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CANADA
MEDICAL & SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Introductory Lecture delivered on Friday, 1st October, 1875, at the opening of the forty-third Session of the Medical Faculty of McGill University, by GILBERT PROUT GIRDWOOD, M. D., M. R. C. S. England, Professor of Practical Chemistry.

GENTLEMEN,—In conformity with the requirements of a time-honored custom, and in obedience to the request of my colleagues, I appear before you to deliver the introductory address on this the opening day of the 43rd session of the Medical Faculty.

Gentlemen, in the name of the Professors of this Faculty I extend to you all a hearty welcome, and hope that you who have been rusticating during the vacation have returned with renewed energy to the work before you.

Allow me to call your attention to a few changes which take place this year in the professional staff.

Dr. Campbell retires from the active duties of the chair of Surgery; and here let me offer to him the expression of deep regret at the loss we suffer by the step he has felt himself obliged to take, and in this regret we must not forget the large share we have had of his energies, in the exercise of his duties of teacher in this faculty, and for which this university has bestowed on him the rank of Emeritus Professor. Many of you gentlemen, doubtless, feel this regret more than I can, from the fact that you have been for a longer period the associates of his toils, and been honored with his friendship, and have for a longer period enjoyed

his society and friendly counsels ; among you are perhaps some at whose nativity he was present, and at whose birth your mother received his fostering care and attention, for Dr. Campbell was a teacher in this school at a time when many of you were in your cradles.

But, gentlemen, our regret is tempered with pleasure, and like a medal has its obverse and reverse.

We rejoice in the fact that we are able to keep our good and talented friend with us as Emeritus Professor of Surgery, and that we still are able to have him with us as the Nestor of our councils, giving us the benefit of his vast experience and mature judgment, professionally, as Professor, and as our Dean.

That he may long live to be present with us to assist and direct us is not only the wish and the hope but the earnest prayer of us all.

By Dr. Campbell's retirement the chair of Surgery becomes vacant, and is filled by our tried and trusty friend Dr. Fenwick, who is already so well known not only to us and to you, but the world over, for his success as a surgeon and his labours as a journalist, and I may add as well loved as known by all who have the pleasure of his friendship.

We have also to regret the loss of our colleague Dr. Drake, who has been obliged to give up the labours of teaching on account of ill health.

To him we must express our heartfelt regrets at the cause which has necessitated his retirement, and tender him our hopes that the relaxation he will be enabled to obtain will restore him to health, and long may he live to enjoy the honour, that of Emeritus Professor, conferred upon him by this college for his services as teacher. The remaining changes in the staff result from the retirement of these two gentlemen. Dr. Osler takes the chair vacated by Dr. Drake, the Institutes of Medicine.

Dr. Roddick succeeds to clinical surgery lately occupied by Dr. Fenwick, in conjunction with the chair of Medical Jurisprudence, in which latter course the chair is filled by

Dr. Gardner, who lately held that chair in the Lennoxville School. Dr. Godfrey has been appointed to the chair of Hygiene, and Dr. Shepherd as Demonstrator of Anatomy.

Thus the Governors have endeavoured to fill up the vacancies consequent on the retirement of their friends with the best talent that the country affords, and we, gentlemen, will endeavour to uphold the position of our Alma Mater, as a school of learning, and in this endeavor we hope to have the cheerful and unwearied co-operation of all the undergraduates.

It is difficult after so many able predecessors have gone over the ground before me, to find a subject whereon to address you. The history of our science has been traced from its beginning to its present date by abler hands than mine. I shall therefore content myself with a few remarks for the guidance, especially for those who now, for the first time are present within these portals ; and trust that they may find acceptance with the elder students who have listened to the eloquent addresses that have been given here in former years. Gentlemen, we meet here to day to inaugurate another year of work, it is well for us at this moment to cast a retrospective glance at our past labours and examine our parts, to see if the work already performed meets with our entire satisfaction, or if in any way we can improve on what has been done. Some of you have had experience and are now entering upon your last year of study, and to you but scant time is left to repair any shortcomings in the performance of your duties. I trust few among you will be able to condemn yourselves on that score.

Should there be one, however, I trust he will take warning and lay down a specific rule for action, allotting to every hour its proportion of labour, and so toil on that by the end of the session all gaps may be filled, and on the day of trial he be not found wanting.

On you, gentlemen, who this day for the first time take your seat on those benches as students, I would urge the

necessity of self-examination to determine whether or no you have considered the duties you are undertaking. Whether the selection you have made of medicine as a profession is all that you could wish for in an occupation. Be assured that the art and science of Medicine and Surgery is no mean mistress to be toyed with for an hour and cast off at your pleasure, she is exacting, and demands of you the most ardent and intense devotion of your first love, and if you freely give that devotion she will not be backward in repaying you for you toil.

Should your self-communion lead you to doubt if you are quite sure of yourselves, then reconsider your decision and if you arrive at any adverse opinion, retire from the profession, and seek some occupation more in consonance with your ideas of life.

Let us see what is required of the student in medicine:

You come here under the supposition that you have received a liberal education, and the more liberal and extended that education has been the more easy you will find the after steps, which lead you to the study of the hidden mysteries of nature and science. These studies being arrranged for a period of four years, you will, if wanting in preliminary knowledge, have hard work to make up for those deficiencies.

You now have your professional studies to go through and they require of you a total abnegation of self, you must be ever ready to attend to any duty you may be called upon to perform, for accidents happen at all sorts of inconvenient hours, and at last having passed your examinations with flying colors, and been rewarded for your proficiency by your license to practice you commence the hard experiences of life.

It is needless to remind you of the oft-told tale of ill-requited toil, that has often before been mentioned to you, but gentlemen, you have selected a profession which has for its object the alleviation of human suffering. What more ennobling object can a man have in view.

In such high estimation was it held by the ancients that they deified the most celebrated physician Œsculapius.

The history of our profession dates to the earliest ages of man, for with his appearance on this globe his ills commenced and with them attempts to relieve them.

As our knowledge increased experience began, and records commenced on all subjects.

All sciences, as we now know them, are but the vast chaos of human record from the remotest ages, organized and reduced to system and order by the master minds whose names we look back to with admiration and reverence, that they had been able to accomplish so much with such poor appliances as they had to work with ; and whose names stand out as goals to be won and as examples to be imitated.

In our days when the field of labour is so extended, it has became the custom to divide the whole field among a number of hands, and for each to select his own special department for the most perfect cultivation.

In medicine this system of division of labour has been elaborated and we have our specialists. It is, however necessary for a member of our profession, before becoming a specialist to make himself proficient in the general knowledge thereof, and more especially is this the case in this country where the field of your labours will be largely extended through a sparsely populated district.

In large cities you may give up the general practice to become a specialist, but in the country you must be able to act at once in every case you may be called upon to attend.

Therefore cultivate all the brances of your curriculum and your profession

Your student life has for its object not merely the cramming you to pass an examination, although that is by law rendered a necessity, and rightly so ; it has for its object the rendering you qualified to treat a case of disease whenever and wherever you may be called upon, and you must be ready to act on the moment ; there is no waiting to consult authorities, you must have your knowledge at your

finger ends ; you must not only know but you must be able to at once apply that knowledge.

A human life is hanging on your ability to do the right thing at the right moment.

How is this to be obtained ?

Only by indefatigable industry and punctual attendance to your duties as students.

In the curriculum laid down for you, you have the advantage of the guidance of those whose judgment of what is necessary has been matured in the field of practice, and you are the fortunate husbandmen who are the reapers of the rich harvest the result of the toils and labors of your predecessors.

And having reaped that harvest it will become your duty to till the soil by diligent work, that when you are called away from the abode of men you will feel that the talent that was committed to your charge you have utilized to its fullest capacity, and you have left your successors a good account with interest added.

In the course of the lectures you are called upon to attend you will be led by degrees from the groundwork of medicine, through various stages to the most profound theories of human disease. From the bony skeleton, the framework and support which carries the soft parts to the most complicated structures to the generation of thought, a perfect whole.

Be careful to lose no opportunity of becoming acquainted with human anatomy, and rest not satisfied with human anatomy alone, study along with it, the anatomy of the lower animals, for upon them you will have to make experiments to carry out original research, and by analogy you will be able to interpret the signs and symptoms of disease.

In Botany you will be taught the structure of parts of plants, and their functions, their modes of propagation, and of repair to injury, and will find a marvellous similitude between the functions in the animal and vegetable kingdoms.

By the study of these two subjects you will have your minds led to a comprehension of the grand scheme of creation.

You will have forced upon you the glorious conception of a superior ruling power; you will behold with awe the mighty works of creation, and be led to a sense of gratitude that these beauties should be unfolded to your view. In the study of chemistry you will be able see the wondrous variations and complex changes that take place in the unorganized elements themselves, and be able to trace from the simplest element the changes to the most complex form of matter.

You will become familiar with the various imponderable agents which work such vast changes in the world, light, heat and electricity, themselves unseen and only making themselves known by their effects. The mystery of the thunderstorm, with its superstitious surroundings, and the arch of resplendent colour, promise of future pleasure, will be explained to you; and yet more, you will be able to trace the lifegiving principle of heat.

You will find all these studies systematized and ready to your hand to grasp, and by their systematic study you will be led gradually to put your own ideas into system and order, and be prepared for the engrafting upon that knowledge the greater and still more wonderful scion of knowledge the practical application thereof to the benefit of your fellow creatures, and the alleviation of their distress; and when after the laborious hours you shall have passed in your studentship and have arrived at what now appears to you the climax of your ambition, and gained the reward so far as your teachers are concerned, the degree to which you will be entitled and have commenced the practice of your noble calling, you will receive a share of your reward in the thanks bestowed on you by those who fall into your hands in the hour of their affliction.

Be punctual at your lectures, be earnest in your attention, labour to understand, inquire of your teachers on any

point which is difficult to you, and rest not satisfied till you have probed the difficulty to the bottom.

Take notes of all you hear; examine for yourselves, and take nothing for granted, but whenever possible verify for yourselves.

Think nothing too small or trivial for observation, it is by straws you can tell the currents of wind or of stream.

Make collections of facts, and therein be careful you are not deceived, for the facts you may record will some day be taken as such, and be systematized by others on your responsibility, and if you allow an error to creep in in your observations you will be so far responsible for errors occurring afterwards.

The whole domain of theory is dependent upon the truth of the facts from which the theory is deduced. In all matters scientific or otherwise we observe facts and record them; and by-and-bye when a sufficient number of experiences have been established, some master lays hold of all these facts, and thereupon deduces theories andl aws, and hence the student of science is led to become a student of truth, and thence to try by every means to throw out error and superstition, which have so often and are still so often employed by the knave to prey upon the credulity of his fellow man.

Be careful in the study of practical anatomy and chemistry; by the one your hand will be educated to the necessary dexterity to perform an operation with comfort and success to yourselves, and the least discomfort to the sufferer; by the other your mind will be moulded to a systematic mode of analysis, by which you will be the better enabled to examine and decide upon a difficult case.

Your materia medica will teach you the derivation of the materials scattered with such profusion by a beneficent Providence; their uses, and mode of application, and will lead you through the sciences of Botany, Geology, and Chemistry. The application of these various branches will be thoroughly explained to you in your lectures, on the

theory and practice of medicine, surgery and midwifery, the institutes of medicine, and medical jurisprudence.

But gentlemen attendance at these lectures will not alone qualify you, you must apply these theories to the cases you find in the wards of the hospital; there it is by the bedside you must for yourselves apply the knowledge gained at your lectures or in your reading; there you must study those physical signs which enable you to distinguish health from disease, and one disease from another.

Note in the hospital wards the practice of your teachers, and verify your own observations and prognosis whenever opportunity occur by your attendance in the dead house, and compare the results there found with the facts observed during lifetime.

You will in the course of your studies have observed that some diseases are communicable, and that there are certain conditions which are best adapted to keep the body and mind in a healthy condition, and others which tend to depress the energies of the body and predispose it to disease.

These observations constitute the science of Hygiene. This science, the outgrowth of the labors of former observers has been elaborated and systematized till it forms a separate course of study, to which your special attention will be given with great advantage.

By attention to this science and the laws which regulate it, the death rate has been decreased from 40 to 17 per 1000 annually in well regulated cities.

The application of your knowledge in Medical Jurisprudence is the most exacting. It requires in you a more intimate acquaintance with all branches of your studies, often having to determine between poison and disease, between injury, accidental or intentional, even to the determining of the nature of the skeleton, and oft times requiring you to enter that most difficult of problems, the human mind, and to determine whether or no it was off the balance.

I would particularly urge on you the study of chemistry at this time, as there is a new law in operation, against the

adulteration of articles of food, and who should be so competent to determine whether an article is injurious to health or not as the physician ; furthermore there will be appointments to be obtained under the Government, and these will require men competent to undertake the work. Having toiled up the various rounds of the ladder till you reach the trial balance, and been weighed, and found good and true coin, you become graduates of this university or any other to whose honours you aspire.

You will have fulfilled the requirements of the law of your country, but let me trust that the insight you will have gained into the knowledge of your profession, will have ripened the early fancy of your first love into the mature, enduring, and earnest devotion of the wedded man.

You may now select your special object of study and pursue it to perfection, and by your assiduous performance of duties render yourselves qualified for selection as teachers, or add your names to the golden list of original discoverers for the admiration and emulation of succeeding generations of students.

Let your motto be

"Me doctarum hœdarœ premia frontium,
Dis miscent superis."

Introductory Remarks to, and Synopsis of, Practical Course on Institutes of Medicine. By WM. OSLER, M.D., Prof. Institutes of Medicine, McGill University.

If one characteristic more than another marks the medical education of the present day it is the desire to have, as far as possible, all the branches taught practically. The theoretical age in medicine is passing away, and is being rapidly replaced by a practical one. Already in large centres like London a revolution has been effected, due in great measure to the wisdom and foresight of the men controlling the great examining bodies, who now demand of all

students presenting themselves for degrees or diplomas, satisfactory evidence of a thorough practical acquaintance with every department of medicine and surgery. It is a well-known fact that the enormous percentage of rejections at the Primary examination for the M. R. C. S., (often 50 per cent.) results from failure in the practical part; and the same holds good at London University, where no degree of excellence in answering written questions will compensate for ignorance of the details of chemical and microscopical manipulation. This is as it should be, and though the reputation which the medical department of McGill University enjoys throughout the country has been obtained by the practical character of the teaching offered, much remains to be done. Progress must be our watchword, and we must endeavour to keep pace with the old country institutions by taking heed that the beneficial reforms effected in them quickly find a place with us. In this spirit the course you are about to begin has been inaugurated. An opportunity will henceforth be afforded to the students attending this School of becoming practically acquainted with the use of the microscope in physiology and pathology; and I may venture to congratulate McGill College as the first in this country to offer such a course, and in so doing to be the first to conform in all respects to the requirements of the College of Surgeons of England, which demand that such shall be provided.

The first essential in a course like this is a proper supply of good microscopes, every student must be furnished with one to enable him to follow out the demonstrations with any degreee of satisfaction. These have been obtained from Dr. Hartnack of Paris and Potsdam, and are the same as are in use in the chief laboratories of Europe. No microscope maker, British or foreign, has yet, (as far as my experience goes,) made up an instrument at all to be compared with compact, Hartnack's students' microscope. It is small and easily carried about, not burdened with stage movements, &c., and so not liable to get out of order. The

The object glasses are very superior, possessing a clearness of definition, and power of penetration excelled by few, if any, English lenses. Their uniform excellence is remarkable; of the dozens of lenses by this maker that I have examined, I have never met with an inferior one. An instrument with magnifying powers ranging from 65 to 500 diameters—capable of easily defining ordinary Bacteria—costs out here (including duty and carriage) about $45, a little more than would be paid for a single English object glass ($\frac{1}{8}$ inch) magnifying as much!

That you have a due appreciation of the value of the microscope as an important means of obtaining correct ideas on physiological and pathological subjects, your presence here to-day assures me. As practical Physicians a knowledge of its use will be most advantageous, and limited indeed must that practice be which does not afford some cases upon which the microscope would throw light. In no class of diseases is it of greater service than in the various Renal disorders. Here we may not only date the commencement of the affection, and follow it in its progress, but, also, very often obtain tolerably certain evidence of the nature of the changes going on in the kidneys. In the examination of vomit and alvine discharges the practitioner is able, if familiar with the use of the microscope to decide upon the nature and origin of substances, which, to the unaided vision, may appear very doubtful. I remember a case a few years ago, which occurred in the practice of a friend, of a man who had a fistulous opening in the right iliac region, which discharged a considerable quantity of stinking pus; occasionally a distinct fæcal odour was perceptible in the discharge, and the question arose as to a communication with the gut. After a careful search I found several portions of striped muscular fibre and vegetable tissue, proving that at some point a communication with the bowel must have existed. Satisfactory evidence can be obtained by it of the occurrence of softening in a lung, by a careful examination of the sputa, even before the physical signs give any such indication.

In Medico-Legal inquiries the general Practitioner derives most important aid from the microscope. Chemical analyses in poison cases are usually—and rightly—carried out by specialists, but every medical man should be able, in given specimens, to distinguish between blood stains and those of reddish fluids, between human hair and that of animals, and be able to pronounce an opinion on a supposed semen stain. In the diagnosis of tumours, another important use is found for this instrument; but here, as we shall learn, caution must be exercised. Except in well marked instances of Scirrhus and Epithelioma, few things are more difficult to decide by the microscope alone, whether a given tumour be a malignant or benign growth. Often it is quite impossible, and in all cases the general character of the tumour must be taken into consideration. The Physician is usually the sanitary authority of his district, and supposed to know diseased from healthy meat, which it is not always possible to do on external examination; and here again the microscope will do good service. These are briefly a few of the instances in which a knowledge of the use of this instrument will assist you in practice. I have purposely mentioned these few pathological instances of the use of the microscope first, for as practical physicians we must consider them of primary importance; but in addition you will find a genuine source of enjoyment and profit in following out almost any branch of Histological inquiry. We shall begin upon and work over the normal textures of the body, which will familiarize you with the details of manipulation, and without which it would be impossible to appreciate the pathological changes in the various organs. As in learning the use of any other instrument, so with the microscope, you must not expect to become proficient all at once. In the present course you will, at any rate, master the chief difficulties, and be able to pursue the study by yourselves, as well as prepare a set of specimens that may be useful for reference hereafter. Though the two hours devoted to the demonstration will

be sufficient to show you how to examine and prepare the tissues, yet I hope to be able to arrange for another hour in the week, when you can have access to the microscopes, and study your specimens. We shall try to carry out on each day the appointed work, but I expect you all to keep a sharp look out in the Hospital, and obtain any interesting specimens that are about. They do not always come to hand when wanted, and must be examined as we get them. Some of you, no doubt, will want microscopes of your own, and I am negotiating to get an agency established here for these instruments, whereby they can be supplied to the students at cost price, and I am in hopes of being able to obtain the sanction of the Government to pass them into the country free of duty for educational purposes. I trust the course to-day inaugurated contains the promise of better things to come; and I look forward to the time—not far distant I believe — when we shall have a well equipped Physiological Laboratory, in which students may not only obtain a practical knowledge of this important subject, but also, under the superintendence of a skilled assistant, be able to carry out and extend their physiological studies.

SYNOPSIS OF THE COURSE.

DEMONSTRATION I.—General description of the Microscope. How to clean it. How to tell its magnifying power. How to draw with it. Examination of dust, cotton fibres and air bubbles.

DEM. II.—Protoplasm. Amœba. Cyclosis in Anacharis. White blood corpuscles.

DEM. III.—Red blood corpuscles of Frog, Fish, Bird and Man. Hæmoglobin crystals from Rats' blood. Hæmin crystals. How to examine blood stains.

DEM IV.—Epithelium: squamous, cylindrical, glandular and ciliated.

DEM. V.—Connective tissues. Corpuscles. White fibrous and elastic tissues. Adipose tissue. Pigment.

DEM. VI.—Tendon, cartilage, bone and tooth.

DEM. VII —Muscle, voluntary and involuntary.

DEM. VIII.—Blood vessels. How to inject.

DEM. IX. Method of hardening tissues. How to cut sections. Liver.

DEM. X.—Lung.

DEM. XI.—Alimentary canal.

DEM. XII.—Kidney.
DEM. XIII.—Lymphatic vessels. Skin,
DEM. XIV.—Nerve, fibres, cells. Central organs.
DEM. XV.—Examination of sputum and vomit. Discharges from uterus and vagina.
DEM. XVI.—Pus. and tubercle
DEM. XVII.—Examination of urine. Casts.
DEM. XVIII.—Examination of urine. Inorganic deposits.
DEM. XIX.—Morbid growths. Cancer cells.
DEM. XX.—Parasites: Animal and vegetable

Case of Fractureof the Epiphysis of the Great Trochanter. Periostitis.—Pyæmia.—Death. By T. G. RODDICK, M.D. Professor of Clinical Surgery, McGill University, Attending Physician to the Montreal General Hospital.

On the 4th of July (Sunday) last, I was called to attend a lad, H. P., aged 16, living with his parents in St. Lawrence street, of this city. I found him lying in bed on the right side, and suffering very considerable pain in the lower part of the left thigh and knee, with an aching sensation over the gluteal region. I questioned both him and his mother as to the origin and history of his ailment, but could elicit nothing very definite beyond the following: It appears he had been limping about for three or four days in the previous week, complaining of soreness in the limb, but which was attributed to an ill-fitting boot he insisted on wearing. However, on Thursdsy, while standing at the desk in the office in which he was engaged, he was suddenly seized with an excruciating pain in the left hip, so great and persistent indeed that he had to be taken home in a cab, and placed in bed. After a few hour's rest he became much relieved, and on the following day he limped about the house with comparative comfort. On the Saturday, however, he could not get about without assistance, and next day (Sunday) I was sent for. He had always been an exceedingly active lad, out-stripping the majority of his comrades in the ordinary athletic exercises of running, jumping, &c., and on or about the day his lameness became noticeable, he

has an indistinct recollection of spraining or twisting the affected limb while hurriedly leaping a fence in pursuit of a ball. He limped through the remainder of the game, but next day thought little of the accident, attributing the stiffness in the limb to the tight-fitting shoe already spoken of.

Although there was little or nothing in the history above related to draw my attention in any particular direction, I examined carefully the affected limb but failed to find anything to account for the symptoms of which the patient complained. There was no special pain complained of on pressure over the region of the hip-joint, nor indeed in any other part of the limb, so I was disposed to look on the case as being neuralgic in character, and accordingly administered a hypodermic injection of morphia, with instructions to foment the thigh with hot water and give a dose of senna. I might mention that the patient's bed was very much exposed to draught from a window, which I thought might have had something to do as a cause, and ordered him to a larger and better arranged room.

July 5th.—I found that he was much relieved by the hypodermic injection, and had passed a comparatively comfortable night. I examined the limb again to-day most completely, but with a negative result as far as any injury to the bone was concerned. There was, however, some pain on pressure, and slight swelling over the outer side and front of thigh, and on moving the limb the pain was decidedly greater in the neighborhood of the hip than before. The presence of swelling with pain on deep pressure led me already to suspect periosteal inflammation. There was also now marked constitutional disturbance as evidenced by the coated tongue, rapid pulse, 110, and slight headache. My attention was directed to-day to a swelling of the parotids, especially of the left side, which had been noticed only since my visit yesterday. There was also slight pain in the the right ankle and great toe, with a small patch of redness over each, but no swelling in either that I could make out. I looked upon these as symptoms of grave import. I order-

ed hot poultices to the entire thigh, and internally powders containing five grains of Dover's powder, and half a grain of Calomel every 4 hours.

July 6.—Pulse 116 ; temperature 101½:—Had a slight rigor during the night, the first since his illness, and to-day looked very haggard, although the sides of the face were even worse swollen from the parotid inflammation than yesterday ; the pain in the ankle and toe were worse and the redness was more extensive. The swelling in the thigh was more marked, and although I could not make up my mind that there was fluctuation, I decided on giving him the benefit of the doubt, and accordingly plunged my exploring trocar into the thigh striking the femur on the outer side, and about the junction of its upper and middle third. A quantity of unhealthy-looking sanious pus flowed through the canula, thus verifying the diagnosis at least in one particular. I now gave the patient chloroform, and followed the exploratory puncture with a long and deep incision, down to and through the periosteum. This was followed by an enormous quantity—probably half a pint—of the variety of pus above described. I plugged the wound to the bottom with oiled lint, and ordered poultices of linseed meal. I prescribed also a grain of quinine, twenty minims of the tincture of iron, and five grains of the chlorate of potash in mixture every four hours, together with beef tea, milk, and wine ad libitum.

July 7.—Was very comfortable after the operation and slept well. Pulse 120 ; temp. 102.—Tongue inclined to be dry in centre ; has had two stools rather relaxed in character. I injected the wound thoroughly with a weak corbolic solution as the dicharge continues to be very profuse and fetid. I examined the bone with my finger passed through the wound and was surprised to find a large surfaee of bare bone extending upwards towards the neck of the femur. A considerable quantity of the injection would be also retained, showiug that a large cavity existed around the bone. A remarkable feature in the case however is the fact, that

almost coincident with the removal of the pus by the incision the parotid enlargement and pains in the joints of the great toe and ankle began to subside, so that by the time I returned, in twenty-four hours, the face had almost resumed its original appearance, and the patient could move the affected joints.

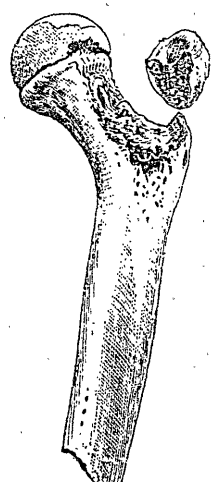
July 8th.—The parotid swelling has entirely disappeared and the ankle and great toe can be moved as well as ever. The pulse to-day is 124, and small in volume; temperature 100¾; had a quarter of a grain of morphia during the night which gave him a refreshing sleep. The discharge from the thigh continues to be large in quantity, and of a most offensive odour. I repeated the carbolic injection and was again surprised at the quantity retained.

July 11.—The condition of the patient during the past two days has been slowly but surely growing more unfavorble. The pulse has ranged from 120 to 130, and the temperature from 101½ to 103 at night. The discharge contiuues to be if anything more profuse and disagreeable, and the patient's strength is rapidly running down.

At my suggeetion, my friend Dr. Fenwick, met me in consultation this afternoon, and after a careful examination of the case agreed with me in the diagnosis and course of treatment adopted, but suggested in addition the introduction of a drainage tube. I proceeded immediately, under chloroform, to make a counter-opening about four inches higher than the original one, and while in the act of passing my finger down to meet the probe bearing the tube I came across a fragment of bone, drawn far away from the shaft of the femur, and which on more careful examination we found to be the *epiphysis of the trochanter major.* As it was held firmly by the muscles inserted into it, and was evidently at that time doing no material harm, we decided on leaving it. The drainage tube was introduced and subsequently did good service in carrying off the rapidly accumulating blood and pus.

July 14.—Has been rapidly growing worse during the

past two days. The pulse is now 140 and thready; temperature 99½. There is a tendency to diarrhæa, although not to any serious extent. To-day he notices that he cannot move his left arm without the assistance of the other, although he has perfect sensation in it, and the pulse of that side is equal in volume with the opposite. When raised it falls heavily and in any position desired, showing an absolute want of power. He is free from pain in any place excepting the injured limb and then only when disturbed. I am still



continuing on with the same treatment, both locally and internally, with the addition of a little brandy and champagne, occasionally.

July 16.—Dr. Fenwick saw him with me again to-day, but could suggest nothing beyond what was being done. He is evidently gradually sinking.

July 17th.—Died this morning; no change in the general symptoms having previously occurred.

Autopsy.—Thirty-two hours after death, assisted by Dr. Cameron, I cut down upon and removed a large portion of the diseased femur, with the unattached epiphysis of the trochanter major. We found the periosteum separated from

the bone down nearly to the junction of the lower with the middle third, consequently for that distance the femur simply lay in the centre of an immense abcess, the lining membrane of which corresponded to the periosteum. The detached epiphysis was by this time almost completely denuded of periosteum, so that it could be removed from its muscular attachments with little difficulty. Owing to the opposition of friends the examination was not further continued.

Remarks.—The above case is almost unique in kind and occurrence, for we are told by Prof. Hamilton, in his admirable work on Fractures and Dislocations, that so far as he knows there is only one "well authenticated example" of fracture of the epiphysis of the great trochanter on record, viz., a case reported by Mr. Key to Sir Astley Cooper. To quote from Prof. Hamilton, "the subject of this case was a girl aged about sixteen years, who fell (March 15, 1822) upon the side-walk, and struck her trochanter violently against the curb-stone. She arose, and without much pain or difficulty walked home. On the 20th she was received into Guy's Hospital, and the limb was examined by Mr. Key. The right leg, which was the one injured, was considerably everted, and appeared to be about half an inch longer than the sound limb. It could be moved in all directions, but abduction gave her considerable pain. She had perfect command over all the muscles, except the rotators inwards. No crepitus could be detected. Four days after admission she died, having succumbed to the irritative fever which followed the injury. The autopsy disclosed a fracture through the base of the trochanter major, but without laceration of the tendinous expansions which cover the outside of this process, so that no displacment of the epiphysis had occurred, nor could it be moved except to a small extent upwards and downwards. A considerable collection of pus was found also below and in front of the trochanter. The absence of displacement in the fragment, with its peculiar and limited motion,

sufficiently explained why the fracture could not be detected during life."

The cause of the accident in my case is still to some extent a mystery. Could the fracture have occurred from muscular action on the occasion described, when the lad leaped or threw himself from the fence in pursuit of his ball? I have thought this not improbable, and the process being firmly held by the tendinous expansions covering it, allowed of his walking with comparative ease for several days, until these suddenly giving way, either from ulceration or periosteal effusion, produced the agonising pain and instant lameness described as occurring while standing at his desk.

Although there was at the time an absence of all history of injury to the bone, I examined the limb most carefully on the occasion of my second visit, but failed to discover any of the ordinary symptoms of fracture in that locality, such as crepitus, inversion, eversion, &c. There was neither shortening nor lengthening of the limb, for after the consultation with Dr. Fenwick, or, if I mistake not, in his presence, I measured most accurately without discovering either of these signs. The absence of crepitus is readily understood when we consider that early in the accident the fractured epiphysis was no doubt bound down firmly by the tendinous expansions, (which it will be remembered was the cause of absence of crepitus in Mr. Key's case,) while later on the effusion of serum and blood which followed, would effectually separate the fractured surfaces and obscure this sign.

The other points of interest in the case were the unmistakeable signs of blood contamination, as evidenced in the enlarged parotids and painful joints, which, however disappeared with remarkable rapidity as soon as the periosteum was opened and the pent up pus dislodged. It is more than likely that had the incision been delayed many hours longer, the pyæmic symptoms would have made such headway as to have got beyond all control, and life would have

been destroyed much more rapidly than was ultimately the case. The paralysis of the left arm, which occurred on or about the tenth day of my attendance was as complete as that which occurs from fracture of the spine or other cause of pressure on the cord, entirely destroying its function. Motion, however, in the opposite arm and leg was unimpaired, so that it is not easily explained on the supposition of local effusion, as both sides, and in fact every part below that would have participated in the paralysis. There is no doubt but by the time this symptom appeared all power was lost in the fractured limb, which was also the left, but this I attributed to the extensive disease going on in the thigh, although I have since thought that the same cause, such, for instance as a pyæmic abscess in the brain, might have produced loss of power in both arm and leg.

Periscopic Department.

SURGERY.

A Case of Total Extirpation of the Larynx with the Hyoid Bone, and a portion of the Tongue, Pharnyx and Œsophagus. By B. Von Langenbeck, Prof. in the University of Berlin.

Gentlemen,—The preparation which I beg to lay before you is worthy of attention on account of the unusual extent to which the cancerous degeneration has reached in the larynx and beyond it. It was necessary on this account to remove the whole larynx with the epiglottis, the hyoid bone, and the posterior third of the tongue, as well as the anterior and lateral portion of the pharynx with the pharyngo-palatine arch, and a small part of the œsophagus. I will give first a brief statement of the history of the disease.

A master smith named Krause, of Brandenburg, aged

fifty-seven, was admitted into the hospital on November 29, 1874, with violent dyspnœa, threatening suffocation, attacks of cough attended with a whistling sound, and a cyanotic tint of the face. It was impossible to obtain the anamnestic circumstances of the disease from the patient himself; and we only learned that he had been a healthy and strong man up to about four years previously, when he suffered from hoarseness and difficulty of breathing, and for some time he had been treated in Berlin by cauterisation of the larynx. Laryngoscopic examination, which was very much impeded by the difficult respiration, showed, ulceration at the anterior commissure of the vocal cords and a defect of the arytenoid cartilage. The evening temperature was 38·2 Cent. (100·76 Fahr.) On November 30 tracheotomy was performed, under chlorofrom. The upper rings of the trachea were ossified, and were divided with difficulty; and after the trachea had been opened, the introduction of the cannula was hindered by incessant and long-continued paroxysms of cough. By these, a quantity of thin purulent sputa was expectorated and he was considerably relieved. Some infusion of ipecacuanha, with morphia, was given. The tormenting paroxysms of cough with abundant expectoration of purulent sputa and acute fever, continued until December 10. The fever then ceased, the sputa became mucous, and the operation wound healed leaving at the end of December only the fistula in which the cannula lay.

An examination made at this time revealed distinct enlargement of the larynx, and tenderness on pressure. The lymphatic glands in the right inframaxillary region, were swollen. Nothing abnormal could be detected on inspection of the mouth and fauces; with the finger, the epiglottis was felt to be swollen. The laryngoscope showed remarkable œdematous swelling of the epiglottis and of the ary-epiglottic ligaments, so great that it was impossible to obtain a view of the cavity of the larynx and of the rima glottidis.

Extirpation of the larynx was urgently recommended at this time; but the patient refused to submit to the operation, and left the hospital on January 11, 1875.

On July 1, Krause was re-admitted. Breathing had been carried on with perfect freedom through the tracheal tube; but lately there had been increasing difficulty of deglutition, so that the patient was now only able to take fluid food. The larynx, so far as could be ascertained by palpation, was swollen, widened, without distinct outline and hard. On both sides of the neck, infiltrated inframaxillary glands could be felt.

On pressing down the tongue, a yellowish red nodulated mass was seen to project behind the root, which we were inclined to regard as the diseased epiglottis. Laryngoscopic examination was impossible, in consequence of the masses of mucus which filled the pharynx and completely closed the upper opening of the larynx. In this region the finger felt a ragged nodulated swelling, which prevented the finger from penetrating further into the pharynx. The patient's general condition and strength were satisfactory.

Extirpation of the larynx was performed on July the 21. The patient having been narcotised by chloroform administered through the trachea was enlarged downwards, and Trendelenburg's tamponcannula was introduced and fixed into the trachea by pumping air into the India-rubber bag. Anæsthesia was kept up to the end of the operation by administering chloroform through a tube introduced into the cannula.

I performed the operation in the same way as I had devised in 1854 in a similar case, in which however, operative procedure was finally abandoned.

A transverse incision was made two centimetres (0·8 inch) above the hyoid bone, from the inner edge of one sterno-mastoid muscle to that of the other. From the centre of this incision another was carried in the middle line, over the larynx, close down to the tracheal fistula, the upper cicatrix of which, however, was not divided. The skin was

then turned back in two flaps, and the larynx (thyroid cartilage) was laid free. The infiltrated lymphatic glands, with the right submaxillary gland, were then extirpated; the mylo-hyoid, digastric, and hyo-glossus muscles were cut through above the hyoid bone, the lingual artery was exposed and tied; the glands were then removed on the left side, and the lingual artery was tied. The operation was considerably impeded by the unusual shortness of the patient's neck by the fusion of the soft parts with the larynx, probably induced by the long retention of the cannula. The stripping off of the soft parts from the thyroid and cricoid cartilages could only be imperfectly accomplished; and the intention of dissecting off the pharynx and the upper end of the œsophagus from the larynx had to be abandoned, as the cancer had invaded the first-named of these parts.

It being then impossible to preserve the anterior wall of the pharynx and œsophagus, we proceeded to lay open the fauces. The larynx being drawn forward and downwards by a sharp hook fixed in the hyoid bone, the point of the tongue was drawn out of the mouth by means of a thread passed through it, and the root of the tongue was cut through about four-fifths of an inch above the hyoid bone. The superior thyroid arteries were then tied, and the lateral wall of the pharynx cut through. Finally the pharyngo-palatine arches, which were stretched forward by the strong dragging of the larynx, were divided. The external carotid artery, which was drawn forward with the lateral wall of the pharynx was then laid bare on each side, tied in two places, and cut through between the ligatures. The lingual and hypoglossal nerves were also exposed and divided.

The larynx now remained connected only with the trachea; and the latter was divided close blow the cricoid cartilage, so as to leave the tamponcannula in the tracheal fistula.

The anterior cervical region from the chin nearly as far as the manubrium sterni, showed now a large opening at the

bottom of which the spinal column, covered by the posterior wall of the pharynx and œsophagus, lay exposed. The skin of the neck, which had been divided by the transverse incision, was turned over in two flaps like a collar. The trachea sank downwards, so that the cannula lay close above the sternum. At the end of the wound were seen the velum palati and the broad wounded surface of the tongue. On inspection through the mouth, the anterior part of the tongue was seen to be quite pale ; it had receded from the lower jaw, and was completely immovable.

The muscles divided and removed in the operation, besides the small laryngeal muscles, were the sterno-hyoid, sterno-thyoid, crico-hyroid, and mylo-hyoid, digastric, genio-hyoid, stylo-hyoid, and stylo-glossal ; the stylo-pharyngei, glosso-pharyngei. and palato-pharyngei. Forty-one ligatures were applied to vessels, viz., to the external maxillary, lingual, superior thyroid, external carotid, and laryngeal arteries ; and both hypoglossal and lingual nerves were divided. Along with the infiltrated lymphatic glands I had removed both submaxillary glands, feeling that these glands, which were apparently somewhat enlarged, might become diseased.

Notwithstanding the extent of the wound and the length of the operation, which lasted two hours, there was comparatively little exhaustion. The patient's appearance was good : pulse 80, full and strong ; temperature 36·8° Cent. (98·25° Fahr.). I belive that this is mainly to be ascribed to the circumstances that complete chloroform-narcosis was steadily kept up by the help of the plug in the trachea from the beginning to end of the operation ; that we were able to completely prevent the flow of blood into the air-passages ; and that, the operation being performed by careful anatomical dissection without any bruising or laceration of the parts, we were able to tie the great vessels before dividing them.

After the operation was completed, and the patient had awakened from the anæsthesia, some Hungarian wine was

given to him through an œsophageal tube, the tampon-cannula was removed and an ordinary strong tracheal cannula substituted. In order to prevent the mucus which was abundantly secreted by the remaining part of the fauces, from coming into contact with the cannula, a compress soaked in a solution (one-third per cent.) of salicylic acid was placed round the neck so as to cover the wound. I abstained from attempting to unite the wound in the cervical integuments by sutures, fearing that the stretching of the parts would favour the burrowing of the secretions from the wound between the divided cervical fasciæ. The flaps of skin on the two sides of the neck were therefore simply laid down in place, and supported by the above-mentioned salicylised compress.

July 22. The patient had vomited twice since the preceding evening (after effect of the chloroform) ; in other respects his condition was good. Pulse, full and strong, 80 ; temperature, morning 38·6° Cent. (101·48° Fahr) ; evening, 39·8° Cent. (103·64° Fahr.). He was fed three times daily through the œsophageal tube, and had nine eggs, milk, soup, and about a pint of Hungarian wine in the day.

July 23. There was abundant expectoration of thin mucus through the cannula. Temperature, morning, 38·6° Cent. (101·48° Fahr.) ; evening, 39·4° Cent. (102·92° Fahr.) ; pulse, 80.

July 25. The patient passed a good night. Since the preceding day there had been diarrhœa, for which fifteen drops of tincture of opium were ordered. The temperature and pulse were as on the 23rd. On account of fœtor, the cavity of the mouth was several times washed out with salicylised water. By means of a large sponge, which was pressed above the cannula against the posterior wall of the pharynx, overflow into the trachea was prevented, and the mouth and fauces were carefully wiped with a solution of salicylic and boracic acid.

July 26. There was still abundant purulent secretion ; but respiration was perfectly free and quiet. Pulse full,

strong, regular. Evening temperature, 38·2° Cent. (100·76° Fahr.).

July 28. The patient's general condition remained good; he was free from fever.

In the preparation, the anterior wall of the œsophagus and pharynx is cut through, larynx is cut away from behind, and the hyoid bone sawn through in the middle. The cancerous degeneration has so complelely involved the upper division of the larynx. the epiglottis, and hyoid bone, that it is difficult to recognise the individual parts. The inner surfaces of the cricoid and thyroid cartilages, as far as the laryngeal pouches and the inferior vocal cords, are free. The morbid change begins close above the laryngeal pouches, and in the form of nodulated masses, completely fills the whole upper part of the laryngeal cavity. The arytenoid cartilages and the ary-epiglottic ligaments are completely lost in the tumour. The epiglottis is recognisable in a somewhat separate mass, in which some fragments of the œsophagus can still be recognised. The hyoid bone is surrounded by the swelling, which was growing upwards into the base of the tongue.

The anterior surface of the hyoid cartilage and the ring of the cricoid cartilages have remained quite free from disease. The tongue is divided in front of the papillæ circumvallatæ, and the cut surface shows healthy tissue. The removed larynx, hyoid bone, and tongue are about 4·4 inches long, of which 1·2 inches belong to the tongue.

You are aware, gentlemen, that after Czerny had demonstrated by experiments on dogs the possibility of extirpating the larynx (*Wiener Medizinische Wochenschrift*, nos. 27 and 28, 1870), the first extirpation of the larynx in man was performed by Billroth. On December 31, 1873, he removed the larynx from a schoolmaster, aged thirty-six, on account of diffuse epithelial cancer, A part of the two upper tracheal bags, and the whole of the cricoid, arytenoid and thyroid cartilages were removed, and a third of the base of the gullet was taken away. The œsophagus and pharynx,

the anterior and greater part of the epiglottis, and the hyoid bone, were preserved. The patient was dismissed cured on March 2, 1874, able to speak intelligibly by means of an artificial larynx (Dr. C. Gussenbauer, in *Archiv für Klinische Chirurgie*, Band xvii. 1874).

The second operation, for partial extirpation, was performed by Heine, of Prague, in a case of stenosis of the larynx. How much of the larynx was removed I do not know; and regard to this I must refer you to the forthcoming transactions of the fourth German Surgical Congress, held in April of the present year, at which the patient operated on by Heine was shown.

A third operation of this kind performed on August 12, 1874, by Dr. Moritz Schmidt, of Frankforr, who removed the cricoid, thyroid, and arytenoid cartliages from a cattle-dealer, aged, fifty-six, on account of carcinoma of the larynx, producing narrowing and symptoms of suffocation. The patient died of collapse on the fifth day after the operation.

With regard to the steps of the operation, I must inform you that Billroth and Schmidt made a longitudinal incision upwards from the hyoid bone, and removed the larynx by cuttingh throug the trachea from below; while I made a T-shaped incision, freed the larynx from its connection above by careful dissection, and divided the trachea last of all. I would recommed my method also in cases where the larynx alone is to be removed, and the epiglottis, hyoid bone, and tongue, are to be preserved. By performing extirpation from above, it becomes possible to expose and tie the principal arteries before dividing them, so as to reduce the loss of blood to a minimum and prevent the escape of blood into the trachea, even when one operates without plugging the trachea, or when the plug is spoiled. I must however, attach the greatest importance to the plugging of the trachea; and it is advisable always to have at hand several of Trendelenburg's tamponcannulæ in case that one or other of them should fail.

In order to be able to carry out the plugging as quickly

as possible, it is advisable to perform the tracheotomy before proceeding to extirpate the larynx. Indeed, in most cases it will be possible to wait for the cicatrisation of the tracheal fistula before proceeding to the principal operation. The advantage is gained by this, that the trachea, being united to the skin in the region of the fistula, does no sink downwards as is otherwise the case, and that the process of stitching the skin of the neck to the trachea may be omitted.

In the cases operated on by Heine and Billroth, an artificial larynx was fitted on soon after the operation. In my patient, the large traumatic cavity, extended far beyond the limit of the larynx, will render this impossible, and it will be necessary to wait for the cicatrisation of the wound. How this will take place if the case continue to make favourable progress, and whether in the perfectly immovable state of the remnant of the tongue, the power of swallowing may return, I am not able to foresee.—*London Medical Record.*

The Case of the late Prof. J. Hughes Bennett. By W. CADGE, F. R. C. P., Surgeon to the Norfolk and Norwich Hospital.

Professor J. Hughes Bennett died at Norwich on Sept 25th, 1875, aged 63.

A narrative of his illness, so far as it is known to me, particularly of the last complication which led to his death, will have a sad interest for those who knew and loved him as a friend or teacher; and a deep professional, as well as a sad, interest for those, and they have been many, who from time to time, have used their best skill and thought to detect and unfold the hidden cause of his mysterious case. I know not exactly when or how Dr. Bennett's first failure of health commenced; but it was many years ago. The most prominent and persistent of his early symptoms were those of a bronchitic and laryngeal affection, which were sometimes urgently alarming, sometimes almost recovered from, were readily reproduced, and did frequently recur up to the very last.

By slow degrees, his general health failed, he grew thinner, looked paler and lost strength. A few years ago it was discovered that he had diabetes ; but this disappeared without any great rigor of treatment, and has not been thought or known to have recurred, except occasionally and very slightly. On this point, however, there may be room for doubt. Since the first discovery and the first disappearance of the sugar, I have reason to believe that examinations of the urine have not been frequently made. In conversations and in answer to questions on this subject Dr. Bennett always spoke of the diabetes as a thing of the past, and as not bearing with importance, or as having much influence, on his steady deterioration of health ; at no time had he thirst or diuresis ; and, therefore the malady did not impress itself on his thoughts by the usual general symptoms. Very recently, however, (in August) sugar was again found ; and I have before me a paper containing observations on the urine made three times daily during the first half of September, 1875 ; from which it is shown that while the specific gravity and the quantity of the urine were but little, if at all, above the natural standard, sugar appeared and disappeared in a quite irregular and intermitting way, thus the urine passed during the night gave a dense deposit, with Pehling's test on five out of fourteen days ; that passed at mid-day on six, and that passed in the evening on four out of fourteen days ; while in all the other observations, no sugar was found. During this period his diet was very similar from day to day ; consisting of fish, a little meat, pudding or tart, fruit and sherry ; very little bread and no potatoes.

If, as I have said, in this long interval between the first and last clear recognition of diabetes, the urine was but seldom examined, and when examined, chanced to be free from sugar, it seems probable that glycosuria, in one of its intermittent and milder forms, existed throughout, and was the true and chief cause of the emaciation and debility which in any other hypothesis, it has been found so diffieult to explain.

Be that as it may, his health continued to decline. The last three winters he passed in the south of France, with some benefit, possibly, to his bronchial and laryngeal affection, but apparently without any effect on his general state. For many years. Dr. Bennett had suffered from occasional attacks of gout; and he was liable, too, to lithic acid deposit in his urine; occasionally for several years, he had experienced some slight impediment and irritation in making water, which he thought to be due either to slight stricture or to prostatic enlargement. From time to time, a simple catheter was passed, but no stricture was discovered. Last winter at Nice, he had rather more vesical irritation than usual. On his way to England, in June, he stayed for a time on the borders of the Lake Geneva; and a letter received from him on July 1st will best describe his condition.

"I have long been intending to write to you in consequence of a malady which has been creeping upon me for some years, but which now is causing me no small anxiety Frequent micturition; pain in the back, long thought to be lumbago, but which I now know to be renal; sediments of uric acid, and attacks of acute gout in the right foot, and one in the stomach, have indicated during the last, say four years, pretty clearly the general diathesis and approaching local disorder. About three months ago, at Nice, I was suddenly seized with pain during micturition, extending to the extremity of the urethra, and passed about a tablespoonful of bloody urine, mixed with gravel. The bladder was irritable for about twelve hours. Lying in bed, poultices, and some alkaline water, got rid of it. Since coming here, four weeks ago, I have been sensible of dull pain in the perinæum; had two more attacks of irritable bladder, passage of blood, etc. Whether all this signifies irritable bladder, prostatic or renal disease, or stone, I cannot tell. Can you suggest what should be done? I have given up wine, beer, acids, fruit and sugar; take a good deal of milk, little meat; indeed, the desire for animal food is small. I continue pale, weak, and emaciated; I apply poultiees to relieve local pian,

and take about twenty grains of bicarbonate of potash thrice daily, in the slightly alkaline waters of this place; I also take fifteen drops of vin. sem. colch. every other night or so. It may be only gout, but I dread stone. My urethra is very irritable; and the last time a catheter was passed I nearly fainted. This was two years ago; and I was then assured that there was no stricture or prostatic disease, merely a weak bladder."

In July, he came to Norwich, looking more emaciated, pale, and ill than I had ever seen him. On carefully sounding, a stone was readily felt, apparently of some size; the bladder was capacious and healthy, and could retain nearly half a pint of urine; the prostate was slightly enlarged; the, urethra very sensitive and irritable; the urine was clear acid, specific gravity 1,020, and contained no albumen. He was much depressed by the knowledge that he had stone, but his innate force of character came to his aid; he looked the difficulty in the face, and was prepared at once to undergo treatment. It was not without difficulty that I induced him to go to Edinburgh in the first week of August; there were many reasons which made a visit there desirable, travelling did not add much to his troubles; and I confess that I was not without the hope, that once there, he would be persuaded to ask, and would see the wisdom of accepting the aid of one of his distinguished colleagues and friends. While there, he received much comforting and valuable encouragement, but his symptoms increased in severity. He wrote on August 18th: "There is now much more irritation than when I last saw you; stooping and turning cause sharp pangs, and the close of micturition is very torturing." He returned to Norwich; and the question of operation, lithotomy, or lithotrity, presented itself. Either must be attended with the greatest hazzard in one so worn and unhealthy; but the thought of doing without operation was simply intolerable, and not to be considered. In favor of lithotrity, were the fair quietude and healthy condition of the bladder and urine; but there were serious drawbacks. Dr.

Bennett was a man of high spirit and courage; but his courage fitted him rather to encounter one great risk than to endure the wear and tear of repeated operation, frequent use of instruments, and the probability (made more probable by the presence of glycosuria) of troublesome cystitis; the size of the stone alone could decide the point, and to ascertain this, Mr. Clover kindly came down and administered nitrous oxide, followed by ether; while, with the lithotrite I found that the stone measured 1½ inches by 1 inch. Such a stone as this was fairly within the compass of lithotrity in an otherwise favorable patient; but in this case I had not a moment's doubt, that lithotomy, if carefully and accurately done, notwithstanding its greater immediate risk, afforded the best chance of complete recovery. In this view the patient readily acquiesced; and on the following day, September 16th, I removed the stone by lateral lithotomy, assisted by Mr. Crosse, Dr. Beverley, and Mr. Hooker. The nitrous oxide and ether was again used by Mr. Clover, with admirable effect; there was never a movement of the patient, nor the least headache or sickness afterwards. The operation was easy and satisfactory. The transverse artery of the perinæum was large, and spurted freely; it was easily tied when the stone was removed; the blood was so thin, and so little disposed to coagulate, that every little vessel continued to ooze; and I deemed it best to plug the wound round a silver tube, rather than allow any quantity of blood to be lost. The stone was composed of lithic acid; it measured 1½ by 1 inch, and weighed 193 grains. No more blood was lost, and urine passed freely afterwards. He suffered considerable aching pain in the wound for some hours; but it was gradually checked by half a grain of morphia introduced into the rectum at thh time of operation, and twenty drops of Battley by the mouth two hours after. At night he turned cautiously on one side took twenty grains of chloral, and had some hours' sleep. Pulse 90.

September 17th. Urine plentiful; he had pain only when

he moved. Pulse 96; temperature 102 deg. Tongue dry but clean. He had taken egg and milk and a few teaspoonfuls of brandy in soda-water; he had frequent cough and expectoration, which caused temporary pain in the wound.

September 18th. The tube and part of the plug was removed; after which the bladder was able to retain urine and empty itself by the wound every two hours. This caused considerable pain in the parts from smarting and spasm; but in a day or two when all the lint was removed, it abated, but never wholly ceased. Pulse 92; temperature 101 deg.

I need not record minutely the daily progress of the case. Suffice it to say, that for four or five days there was a good prospect of speedy recovery; he took food plentifully, and was in good spirits; and everything went on well so far as concerned the pelvis and bladder; the urine was easily caught and was clear, but loaded with sugar, with a specific gravity of 1030 to 1035. By degrees, however, the cough and expectoration became more frequent; and this, with the frequent spasm and larger amount of water secreted distressed him and prevented sleep. Opiates by the mouth or bowel relieved for the time, but were apt to be followed by sickness; chloral did not act well, and signs of increas- debility showed themselves. The pulse continued from 90 to 96, but became weaker and weaker. Aphthous patches gathered on the tongue and throat, and made swallowing difficult, and thus the prostration went on; and death from sheer exhaustion took place on the 25th, the tenth day after the operation.

Post mortem examination, forty-eight hours after death The body was emaciated; the surface pale and bloodless The blood was thin, and transuded through the vessels and stained the tissues. Only one small clot in the right ventricle of the heart was met with.—The *bladder* was perfectly healthy; its muscular walls were rather thin and dilated; its mucous membrane was pale and smooth.—The *prostate land* was enlarged to the size of a small apple; it projected

somewhat like a cornice into the bladder, and on this projecting part there were traces of slight ecchymosis beneath the mucous membrane. The lithotomy wound was clean and so slight, that looking from the bladder, none could be seen, and on closer scrutiny it was found that the knife had only divided the mucous membrane and had scarcely reached the left lobe—this, doubtless, explains the power of the bladder to retain urine the moment after the tube was removed.—The *kidneys* were slightly congested, but not unhealthy. — The *liver* weighed 4 lbs. 5 oz., and was healthy.—The *spleen* was greatly hypertrophied, and weighed 2 lbs. 12 oz. ; texture firm, of natural color and appearance.—The *stomach* and *intestines* were healthy.—The *heart* was large and flabby, and weighed 1 lb. 1 oz. ; its valves were healthy ; the left ventricle was empty ; the right contained a soft clot; the aorta was deeply stained by the colouring matter of the blood ; its walls were atheromatous, and there were several calcareous scales.—The *lungs* were emphysematous and œdematous ; there was some dilatation of the small bronchi; at the apices there were some small patches of collapsed lung-tissue ; no tubercle ; the right lung weighed 1¾ lbs. ; the left, 1½ lbs. There were some old pleural adhesions on the right side.—The *trachea* and *larynx* were pale and healthy.—*Head.* On raising the calvarium, a soft tumour was discovered situated on the right side of the head, about an inch above the ear, between the dura mater and the bone. It was about the size of a hen's egg, and projected towards the brain, so as to produce a deep pit or hollow into which it fitted. The convolutions were flattened and pressed down, but not otherwise altered ; no softening ; no congestion. The dura mater covering the tumour was somewhat thickened. The parietal bone was thickened and hypertrophied around the circumference of the tumour ; over it there was thinning by pressure and absorption, and at one point, about the size of a shilling, all trace of bone had disappeared, and it was replaced by fibrous membrane. The tumour had a cystoid character,

with a distinct investing membrane, and its contents consisted of a blackish pulpy material resembling the interior of a recent aneurism, or more closely of a myeloid tumour. Under the microscope, there were seen cells of various descriptions, plates of cholesterine, fatty granules, and altered blood-corpuscles.—The *brain* itself was anæmic, but not, on the whole, unhealthy; it weighed 47 oz. The optic thalami, corpora striata, pons Varolii, and medulla oblongata had a somewhat shrunken atrophied appearance, and were, perhaps, harder and tougher than usual. The arteries were healthy, and, to the naked eye, the texture of the brain around them seemed natural. I will make no comment further than to say, that so far as I have been able to ascertain, Dr. Bennett never suffered from headache, giddiness, or any symptom directly indicative of such a lesion as that just described.

I may add, that Professor Sanders of Edinburgh, who happened to be staying in Norwich, visited Dr. Bennett a day or two before he died, and was present and kindly assisted at the *post mortem* examination.—*British Medical Journal.*

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

The annual meeting of the Medico-Chirurgical Society was held on Friday evening last in the Library of the Natural History Society. The President, Dr. Reddy, read an address giving a *resumé* of the proceedings for the past year. A special vote of thanks was accorded to Dr. Roddick, the retiring Secretary-Treasurer, for the able and indefatigable manner in which he had filled the office since 1870. The following gentlemen were then elected officers for the ensuing year:—Dr. Godfrey, President; Dr. F. W. Campbell and Dr. Drake, Vice-Presidents; Dr. Roddick, Dr. Osler and Dr. Gardner, Council; Dr. Bell, Secretary-Treasurer.

CANADA

Medical and Surgical Journal.

MONTREAL, NOVEMBER, 1875.

MEDICAL AMENDMENT BILL.

We lay before our readers the bill which is proposed to be introduce, before the Local Legislature of this Province of Quebec, with a view to its becoming the Law, in substitution of the act of 1847, under which the profession is at present governed. How far this bill is an improvement on the old act, remains to be seen. The act of 1847 admits of improvement, but we do not think that this bill in any way fulfills that desired end. In matters medical, we deem it advisable to avoid as much as possible all hasty Legislation. We have an act which is efficient, and under which the profession has prospered for nearly thirty years, and although not wedded to the present act, believing as we do that it can be much improved upon, yet to force on the profession a change without due and careful consideration, and without fully submitting the various provisions of the bill, to the members of the present College, would be a most high-handed measure, and one that we fear would lead to trouble. But let us carefully look into this bill and inquire how far its provisions are more desirable, than the act of incorporation passed in July, 1847. The very first clause of this Bill contains an allegation, which to say the least is questionable. It states that it is "highly desirable "that the medical profession of the Province of Quebec, "be placed on a more respectable and efficient footing." This commencement would lead the casual reader to suppose that the following clauses contain suggestions which are

in keeping with the advances of the day, and that as scientists, we were endeavouring to obtain an enactment which would raise the standard of medical education to the very highest pitch. Now we maintain that in our Province, we are far better off in that respect, than in some other parts of the Dominion, notably in the sister Province of Ontario, where the Profession is a most happy family, members of legitimate medicine being forced into communion with votaries of all the various pathys, who enjoy an equal status, and are possessed of equivalent rights, and furthermore are the very arbiters to settle the question, of who shall, and who shall not be, in future, admitted as practitioners of Medicine, Surgery and Midwifery, amongst them.

There is one feature of this Bill that we think very objectionable. The college of Physicians and Surgeons, for the Province of Quebec, as at present constituted, is open to all comers who hold the License of the College for four years. On payment of the small fee of ten dollars, and an annual subscription of two dollars, Licentiates become Members, and are eligible for election to the governing board. The College has granted its license to some 1,500 practitioners, but not more than 150 of these gentlemen have availed themselves of the privilege of membership. If the profession as a body politic cares so little about privileges that are open to it, we scarcely think that it will be legislated into altering its opinion or course of action. The present Members of the College, have complied with the law and contributed to the funds of the College, furthermore, they have assisted with their annual subscription in defraying the working expenses of the College. The College possesses a fund which we hope to see increased, so as to give it a permanency, in the acquisition of property, in the form of a building, library and museum, which each individual member will take pride in augmenting. These are the circumstances and conditions which will place the medical profession in this Province on "a more respectable and efficient footing," and not the very doubtful measure

of forcing these privileges by Act of Parliament on all members of the profession.

We pass over several clauses to which we can have no objection as they are mere matters of detail bearing on the election of the governing board of the College, but we may observe, that we do not regard this method of election in any way an improvement on the present system of election.

We come now to clause seven bearing on the qualification of those about to commence the study of medicine. This is a most extraordinary clause, it prescribes that a person must pass a preliminary and satisfactory examination on the following branches: (Then follow a list in conformity with what is demanded by the Council for Medical Education and Registration of Great Britain.) But at the latter part of the clause we read that the College may exempt from classical examination any person being the bearer of a diploma of Master of Sciences or a certificate testifying that he has successfully followed in a good educational establishment a course of study comprising the branches hereinbefore mentioned; now it strikes us that the promoters of this bill may possibly mean "Bachelor of Arts," instead of Master of Sciences, the latter is a degree which we do not believe is conferred by any University in the country. But then again, exempting from examination the bearer of a certificate of qualification from any good educational establishment appears to us to be a retrograde movement, and one which will not tend to place the medical profession in this Province on a "more respectable and efficient footing." With respect to the curriculum of study presented, it is meagre and deficient in many respects.

At clause ten, we read that no Student shall receive the College License, unlese he shall have passed a satisfactory examination, before the Board on the several branches, enumerated in the foregoing section.

Provided always that it shall be lawful for the said Board to grant the College License, without examination to any person bearing a diploma from a Canadian Incorporated

University, or School of Medicine, on condition that the same has been obtained, agreeably to the following regulations:

The regulations provide that the teaching bodies shall have hospital accommodation for their students, and other necessary apparatus and plates, without which a course of Lectures on any branch connected with Medicine, would be uninstructive, and furthermore, that all teaching bodies shall submit to the supervision in their examinations, of a committee of gentlemen, appointed by the Board, with a view of ascertaining if diplomas are granted according to the merits of the students.

Now this in principle, we object to. If we are to have an alteration in the present law, let us have but one door of entrance to the profession.

The license to practice should be accorded after due study and successful examination. The diploma of a University or incorporated school, is an honorary qualification, and can give no legal right to the holder of it to practice his profession. Allow the schools to teach as pleases them best. If they teach dishonestly the result will soon become apparent, but the College of Physicians and Surgeons, which is the administrator of the law of the land, ought to be empowered to test to the fullest extent the qualifications and knowledge of those who undertake the responsible duties of a Physician, Surgeon and Accoucheur.

There is one other point which we deem it advisable to mention, one which we doubt not has escaped the promoters of this bill, though we feel certain that they will agree with us in its necessity. Like all societies of men we are liable to admit into our ranks unworthy members. We think the college should have the power of removing unworthy members by expulsion,—such expulsion to deprive the unworthy member of all right to practice his profession. We observe in the Legal profession an erring brother can be brought up and reprimanded or deprived of his gown by the Council of the Bar of his district; why should not the

Medical profession secure similar powers,—then, indeed, should we be moving in the right direction, and seeking to place the Medical Profession of this Province on "a more respectable and efficient footing."

We do not oppose the alteration of the present law, but we do say, let us in all decency submit the proposed amendments in regular form to the members of the College. There is no hurry, the profession is not without a good act, and there is no time between this and the 20th of November to fairly go into this measure; the present time is inopportune. The schools and Universities are in full session; many of the members of the College are busily engaged in the labour of teaching. This matter should not be hurriedly put through, but carefully and intelligibly discussed, at as full a meeting of the members of the College as can be summoned. We say as can be, because there is no provision in the act under which we are governed whereby a general meeting of the members of the College can be called except at the regular triennial meeting. Parliaments are jealous of any infringement of laws or acts which have an existence, so that in presenting a bill of amendments which has not been conceived and brought forth in regular order, the promoters of the bill will place themselves in the position of being refused, and of seeing all their labor go for naught.

BILL.

An Act to incorporate the Members of the Medical Profession, in the Province of Quebec, and to regulate the Study and Practice of Physic and Surgery therein.

1. WHEREAS the laws now in force for regulating the practice of Medicine, Surgery and Midwifery require amendment; and whereas it is highly desirable that the Medical Profession of the Province of Quebec, aforesaid, be placed on a more respectable and efficient footing, and that better means should be provided for the conviction and punishment of persons practising Medicine without license: Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and of the Legislative Assembly of the Province of Quebec, and it is hereby enacted by the Authority of the same, that from and after the passing of this Act, the Act or Ordinance of the Legislative

Council of the late Province of Quebec, passed in the twenty-eighth year of thereign of His late Majesty King George the Third, and entituled: *An Act or Ordinance to prevent persons practising Physic and Surgery within the Province of Quebec, or Midwifery in the Towns of Quebec and Montreal, without license*, and all other Acts or parts of Acts in any manner relating to the mode of obtaining Licenses to practice Physic, Surgery or Midwifery shall be and are hereby repealed, except in so far as relates to any offence committed against the said Acts or any of the same before the passing of this Act, or to any penalty or forfeiture incurred by reason of such offence.

2. And whereas it is expedient that the Medical Profession, within the Province of Quebec, be empowered under certain restriction, to frame its own statutes for the regulation of the study of Medicine in all its departments and By-laws for its own government, be it therefore enacted that from and at the passing of this Act, all Physicians empowered to practice Physic, Surgery and Midwifery within the Province of Quebec, and their successors shall be and are hereby constituted a body politic and incorporate by the name of *The College of Physicians and Surgeons of the Province of Quebec*, and shall by that name have perpetual succession and a common seal, with power to change, alter, break or make new the same; and they and their successors by the name aforesaid, may sue and be sued, implead, and be impleaded, answer and be answered unto in all Courts and places whatsoever, and by the name aforesaid shall be able and capable in law to have, hold, receive, enjoy, possess and retain for the ends and purposes of this Act and for the use of the said College, all such sums of money as have been or shall at any time hereafter be paid, given or bequeathed to and for the use of the said College; and by the name aforesaid shall and may at any time, without any Letters of Mortmain, purchase, take receive, have, hold, possess and enjoy any lands, tenements, or hereditaments, or any estate or interest derived or arising out of any lands, tenements or hereditaments or the purposes of the said College, and for no other purposes whatever; and may sell, grant, lease, demise, alien or dispose of the same, and to do or execute all and singular the matters and things that to them shall or may appertain to do in the premises; Provided always that the real estate so held by the said Corporation shall at no time exceed in value the sum of one thousand pounds.

3, And be it enacted, that from and after the passing of this Act, the persons who compose the College of Physicians and Surgeons shall be called "*Members of the College of Physicians and Surgeons of the Province of Quebec.*"

4. And be it enacted, That the affairs of the said College shall be conducted by a Board of Governors composed, first, of two delegates from each of the Universities, Colleges, or Schools of Medicine incorporated within the said Province, giving medical tuition accorcing to the Provisions of this Act, or which shall be established hereafter; provided that no professor belonging to any of these teaching Bodies shall be eligible to be a member of the Board, except as a representave of the College by which he is delegated; 2. of 24 Members elected by the registered Physicians of the Province, one member being elected for each territorial division having a member in the Legislative Council by the registered Physicians residing within said division; and the mode of election together with the time thereof shall be determined by a By-law of the Board, and in default thereof, by the Lieutenant-Governor in Council.

The Members of the Board shall be elected for three years; but in case of decease or resignation, a new election shall be held if the member represent a said territorial division, or in the case of a delegate from an University, the University shall appoint another member to replace the member deceased or resigned.

The first election of Members to represent the territorial divisions and the

incorporated Universities or Schools on the Board shall be held on the , and the present Board shall fix and determine the place within reach of the divisions, name and appoint Returning officers, and shall take all necessary measures for that purpose. In case of contestation, the Board shall decide and adjudge, and if the election be null or illegall, they shall order another to be held.

All physicians within the Province empowered to practice Physic, Surgery and Midwifery, shall be entited to vote and may be elected Governors at the first election.

But no person shall vote at any of the subsequent Elections, nor be eligible as Governor, unless he shall have previously paid up all dues imposed by and satisfied the new Board.

The Board shall name and appoint a President, a Vice-President, a Registrar, a Treasurer, and all other officers required for carrying out the provisions of the law.

Within each territorial division, a medical association may be established (agreeably to the By-laws of the Board) of which all Physicians residing within said Division shall form part, and of which the representative on the Board shall be the *ex-officio President.*

5. And be it enacted, that the said Board of Governors, shall be, and they are hereby constituted "*The Provincial Medical Board,*" in which capacity they shall meet for the examination of candidates not less than twice in each year, at the time and place as to them shall be deemed most fit, and on which occasions seven members shall be a *quorum* for the transaction o business.

6. And be it enacted, That from and after the passing of this Act, no person shall be admitted as a Student of Physic, Surgery or Midwifery, unless he shall have obtained a certificate of qualification from the said Provincial Medical Board.

7. And be it enacted, that no certificate of admission to the study of Physic as aforesaid shall be allowed by the said Board to any claimant of the same, unless he shall have passed a preliminary and satisfactory examination on the following branches; English, French, Latin, History, Geography, Mathematics, Algebra, Geometry, Natural Philosophy and Physics and unless he shall be the bearer of a Certificate vouching for his good moral character. Provided always that it shall be lawful for the said Board to exempt from classical examination any person being the bearer of a diploma of Master of Sciences or of a certificate testifying that he has successfully followed in a good educational establishment a course of study comprising the branches hereinabove mentioned.

8. Be it enacted, that from and after the passing of this Act, no person shall practice Phisic, Surgery or Midwifery, unless he shall have obtained a license for that purpose from the said Provincial Medical Board.

9. Be it enacted, That no person shall apply for, or be entitled to, a College License unless he has followed uninterruptedly during a period of (not less than four years, to be reckoned from the date of his admission by the Board to the study of Physic), in some incorporated Canadian University. College or School of Medicine, two six months' courses of Anatomy and Physiology—of Practical Anatomy—of Surgery—of Practice of Medicine—of Midwifery—of Diseases of Women and Children—of Chemistry—of *Materia Medica* and Pharmacy—*one six* months's course of Institutes of Medicine—One three months' course of Medical Jurisprudence and Toxicology—one three months' course of Botany—one six months' course of Clinical Medicine—one six months' course of Clinical Surgery—one three month's course Lying in Hospital (or a certificate testifying that he has attended six accouchments—a three months' course of Hygeine—of Practical Chemistry—of Practical Surgery—and produce a certificate of his age of majority and of a good moral character.

10. And be it enacted, That no student shall receive the College license unless he shall have passed a satisfactory examination before the Board on the several branches enumerated in the foregoing section.

Provided always that it shall be lawful for the said Board to grant the College License without examination to any person bearing a diploma from a Canadian Incorporated University or School of Medicine, on condition that the same has been obtained agreeably to the following regulations:

1st. All Bodies teaching Physic, Surgery, and Midwifery shall be held to have for the use and practice of the Students an hospital containing at least fifty (50) beds, a lying-in ward with twenty-five beds at least, a libray, a cabinet or laboratory of Natural History and Botany, supplied with such instruments and articles as may be deemed necessary by the Board to enable Professors to illustrate and explain their teaching.

2. A Committe of three Members, of whom two shall be the nominees of the Board and the third one of the Government, shall attend the examinations of Students at the Incorporated Universities or Schools of Medicine, with a view of ascertaining if diplomas are granted according to the merits of the Students, and if the provisions of the law are duly carried out, and if, according to the report of the delegates, there shall be any infringement of the same, it shall then be lawful for, and the right of the said Board to examine those students *de novo*, or to refuse to the same the College License

11. And be it enacted that the said College shall have power to make rules with regard to the admission by the Universities of Students of Medicine from foreign countries, and also with regard to the granting of the College License to bearers of diplomas from foreign Universities, and to cause to see established on oath, (to be administered by the Chairman for the time being) the truth and genuineness of all assertions or letters of introductions made or presented by any claimant to the privilege of studying or practising Physic; and to make and enact all such rules and regular tions as may be necessary for the Government and proper working of the said Corporation, which said rules and regulations shall, before they shall come into effect, be sanctioned by the Lieutenant-Governor in Council.

12. And be it enacted and declared that it is and shall be sufficient that the said Schools of Medicine shall yearly cause to be delivered one hundred and twenty lectures on the subjects by law provided, in the English language or in the French, without its being necessary that any lecture should be delivered in both languages, and each lecture in whichever language delivered, shall be reckoned as one of the one hundred and twenty.

13. And be it enacted, That all persons obtaining a License to practice from the College of Physicians and Surgeons of the Province of Quebec, shall be styled *Licentiates* of the said College, and be consequently in due course of time eligible to be elected Members of the said College, and such persons so elected shall be at once eligible for election as Governors; and the said election, either as members of the said College, or as Governors thereof as aforesaid, shall be made under such rules and regulations therefor, and in such manner as the said Corporation shall make therefor, to be sanctioned by the Governor of the Province in manner aforesaid.

14. And be it enacted, That the Board of Governors aforesaid shall regulate the fees to be paid by all candidates to the study of Medicine, provided the amount of said fees shall not exceed the sum of five dollars; and also by all persons who obtain from the said Board a license to practice Medicine; provided that the said fee do not exceed the sum of ten dollars; and the said Governors shall have the power to dispose of the saidfees in such manner as they shall deem most proper for the interests of the College.

15. That no midwife shall be permitted to practice midwifery unless she has presented herself for examination before the Board and obtained a license for the purpose of the said practice. The Board whenever deemed by them necessary and proper, may order that a theoretical and practical course of midwifery be followed by said females.

16. And be it enacted, That each Medical Practitioner from and after the

sanction of this Act shall be bound to have his name registered within one year, and for such registration fee he shall pay a sum of
under the penalty of a fine of
which said fine shall be payable yearly until said practitioner has complied with the law.

17 Any Physician convicted of felony before a Court of Justice, shall forfeit his right as such.

18. And be it enacted that each practitioner whose name shall not have been enregistered as aforesaid, shall forfeit his right of legally suing for medical services.

19. Be it enacted that no person shall be appointed a Physician in the public service of this Province, or to an hospital, nor shall he receive any fees from Government, unless his name has been duly enregistered as aforesaid.

20. Be it enacted, that any person whose name shall not be enregistered as aforesaid, and who shall be convicted of having practised Medicine, &c., shall on summary conviction before a Justice of the Peace, be condemned to pay a fine not exceeding $100.00, and of not less than $25.00.

The same penalty shall be incurred by each and every person taking the name of or styling himself a Dr. or assuming any other qualification implying that he is legally authorised to practise physic, or offering his services as a Physician.

A similar penalty shall also be incurred by any individual advertising in public newspapers the sale of drugs or medicines for procuring abortion, or other immoral purposes, and also by the proprietors of such newspapers.

21. Be it enacted, that the Books of enregistration shall be held a legal proof in all Courts of Justice.

22. Be it enacted, that in all suits, the proof of enregistration shall be incumbent on the prosecuted party.

23. Be it enacted that all legal suits shall be brought before any justice the peace having jurisdiction within the place where the offence shall have been committed.

24. Be it enaced, That such justice of the peace, beside the above mentioned penalty, shall have the power to convict with costs, and in case such costs and penalty should not be paid, to order imprisonment for a term not exceeding 30 days.

25. Be it enacted, That any person convicted of illegal practice, who shall give notice of an appeal from the judgment of a justice of the peace, shall, before he be set free, give bail to the amount of the penalty, costs of judgment and appeal.

26. Be it enacted, that the said penalties shall be paid to the justice of the peace, and by the latter to the Treasurer of the Board. Any person may sue in his own name, or enter a complaint before the Court, and the Board shall be authorised to allow the prosecuting party the whole or part of the penalty, provided always that it shall be in the power of the Board to stop all proceedings by an order signed by the President.

27. And be it further enacted, that this Act shall be a public Act, and that it shall be held and received as such in all Courts of Justice, and by all persons within this Province.

Obituary.

WILLIAM R. BEAUMONT, F.R.C.S., ENG.*

By the death of Dr. Beaumont the Medical Profession of Canada has lost one of its brightest ornaments. The subject of the present notice was born in London, in 1803, and was descended from a family established in England in the

* The Data for this notice have been supplied by Dr. Temple and H. Beaumont, Esq., and we are indebted to Dr. Zimmermann of Toronto, for kindly sending us the facts in time for this number of the Journal.

beginning of the 14th century, and originally French. Having received a liberal education, he at an early age commenced and "did very assiduously prosecute his professional studies at St. Bartholomew's Hospital for a more than ordinary length of time," as testified by Mr. Abernethy, whose dressing-pupil he was, and whose esteem he had won—as also that of Sir Astley Cooper, Lawrence, Mayo, Marshall Hall and others of renown in his profession. Proceeding to Paris he studied Anatomy during ten months under Amussat who perceived in him "un zèle et une aptitude rare."

He obtained the license to practice Surgery and was admitted as a member of the Royal College of Surgeons, England, in Dec. 1826; Fellow of the Royal Medical and Chirurgical Society, London, in 1836, and was Surgeon to the Islington Dispensary for some years prior to 1840. Before leaving England he contemplated entering the Army Medical Service, a commission in which he expected, at the instance of Abernethy, from Sir James McGregor, Director General; but having to wait long for it owing to some official regulations regarding the appointment of Army Surgeons, it was abandoned. Desiring to see the New World he came to Canada in 1841, accompanied by his friend Dr. Spear, and obtained in 1842, by Governor General's warrant the license to practise in Canada. He was appointed to the Professorship of Surgery in the University of King's College (now University of Toronto,) in March 1843, which he held for ten years, until the abolition of the Faculty of Medicine of which he was then Dean. He delivered clinical lectures on Surgery at the Toronto General Hospital to which he had been appointed shortly after coming to Canada. In June 1868, he succeeded the Hon. C. Widmer, as consulting Surgeon, and this office, up to the time of his death, he continued to hold, though obliged four years before to abandon active professional duties from loss of sight. He was elected F. R. C. S. Eng. in Aug. 1844, graduated M.D., at the University of Toronto in 1850, and became Member of the Société Universelle d'Ophthalmologie, Paris, in 1861.

To the students of the Toronto School of Medicine he in 1870-71, delivered Lectures on Ophthalmic Surgery, and Clinical Surgery, at the Hospital. In 1872 he was elected Emeritus Professor of Surgery in the University of Trinity College Toronto.

He invented and himself made several surgical instruments, some of which are of great ingenuity and utility. In

1836 he described before the Royal Medico-Chirurgical Society an instrument for passing sutures in deep-seated parts, as in the operation for cleft palate, which was examined and admired by Brunel the great engineer, and was reputed by Tiemann the Surgical Instrument maker in New York to have been the origin of the Singer Sewing Machine. Sir James Paget told the late Dr. Fraser of this city, of the esteem in which Dr. Beaumont was held by all old St. Bartholomew's students, and that he believed that he was the inventor of the principle of the modern Sewing Machine. An account of the invention was published in the "Medical Gazette," for 1836, and the original account may be found in the Transactions of the Medico-Chirurgical Society for the same year, and a description of it may be found in he "Lancet," of March 17th, 1866. With it a continuous chain of stitches can be sewed though in the operations for which it was invented but one at a time was required. He also invented instruments for tying Polypi, a sliding Iris-forceps, a speculum, a probe-pointed Lithotomy knife, and others. He was author of essays on the treatment of Fractures of the Leg and Fore-arm by Plaster of Paris, 1831; on Polypi, 1838; "Case of Large Cartilaginous Tumor of the Lower Jaw," 1850, and he contributed "Clinical Lectures on Traumatic Carotid Aneurism" to the "Lancet," in 1854; "The Several Forms of Lithotomy." Ibid. 1857; A Deeply Penetrating Wound through the Orbit, (five and a half inches deep), Recovery. Ibid. 1862; papers on Exostosis of the Scapula, Aneurism of the Femoral Artery, &c., &c. He has made many donations of valuable preparations, casts and instruments to the Royal College of Surgeons, England, and to other collections. During the Fenian raid of 1866 he had charge at Port Colborne of the hospital for the wounded.

In the winter of 1865 he lost all useful sight of the left eye from acute inflammation, yet was able to perform operations requiring an unerring hand, among them, that for artificial pupil; but at length the left eye became completely useless and the sight of the right affected, and in 1871 greatly impaired, and by the New Year of 1873 lost entirely. Since this time he had lived in retirement with his family about him, and passed quietly away on Oct. 12th, 1875. He was a gentleman of a quiet and retiring disposition, a sound surgeon and an instructive lecturer, and his memory will be held in veneration by all with whom he came in contact.