked on several occasions that the attack, treated energetically at the start, by emetics and purgatives, was generally rendered milder and of less duration, and besides, that in the intervals the patient was troubled with pyrosis. We prescribed Dufresne's pills of pancreatine, four for a dose after each meal, without other treatment or change of diet. For five months, during which this treatment has been carefully followed, there has not been the slightest sign of erysipelas. Our patient has not enjoyed such good health for years. Recently an accident has confirmed, in a remarkable manner, the stability of the cure. From indigestion, the patient was attacked with vomiting and diarrhoea. Before the treatment with pancreatine, such an attack would certainly have been followed by facial erysipelas. On this occasion, not the faintest redness of the skin was seen.—*Dr. C. Girard in L'Union Medicale.*

CUTANEOUS ERUPTIONS IN THE COURSE OF SEPTICÆMIC SURGICAL AFFECTIONS.

Upon the whole, we may, with M. Verneuil and several other writers, lay down this almost absolute law: Whenever after a surgical operation or a traumatic lesion there appears an extensive scarlatinal rash, or a generalized scarlatiniform eruption, there is great need to fear pyæmia. Whenever after a chill, even though very slight, supervening on a wound or operation, the appearance of this eruption is found, we may affirm that purulent infection has occurred with sufficient certainty to enable us to pronounce a fatal prognosis.—*La France Medicale.*

THE BROMIDE OF LITHIUM.

The bromide of lithium, which was introduced into therapeutics a few years ago, is a very estimable remedy with sedative and lithontryptic properties.

Owing to its richness in bromine, which amounts to 91.95 per cent., it is much superior to all the other bromides, and the 8.05 parts of lithia per cent. which it contains, are capable of neutralizing a considerable quantity of uric acid, seeing that one part of lithia neutralizes four parts of uric acid.

By virtue of this double action, which has been demonstrated in the Paris hospitals and in private practice, the bromide of lithium is indifferently employed in cases of nerve disturbance or in manifestations of the uric acid diathesis. Experience has, in fact, demonstrated its favourable effects in epilepsy, chorea, insomnia, hypochondriasis, and in the various forms of the uric acid diathesis, such as nephritic colic, gout, and diabetes.

In those affections accompanied with pain, as gout and nephritic colic, the bromide of lithium would exercise its lithontryptic action, as well as act as a sedative and allay the sufferings of the patient, in a short time.

Hence it is believed that the bromide of lithium is as valuable a remedy as we possess in therapeutics, and we do not know how to recommend it adequately.—*La Andaluçia Medica.*

ON THE THERAPEUTIC EMPLOYMENT OF OIL OF LAMPREYS; PETROMYZON FLUVIATILIS.

Dr. Markonet has employed oil of lampreys in a large number of cases; this oil has the appearance of Provence oil, it is more fluid than cod-liver oil, has not so repulsive a flavour, and is better tolerated by the digestive organs. It promotes nutrition, having even a greater effect in this way than cod-liver oil. According to a quantitative analysis, it contains a little more iodine than the latter; which it might consequently take the place of it with advantage. The lampreys are captured in large numbers at the mouths of the rivers which empty into the Caspian Sea. Purified lamprey oil costs at Moscow eight times less than cod-liver oil.—*Lyon Medical.*

TREATMENT OF GLEET BY MEDICATED BOUGIES.

From *L'Union Médicale du Canada*.

In the *Revue de Ther. Medico-Chir.* the treatment of gleet by Reynal's bougies is very highly spoken of. These bougies are composed of gelatine and glycerine, medicated with sulphate of zinc, three centigrammes, and extract of belladonna, three centigrammes. They are six centimetres long, and in diameter, equal to thirteen or fifteen of Charrière's scale. They should not be oiled, but moistened, before introduction. The patient should micturate before using them. They take an hour to an hour and a-half to melt. In ninety-six cases in which they were used, all were cured, the average length of treatment being sixteen days. Some cases were of five or six years' duration, and had tried every method of treatment.

From *Le Progrès Médical*.

According to Montard Martin the lateral movements of the knee are not a sign of loss of the external ligaments, but point rather to destruction of the articular cartilages. On the other hand, the cartilages may be destroyed without there being grating on moving the joint.

MEANS OF ARRESTING HÆMORRHAGE.

Hæmorrhages in general, and metrorrhagias in particular, whatever strictly be their proximate cause, are, as we know, very often difficult to suppress. Hæmostatics internally, astringent injections of all kinds, the tampon, etc., frequently fail. But a means which has succeeded with me in an almost infallible way, is the injection of hot water at 50° centigrade thrown directly upon the neck (of the uterus) by means of the tube of an irrigator removed from its caoutchouc canula.—*Le Progrès Médical*, from *L'Union Médicale*.

THIN PENCILS OF NITRATE OF SILVER.—These may be prepared by fusing the nitrate in a capsule, and slowly drawing up the liquid by suction, into a glass tube. When cold, warm over a spirit-lamp and push out the pencil with a knitting needle.—*New Remedies*.

THE CANADIAN

Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.

TORONTO, AUGUST, 1877.

"THE BEST OF FRIENDS MUST PART."

Our autumn pruning will commence with the September number. To a good many of our readers this announcement will explain itself when they find that the August number of THE CANADIAN JOURNAL OF MEDICAL SCIENCE is the last they will receive until their accounts with the proprietors are settled. This applies especially to those who see the figures 1876 still after their names. Though separated from them for a time, which we hope will be but brief, we shall ever hold them in remembrance, and they must console themselves as best they can by sighing with Maud Muller for "what might have been." Delinquents sincerely, substantially, and seasonably repenting can have the missing numbers supplied.

THE MEDICAL COUNCIL.

We devote more space this month to the proceedings of the Medical Council than they really merit, but if we did otherwise we might be accused of prejudice.

Our readers can now judge of their value for themselves. One of our associates who tried to analyze them, declares that he found only four grains of wheat in the whole mass of chaff, or in other words, the Council did four things during its session of four days.

1st. It received the report of the Examiners.

2nd. It modified the curriculum on the recommendation of the Educational Committee.

3rd. It refused to register certain persons without examination.

4th. It erased a name from the Register.

And, yea verily! *we* find a fifth grain, which, although it looks very like chess, we are willing to count in, and as it is doubtless the personal experience of the Council, it may be regarded as a confession of past sins, the forerunner of repentance, and the harbinger of better things to come.

But we are glad *even to be assured* that the Council will "on all occasions, by exhortations and scientific explanations . . . by their united and collective influence," endeavour to suppress the vice of intemperance.

We think a little personal example would have more influence than all their "collective exhortations." On the whole, we begin to regard the Council with more favour, and think we see evidence of improvement, the progress of which we shall not fail to chronicle.

It has been no pleasant duty to apply the caustic to the moral ulcer by which the harmony and the usefulness of the Council were being endangered. We have always felt a deep interest in the Council, and with all its faults we would be sorry to have it destroyed, and just because we desire for it a long life of usefulness, we have thus fearlessly criticised its doings and censured its misdeeds. But some of its members still indulge in impertinent twaddle about the schools swamping the territorial representatives, &c., making insinuations as uncalled for as they are unjust.

We can assure these gentlemen that if it were not for the few discreet men thus traduced, the Medical Council would very soon have shared the fate of the "cities of the plain" by the voice of an outraged profession.

However much the Council may have felt that Dr. Hodder was being unfairly thrust out of his position as representative of Trinity Medical School by Dr. Geikie, *they* were not called upon to engage in the fray.

To our mind their plain duty was to admit Dr. Geikie to the seat in the Council when he presented the proper credentials in due form, and then leave him and Dr. Hodder to settle their differences in their own way.

There was no use in saying that two men from the same school could not sit in the

Council at the same time, for the law is very clear on that point.

We have no evidence to show that Dr. Hodder ever appeared in the Council after Dr. Geikie secured the appointment, and we believe that Dr. Hodder has too much self-respect to attempt to force himself into a position in which he had been supplanted. There is no doubt Dr. Hodder's age, position, and previous occupation of the seat would apparently have justified his re-appointment to it.

THE CANADIAN MEDICAL ASSOCIATION.

This Association, as will be seen by the advertisement, meets in Montreal, on Wednesday, September 12th. We hope that many in Ontario will avail themselves of the opportunity, and muster strongly. An association such as this, composed of members from all parts of the Dominion, assuredly deserves the hearty and active co-operation of those who think that any benefit accrues from the annual gathering and interchange of opinions of men who are working together in the same branch of science. Many important papers will be read at the ensuing meeting, and the discussion upon them should be of great interest. All ought to be willing to contribute their mite to the common fund of knowledge, as no one can practice our profession for any length of time without having experiences and difficulties upon which some light might be thrown, by comparing them with or adding them to those of others. Arrangements will be made with the various railroad and steamboat companies for the issue of tickets at a reduced rate, so that a pleasant holiday may be spent without great expense. Many of our readers are not members of the Association; but, we need only remind them that there is nothing to prevent their becoming members at the coming meeting, and taking part in all its proceedings.

PERSONAL.—Dr. F. Le. M. Grasset, of Toronto, has been elected Fellow of the Royal College of Surgeons, Edinburgh, and Fellow of the Obstetrical Society, Edinburgh.

Medical Council Examiners for the year 1877-8: *Materia Medica and Sanitary Science*, Dr. H. H. Wright, Toronto; *Anatomy, Descriptive and Surgical*, Dr. Bergin; *Medicine, Medical Pathology, Medical Diagnosis, Botany*, Dr. Fowler, Kingston; *Midwifery and Diseases of Women and Children*, Dr. Workman, Toronto; *Surgery, Surgical Pathology and Microscopic Anatomy*, Dr. M'Laughlin, Bowmanville; *Chemistry, Theoretical and Practical*, Dr. Morrison, Newmarket; *Physiology*, Dr. Kennedy, Toronto; *Medical Jurisprudence and Toxicology*, Dr. Logan, Ottawa; *Homœopathic Examiner*, Dr. Morden, London. *Matriculation Examiners*: A. McMurchy, M.A., Toronto; Samuel Wood, M.A., Kingston.

PHOTOGRAPHS.—We have received from R. Berendsohn, of New York, photographs of Sir Astley Cooper, John Hunter, and Dr. Bright. Any one wishing to have pictures of these celebrated men will find those sold by Mr. Berendsohn good and cheap.

We have received a communication signed Ottawa, which has come to hand too late for insertion in this issue. We shall be glad to give it space in September, but in accordance with rules, must ask "Ottawa" to send us his card, not necessarily for publication, &c.

MEDICAL SCHOOL IN OTTAWA.—It is reported that a new medical school is to be started in Ottawa.

BOOK NOTICES.

Syphilitic Phthisis. By WM. PORTER, M.D., St. Louis.

Annual announcement of McGill University Faculty of Medicine. Session 1877-78.

Seventeenth Annual announcement of the Bellevue Hospital Medical College. Sessions of 1877-78.

Transactions of the 79th Annual Session of the Medical and Chirurgical Faculty of Maryland.

Report on Dermatology. By LUNSFORD YANDELL, M.D. Read before the Kentucky State Medical Society.

Reply to Dr. J. Marion Sims' Pamphlet, entitled "The Women's Hospital in 1874." By Drs. E. R. PEASLEE, T. A. EMMET, and T. G. THOMAS.

Recherches cliniques et therapeutiques sur l'Epilepsie and L'Hysterie Compte rendu des observations recueillies a la Salpêtriere, de 1872 a 1875. Par Bourneville.

The first part of the work treats of *L'etat de mal epileptique*, which is characterized by (a) the almost incessant repetition of attacks, often running in to each other; (b) collapse varying in degree, even to absolute coma without return of lucidity; (c) hemiplegia more or less complete, and fugitive; (d) frequency of pulse and respiration; (e) and especially by considerable elevation of temperature, which remains in the intervals of the attacks, and even increases when they have ceased. Full clinical notes are given of a typical case ending fatally. The second part is devoted to the therapeutic effects of ammoniated sulphate of copper, monobromide of camphor, ice, oxide of zinc, and nitrite of amyl, a number of cases being given under each remedy. The conclusions arrived at are that the copper gives negative results. The monobromide of camphor diminished the number of attacks, and is of most benefit in cases where vertigo is the prominent symptom. The application of ice had a beneficial effect, especially in cases where permanent frequency of the pulse, palpitations and precordial pains were present. Oxide of zinc diminished the number of attacks in half of the cases. Nitrite of amyl in five drop doses, by inhalation, warded off the attacks in a large number of cases of epilepsy and hystero-epilepsy. In one case no return of the disease had taken place after eight weeks; in another, after four months. Some of the cases were subject to attacks daily. The third part of the work is devoted to the study of two cases of hystero-epilepsy. The clinical histories are given very fully.

Communications.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

HARVARD SCHOOL OF MEDICINE.

BY WILLIAM OSLER, M.D.

It may be interesting to some of the readers of this JOURNAL, and instructive to those engaged in medical education in this country, to learn somewhat of the internal economy of what must be regarded as the most progressive medical institution on this continent.

A week spent in Boston in the spring of 1876, and another in April of the present year (when I had the company of my colleagues, Drs. Rose and Shepherd), have made the details of the work in several departments of the Harvard School of Medicine tolerably familiar, enabling me to speak, with some degree of accuracy, of the system there in vogue.

Up to 1871 the plan of education did not differ materially from that at other American schools—a winter session of four or five months, and an optional summer course; the requirements for a degree being no greater than at similar institutions.

At this date sweeping changes were made in the methods of teaching, the length of residence, and the examinations. I have been given to understand that, to a large extent, these measures were forced upon the Faculty by President Elliot in the face of a strong opposition, and, in the words of his report for '74-'75, "so rapidly were they enforced that not a few well-informed persons thought that the school would be killed outright." Instead, however, Harvard has since entered upon a career of educational prosperity which places her in a most enviable position among American schools, it being almost universally acknowledged that her degree, and her degree alone, carries with it the guarantee that the possessor has spent the proper time in the acquisition of medical knowledge, and that he has passed examinations which are thorough and searching.

Let us see in what the changes consist. Briefly, they are these:

1st. A greatly increased length of residence. The session begins on the Thursday following the last Wednesday in September, and con-

tinues until the last Wednesday in June, being divided into two terms with a vacation of a week between.

2nd. The course of instruction, extending over three years, "has been so arranged as to carry the student progressively and systematically from one subject to another in a just and natural order." The studies for the first year students are Anatomy, Physiology, and General Chemistry; for the second, Medical Chemistry, *Materia Medica*, and Pathological Anatomy, Clinical Medicine and Surgery; for the third, Medicine, Surgery, Clinics, Therapeutics, and Obstetrics.

3rd. Written examinations have been substituted for the oral, and students must pass in the subjects of one year before they can pursue those of the next. The above is an outline of the system of education now generally known as the *graded* system; one which is, no doubt, likely to be adopted by very many of the medical schools.

As was expected, a considerable reduction in the numbers attending Harvard followed the adoption of these measures; thus, while in '70-'71 there were 301 students, in '71-'72 there were only 203, in '72-'73 but 170, in the following session, 175, in '74-'75 the number rose to 192, in '75-'76 to 206, while there is an additional increase in the present session. The effect of the reduction in numbers upon the income was compensated for by the increase in the fees, which are now \$200 for a year; so that while with 301 students in '70-'71 the income was only \$22,717, in '74-'75, with 192 students, it was \$36,661; and the last session the income exceeded the expenditure by \$6,000.

The class of students has also much improved, owing to the increased standard demanded for graduation. In '70-'71 only 23 per cent. of those attending the school held literary or scientific degrees; in '75-'76 the number had risen to 42 per cent. An interesting fact since the new regulations were enforced is the striking reduction in the number of students from the British North American Provinces, chiefly Nova Scotia and New Brunswick; in '70-'71 ten per cent. were from the Dominion, but in '75-'76 only two per cent. Several Canadian students passed on to the New York schools,

while Dalhousie College keeps many Nova Scotians at home, and there has been a slight increase in the attendance of Lower Province men at McGill during the past four years.

On and after September of this year there will be a matriculation examination for admission to the school; another most important step, and one the results of which are looked forward to by Harvard men with some anxiety. To us in Canada this may appear strange, but it is the first time that any Medical University or School in the United States has sought to fix a standard of general education for the men who aspire to be her graduates. A reduction in the number of students is expected in consequence of it; and, to make provision against the possible diminution in tuition fees for the succeeding terms, the school has been husbanding its resources for the last three years. (Report '75-'76.)

We shall now refer briefly to the work in some of the departments. Anatomy is still presided over by Dr. Holmes—better known to us in his literary than in his professional capacity. I was not so fortunate as to hear him lecture, but attended a recitation, the equivalent of the weekly examination or "grind" of our schools. The subject was the cranial nerves, and the answering, for first year students, was creditable. I noticed, however, that very many names were called before a respondent was found, silence being apparently with them the "not prepared" of our students. The humour of "The Autocrat of the Breakfast-table" glanced out here and there, and enlivened the hour. Good sensible questions were put, but no special minuteness in answering seemed to be demanded. Anatomy is a first year subject only, but practical anatomy (till January) and surgical anatomy form part of the second year studies. From what we could gather it does not appear that the same attention is given to practical anatomy at Harvard as in the London or Canadian schools. It is on the time-table from 5 to 6 daily until May; and yet, at the beginning of the second week in April, the dissecting room was empty.

The surgical anatomy demonstrations by Dr. Cheever to the second year men were excellent and just what they should be. The

examinations on this subject are by written papers. How, by the way, this most anomalous method of testing a man's knowledge on such an eminently practical subject as anatomy crept into the schools would be interesting to know. Happily, however, it is gradually yielding to the more rational system of practical examinations; and for this the profession has largely to thank the Royal College of Surgeons. We would earnestly commend to all medical teachers on this side of the Atlantic the consideration of examinations in anatomy as conducted by that corporation.

Physiology, under the care of Prof. H. P. Bowditch, received the attention that would be expected from such a well-known worker; his time being wholly devoted to the subject. In addition to lectures and recitations there are exercises called conferences, which form a feature of this school. For example, in physiology, a certain number of subjects are announced, chosen by the students, and essays prepared, which are read in due order before the class, and criticised by the Professor and students. Practical physiology is taught in the laboratory, and at my first visit I had the pleasure of seeing a class of students working out for themselves upon frogs the chief facts in the physiology of reflex action.

The method of teaching chemistry (Prof. Wood) appeared, from what we saw, to be specially adapted for medical students. In the first year, general chemistry is taught, and, to a very large extent, by laboratory work. Thus, while in both terms there are 36 lectures and the same number of recitations, 500 hours are also devoted to practical work. In the second year, medical chemistry is dealt with in the same way, and in the laboratory the urine and poisons are thoroughly studied. In this way sufficient time is devoted to the subject to enable the student to master properly the methods of analysis, thus making the teaching really effective. Pathological anatomy is well represented by that veteran pathologist, Professor Jackson, and Assistant Professor Fitz, upon whom the teaching mainly devolves. It is a second year subject, and occupies a much more prominent position than is usually given to it, there being lectures or recitations daily through-

out the session. Considerable attention is also paid to pathological microscopy, both medical and surgical. Autopsies are conducted in the *post-mortem* rooms of the Massachusetts General and the Boston City Hospitals. The new autopsy room at the former is one of the most perfect in the world. And here I would wish to acknowledge the extreme kindness of Dr. Jackson in demonstrating to us the noteworthy specimens in the Warren Anatomical Museum and in that of the Society for Medical Observation. To him it was evidently a labour of love, to us a time of much profit. It is a rare and truly pleasant thing to see combined in one man the enthusiasm that too commonly fades with youth and the ripe wisdom of old age.

Materia medica and therapeutics are divided; the former is a second year subject, and is taught largely, as in some of the London schools, by practical demonstrations; the latter is a final branch, and is taught by lectures. My time, I am sorry to say, did not permit me to see the working of this department.

The method of clinical teaching, both in medicine and surgery, is, in some respects, peculiar to the school. In addition to the ordinary bedside instruction and lectures upon cases in the theatre, there are what are called clinical conferences. Cases, either in the hospitals, or, as more frequently happens, to be visited at their homes, are given to the students for diagnosis and treatment; written reports of these are prepared, and are read before the class, to be criticised by the Professor and students. Many cases thus prepared are simply corrected by the Professor and handed back. Without doubt this forms an admirable method of exercising in the student the faculty of close observation, and for enforcing accuracy, since when a man knows that his report of a case will be subjected to close criticism, it tends to make him additionally careful. Nothing that I saw at Harvard pleased me more than the teaching of clinical medicine; it is scientific, thorough, and practical.

I regret that I cannot speak personally of the surgical teaching of the school. In obstetrics operative courses upon the cadaver, after the method practised in Vienna, have been intro-

duced, and are very popular. Clinical instruction is also given in syphilis, otology, diseases of women, diseases of children, and in diseases of the nervous system, by specialists in these subjects.

By no means the least important of the many changes at this school is that in the manner of conducting the examinations, which is now by written papers, instead of by the short oral test, in vogue at most of the American colleges. Each student is given a number by the janitor, known only to that official, and, I believe, to the Secretary. This he appends to his answers to the examination papers, and when the lists are put up, he looks for his number. If figures equivalent to more than 50 per cent. of the total marks are against it, he knows that he has been successful. This is a very simple and efficient way, and obviates one serious objection to the principle of teachers in schools examining their own students. The following facts speak for the quality of the final examination. In '74-'75 thirty-eight candidates for the degree of doctor of medicine presented themselves, of whom eight were rejected. In '75-'76 fifty-six candidates offered themselves, of whom fifteen were rejected and five withdrew. It would be interesting to get similar data from the New York and Philadelphia schools.

It is a matter for surprise that some of the leading colleges in the United States have not followed the good example of Harvard. No doubt it would be accompanied for the first few years by a great falling off in the number of students, and consequent diminution in income, and this, in many instances, is avowedly the chief obstacle to so desirable a step. One or two of the smaller schools have adopted the graded system, and I see by a recent American journal that the University of Pennsylvania has decided to pursue it, though in a modified and curtailed way. These are indications that the medical schools in the United States are being stirred up to some sense of the requirements and dignity of the profession they teach. It is high time. The fact that a Canadian student, after completing his second winter session (not even passing his primary), can go to the University of Vermont,* and, I doubt not, to many other institutions, spend ten weeks and graduate, speaks for itself, and shows the need of a sweeping reform.

* I mention this school because an instance, such as I refer to, came under my notice. The gentleman is at present a fourth year student of McGill College.

Meetings of Medical Societies.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

MEETING OF MEDICAL COUNCIL.

The Medical Council of the College of Physicians and Surgeons of Ontario met on the 3rd of July in the County Council Chamber. The President, Dr. Daniel Clark, took the chair at a quarter to three o'clock. He said their was nothing of great consequence to bring before them. All the members, he observed, had come up with the exception of one, and that one was prevented being there through sickness. They had, they were aware, been somewhat hurriedly removed from their rooms in the Mechanics' Institute building. The Government had, however, been seen, and they had offered the Council the use of the old King's College University. They will have the use of the building in about seven or eight months. While the deputation was interviewing the Government mention had been made of a new Anatomy Act, having for its object the supply of bodies from the gaols and other public institutions for the use of students. The want of subjects for the use of students had been greatly felt. While acknowledging the able way in which the proposed by-law had been drawn out, he had to say that in his opinion it would be far better to reduce the by-law very considerably in size. A few clauses would, he thought, be sufficient to cover the object intended. Besides, it would be better to make the clauses brief, as the subject was one which was not the most agreeable for discussion in the House. He had to state, moreover, that the question of Government aid had also been asked, and he (the President) thought if the matter were fairly brought before Parliament, a grant would be given to aid them in their Medical Examinations. The Veterinary College receives such aid, and aid to their institution would, he felt sure, be also granted. He had much pleasure in stating that the question of reciprocity between medical practitioners in this country and in Britain had been considered in a very friendly way by the Faculty on the

other side. The Home Medical Faculty had evidently got to have a better estimation of the high standard of medical advancement in Canada. He (the President) had written to the Premier of the Dominion to bring the matter before the Home Government, and he had done so. It was safe to assume that the matter had been favourably discussed at home. This question had assumed a very favourable phase, and it was a pleasant duty he had in stating that the matter had turned out satisfactorily. He would add further that he was obliged to them for the support he had received during the time of his presidency.

On the roll being called the following members of the Council were found to be present:— Drs. Aikins, Toronto; Allison, Bowmanville; Berryman, Yorkville; Bethune, Glanford; Bogart, Whitby; Campbell, Toronto; Carson, Whitby; W. Clark, Guelph; Cornell, Toledo, Ont.; Edwards, Strathroy; Henderson, Strathroy; Henwood, Brantford; Hyde, Stratford; Irwin, Wolfe Island; Logan, Ottawa; McLaughlin, Enniskillen; Morden, London; Morrison, Newmarket; Miner, Merrickville; Ross, Toronto; Vernon, Hamilton.

The Council then proceeded to the election of officers, with the following result:—

President, Dr. D. Clark (re-elected); Vice-President, Dr. Campbell (re-elected).

On motion, it was agreed that the standing committees be the same as last year.

The motion was carried unanimously.

PETITIONS.

A petition was received on behalf of Dr. Geikie, enclosing certificate of charter from Trinity Medical College, and asking that he be admitted as a member of the Council to represent that College.

Dr. BERRYMAN objected to the course taken, and moved that the petition be referred to the Credentials Committee.

Dr. HYDE thought it was entirely out of place to deal with the matter unless in the way pointed out by Dr. Berryman.

Dr. CLARKE and others spoke on the same subject, upon which

Dr. GRANT moved, seconded by Dr. EDWARDS, "That Drs. Clarke, Campbell, Morrison,

Bethune, McLaughlin, and Lavell do constitute a committee to examine the credentials which may be presented during our present session.

The motion was carried.

There were several other petitions received, which were referred to the proper committees to be dealt with in due form.

REPORT BY THE BOARD OF EXAMINERS.

Dr. WORKMAN's report on behalf of the Board of Examiners was read. The document is a very flattering one in regard to the educational advancement of medical students. One clause reads as follows:—

The total number of candidates who presented themselves was 194, of whom 188 passed—45 as first year's men, 63 primarily, and 80 finals. The proportion subjected to oral examination was small.

NOTICES OF MOTION.

DRS. ALLISON, CAMPBELL, and BERRYMAN gave notices of motions. On motion of Dr. BERRYMAN, seconded by Dr. W. CLARK, a committee was appointed to draft a resolution of regret at the absence of Dr. Dewar.

EVENING SEDERUNT.

The President took the chair at eight o'clock. The Secretary called the roll, after which

A COMMUNICATION

or petition was read on behalf of Dr. Forbes, lately from Pennsylvania, praying that all prosecutions against the said Dr. Forbes for practising in Canada without a license be suspended.

The petition was referred to the Credentials Committee.

REPORT.

Dr. LAVELL, Chairman of the Credentials Committee, gave in the following report:—

MEDICAL COUNCIL COMMITTEE-ROOM,
July 3, 1877.

The Committee on Credentials beg leave to report that they have had before them a certificate signed by Dr. N. Bethune, as pro-Dean, and Dr. W. B. Geikie, as Secretary of the Corporation of Trinity Medical Board, appointing Dr. W. B. Geikie as the representative of said Corporation to this Council, and being sure that Trinity Medical School is separate and distinct from the University of Trinity College, and not a part thereof, recommend that the said Dr. W.

B. Geikie be admitted to a seat at this Council as such representative.

(Signed) Dr. LAVELL, Chairman.

Dr. BERRYMAN moved that the Council go into Committee of the Whole to consider the Report.

The Council therefore went into Committee of the Whole, with Dr. Macdonald in the chair.

Dr. BERRYMAN said that he moved the Council into Committee of the Whole so as to find out how the Committee could reconcile their recommendation with the circumstances of the case.

Dr. LAVELL, in order to satisfy Dr. Berryman, read a portion of the Act incorporating the Trinity Medical School.

Dr. MUIR then stated that the Executive of the Council had neglected the interests of the College of Physicians and Surgeons of Ontario in allowing such an Act of Incorporation to be passed. There is no saying where such multiplication of representatives will end. He would also point out that the voices of territorial representatives are silenced by the representatives thus introduced from Medical Schools.

Dr. D. CLARK said he considered the Executive had not fallen short of their duty in permitting the passing of the Act of Incorporation. Were they to go down to Ottawa and dictate to the Legislature what they shall or what they shall not do? He might now state that it would be a question whether Dr. Hodder has a right to sit in this Council Board without resigning his position in the Trinity Medical College.

Dr. CLARK, Guelph, said that Dr. Clark's remarks were all wrong. There could be no question as to the fact that they had been very negligent in not having the Council properly represented at the House of Assembly, and in failing to oppose the passing of such an Act of Incorporation. The fact is, they will be entirely controlled by representatives from schools soon to the exclusion of territorial representatives. While saying all this, he had no doubt of Dr. Geikie's having a right to sit at this Council Board; and he was of opinion that Dr. Hodder has also a right to be present as a representative from Trinity College. He regretted that such an Act of Incorporation had been passed, as he

will feel himself bound to support every application for an Act of Incorporation. He said he was no prophet, but he could plainly see that the precedent formed by this case will have an injurious effect on the Medical Council, in fact it will, he felt sure, have the effect of breaking it up as a Territorial Representative Assembly.

Dr. BERRYMAN said he rose in the place of an apologist. He was a member of the Executive, but he knew nothing of the Act, for he never saw it. He felt sure that the members of the Executive had been apathetic or negligent in allowing such an Act to be passed. It is too late now to protest against the Act, however. He felt sure that it was never intended that the Act should have such an effect. It was evident that the territorial representatives will be snuffed out; they cannot help it. Then the government of the Council will fall into the hands of the school representatives. He regretted that the thing had been done, but it cannot be helped. He had no doubt whatever but that Dr. Geikie will have a right to take his place at the Council Board. Dr. Hodder will also be entitled to hold his seat.

Dr. LAVELL said he could not see why Dr. W. Clark and Dr. Berryman should confound two ideas. Although, for instance, Victoria College Medical School got an Act of Incorporation, that would not entitle the teacher in the School to sit at the Council Board.

Dr. BERRYMAN said it would entitle such teacher to sit at the Council Board just the same as himself (Dr. Lavell).

Dr. LAVELL—Well, if it does, it must be admitted, however, that there cannot be two teachers of one Medical School representatives at this Council Board. In this way Dr. Hodder, since the incorporation of Trinity Medical College, cannot sit as a representative at this Council unless he resigns his position as a teacher. He said so with all due respect to Dr. Hodder, whose name came up only as a necessity. Besides, he did not see where the Council had suffered by the introduction of school representatives. As far as he was aware he thought that the school representatives had done good service since they came among them. Whatever they might say, the school representatives had helped the interests of the Council as much

as the territorial representatives. He would again repeat that before Dr. Hodder can now take his place at the Council Board he must resign his position in Trinity Medical College.

Dr. Ross, as a territorial representative, said he did not think there was so much chance of the territorial representatives being swamped by the school representatives. Indeed, he looked forward to the time when each territorial division shall have two representatives instead of one. Moreover, in the face of the Act of Incorporation, there cannot be two representatives from the one school.

In Section 8 of the Ontario Medical Act the following sentence deals with the point at issue:—

Provided always, that no teacher, professor, or lecturer of any of the before-mentioned colleges and bodies shall hold a seat in the Council except as the representative of the college or body to which he belongs.

Dr. BETHUNE, representative of Queen's College, Kingston, said that he did not think that the school representatives had in any way overridden the territorial representatives. He thought also that these repeated attacks on the Medical Schools came with a bad grace.

After some further remarks by Drs. GRANT, Hyde, Muir, and Edwards,

Dr. MUIR, as an amendment on the proposal to adopt the report, moved, seconded by Dr. Ross,

That one teacher of Trinity Medical School being already a member of the Council, that institution cannot, under the Medical Act, send another representative here.

The amendment was carried.

Dr. W. CLARK said that he had heard of a man named Moore, said to be a prosecutor of the Council, who had been going about the country imposing on people, and in one place he had gone off without paying his hotel bill.

Dr. LAVELL said it was too true about Moore. He had been doing the Council a great deal of harm, getting them into disrepute. He had even gone so far as to collect subscriptions to pay his expenses.

Dr. PYNE, the Secretary, said he had been annoyed with letters from this man.

The PRESIDENT said he had had letters from this man Moore also dunning him for money to

pay his expenses while going about attending to prosecutions, which, as a rule, fell through under his care.

It was ultimately agreed that the whole question be rigidly inquired into.

Re DR. DEWAR.

The Committee appointed to draft a resolution of regret at the absence and serious illness of Dr. J. F. Dewar, reported the following:—

That it is with great sorrow we miss our zealous and courteous colleague, Dr. J. F. Dewar, from his accustomed seat at this Council. We feel we lose in his absence much wise counsel and vigorous labour in the service of our responsible duties.

The report was adopted, and a copy was instructed to be sent to Dr. Dewar.

SECOND DAY--MORNING SEDERUNT.

The President took the chair at 10.25 a.m.

The Secretary called the roll, and read the minutes, after which

Dr. GEIKIE stood up and claimed his seat at the Council Board. His credentials, he said, were duly approved of, and he maintained he had a right to sit at the Council Board. He had nothing, of course, to do with the manner in which the action of the Council might affect any other person, but as far as he was concerned, he maintained he had a right to be present.

The PRESIDENT said that the motion passed last night did not mention the name of Dr. Geikie.

DRS. W. CLARK and LAVELL said that there could be no doubt the resolution of last night excluded Dr. Geikie from sitting at the Board.

Dr. BETHUNE, as one of the minority, said he did not care to move in this matter; but he thought that they had excluded Dr. Geikie; he thought that Dr. Hodder's position is changed. He is representative of Trinity College, not of Trinity Medical School.

Dr. LAVELL moved, seconded by Dr. McLAUGHLIN, "That the question of the right of Dr. Geikie to be present and sit at the Council Board be again opened up for discussion."

Dr. ALLISON moved as an amendment, seconded by Dr. HYDE, "That Dr. Geikie has no right to sit at this Council."

Dr. EDWARDS then moved as an amendment to the amendment, seconded by Dr. AIKINS, "That Dr. Geikie cannot take his seat in this Council as representative of Trinity School, as Dr. Hodder, a teacher in that School, is now a member of this Council."

The motion was carried.

TREASURER'S STATEMENT.

Dr. AIKINS then read the treasurer's statement. The amount of cash intromitted during the year is \$10,519 81. The balance on hand is \$5,208 14.

On motion, the account was referred to the Executive Committee.

Dr. BERRYMAN presented his motion, having reference to the amending of the Act for the proper registration of births, deaths, and marriages.

In presenting the motion, Dr. BERRYMAN said that he would speak on it in the afternoon.

Dr. CAMPBELL moved the reading of the By-law relative to the regulation of the proceedings of the Council, a second time.

The motion was carried.

Dr. CLARK then moved, seconded by Dr. McLAUGHLIN,

That the report of the Public Prosecutors, as well as all papers connected with the subject of other prosecutions, be referred to the following gentlemen as a Special Committee: Drs. Herwood, Ross, Logan, Macdonald, Hyde, Irwin, W. Clark, and Allison.

A letter to the President from Beatty, Chadwick and Biggar was read, demanding the admission of Dr. Geikie to a seat in the Council Board, and threatening legal proceedings in case of a refusal.

Dr. HYDE thought they had better take legal advice.

The PRESIDENT also thought they should consult their legal advisers.

Dr. MUIR said he would second the motion of Dr. Hyde.

After a remark or two by Dr. Bethune,

Dr. MUIR said he thought they were forgetting the main point, viz., that it was sought to send two representatives from this school, and this must be prevented.

Dr. McLAUGHLIN moved that the communication be laid on the table.

Dr. LAVELL seconded the motion.

Dr. GRANT thought that it would be better to take Dr. Geikie in as a member of the Council. He would therefore move, "That Dr. Geikie be this afternoon admitted to the Council and allowed to take his seat."

Dr. HYDE thought that such a course as Dr. Grant proposed would have the effect of placing the Council in a most humiliating position, and he was strongly opposed to it. They had taken a certain course yesterday, and they should uphold it.

Dr. W. CLARK said that no matter what the expense might be they should contest the matter, and see what the position of these schools was as regards the representatives from them. They had had a letter from lawyers before they had had time almost to discuss the matter thoroughly, and it was not to be supposed that this Council is to be bullied by any legal parties into doing anything which they have any doubt about.

The motion of Dr. McLaughlin, which was seconded by Dr. Lavell, was then carried.

THE RECIPROCITY QUESTION.

Dr. ALLISON, as intimated yesterday, moved his resolution regarding the reciprocity between British and Canada Medical Faculty.

The following is the motion :

That as the Medical Council of Great Britain at a recent meeting has signified its intention of conceding the principle of reciprocal medical registration between the Colonies and the Mother Country, the recognition of which principle is hailed by this Council as one fraught with mutual advantage to the two countries. That as soon as that body is empowered by Imperial Statute, and gives effect to the said statute by the passing of a by-law or otherwise, that upon this Council receiving due notice of which, the same reciprocal privilege will be accorded to the registered graduates and licentiates of the parent country, who may desire registration in the Province of Ontario on paying the usual fees. And that a copy of this resolution be forwarded by the Registrar, duly authenticated by the seal of this Council, to the Medical Council of Great Britain.

Dr. HYDE gave some explanations regarding the motion, on which

Drs. CAMPBELL, McLAUGHLIN, LAVELL, AIRKINS, &c., gave their views in regard to the

question of reciprocity; these being in effect that the motion if carried would have an injurious effect on the Ontario Medical Council. The principal part of the discussion had special reference to the matter of registration, the Imperial Act of Great Britain calling on the colonies to register all applicants who present themselves from the Old Country.

The PRESIDENT said there was one point they seemed to avoid reference to. They have an Ontario Act to guide them in the question of registration, and he would say that if any one would register under an Imperial Act while he had an Ontario Act to guide him he ought to be lynched.

Dr. BROUSE thought that the Medical Faculty here have a right to deal with their own educational matters independent of the Acts passed in Great Britain.

Dr. BETHUNE supported the views of Dr. Brouse.

Dr. Allison's motion was then put and lost by a majority of 21 to 3.

Dr. ALLISON then put the following motion :

That in consequence of the widespread feeling of dissatisfaction that exists among the members of the medical profession throughout the Province with the manner in which the medical examiners are annually appointed, it is hereby resolved that in future no member of the Council shall be appointed to that office, but that the appointment of the medical examiners shall be made from among the qualified members of the profession outside the Council; that five of the examiners be chosen from among the members of the College of Physicians and Surgeons in the territorial divisions who are unconnected with any of the teaching bodies or schools of medicine, and the remainder from among the said teaching bodies or schools of medicine, or other qualified bodies now or hereafter existing in the Province of Ontario.

After Dr. W. Clark had spoken on the motion it was put to the meeting and lost by 20 to 4.

Dr. W. CLARK thought it necessary that they should now have some place of their own to meet in. The County Council had been kind in letting them have their Council Chamber as a meeting place, but they could not always have this. He therefore moved, seconded by Dr. Grant,

That the Executive Committee be asked to

take steps to acquire either from the Government or from some one else, by purchasing or renting, a suitable place within which the Council can meet, subject to the approval of the Council.

The motion was carried.

THE REGISTRATION OF BIRTHS, ETC.

Dr. BERRYMAN brought forward his motion with regard to the amending of the Act regarding the registration of births, deaths, and marriages. He had reference especially to the fact that the doctors are liable to be fined for failing to comply with the requirements of the Act. But what he wanted more particularly to point out was the fact that grave-diggers had the power to take and bury bodies without any certificate. In this way the body of a person who may have been murdered could be buried without the matter coming to light.

Dr. BETHUNE thought that the law was very defective, inasmuch as bodies can be buried without any certificate. He thought also that a longer time should be given within which to register the death, forty-eight hours being too short, because in many cases it is necessary to bury bodies in a hurry. If the registry cannot take place before the body is buried the medical certificate will be sufficient to satisfy the registrar.

The discussion closed, it being close on six o'clock.

The Council then adjourned till 8 o'clock.

EVENING SEDERUNT.

The President took the chair at 8:15 o'clock.

The Secretary called the roll and read the minutes, after which the business of the Council was proceeded with.

THE PERIOD OF STUDY.

Dr. AIKINS asked the Council to consider the advisability of defining what was meant by the four years' curriculum for medical students. Did it mean forty-eight months or forty-two months after their matriculation in September or October?

The Council adjourned in order to allow the Committees to proceed with their work.

THIRD DAY'S PROCEEDINGS.

The Council met at 10 a.m. After the minutes had been read and approved of,

Dr. GRANT presented the report of the Committee appointed to draft a resolution setting forth the views of the Council on the use of alcoholic beverages. The report read as follows:—

"This Council feels that the excessive use of alcoholic beverages is decidedly on the increase in our midst. We, as representatives of the profession in Ontario, beg to assure the public that it shall be our constant endeavour, on all occasions, by our exhortations and scientific explanations of the danger of such excess, to suppress it to the utmost by our united and collective influence.

"C. H. GRANT, M.D.,

"W. H. BROUSE, M.D.,

"E. G. EDWARDS, M.D."

The motion was carried.

The PRESIDENT invited the members of the Council to visit the Lunatic Asylum and make an inspection of its working. The Council decided to accept Dr. Clarke's invitation, and appointed Friday noon to make the visit.

The meeting then adjourned to allow time for the committees to meet.

AFTERNOON SESSION.

The Council met again at 2.30.

Dr. CORNELL presented the report of the Committee on Printing.

The report was received and considered in Committee on the Whole. It recommended the payment of several accounts, which were ordered to be settled, with the exception of a few which were referred to other committees.

Dr. AIKINS presented and read as follows the report of the

EDUCATIONAL COMMITTEE.

The report of your Educational Committee respectfully sets forth that after careful consideration it recommends as follows, viz.:—

First—That hereafter the matriculations be held on the first Tuesday and Wednesday after Good Friday, and the third Tuesday and Wednesday in August of every year.

Second—That in connection with the matriculation examination a note of warning be added that the examination includes writing

from dictation; and further, that correct spelling and legible writing shall be indispensable.

Third—Matriculated students in Arts of any university in Her Majesty's Dominion will be exempted from passing the matriculation examination of the Council only when such university matriculation is equivalent to that of this Council.

Fourth—That botany be removed from the matriculation and placed in the second year's examination.

Fifth—That a three months' course of lectures on botany be required as heretofore.

Sixth—That until June, 1878, any pupil in his matriculation examination failing to pass on botany, but passing on all the other subjects, be not considered as rejected, but required to attend the course on botany and pass on it subsequently.

Seventh—That in the case of graduates in Arts, botany be not required where evidence is given that they have already attended a course of lectures and been examined upon it; and also, that theoretical chemistry be not required of such graduates if they produce evidence of having attended two full courses and passed an examination upon it.

Eighth—That, in the published announcement, page 13, item (b) first line, instead of the words "after this date" the precise date be inserted.

Ninth—That in the first year examination in the subject of anatomy, the bones of the head be omitted and that chemistry be limited to the metalloids or non-metallic bodies.

Tenth—That botany and the physiology of the First Year be added to the present subjects of the Second Year's examinations.

Eleventh—That descriptive anatomy as a whole form a part of the examination of the Third Year.

Twelfth—That instead of surgical anatomy, as at present, forming a part of the Third Year examination, medical and surgical anatomy be placed among the subjects of the Fourth Year examination.

Thirteenth—That at the annual examinations the percentage upon each subject required for passing be as follows:—First year, 33 per cent.; second year, 50 per cent.; third and fourth years, 60 per cent.

Fourteenth—That at the several examinations the examiners are hereby required to make their examinations as demonstrative or practical as possible.

Fifteenth—That at the examinations a period of not less than ten days intervene between the last written examination and the first following meeting of the examiners.

Sixteenth—That as soon as the Legislature has made such amendments to the Anatomy Act as shall have resulted in a sufficient supply of material being available for the schools, every candidate for the final examination be required to produce a school certificate that he has attended a full course of operative surgery on the dead subject; and also, another certificate to the effect that he has himself performed on the dead subject under the eye of his teacher all the ordinary operations in surgery.

Seventeenth—That as soon as abundant material is available for the Council a part of every student's final examination shall consist of dissections and operations on the dead subject.

Eighteenth—That a new Annual Announcement be published as soon as possible after the adjournment of the Council.

W. T. AIKINS, Chairman.

The report was considered in Committee of the Whole, Dr. E. G. Edwards in the chair.

On the first clause, Dr. AIKINS explained that a great difficulty arose from their being four matriculation examinations yearly, as was now the case. This clause was carried as well as the second.

On the third clause, Dr. AIKINS stated that there were certain universities in which matriculation meant only the registration of one's name and the payment of a fee. For this reason they recommended the change. The clause was passed.

The fourth clause was made because it was found that botany was not taught in the Grammar Schools, so that students had no means of preparing themselves in this department.

Dr. ROSS did not think there was any use of medical students learning botany.

This clause, as well as five, six, seven, and eight, were passed.

The Committee recommended the change indicated in clause nine, because it was found that the work of the first year was too much to be done efficiently. This clause, with those up to the fifteenth, were approved of.

Dr. AIKINS said that clause fifteen was absolutely necessary. The time allowed for the examination of candidates' papers was far too small, and the papers could not be examined with any degree of accuracy.

Dr. HYDE considered that it was too long

and expensive to keep students for two weeks in the city waiting for their oral examinations after the decision of the examiners.

Dr. AIKINS replied that the change was necessary if they were going to raise the standard of medical education in Ontario.

Dr. McLAUGHLIN gave as his experience as an examiner that at least fifteen days should be allowed for the examination of papers.

The clause was finally carried.

The remaining clauses were passed without discussion.

The Committee rose and reported, and the report was finally adopted by the Council.

The PRESIDENT read a summons from the Court of Common Pleas issued against the Medical Council to force them to give Dr. Geikie a seat at the Board as a duly elected representative.

The President, Drs. W. Clarke and Aikins were appointed a committee to take legal advice and determine whether it was advisable to contest the case.

The Council went into Committee of the Whole on the Finance Report, which was adopted with a few amendments.

In the consideration of the report the action of the registrar and Dr. Campbell in expending sums without the sanction of the President or Executive Council, was discussed, and met with the very strong disapproval of the Council.

Relative to the subject, Dr. W. CLARKE moved, seconded by Dr. BETHUNE, that the registrar be ordered to hand over all moneys received by him to the treasurer. Carried.

A communication was read from Mr. W. H. Howland, Chairman of the Hospital Trustees, as follows:—

DEAR DR. BERRYMAN,—The Toronto General Hospital Trustees have received the following large contributions towards building a fever hospital:—

W. Cawthra	\$5,000
W. Gooderham, Sr.	5,000
Jas. G. Worts	3,000
	\$13,000

They have also received smaller contributions something over \$2,000, all of which and very much more have gone for improvements.

We have further received considerable support from the country municipalities, who have largely purchased our \$50 tickets, allowing them to send in four patients for that sum. This is less than any hospital I know of, as we take all the risk of the patients remaining in a long time.

I trust the Medical Council will do us the honour of paying us a visit, in which case I should be very glad to explain to them several matters in which I think they would be interested.

W. H. HOWLAND, Chairman.

NOTICE OF MOTION.

Dr. BERRYMAN, seconded by Dr. MUIR, moved, That on hearing the communication read as sent to Dr. Berryman by W. H. Howland, Chairman of the Board of Trustees of the Toronto General Hospital, setting forth the improved condition of that institution by the munificent donations so lavishly bestowed on them, we cannot separate without recording our professional appreciation of such generosity on the part of private individuals—directed so nobly to the alleviation of suffering among our indigent poor. We sincerely trust that such noble efforts may, on proper representation to the Government of our Province, be seconded, as we think they should be, by increased grants from our public exchequer to maintain and increase in usefulness the various hospitals in our midst, at present striving to do much good with such small means at their command to accomplish a great work with but scanty encouragement from Government sources.

The Council adjourned till 8:30 p.m.

EVENING SESSION.

The President took the chair at 9:30 p.m.

REGISTRATION.

Dr. BETHUNE presented the report of the Registration Committee, on which the Council went into Committee of the Whole. Among other things it recommended that Messrs. Whiteford and Farley be not allowed to register.

The PRESIDENT stated that at the last session a Bill was introduced into the Legislature allowing all British medical graduates to practise here. He did not hear of the tenor of this Bill till the day appointed for the second reading. He believed that the Bill was introduced principally for the purpose of admitting to registration Messrs. Whiteford and Farley, who were

influential persons in their district. Dr. Aikins, Dr. Pyne, and himself, and others at once went to the House, but were informed that there was no hope in defeating the measure. A compromise was effected by the deputation agreeing to use their influence with the Council to admit the two gentlemen to registration without examination, unless that were a formal one. He (the President) admitted that they had done wrong, but pressed by the urgency of the occasion they agreed to the compromise, and the Bill was withdrawn. The Executive Committee could not be got together in so short a time, and the deputation had to act on their own responsibility. He had no objection to Messrs. Whiteford and Farley, who were both graduates of medical schools in Britain.

Dr. BROUSE was fearful that to admit these gentlemen without examination would be to create a precedent that would destroy the influence of the Council. It would be better to go back to the Legislature and fight them. He thought that what occurred in Philadelphia showed the necessity of the protection to the profession the Council afforded. He suggested that the President or some one else should plainly state the case to the two applicants, and if they were men of honour they would submit to a practical examination. To admit them without examination would be to open the door to any one who could command influence in the Legislature.

Dr. WM. CLARKE contended that the compromise should never have been made.

Dr. AIKINS said that the deputation did not pledge the Council to anything definite. They merely promised to use their influence with the Council to get them registered.

Dr. LAVELL said that these men were also graduates of McGill College, from which institution had come great opposition to the operation of the Ontario Medical Act. He was of the opinion that the compromise should be refused, and let the Legislature do what it pleased. If the public chose to be dosed by Tom, Dick, and Harry, why let them, and the Council would refuse to be responsible.

Dr. AIKINS said that he did not care what the Council did with the application. He had fulfilled his promise to Mr. Wells, M.P.

Dr. BETHUNE suggested that the clause in the report should read as follows:—"That the Committee cannot conscientiously recommend their registration without an examination."

This was agreed to, and the report then passed. The Council adjourned.

Friday, July 6.

The Council met again at ten o'clock.

The Finance Committee presented their second report, which was carried.

The Prosecution Committee recommended the dismissal of a man named Moore, who had been prosecuting legally qualified men.

The Education Committee presented their second report.

The following clauses were adopted in Committee of the Whole:—

1. That graduates in arts shall be required to pass the first and second annual examinations, or may pass the third and fourth at the end of the third year.

2. Pupils who are or have been required by the regulations of this Council to go up for any annual examination, and who have refused or shall refuse to do so, shall lose one year for each such refusal.

3. That the written portion of the next professional examination commence in Toronto and Kingston towards the end of May, 1878, the precise date to be fixed by the President.

4. That the President make all necessary arrangements for properly carrying out the examination, and further, that he arrange that the questions submitted to candidates shall be printed and not dictated.

5. That hereafter no rebate shall be allowed to unsuccessful candidates at any of the examinations.

6. The primary examinations shall cease after July, 1877.

That attendance at a course of twenty-five lectures on Sanitary Science shall be required of every student, except such as have already attended two winter courses of lectures.

The Committee rose and asked leave to sit again.

The Council adjourned till two o'clock.

AFTERNOON SESSION.

The Council re-assembled shortly after two o'clock.

The Committee appointed to report on the visit to the Lunatic Asylum, reported as follows:—

That this Council would beg to tender its thanks to Dr. Daniel Clarke for the invitation kindly proffered to them to visit the Toronto Provincial Lunatic Asylum, thus affording them an opportunity of investigating the details of management of this important institution, and so much required for the treatment of safe-keeping of a large and unfortunate part of our community. We are truly glad to see that in the extent of its buildings—the costliness of its internal appointments, our Government has shown no niggard hand in attending to the comfort and possible recovery of this unfortunate class of our fellow-creatures. We must congratulate the Government on their selection for its Superintendent of our worthy colleague and President—a gentleman in whose hands such an important trust will be perfectly safe,—both from the high and scientific attainments which he possesses, as well as his great urbanity and kindness of manner. We feel the more gratified in this our expression of feeling when we remember that we as a body were sponsors by our recommendation for his fitness for his responsible office. The Council would at the same time beg to express their feeling of thanks to our worthy President for his zeal and constant urbanity in his position of chairman of this Council for the past year.

The report was adopted.

The Council resumed the consideration of the second report of the Education Committee, and passed the remaining clauses with amendments. The effect of the clauses as amended was that several applications on behalf of certain persons to be exempted from examination be not entertained; that a committee consisting of the President, Drs. McLaughlin, Campbell, and Morrison be appointed to report to the next meeting on the whole subject of matriculation, having special reference to the Intermediate Examination of the High School, and that, when, through amendments to the Anatomy Act, sufficient material would be available for dissection, pupils will be required to give evidence of having twice dissected the whole body.

Dr. BERRYMAN moved, "That the Committee on Registration be requested to inquire by

what right the Rev. Mr. Edgar, formerly a Primitive Methodist minister, was placed on our register." Carried.

Dr. ATKINS moved, "That a new register be published before the first of January, 1878."

Dr. BERRYMAN was authorized to forward to Dr. Dewar a vote of condolence passed by the Council.

The Council adjourned till 5:30 p.m.

EVENING SESSION.

REPORT OF REGISTRATION.

The Committee of Registration beg leave to report that it has examined all the papers in connection with the registration of the Rev. James Edgar, and we are quite satisfied that he had no right to registration, and that his name be removed from the Medical Register.

ALEX. BETHUNE, Chairman.

The report was received and unanimously adopted.

MOTIONS.

Moved by Dr. BERRYMAN, and seconded by Dr. Wm. Clarke,

That this Council has watched with great interest the active efforts put forth by Dr. W. Brouse from his seat in the House of the Dominion Parliament in connection with the organization of a bureau of statistics—we cannot too strongly urge on the Government the importance of this inquiry—all important to the public at large, and the medical profession from a sanitary and hygienic point of view, and to the Government especially for internal statistical purposes or national polity; we trust he may not flag in his onerous but important work. Carried.

COMPLIMENT TO THE MEDICAL COUNCIL.—A large number of the Council employed the noon recess in paying a visit to the Asylum, to which they had been invited by Dr. Clarke, the President of the Council, who is also the Medical Superintendent of the institution. The party were received with great cordiality, and made the tour of the wards in both wings of the building. After the inspection, the visitors sat down to an excellent luncheon. The invitation was a graceful compliment from Dr. Clarke to the visitors in their professional character. The whole party expressed themselves greatly pleased with the event, and acknowledged their sense of the kindness of Dr. Clarke.

Miscellaneous.

BENZOIC ACID IN CHRONIC CYSTITIS.—Dr. Mulhorn, in the *Medical and Surgical Reporter*, states that benzoic acid works like a charm in cystitis. He gives ten grain doses.

The deaths of Dr. Wilhelm Volkmann, one of the founders of modern physiology, and of M. Caventou, the discoverer of quinine, are announced.

STICKS OF SULPHATE OF COPPER.—Four parts of copper sulphate and one part of borax triturated are said to form a mass easily rolled into sticks. A drop of glycerine facilitates.

—*New Remedies.*

COLCHICIN HYPODERMICALLY IN CHRONIC RHEUMATISM.—Colchicin in doses of two milligrammes hypodermically has given satisfaction in cases of chronic rheumatism, rheumatic neuralgia, &c.

MALT EXTRACT AND COD LIVER OIL, mixed in equal parts, produce a perfect emulsion, semi-solid, in which the taste of the oil is more perfectly concealed than can be accomplished by any other method.

USE OF THE STETHOSCOPE IN JOINT DISEASE.—In diseases of deep-seated joints where grating is not readily obtained, the auscultation of the suspected joint and of the corresponding sound one has been recommended as being useful.

BUGS.—The best remedy for bugs in hospitals is a bug trap, made by boring a series of holes in a piece of soft wood with a gimlet, and placing this under the mattress in each cot. The piece of wood is to be put periodically into a basin of boiling water.

OPIUM ANTIDOTES, SO-CALLED.—An analysis of a number of opium antidotes, extensively advertised in the States as containing no opium, shows that morphia is a constant ingredient, in quantities varying from two to twenty-five grains to the ounce.

EXTRACTION OF FOREIGN BODIES FROM THE OESOPHAGUS IN CHILDREN.—Place the child on its belly on a table with his head, supported by an assistant, projecting beyond it. The finger is then introduced into the mouth in order to depress the tongue, and the coin slides out along the finger of the operator.

REMOVAL OF TRACHEOTOMY TUBES.—The blades of an ordinary pair of pharyngeal forceps are introduced closed, and acting as a probe, discover the situation of the tube. They are then passed into the lumen, firmly expanded, and equal pressure being thus established, the instrument is withdrawn, carrying the tube with it.

Mr. G. D. Thane has been appointed Professor of Anatomy in University College, London, for two years. Mr. Henry Smith has been appointed Professor of Systematic Surgery in King's College. Dr. Peacock has resigned the office of physician at St. Thomas's Hospital. Dr. Ord is the successful candidate for the vacancy, and Dr. Greenfield for the assistantcy.

EXTIRPATION OF THE KIDNEY.—Mr. Jessop, of the Leeds Infirmary, lately removed the left kidney from a child two years and three months old. The symptoms were hæmaturia and irritation of bladder, and rapid emaciation. A rapidly growing tumour was discovered in the left renal region. The incision was similar to that for colotomy, but longer. The kidney weighed sixteen ounces, and was eucephaloid in appearance. Eight days after the child was doing well.

COLONIAL MEDICAL DEGREES.—The project of registering colonial degrees involves the question of "reciprocity." The colonies re-examine men holding British qualifications before they are admitted to practise in those outlying provinces of Her Majesty's dominions. Until this practice prevails, we fail to see the perfect fairness of requiring that degrees granted by universities, over which the Medical Council of the home country has no sort of control, should be admitted as the sole ground of a claim to national privileges.—*London Lancet.*

DEATH FROM CHLOROFORM.—A death from chloroform occurred at the Toronto General Hospital on July 18th. A woman, aged 25, was about to be operated upon for some uterine trouble, and but a few drops of the anæsthetic had been given when she suddenly died. She had taken chloroform previously and had no unpleasant symptoms. At the *post mortem* fatty degeneration of the right ventricle was assigned as the cause of death.

TAYUYA ; A NEW REMEDY FOR SYPHILIS.—M. L. Faraoni, in a pamphlet published in the course of last year, states that Ubicini found in Brazil a tribe who suffered much from lues venerea, and who employed with success in this disease a plant having the local name of "tayuya." The plant (*dermophylla pendulina*) belongs to the family of cucurbitaceæ, and grows in the primeval forests of Brazil. The alcoholic extract of the root is the part employed, and it may be injected hypodermically in doses of fifteen grains. It is almost always successful, relapses are rare, and mercury and iodine are practically rendered unnecessary.—*London Lancet.*

AMENDED SCHEME FOR AN EXAMINING BOARD FOR ENGLAND, AS ACCEPTED BY THE CONFERENCE OF THE REPRESENTATIVES OF ALL THE MEDICAL AUTHORITIES IN ENGLAND, AND SUBMITTED TO THE CONSIDERATION OF THOSE AUTHORITIES, MAY 1ST, 1877.

Recommended.—1. That a board of examiners be appointed in this division of the United Kingdom by the co-operation of all the medical authorities in England—that is to say, the Royal College of Physicians of London, the Royal College of Surgeons of England, the Society of Apothecaries of London, and the Universities of Oxford, Cambridge, Durham, and London ; it being understood that, liberty being left to such co-operating medical authorities to confer, as they think proper, their honorary distinctions and degrees, each of them will abstain, so far as allowed by law, from the exercise of its independent privilege of giving admission to the Medical Register.—"Section 1.—Note a. Hereby it is intended to secure that none of the qualifications granted by any of the co-

operating authorities shall be conferred on any person who shall not have been examined and approved by this board."

2. That the board be constituted of examiners nominated by a committee called herein "the Committee of Reference," and appointed by the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries, in such manner as they shall severally think fit.

3. That examiners be appointed to conduct examinations on the following subjects:—

—(1) Anatomy ; (2) Physiology ; (3) Chemistry ; (4) Materia Medica ; (5) Medical Botany ; (6) Pharmacy ; (7) Medicine ; (8) Surgery ; (9) Midwifery ; (10) Forensic Medicine ; or on such subjects as may be hereafter required.

Questions on Forensic Medicine are to be included among those asked by the examiners on Chemistry, Medicine, Surgery, and Midwifery.

4. That the appointments of examiners be apportioned according to a plan to be agreed upon by the three herein-before-mentioned medical authorities.

5. That the examiners be nominated and appointed annually ; that no examiner hold office for more than five successive years ; that no examiner who has continued in office for that period be eligible for re-election until after the expiration of one year, and that no member of the Committee of Reference be eligible for nomination as an examiner.

6. That the Committee of Reference consist of two representatives from each of the universities and medical corporations of England.

7. That one-fourth of the Committee of Reference go out of office annually, but that the retiring members be eligible for re-appointment, and that the proportionate number of members appointed severally by the co-operating medical authorities be always maintained.

8. That the duties of the Committee of Reference be generally as follows:—(1) To nominate the examiners for appointment by the three hereinbefore-named medical authorities. (2) To nominate on each occasion double the number of persons required to be appointed as examiners. (3) To arrange and superintend all matters relating to the examinations, in accordance with regulations approved by the co-oper-

rating medical authorities, or the majority of them. (4) To consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by any of the co-operating medical authorities, and to report their proceedings to all the said authorities.

9. That, except as hereinafter provided, there be two or more examinations on professional subjects; and that the fees of candidates be not less than thirty guineas, to be paid in two or more payments.

10. That every candidate who shall have passed the final examination conducted by the board shall, subject to the by-laws of each licensing body and to the provisions hereinafter contained, be entitled to receive the license of the Royal College of Physicians of London, the diploma of member of the Royal College of Surgeons of England, and the license of the Society of Apothecaries.

11. That every member of an English university who shall have passed such an examination or examinations at his university as shall comprise the subjects of the primary examination or examinations conducted by the board, and who shall have completed not less than four years of medical study, according to the regulations required by his university, be eligible for admission to the final examination; that every candidate so admitted to examination be required to pay a fee of five guineas; and that every such candidate, who shall have passed such final examination, shall, on the further payment of not less than 25 guineas, and subject to the by-laws of each licensing body, be entitled to receive the license of the Royal College of Physicians of London, the diploma of member of the Royal College of Surgeons of England, and the license of the Society of Apothecaries. "Sections 10 and 11.—Note *b*. Provided that if women be admitted to examination by the Conjoint Board they shall not, on passing, be entitled to become licentiates or members of any of the co-operating authorities without the special permission of such authority."

12. That any or either of the co-operating medical authorities shall be at liberty to withdraw from this scheme, and the joint examining board to be constituted hereunder, at any time

after five years from the 1st day of October, 1877, upon giving to each of the other co-operating medical authorities one year's previous notice in writing, dating from the first day of October in that year, of their intention so to do, and that, at the expiration of the time limited by such notice, the medical authority giving the same shall be released from all obligation to conform to the terms of this scheme or any rules or regulations which may hereafter be made for giving effect to it.

Appendix to Scheme.—That one half of the fees received for the examinations be appropriated to the payment of examiners, and other expenses incidental to the examinations, in such manner as the Committee of Reference may determine, subject to the approval of the co-operating medical authorities. That the remaining half of the fees received for the examinations be appropriated in the following manner:—Towards the maintenance of the museum of the Royal College of Surgeons as an institution of national as well as professional importance, for its unendowed professorships, and other allied expenses, two-sixths; to the Royal College of Physicians in respect of qualifications to be granted, one-sixth; to the Royal College of Surgeons in respect of qualifications to be granted, two-sixths; to the Society of Apothecaries in respect of qualifications to be granted, one-sixth.

JAMES PAGET,

Chairman of the Conference.

May 1st, 1877.

APPOINTMENTS.

John C. Mitchell, of the village of Newtonville, Esq., M.D., to be an Associate Coroner in and for the United Counties of Northumberland and Durham.

His Honour the Lieutenant-Governor has been pleased to cancel the commission of Robt. McDonald, formerly of the County of Perth, now of the Village of Hagersville, Esquire, M.D., as an Associate Coroner in and for the said County of Perth.

His Honour the Lieutenant-Governor has been pleased to make the following appointment, viz. :—

Robert McDonald, of the Village of Hagersville, Esquire, M.D., to be an Associate Coroner in and for the County of Haldimand.

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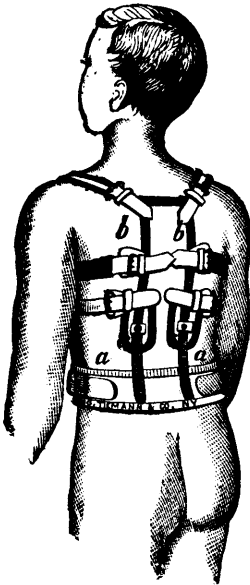
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Sulphate of Soda	1·213 "
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THE COLLEGIATE YEAR is divided into three Sessions:—A Preliminary Session, a Regular Winter Session, and a Spring Session.

THE PRELIMINARY SESSION will commence September 19, 1877, and will continue until the opening of the Regular Winter Session. It will be conducted on the plan of that Session.

THE REGULAR WINTER SESSION will commence on the 3rd of October, 1877, and end about the 1st of March, 1878.

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THE SPRING SESSION embraces a period of twelve weeks, beginning in the first week of March and ending the last week of May. The daily Clinics, Recitations, and Special Practical Courses will be the same as in the Winter Session, and there will be Lectures on Special Subjects by the Members of the Post-Graduate Faculty.

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STUDENTS WHO HAVE STUDIED TWO YEARS may be admitted to examination in Chemistry, Anatomy, and Physiology, and if successful, will be examined at the expiration of their full course of study, on Practice, Materia Medica and Therapeutics, Surgery and Obstetrics; but those who prefer it may have all their examinations at the close of their full term.

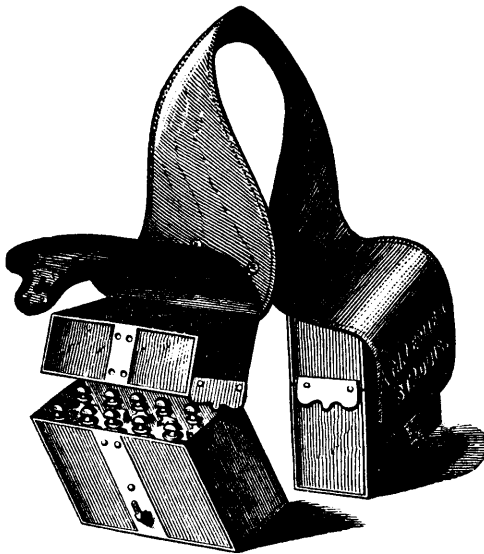
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BIRTHS.

On the 13th ult., at Chesnut Cottage, Cumberland, the wife of Dr. James Ferguson, of a son.

On the 9th inst., at the "Nest," the wife of W. C. Chewett, Esq., M.D., of a son.

MARRIAGES.

At Cousland Park, Dalkeith, Scotland, on the 25th June, by the Rev. George S. Smith, minister of Cranstoun, John Sime Cowan, M.D., Dunbar, to Hannah, daughter of Thomas Brown, Esq.

On the 10th inst., at the residence of the bride's father, by the Rev. M. Morgan, R. C. Butler, M.D., Kirkfield, to Miss Clara L. Burton, youngest daughter of John Burton, Esq., Barrie.

At the residence of the bride's father, Woodlands, on the 10th ult., by the Rev. Neil McKinnon, John Stalker, M.D., of Harwichville, to Helena Ross, youngest daughter of H. R. Archer, of Newbury. No cards.

In this city, on the 19th inst., at the residence of the bride's brother-in-law, A. T. Crombie, by the Rev. R. Monteath, Niven Agnew, M.D., to Jane, daughter of the late James H. Cobban, for many years collector of H. M. Customs, Alloa, Scotland, and relict of the late Ewen McEwen, barrister, Kingston, Ontario, all of Toronto.

DEATHS.

At Port Elgin, on Wednesday, the 18th inst., Eleanor, beloved wife of Robert Douglass, Esq., M.D., aged 41 years and 10 months.

Canada Medical Association.

THE TENTH ANNUAL MEETING

Of the CANADA MEDICAL ASSOCIATION will be held in the
CITY OF MONTREAL,

ON
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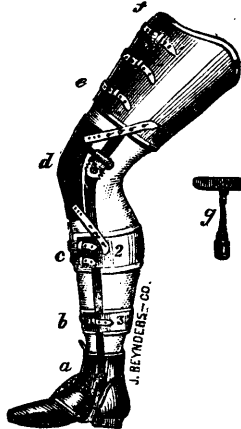
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