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CANADA  
MEDICAL & SURGICAL JOURNAL

APRIL, 1878.

Original Communications.

VALEDICTORY ADDRESS  
TO THE GRADUATES IN MEDICINE AND SURGERY,

DELIVERED IN BEHALF OF THE MEDICAL FACULTY OF MCGILL UNIVERSITY.

BY ROBERT T. GODFREY, M.D.,

Professor of Hygiene, McGill University, Montreal.

MR. CHANCELLOR, MEMBERS OF CONVOCATION, LADIES AND GENTLEMEN :—

In accordance with our yearly custom, it becomes now my pleasurable duty to address a few parting words on behalf of the medical faculty of this University to the graduates in medicine and surgery of the session just concluded.

GENTLEMEN GRADUATES :—Your term of pupilage with this University having ended, you have received what you so faithfully and studiously devoted four years of your time to acquire : the degree just conferred of Doctors of Medicine and Masters in Surgery ; and as your late teachers we congratulate you on the attainment of this well-merited honour, and we heartily welcome you amongst us as brother practitioners. But although the barrier which divided us as professor and student has in your case been this day removed, allow me to impress upon you the necessity of continuing to the end to be students—students of nature and her laws, a thorough knowledge of which is

essential to the successful practice of that profession into which you have just entered.

In taking an affectionate leave of you we may be permitted to offer a few friendly suggestions and words of counsel, such as age, experience and an interest almost parental, may reasonably be supposed to warrant. Although the tie between us as teacher and pupil is this day severed, be sure that a continued and deep interest in your future welfare and advancement remains with each one of us, and very naturally so: for who has a prouder right to watch over her children than those to whom this University has confided the sacred trust of their education.

Allow me to record with emphasis, that in addition to the most praiseworthy assiduity, you have as a class, by unwearied good conduct, secured the respect and esteem of each member of this Faculty. For some years past a marked improvement in the ordinary deportment of the young men attending the classes of this University, has been a matter of public notice. While much of this noticeable change may be due to greater earnestness in the discharge of your duties as students, in the various branches of science, dwelt upon and taught within these walls, a larger field for the acquisition of knowledge, more earnest and actual work to be gone through, and an honourable rivalry for a prominent place amongst your fellows; yet, I must be allowed to attribute this salutary change to the principles of temperance in all things, and also, in a great measure, to total abstinence, which is carried out by the majority of our under-graduates.

I do not desire, gentlemen, to dwell on this subject, as I am aware that these principles have been inculcated by each one of us, and by many an example of total abstinence is carried out to the full. I should fail in my duty, however, in these parting words if I omitted to assure you that it is only by steady perseverance in the practice of those principles that you can hope to attain success in after life. A clear brain, an unclouded eye, a steady hand are at all times indispensable to the Medical Practitioner. He should be ever ready for any emergency, as at any time he may be placed in the most trying position, one

in which the life of a fellow being may be imperilled by his neglect, or may be under Heaven, spared by his ready tact. What a position of responsibility then have we assumed? and what manner of men should we be? If, therefore, through our own folly and criminality we become enslaved to the debasing habit of inebriety, we cannot attribute failure in the practice of our art to ill luck or accident, but to the real cause, our own neglect, a neglect for which we shall be held accountable to our Maker.

For the last four years you have been occupied in acquiring those elementary principles, on which is based a sound practical knowledge of disease and its successful treatment. In the wards of the Hospital you have had ample opportunities of seeing those principles put to the test, and in the post-mortem room of studying those pathological changes which are seen to occur in the train of disease. All these great advantages are to you, so far as this school is concerned, at an end, and you are about to engage in the earnest duties of your life's labour. You must trust in future to your own unaided knowledge. Hitherto you have pursued your studies under the guidance of experienced teachers. The time has come when you must stand alone. No longer can you depend on the varied experience of other men. You will be expected at the bed-side to act with promptitude and with judgment; and although at the outset you may feel sorely the lack of experience, be not discouraged, and do not permit yourself to be cast down by seeming ill-success.

Our paths henceforth will diverge, it may be, widely, but the alumni of this University should ever bear in mind the duty they still owe to Alma Mater. We all, as it were, unite in forming a family circle, and should strive, to our utmost, to maintain the character and standing and preserve the honour of our common parent. Some changes in the curriculum of study have recently been made whereby greater facilities are offered to young men for the acquisition of practical instruction. I allude to the summer course. Attendance on these lectures, although not compulsory, will obviously be of great benefit to the student who avails himself of them.

I cannot allow this opportunity to pass without drawing attention to the increasing interest exhibited by the people of this Dominion in the subject over which I have the honor to preside. The laws of health are obviously of such importance to the human family that they should be very generally disseminated. There appears to be a decided inclination to pass over as a matter of no moment, at least by our Legislature, the urgent demands for the introduction of a Public Health Act. This is very much to be deplored, as we are fully aware of the large amount of preventable disease existing in Canada, and how it swells our mortality tables. Mortality tables did I say, gentlemen? Such, in fact, do not exist among us. As a people we are unable to compute the death rate of any one locality with anything like certainty or accuracy. While the Governments of other nations are, in the spirit of true conservatism, fostering and caring for the health and lives of their people; while in the counsels of the British House of Commons we learn that the motto of reform is "*Sanitas sanitatis omnia sanitas*," we find that in our own Legislative halls the people's representatives are busily engaged in personal squabbles and party strife. How long this country will groan under this misrule of neglect we cannot predict; but let us hope that questions of vital importance to the welfare of the people of Canada may at no distant day receive the attention which their importance demands. You may be curious to know what all this has to do with yourselves as professional men going forth to engage in the work of benevolence which you have assumed. Everything. As has been remarked by the editor of the *London Lancet*: "State medicine ought to be an integral part of statesmanship." The influence of science comprehended under the term medicine, and the light it can throw on every public question in which physical and mental training, the modes of living, the condition of dwellings, the water we drink and the food we live upon—all these are subjects and matters with which as professional men, we have to do. There is scarcely a question of political economy upon which the science of medicine has not a right to be heard. It will be for you, gentle-

men, in going forth, to make these subjects a matter of careful consideration, and in due time make your influence to be felt in the Legislative counsels of the Dominion. Hitherto the experiences and teachings of science have been systematically ignored. The time must come, sooner or later, when the science of medicine will be recognized as not less a part of statesmanship than is law. The science of life, the preservation of health, which is so essential to intellect and capacity for labour, energy and industry; the knowledge of the mortality of communities and their causes, with a view to their amelioration or prevention; the comparison between the mortality and increase of a people, are all subjects of greater importance to the success of legislation than is a knowledge of the method of making laws and the obscure art of interpreting statutes. There can be no question of the fact that sanitary science is destined to hold a prominent place in the counsels of the country. The longer these facts are ignored, the greater will be the loss to the community, and eventually discredit must attach to any administration for such wilful and criminal neglect.

A wise, thoughtful, and well digested sanitary act will be found of greater importance to the people of this Dominion than a Pacific Railroad, and, as a matter of economy, it would result in a saving of both life and treasure. Millions of dollars are spent every tenth year in giving to the country a census report, which, on the question of vital statistics, is utterly worthless, and until we have introduced a proper system of enumeration of births and deaths we shall be unable to form any correct opinion on this all-important topic.

Quite recently it was proposed that the medical course should be made one of nine months, instead of as at present of six months' duration. To this strong opposition is offered, as it is believed, that it would entail extra labour on both teacher and student, not commensurate with the time spent by such a change. It is well known that in this young country many a worthy man is compelled to labour during recess, for the means to enable him to complete his college course. It is a proud boast in this Canada of ours that any position in the country is open

to the poorest children of the soil, and there are men among us, who occupy a distinguished position in the medical profession to whom the door of entrance would have been closed, had the regulations as proposed in this scheme of nine months existed.

Coming back to something more directly personal. For the first year or two after entering into practice, your professional engagements will not be excessively burthensome, but this should not produce despondency. Remember that

“The heights by great men reached and kept,  
“Were not attained by sudden flight;  
“But they while their companions slept,  
“Were toiling upwards in the night.”

Imitate, then, the example of those great men. With perseverance toil upwards in the night of obscurity, and even poverty, pursue the practice of your profession in obedience to your obligation of to-day *Caute; Caste et Probe*; and though you achieve neither wealth nor distinction, you will receive the esteem of those who employ you, and enjoy the highest of earthly blessings, the silent approval of a clear conscience. As was ably said on a similar occasion to the present in this hall, “your reward must principally be sought in the consciousness of having contributed to the welfare and happiness of your race, in the respect of your fellow men, and in the knowledge that you are humbly following in the footsteps of the great physician who, while on earth, went about continually doing good.” The Diplomas you have this day received are a reasonable guarantee of your fitness to enter into the practice of the profession of your choice; if you never fail to supplement your other qualifications with the indispensable virtues of temperance, brotherly love and patience, I can scarcely err if I predict for you, individually and collectively, a full measure of success. Farewell.

MENTAL AND MORAL SCIENCE;  
WITH SOME REMARKS UPON HYSTERICAL MANIA.

BY HENRY HOWARD, M.D., M.R.C.S., ENG.,

MEDICAL ATTENDANT TO THE LONGUE POINTE LUNATIC ASYLUM.

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

MR. PRESIDENT AND GENTLEMEN:—In reading Dr. Newman's "Grammar of Assent," I met with the following passage: "It has always appeared to me that treating on the science of religion was in one particular like treating on mental and moral science; every man can only speak for himself; and for himself every man has the right to speak; and he adds, that under such circumstances egotism is true modesty." I was glad when I found this statement made by such an authority; for I often felt ashamed of my egotism but could not see how I was to avoid it.

You all know, as well as I can tell you, that it is nearly impossible, in the present day, to take up a work on mental and moral science; or read even an article in a journal on these sciences and not find it set forth, either directly or indirectly, that the Christian moral law was opposed to the natural law, and I am free to confess to you that very frequently I thought, myself, that both laws were irreconcilable, yet I always felt that this must be impossible, as God was the author of both laws. I could not rest satisfied in this state of doubt, and so I determined to work out the problem, at least to my own satisfaction; and I shall endeavour this evening to prove to you that these laws are not opposed, and that the apparent irreconcilability has been due to many causes.

One great cause is that we are not, in all cases, certain that what we call a natural law is a natural law, and sometimes what we suppose, or wish to be, a natural law of our being, is nothing more than what is due to some *abnormal* state of our mental and moral organization, whether that abnormal state be hereditary, or due to some accidental cause occurring after birth.

It is not for us as scientists to go into the question of the



origin of evil, and I suspect if we did we would not make much of it. That evil exists, we know, and like everything else that does exist must have had a beginning; our simple duty, I take it, is to deal with it as we find it existing in man, and we may assume that if it never had a beginning, and did not continue to exist there never would have been any occasion for a moral law; the natural law would have been all-sufficient for man, if there was no evil in his organisation; but as we are, so to speak, such a compound of good and evil, a moral law became actually necessary for our guidance, and he who gave the natural law, was, in justice, obliged to give a moral law in man's altered condition, but then he could not give one law in opposition to the one he had already given. That we are composed of good and evil requires no proof from me; every man knows it of himself; every man knows that he is, as it were, a double, one good and one evil, contending each against the other. Every man feels the same as St. Paul did [when he said: "When I would do *good* evil is present with me." True, it is, that the evil, that is the criminal neurosis, in some is greater than in others, therefore it is that we form [such unjust judgments of each other.

Another cause of this apparent irreconcilability between the natural and the moral laws, is due to the fact, that no [matter how ignorant a man may be of natural laws, nearly every man fancies that he is capable of explaining and expounding the moral law; consequently there have been and are, a thousand different sorts of moral laws floating throughout the world. Some naturalists have taken advantage of this anomalous state of affairs, because it suited their card, to condemn the whole moral law, and by their absurd proceedings have succeeded in getting up a cry against mental and moral science, as dangerous to morals, so that men, from whom we should expect better things, talk such nonsense as to warn their hearers to guard against *evil* science, forgetting, or not knowing, that science is truth, and that which is not truth is not science. There is no manner of doubt, but that there have appeared amongst the naturalists men of much more scientific knowledge than amongst

the moralists—in fact the naturalists are all men of science—whereas the majority of the would-be moralists know nothing whatever of science. Indeed, very many of them are not aware that the knowledge of the moral law is as much a science as is the knowledge of the natural law, and that no man is capable of teaching either of these laws without a knowledge of both ; and the man who attempts to do so, only succeeds in rendering himself ridiculous to his intelligent hearers.

There is no man living that knows all the natural laws, for nature has not yet unfolded all her grand secrets, nor will she do so except to the hard-working, persevering scientist. But of these we do know we have sad experience every day, that no man can break them and not suffer dire consequences. Therefore, it behoves us to well consider if there is any moral law claiming our obedience, the acceptance of which would cause us to break the natural law.

Of course in this paper, upon mental and moral science, I have only to deal with these natural laws which directly are borne upon by the teachings of the moral law.

Let us see what these are :

First, it is a natural law for every human being to recognise and believe in the supernatural. I need not go into proofs for it is an established fact, that no peoples have ever yet been discovered, that did not recognise the supernatural,—all, in some way, recognise the supernatural—that it is a power, not of, but greater than man, a power that controlled, not only man, but all the universe. There is no moral law, that I ever heard of, opposed to this natural law.

*Self-preservation* is a great natural law ; indeed it has always been called the first law of nature. Is there any moral law opposed to it? None that I know of. On the contrary, the moral law supports to the full this natural law. But, says the casuist, what of the Christian martyrs, why did they break the natural law, in obedience to a moral law and give up their lives? The answer is very simple ; they actually obeyed the natural law of self-preservation, for in giving themselves up to a temporal death, it was with the belief that they preserved to themselves

everlasting life. But there is a moral law that says, "Thou shalt not steal," and to steal, is take of that which is not thine, but the property of another. How about the man who *must* steal, or die of starvation? Which of the laws is he to break? neither; in this case the moral law of "Thou shalt not steal." is not applicable to him, morally speaking. The starving man who *cannot* otherwise obtain food is perfectly justified in taking it from wherever he can obtain it. Our Saviour himself gave us an example in this when he and his disciples plucked the ears of corn belonging to another, and ate the grains; not, mind you because that they were starving, but simply that they were hungry. And it is a remarkable fact that his enemies did not accuse him of theft, but that he broke the Sabbath, as if a hungry man should not eat on the Sabbath as well as upon any other day. Of course, as God, he had the right to take of that which was his own, for all and everything was his; but he was then acting as man; moreover his accusers only looked upon him as a man.

But the moral law says: "Thou shalt not kill," and it very frequently occurs that a man must kill to save his own life; and under such circumstances killing is perfectly justifiable. So there is no moral law contrary to the natural law of self-preservation.

Procreation is a natural law, from man down through the whole animal and vegetable creation, it is actually necessary for the perpetuation of all things. And in all things we find, that like produces like, kind produces kind; in all things any difference that may exist it is only in degree not in kind, that is, instead of being normal it is abnormal.

Is there any law opposed to this natural law, of procreation, I mean any moral law opposed to it? I know of none. The moral law does not make it obligatory upon all men, but leaves man what he is according to natural law, a free agent, to either procreate or abstain from procreation if he so pleases. The moral law, it is true, confines man within certain bounds, as to procreation; it does not allow him to procreate like the lower order of animals, for many scientific reasons. First, a man to

procreate in this manner would eventually destroy his health, and thus break a natural law, by being the cause of his own death, or if he should have been born with an insane neurosis his life of debauchery would render him a lunatic. Every alienist knows that excessive sexual indulgence has more to do in filling up lunatic asylums than any other cause, save the one of self-pollution. Again, such unlawful procreation is injurious to the welfare of the state, for it would destroy family, and family ties, and the love of offspring, two natural laws which are the very safeguard of society. Consequently the moral law of monogamy is in perfect accord with the natural law; whereas polygamy is not only a breach of the moral, but a breach of the natural law. As I have already said the moral law is not opposed to the natural law of procreation, but it does not make it obligatory upon all; it leaves a man free to marry and procreate, or, if he so pleases, to remain a celibate, and celibacy, we know, is not injurious to a man either mentally or morally.

I know that many sentimental writers, judging of others by themselves, conceive that it is impossible that anyone could lead a life of chastity and purity, but these writers forget, or do not know, that men differ as much in their mental and moral organization as they do in their personal appearance, and what would be impossible for one would be quite possible for another. In fact, these writers do not know that sexual desire is dependent upon a man's cerebellum, as much as his honesty is dependent upon the state of his parietal cells, or his wisdom upon his frontal.

One great standpoint taken by those who are opposed to celibacy, is hysterical mania. They assume that this fearful disease is due to sexual desire, and I can well excuse many who have seen the actions, and heard the language of these insane creatures, mistaking *effect* for *cause*. Hysterical mania is not caused by sexual desire, but their terrible sexual desire is caused by their insanity; some disordered state of the digestive or uterine organs, producing irritation of some part of the ganglionic system, causes hysteria, which is followed by irritation of the cerebellum, producing moral insanity, which develops itself in

strong sexual desire, in time this irritation spreads to the cells of the cerebrum, and the consequence is violent mania : a mania which renders these poor *erotic* creatures so disgusting to attendants by their vile language and unchaste actions. And, gentlemen, let me tell you that above all cases that can come under the treatment of the medical attendant of a lunatic asylum, hysterical mania gives him the greatest amount of trouble. Again, with regard to those who, writing upon hysterical mania, mistake effect for cause, they write as if ignorant of the fact, that the impure female who gratifies her desires by leading a life of impurity, is as frequently the victim of hysterical mania as is the chaste female who does not break the moral law. Moreover, married women and mothers very frequently are the victims of hysterical mania. I have at this moment four married women, mothers, hysterical maniacs ; one of whom was placed under my care by my friend Dr. Reddy.

In justice to you and myself, I cannot conclude this part of my subject without alluding to the moral teachings of the Catholic Church. I would simply say that the Catholic Church does not oppose the natural law of marriage and procreation ; on the contrary, she raises marriage to the dignity of a sacrament, and, as I have already shown, she is purely scientific in approving and sanctioning monogamy, and opposing her moral force to polygamy. She calls upon no man or woman to remain unmarried and lead a life of celibacy ; but that if they remain unmarried they shall lead a life of chastity and purity. And in this also she is perfectly in accord with the natural law. True, that the Catholic Church leaves every man free to marry, or not to marry, and, for what she conceives to be wise reasons, chooses her priesthood from those who choose a life of celibacy, but then there is no obligation upon any man to become a priest ; every man doing so enters that calling with his own free will.

With regard to females who chose a celibate life, the Catholic Church simply provides that those who do not wish to remain old maids in society, can join a religious community, either as teachers, or for the purpose of nursing and taking care of the sick and poor. I would not insult your intelligence by making

an apology for these remarks, for you all know well that I have made them in the cause of scientific truth, and to prove that there was no moral law against the natural law of procreation.

*Love of offspring* is a natural law. I believe no one pretends to say the moral law is opposed to it.

Love of persons, love of freedom, love of knowledge, love of happiness, love of justice and ambition, are all natural laws, and all morally lawful when guided by reason and kept within proper bounds; because if not guided by reason and kept within proper bounds we would be breaking other natural laws. For example, if a man's ambition would lead him to neglect his family and injure his own health, he would be guilty of a breach of both the natural and moral law.

*Fear, envy, jealousy, hatred, revenge*, are those natural to man, can they be called natural laws? I do not believe they can. I believe these characteristics in man are the result of an abnormal mental and moral organization, hereditary, and generally intensified by false teachings of the moral and natural laws.

I think I have now disposed of all the strongest standpoints taken by those who wish to make it appear that to obey the moral law would, in many instances, be to break the natural; and, as on purely scientific grounds, there is no profession so interested in the natural and moral laws as is the members of the medical profession: for our whole science is founded upon natural laws, it is well that we should know that we cannot err morally when we are acting in accordance to natural laws.

But it is well that, as far as it is possible, we should make ourselves sure that we are obeying the natural law; for notwithstanding the great advancement that has been made in medical and surgical science, more particularly within the last quarter of a century, we must all, to a very great degree, plead ignorance of natural laws, and that, consequently, we do not realize the terrible consequence of their breach. We know, for example, that gout, cancer, phthisis, insanity, good and evil came to those that possess them by inheritance, but we never think of asking ourselves the question, are these things the result of breaches of natural laws by our progenitors? We act as if it

were quite natural that such should be the case, and that there was no possibility of escaping from them. Most certainly there is no possibility of our escaping from what we already possess. But, then, can we not do something to guard future generations? Can we not give scientific proof to the drunkard and profligate, that his offspring will inherit his vices? Can we not give scientific proof to the married woman that her child's mental and moral organization will depend very much on what her life is while carrying that child in her womb, and the nurturing and training of it after she has given it birth? Can we not daily impress upon teachers that there can be no system of teaching applicable to all mental organizations, and that what is healthy mental food for one is death to the other? Can we not impress upon these would-be moral teachers, that their teachings are driving people to the lunatic asylums, and can we not, at least, make some effort to convince society that no man is capable of teaching the moral law unless upon scientific grounds. And that if he pretends to teach the moral law he must know something, at least, of the natural law. I do not mean that every man is to go to work and learn mental and moral sciences, no more than that every man should learn practical astronomy; but mental and moral science should be so kept before society that all would understand it, at least as well as they do astronomy. The most illiterate man knows that the world is round, that it turns upon its own axis; that although the sun appears to move, rising in the east and setting in the west, that yet it is a fixed body and does not move at all. But the same man does not know that the bad drainage in his house, and the damp in his cellar, has caused the death of his wife and children; he does not know that air and light are necessary for health; he does not know that darkness and impure air will so destroy the mental organization as to render man an imbecile. Such a man will tell you that his wife and children died because it was the will of God, as if God specially willed their death. Tell such a man that it was the will of God, just so far, and no farther, than that he had established irrevocable, unchangeable natural laws, and that no man can break these laws and not suffer dire con-

sequences,—twenty chances to one but that the man would think you were speaking blasphemy,—and he would go to some moralist and report what you said, who in turn would be warned against you as a dangerous man. When I see an old person die out calmly and quietly, without pain or suffering, I can well understand that they are dying in obedience to natural law and according to the will of God. But when I see infants, children, and young persons dying, I say it is because of some breach of natural law, either on the part of the person or through the fault of their progenitors, whether through ignorance or otherwise. I might be as well told that the farmer that neglected to cultivate his land had bad crops by the will of God, and that the house burned down by an incendiary was the will of God also. Therefore, I hold that is the duty of every conscientious medical man to take every opportunity he possibly can to impress these scientific truths upon society. But the fact is we have much to learn ourselves, and there will always be something still more to learn no matter how much we may know. The present generation knows more than the past, and the next generation will know more than we do; and so will truth advance till science must be recognised as the true basis of civilization. And when I say science, I speak particularly of mental and moral science. Yet, I would not have you understand that in these remarks I exclude religion; on the contrary, I do not believe these sciences can be taught except in connection with religion. The natural and moral laws are truly religious subjects, and as scientific as they are religious. Therefore, as science is *truth*, and religion *truth*, science and religion is one and the same. So no religion can be true that cannot bear the test of science.

I said as medical men we had much to learn scientifically, and I now state what I conceive we most require, is a better knowledge of anatomy, physiology, and pathology. Fortunately for us all, we have many men devoting themselves, with praiseworthy efforts, to the study of these particular subjects. The hard-working microscopist is demonstrating to us, every day, something new: something that we did not know before in the



anatomy of the brain and its appendages, and in the anatomy of the ganglionic system. I am proud to admit how much I have learned on these subjects from our friends Drs. Osler and Fuller ; also from them and many others for the pathological specimens that have been brought before us. As physiologists we take hold of the knowledge thus acquired, and by the careful study of disease, by searching for cause when we find effect, we, in our turn, discover what is the physiological use of these minute parts that the anatomists have shown us to exist, and poor suffering humanity derives the benefit of our united labour in our scientific research. And we, if we have nothing else, have the conscientious conviction that we have done well.

Let me give you an example of what our united labour does. The anatomist discovers a small nerve running in the sheath of each artery, he knows it cannot be there for nothing, it must have a use. The anatomist and physiologist finds that its use is to cause the muscular fibres of the vessel to contract, and thus, as it were, help the heart to propel the blood through the vessels. We take advantage of this fact in the treatment of disease. The medical man finds his patient bleeding to death from hæmorrhage of the lungs or uterus, and gives an hypodermic of ergotine to arrest it, and succeeds ; now there can be no doubt but that the bleeding vessel is thus caused to contract by the direct action of the vaso-motor nerve, which has been acted upon by the ergotine—a medicine having a specific action on the sympathetic nerve, and particularly upon that portion of it we term the vaso-motor nerves. For years the specific action of ergot upon the uterus has been known—long before we knew anything of the vaso-motor nerves—but the physiology of these nerves, I presume, has shown us how it does act, for that it must be through these nerves, is evident from the fact, that the hypodermic of ergotine, arrests hæmorrhage of the lungs just as rapidly as it does hæmorrhage of the uterus. For my own part, I do not see why it should not also arrest cerebral hæmorrhage, and I mean to try its effect in such a case the first opportunity I have. It certainly should act as rapidly as the application of cold water to the cuticle ; though I do not mean to say that in such a case I

would neglect the cold water, at the same time I certainly would try the hypodermic of ergotine. We have lately had a very interesting paper from Dr. Donald Baynes, upon electricity as a therapeutic agent, and I presume that when it arrests hæmorrhage, it is by its action on the vaso-motor nerves. No doubt we have much more yet to learn of this important part of the nervous system, that time with hard study will reveal to us.

You will remember that in one paper I read before you, I described certain symptoms to be found in some cases of insanity, but I did not pretend to account for these symptoms. I told you that if you took hold of both wrists of the patient, one in each hand, feeling the radial arteries with your right and left hands, at the same time, you would find that the pulsation in one wrist came before the other. It was hard to understand how this could be, seeing that the pulsation in each wrist was caused by the heart's action, and should be equal in both. Now I consider we can understand this anomaly when we know the physiology of the vaso-motor nerves. It appears to me easy to comprehend, that in a case of mania there may be irritation in some part of the ganglionic system, causing through the vaso-motor nerves, a more rapid action of the pulse on one side than on the other, or a slower action on one side than on the other. This appears to me to be a feasible way of accounting for an anomaly otherwise incomprehensible.

In papers that I have read from time to time before this society, I have stated that man's mental and moral organization was his inheritance, whether it was good or bad, or good and bad, and that consequently he was not responsible for it. I stated that mind and body were one, and thought was the product of the mind, and under many circumstances involuntary; that it, thought, was subjective but received food from the objective through the medium of the senses. That the food thus supplied in childhood and youth, parents and teachers were responsible for; that the mental food provided in manhood we ourselves were responsible for, because we are free agents and have a free will, and can ourselves choose our mental food. In connection with the fact that mind and body are one, I beg here to

express the great pleasure an editorial in the CANADA MEDICAL AND SURGICAL JOURNAL for February gave me. It is headed "The Curability of Insanity," and recognizes the fact that mind and body are one, in the following sentence: "The organ of the *mind* the *brain*." I say this gave me great pleasure, for, if I am not much mistaken, I was one of the first, on this continent at least, that ever propounded and proved that scientific fact, in a paper read by me before this society, on the 3rd of December, 1875, said paper is published in the *Medical Record* for January, 1876, vol. iv. There were very few at that time to support my views on this question, though very many since; and some there were would-be naturalists, who spoke pretty hard things of me for the views then set forth. However scientific truth always prevails

In some of my papers I have also stated that we could easily account for all the crimes that were daily committed, by remembering what man's mental and moral organization was, and the sort of mental food it was provided with, particularly amongst the poor, and from these facts I drew the conclusion that it was impossible to make laws equally applicable to all persons, under all and every circumstance, and that if society would see crime diminish it must do more to diminish poverty and all its accompanying miseries, provide some more pleasurable objective food for the eye to rest on, if only clean streets and a green tree. And that this would be found a better remedy as a preventive to crime than punishment. I never said that there should not be justice meted out to the true criminal by punishing him; but I have defined the criminal to be a sane man who committed crime by the consent of his will, for that every man was equal in this respect, that all had a *free will*; but, unfortunately for society, there are men of bad, as well as "*men of good will*," and some whose impulse is stronger than their will.

At various times I stated that I conceived insanity to be an hereditary disease, and that the latent seed was caused to break out in some form of insanity by any exciting cause, and that the chief exciting cause was mental suffering which injured the vital power or nervous force, and that one chief factor of this mental

suffering was the present high-pressure system of education. Consequently there could be no system of education applicable to all.

I said I believed in a criminal hereditary neurosis as firmly as I believe in an insane neurosis, with this difference that we all had the criminal neurosis: only some to a greater degree than others. I pointed out the great difficulty there was in diagnosing some cases of insanity, and very frequently it was more difficult to prove a man *sane* than it was to prove a man insane. I have, in my last paper on the Medical Jurisprudence of Insanity spoken to you of the necessity there was for a law of lunacy, and recommended that these views should be brought before the Legislature; and I am pleased to see that the Hon. Mr. Chapleau has moved in the matter in the Local Assembly, and brought in a bill for the more speedy transmission of lunatics into asylums; and I this day had the honor of receiving a letter from the Hon. Mr. Laflamme, Minister of Justice, paying me a very handsome compliment upon my paper on the Medical Jurisprudence of Insanity, and promising me to bring up the subject during recess, and be prepared to move in the matter when Parliament again meets. I mention these facts, gentlemen, because I am fully convinced that the attention given to my paper by these honourable gentlemen, is due to the fact that my views were endorsed by the Montreal Medico-Chirurgical Society.

Much stress is laid by some writers as to what constitutes the cure of insanity, some arguing that, should a third, or a fourth attack occur, there has been no cure. This is simply an absurdity. If a medical man treats a patient for pneumonia, pleurisy, peritonitis, or acute rheumatism, and makes a cure, he does not engage that his patient will never have the same disease again; on the contrary, he warns his patient that the same cause which produced the first attack will likely produce a second. And if, after some months, or years, a second should come, he will not admit that he did not cure his patient in the first instance. And if his patient should happen to be an hospital patient, he will enter him as a new case when he is admit-

ted a second time. At present I have in the asylum at Longue Pointe, two men whom I treated and cured in the asylum at St. Johns. The first was with me four months when I discharged him; he remained well, earning bread for his family for twelve years. He will soon be discharged again. The second is only in the asylum the last five days. When first attacked he remained with me three weeks: I discharged him cured; he remained so for six years, when he got the second attack, during which time he became married a second time, and had a second family. Now, surely I have as good a right to claim a cure in these cases as would a medical man who cured a case of pneumonia. Dr. Howard cured me four different times within ten years, of what he termed bronchitis with the asthma of gouty men. Suppose in time I should get another attack, which is more than probable, and in the end die from an attack, does it follow that he did not cure me in the four first attacks? The fact is, that physically, as well as morally-speaking, we have all some weak points in us that we only discover when it shows itself from some accidental cause. If by the cure of insanity is meant that a person recovering from an attack of insanity will never be subject to a similar attack, then, indeed, there is no case of insanity cured, no more than there is a case of gout, or any other hereditary disease! and it is most true that the number of recoveries under the very best of circumstances, are very few comparatively speaking. For myself, I find that daily the chances are becoming beautifully less.

GENTLEMEN,—Any statement that I have heretofore made before you respecting insanity, and mental and moral science, additional study and experience has not caused me to change my views; and should increased experience cause me to change my views, in the future, I will not be ashamed to tell you so.

In preparing this paper for your consideration, my great object was to prove to you that the natural and moral laws were perfectly reconcilable; and that the great cause of poverty, crime, suffering, insanity, other diseases and early death, was the breach of natural laws, either by our progenitors or ourselves. Moreover, that we all had yet very much to learn of both

the natural and moral law. In each and all of my papers I have carefully adhered to mental and moral science, as far as these sciences were understood by me, without in any way wishing to *force* my views upon any of you; although, of course, I should be pleased to convince you of the truth of my views.

I fear that this paper has been rather wearisome, and not as interesting as it might have been made in other hands. However, the subject itself is one of great interest.

I will conclude by expressing my convictions, that if bigotry, prejudice, and fanaticism are ever to be replaced by equitable justice and charity, it must be done through a wide-spread knowledge of mental and moral science.

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## FURTHER OBSERVATIONS ON DIPHTHERIA ;

BY FRANCIS J. SHIRRIFF, M.D., L.R.C.S., ENG.,

HUNTINGTON, P. Q.

Since my previous communication regarding Diphtheria, written 4th January last, the disease has continued to prevail, although not so extensively. I have attended a number of cases, some of them severe. The same treatment has been pursued, and with uniform success. I have seen three cases which proved fatal; in two of them, I was called in as consulting physician; one died of an affection of the trachea, for whom nothing could have been done; the other died of septicæmic poisoning and hæmorrhage. The other case had been ill over a week; nothing had been done for five days. The throat was filled with a fœtid, black, putrid mass, with a brown fluid flowing from the mouth and nostrils. Next day hæmorrhage set in, which soon ended fatally. Death in this case was evidently caused by the membrane becoming putrid. The soft parts beneath became also affected, ending in fatal hæmorrhage.

I have learned a number of facts regarding diphtheria which are very important: First, that the disease is always caused by a specific contagion, spreading from one person to another, either by personal contact or from articles of clothing: in a

similar way to scarlatina and other zymotic diseases. That it does not arise from dirty cess-pools, rotten carpets, &c., although I am willing to admit that individuals whose blood is filled with emanations from these substances will be more likely to be affected by the contagion, and have the disease in greater severity. The period of incubation varies from seven to ten days. Certain general symptoms, such as chill, headache, &c., always precede the sore throat. I have seen several cases which have been exposed to diphtheria here, furnish symptoms lasting one or two days without very sore throat, but who seem capable of giving true diphtheria to others.

I saw one man aged 50 who had all the symptoms without any sore throat, and who had been in close attendance upon a grand child who died. A week after his slight illness a son of his had an attack, and a young man aged 16 at the same time had a severe attack, and he had been in the habit of associating with the old man, one night lying in bed with him, and smoking from the same pipe. Many have diphtheria so slightly that they are not aware that much is the matter with them, and continue their avocations, thus unwittingly spreading the disease. This is more particularly the case with children attending school. During the past six months there must have been over 200 cases in this place, and in not one has the disease been known to return, at least so far as the other medical gentleman and myself know, and I have been making particular enquiries. I therefore feel confident, that like scarlatina, &c., the disease is not likely to return to the same person for at least many years.

I will relate what happened in one family, which shews clearly the protection those possess who have recently gone through the disease. In the month of October last four little children, members of one family, had each diphtheria, a few days intervening between each case. Their mother, a lady about 40 years of age, attended them at the time, swabbing their throats regularly. They all recovered, their mother remaining unaffected. Three months afterwards they visited a family who had a girl, aged 11, very ill of diphtheria. In about ten days she had a very severe attack, apparently caught from visiting the sick child. The

children were in the room with her constantly, having no one else to look after them. It is nearly a month since Mrs. W. recovered, and the children still continue in perfect health, and have shown no symptom of disease. I could relate several cases of nearly a similar character. Many escape the disease although fully exposed, and they catch it from a very slight exposure. One of our Doctors here had been visiting patients all winter and remained well, and once when swabbing a throat the patient coughed, and a piece of membrane flew into his mouth, but he still remained unaffected. Lately he made a friendly visit to a young man, about his own age, and who had a pretty severe attack. A week afterwards he was seized with diphtheria in its usual form.

In my former article I neglected to give what I believe to be the rationale of the treatment. The swabbing material consisting of No. 2. tinct. of iron, sulphurous acid, carbolic acid and glycerine, destroys the morbid matter contained in the false membrane, and also prevents its decomposition. Its frequent application is necessary to keep up its antiseptic effect, as it must be washed off by the swallowing of liquids. Next, the internal medicine, consisting of chlorat. potass. tinct. ferri, mur. and glycerine, and water taken between the periods of swabbing acts as an antiseptic, but being swallowed it is absorbed and kills the morbid matter contained in the blood, and by being continued even after the recovery prevents the sequelæ which sometimes follow diphtheria. The cold water application I consider of great importance. It keeps down congestion, and prevents the further formation of the membrane, and also favors its separation. When diphtheria breaks out in a family, I make all the other members use sulphurous acid freely, as I believe it has a powerful effect as a preventive, by killing the contagion as it enters the body. I also direct the rooms to be fumigated regularly by burning sulphur on hot cinders. This precaution I constantly recommend, as I believe it tends to prevent the spreading of the disease.



## Reviews and Notices of Books.

*Reports on Diseases of the Chest.*—Under the direction of HORACE DOBELL, M.D., &c., Consulting Physician to the Royal Hospital for Diseases of the Chest, &c., assisted by distinguished coadjutors in different parts of the world. Vol. iii., June 1st, 1876, to June 1st 1877. Svo. pp. 438. London: SMITH, ELDER & Co., Waterloo Place, 1876.

In the advertisement to this volume we learn that these reports will no longer be issued each year, but at such time as there is an accumulation of important facts having reference to the anatomy, physiology, morbid anatomy, pathology, diagnosis, etiology, materia medica, therapeutics, climatology, &c., and their bearing on the thoracic organs or their immediate associates, then will they be thrown into book form, and issued as a continuation of this series; and it is hoped this collection will form a comprehensive and valuable book of reference on Diseases of the Chest, as well as afford to the student an epitome of modern discovery and research.

The first article in this volume is from Japan, the report being furnished by Mr. William Anderson, Professor of Surgery and Anatomy, Imperial Naval Medical College, Yeddo. Mr. Anderson commences his report with an interesting sketch of the condition of the science of medicine among the Japanese, prior to the establishment of schools of medicine on the European plan. He also gives some account of the climate of Japan, physical conformation of the people, their habits of life and the food they live upon, as he fully recognizes the importance of some knowledge of these particulars, before giving a description of the diseases peculiar to a country so little known to the outside world, as is Japan. This forms a most interesting paper, and is included in the first section of this article. In section II. the author gives a general description of the diseases of the circulatory system, and of those of respiration. On the subject of parasitic disease of the heart, the author states that no cases have as yet been reported in the human subject, inasmuch as investigation is obstructed from the difficulty of obtaining

post mortem examinations. He describes, however, one of the *cælelmintha* which is known to be destructive to dogs and other animals, producing sudden death; on examination, the right ventricle has been found to contain a mass of whitish, semi-transparent worms, each worm having a diameter of half a line to a line, and rolled up into a kind of ball. These parasites have been found in the pulmonary artery and lungs producing embolic masses. It is supposed that these worms gain entrance into the body of animals by their drinking water from ditches, rice-fields and other impure sources. He hints at the probability of a similar affection occurring in the human subject, as it would appear that sudden death is somewhat common amongst the Japanese, but remarks that no positive evidence can be given owing to the difficulty of obtaining permission to make post-mortem examinations. This very interesting report is followed by one from China, furnished by Mr. R. A. Jamieson of Shanghai. From this report we learn that primary chest affections are comparatively rare among foreigners in China; on the other hand, secondary lung complications, arising in the course of endemic fevers are of frequent occurrence. The author touches upon the communicability of tubercular phthisis, and he reports a striking case which bears on this question. Dr. John Dudgeon, of Peking, gives an interesting account of the customs of the Chinese, the mode of warming and lighting their houses, although glass is now being extensively introduced, yet the use of paper as a substitute is still quite common. The principal factor in the health of the Chinese is their open out-of-door life. The various trades and callings are carried on in the public streets, and even in their work-shops, the entire side or front is open and fully exposed. Dr. Dudgeon remarks that the Chinese are almost absolutely free from heart disease and disease of the blood vessels, fatty degeneration is never met with, and delirium tremens is unknown in China amongst the natives.

Of diseases of the chest the acute forms are very rare, as is also phthisis. The question of the supposed antagonism between malarial exposure, and the development of tubercle is discussed, and some remarkable facts in support of this supposed

antagonism are given. In speaking of tea used as a beverage, he believes it to be a promoter of health and happiness. He remarks: "the use of boiling and boiled water, either alone or with a little tea in it, is a characteristic of the people, and has been productive of much good, and of the prevention of much disease. The astringency of the tea is a corrective against dysentery and diarrhoea, and the boiling of the water obviates typhoid fever, diarrhoea, calculus, and other affections."

The report from British Kaffraria is from the pen of Charles Egan, B.A., T.C.D., M.R.C.S. This interesting paper was published in the *Medical Times & Gazette*, in August of last year, and is familiar to our readers. The author accounts for the greater frequency of chest affections among the Christianized Kaffir as compared with his wild brother. The wild Kaffir seldom wears any other clothing but a blanket, when he gets wet on returning to his hut he throws off his wet garment and lies before a fire naked, whereas the christianized Kaffir uses European clothing, and when he gets wet to change his clothing is too great a trouble, so that he lies down as he is, sleeping in his wet clothes and thereby becomes more subject to bronchitis, pneumonia, and other affections of the lungs.

We have thus selected the reports from those countries which are comparatively unknown as regards these diseases, and given our readers a sketch of the work. The same scheme is to be found throughout. The other countries reported on are Canada, Australia, the United Kingdom of Great Britain and Ireland, United States of America, Austria, and Hungary, France, Germany, Italy, Russia and Spain. We trust that the announcement that this work will be discontinued as an annual, does not proceed from a lack of support, such an inference would almost follow, and this becomes a conviction when we see such an important and valuable serial, as was the *British and Foreign Medico-Chirurgical Review*, permitted to languish and cease publication for want of that support which it should have received, after a successful career of some thirty years.

Dr. Dobell has given to the profession in these reports a most valuable collection of facts in reference to diseases of the

thoracic organs in the various countries in the world. These, as we before remarked, are not attainable in any other form, without reference to a large number of periodicals, entailing very considerable research and much loss of time. We commend these volumes to our readers. They can be obtained by ordering through Dawson Brothers, St James Street.

*Landmarks, Medical and Surgical.*—BY LUTHER HOLDEN, F.R.C.S., &c., Surgeon to Saint Bartholomew's Hospital. From the second English edition. Small, 8 vo., pp. 128, Philadelphia: HENRY C. LEA, 1878.

These landmarks first appeared in the Saint Bartholomew's Hospital Reports, and the object the author has in collecting them into book form, is to afford the practical surgeon and student of medicine an opportunity of using to advantage all his senses. The student is advised to educate his observation by carefully examining everything appertaining to the normal living body. The position and relation of all the organs—touch, hearing and sight, are the senses which should be freely employed, and without the exercise of these senses the physician or surgeon will be unable to determine with accuracy any departure from a healthy standard. This little work is a most valuable collection of plain, simple and practical hints; it contains instruction which will be invaluable to the busy practitioner as well as to the student of medicine, and we heartily commend it to our readers. It is to be had at Dawson Bros., St. James Street.

*A treatise on Gonorrhœa and Syphilis.*—BY SILAS DURKEE, M.D. Sixth edition. 8vo. pp. 468. Philadelphia: LINDSAY & BLAKISTON, 1877.

The only alteration or change in this edition from the one which preceded it is the date on the title page—word for word, page for page, it is the same—and many important subjects more recently discussed, and somewhat illustrated by Jonathan Hutchinson, and others, on the subject of syphilis, are entirely passed over as beneath the notice of *this high authority*. *Nemo potest nudo vestimenta detrahere.*

*The Science and Art of Surgery; being a treatise on Surgical Injuries, Diseases and Operations.* — By JOHN ERIC ERICHSEN, F.R.S., F.R.C.S., &c., &c., revised by the author from the seventh and enlarged English edition. Illustrated with eight hundred and sixty-two engravings on wood. Svo., Vol. I. pp. 947; Vol. II. pp. 989. Philadelphia: HENRY C. LEA, 1878.

*The Science and Art of Surgery*, by Mr. Erichsen, is so well known to the surgical student that it demands no extended notice at our hands. This is an American edition revised by the author, from the last British edition, and is not simply a reprint. The author remarks, that in consequence of unavoidable delay "in the publication of the seventh British edition, I have found time to add to this one several paragraphs on important practical subjects, which will, I trust, be found to enhance the utility of the work as a guide to the Practitioner of Surgery." Each page of the former British edition has been revised, and in some instances the articles have been re-written. Some two hundred and thirty-seven pages of new matter have been added, extending over the two volumes. The illustrations have been increased in number by the addition of one hundred and fifty new figures. Some of the old engravings have been discarded and others substituted of improved style and execution; besides this the author has embodied in each volume a separate index. This is a very decided improvement, and enhances the value of the work, it facilitates reference to the subjects under discussion. Mr. Erichsen has incorporated into this edition all recent improvements in the science and art of surgery. It is, without doubt, the best dissertation on surgery in the English language, written by any one author. The articles are full and the style free and very readable. To the practitioner this work will be found of special use, as from it he will get a clear insight into the principles of surgery as well as a knowledge of the method of surgical emergencies and practice. The illustrations are very clear, and the type and get up of the book is in Henry C. Lea's best style. It can be had at Dawson Bros., St. James Street.

*Lessons on Laryngoscopy: including Rhinoscopy, and the Diagnosis and Treatment of Diseases of the Throat.*—By PROSSER JAMES, M.D., M.R.C.P., &c. Second edition illustrated with coloured plates. Small 8vo. pp. 176. London: BAILLIERE, TINDALL & COX, 20 King William Street, Strand, 1878.

The first appearance of this little work was in 1873, and it received the approval of the profession for its practical bearing. Since then, the author was obliged through illness to relinquish the practice of his profession: after a lengthened absence he found it advisable to issue a second edition, in this he has not thought it necessary to revise the text, but has added to the illustrations, and also given in addition five coloured plates. These are well finished, and are a valuable addition to the work. The work is practical, short, clear, and as a manual for ready reference, it contains all that is really essential for acquiring a knowledge of the art of examining the larynx with Garcia's mirror, and of successfully applying remedial agents to the lining membrane of the nasal cavities and upper air passages. To those interested in the use of the laryngoscope we know of no better or more instructive manual.

*Materia Medica, for the use of Students.*—By JOHN B. BIDDLE, M.D., Professor of Materia Medica, &c., Jefferson Medical College. Eighth edition, revised and enlarged, with numerous engravings. 8vo. pp. 462. Philadelphia: LINDSAY & BLAKISTON, 1878.

In the preface the author informs us, that in consequence of exhaustion of the seventh edition of his work on Materia Medica, in little over a year from the date of publication, he was obliged to bring out a new edition, and in doing this he has carefully revised, and in some instances re-written many of the articles. Some new articles have been added, so that the work is brought down to the present time. The author's aim has been to give to the students a text-book, short, succinct, and suitable to all his requirements, and in this we believe he has succeeded, and therefore fully recommend the work.

## Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

**Removal of Astragali.**—Mr. LUND, of Manchester, brought forward a case of Removal of both Astragali, in a case of severe Double Talipes. The patient, seven years of age, was said to have been born with the deformity—double talipes equino-varus,—and when six months of age tenotomy was practised, and subsequently he had worn instruments. He came under Mr. Lund's care in January, 1872, and attempts were made under chloroform to break down the adhesion, the chief obstacle being the partial dislocation of the astragalus. An incision, about an inch and a half in length was made over the head of the left astragalus, and when the bone was fully exposed an attempt was made to raise it by means of a gouge, in doing which a thin piece of the cup of the scaphoid and a slice of the inner malleolus were detached. To complete the dislodgment, a small, strong curved hook with a cutting edge in its concavity was used as a lever, and by passing it between the bones, the interosseous band was cut through, and this being done, the astragalus was easily removed. The right foot was similarly operated on, the cutting hook only being used. Antiseptic principles were followed, and the wound healed by the thirty-eighth day. The after treatment consisted in the use of elastic bands, to abduct the foot and keep the extended border raised. At the end of September he was supplied with a pair of Dr. Sayre's club-foot shoes. The boy was shown to the society, and there was seen to be considerable power of flexion at the ankle, and he was able to walk with ease. Mr. Lund advocated this operation for cases of unmanageable talipes, where tenotomy and instrumentation had been tried and failed.—Mr. W. Adams looked upon the case as one of great interest, the only defect being a little excess in the arch of the foot and slight contraction of the Achilles tendon, which might be remedied by its division or extension.—*The Lancet.*

### Stone in the Bladder of the Male Adult.

The following is an abstract of the paper, entitled "An Account of 500 Cases of Operation for Stone in the Bladder of the Male Adult, with remarks on the most important incidents which have occurred in connection with them," by SIR HENRY THOMPSON, F.R.C.S. The 500 cases were in adult males—that is of twenty years old and upwards, the great majority being from 50 to 70 years: the mean age was  $61\frac{1}{2}$  years. They comprised Sir H. Thompson's entire and unselected work from the first case up to January, 1877. The published experience of Cheselden, Martineau, Brodie, and Fergusson was given. The sum of similar cases treated numbered 422. Of these 422, 69 were fatal, or  $16\frac{3}{4}$  per cent.—i. e., 1 in rather more than 6 cases. Of the 500 cases in question, 432 were by lithotrity, and 78 by lithotomy. The number of individuals operated upon was 420, several of the lithotrity patients being operated upon twice, a few three times. In all cases a considerable interval and evidence of fresh formation, mostly a newly descended uric acid calculus had existed. Small phosphatic concretions, although removed by lithotrity, had not been reckoned as stone in the bladder. The chemical constitution of the calculi was as follows: Uric acid, 313; phosphatic, 99; mixed, 81; cystic oxide, 1; pure phosphate, and carbonate of lime, 2; phosphatic calculi formed on foreign bodies, 4. The mortality, accepting almost any death occurring within six weeks of operation, was as follows:—In 422 cases of lithotrity, 32 deaths, or 1 in 13 cases; in 78 cases of lithotomy, 29 deaths, or 1 in  $2\frac{3}{4}$  cases. Total 500 with 61 deaths, or 1 death in  $8\frac{1}{2}$  cases. The causes of death which were given in each case, were tabulated, compared and contrasted, in the two operations, with inferences thereupon. Accidents met with in operating by each mode was detailed and the manner in which they were dealt with. The general inference was arrived at that it is unwise to apply, as a rule, lithotrity to any stones above moderate size; and if any calculus is sufficiently large to require the fenestrated instrument, it is better to employ lithotomy. The author had not employed such an instrument during the past ten years.—*The Lancet.*



**Anchylolysis of both Knee Joints.**—A case of Anchylolysis of both Knee-joints, with shortening to the extent of two inches of the femora, from oblique and comminuted fractures, by Mr. BRODHURST. This communication described a case in which there was fracture of both thigh-bones, together with injury to both knee-joints. Shortening to the extent of two inches took place in each thigh-bone, and anchylolysis followed the injuries to the knee-joints. The mode of restoring motion is related, and it is stated that motion was ultimately as perfect as before the accident; and further, it is stated that notwithstanding the shortening of the femora, the patient was not less active, whether on foot or on horseback, than before his accident.—Mr. Marrant Baker, asked for a further description of the instrument by which these results were arrived at; and Mr. Hulke, referring to a statement in the paper that Sir William Fergusson had pronounced the case to be one of bony anchylolysis, asked whether this opinion was gleaned direct from Sir William, or only on hearsay evidence.—Mr. Brodhurst, in reply, thought the instrument was too well known to have been shown to the Society. He had now used it in many cases for several years, and it consisted in a couple of splints supporting the femur and tibia, or the humerus and forearm, with a roller placed at the elbow or ham; secondly, a wheel and axle. It was thus very powerful, and he had used it in cases of very firm adhesions in which resection had been advised, and in some cases he had used it to restore motion after resection had been performed. The first case in which he employed it was a severe and long-standing one, in which it was necessary to perform tenotomy before applying the traction. Sir W. Fergusson's opinion was communicated to him by the gentleman who was with the patient when he saw Sir William.—M. Hulke criticised the use of such forcible measures in subluxated joints, and in conditions where a stiff and strong lower limb was better than a loose joint.—Mr. Brodhurst contended that, in the case related, the patient, who had seen nearly all the surgeons in London, was placed in an infinitely better condition as regarded his locomotive powers after than before the operation. No one who had

seen him could doubt this.—Mr. Hulke did not question the propriety of the operation in this particular case, but here there did not appear to have been subluxation, as he gathered from Mr. Brodhurst was the case in other instances in which he had employed it.—Mr. Brodhurst said he was misunderstood. In the first case in which he applied the instrument there was subluxation, and he had to remove dead bone and to divide tendons before the instrument could be used.—*The Lancet*.

**Rodent Ulcer.**—Mr. C. HIGGINS read this paper. The patient was a married woman, aged forty-five; her health had always been good. The rodent commenced thirteen years before admission to Guy's Hospital (at the remarkably early age of thirty-two), showed but little tendency to ulcerate until five years after its first appearance. During the progress of ulceration, a second pimple, of apparently the same nature as the first, made its appearance in the angle between the right side of the nose and cheek: it did not, however, ulcerate. The eye-ball, which was quite healthy, was excised, and the ulcerated surface destroyed with a paste of chloride of zinc and starch, applied on strips of lint; after separation of sloughs some cicatrisation took place. The disease soon commenced again; and eighteen months later the surface of the ulcer and adjoining infiltrated tissue were destroyed with the galvanic cautery, and chloride of zinc paste applied; the second pimple, which was enlarging, was also burnt out. After separation of sloughs, cicatrisation again took place to a great extent; but four months later the disease was again spreading rather rapidly. The whole of the thickened margin and base of the ulcer, together with a large amount of adjoining healthy structures, including skin, mucous membrane, muscles, and bone, were cut away with a scalpel, the bleeding stopped with a "thermo-cautery," and chloride of zinc paste applied all over the cavity left. The wound finally healed entirely, but subsequently some recurrence of the ulceration took place, and the diseased tissues were again removed with knife, cautery and caustic. Cicatrisation took place, and with the exception of a small part of the outer margin, the wound has since remained firmly healed.—*Med. Times and Gazette*.

**“Lymph Scrotum.”**—Mr. COLES showed a specimen of “lymph-scrotum” from a patient in China, and gave an account of the pathology of the disease, from the stage of discharge to that of growth. The condition was associated with the presence of filariæ in the blood; and Mr. Coles also described these organisms.

Mr. Marrant Baker asked what was the colour of the lymph that escaped from the cut vessels of the affected organ; whether it was milky, and if so, why?

Mr. Coles replied that the fluid was not milky, and that he could not account for its colour.

Sir Joseph Fayrer said that the pathology of “lymph-scrotum” was correctly described by Dr. Vandyke Carter, in the year 1861. In 1865 he had himself described the same disease under the name of “nævoid elephantiasis,” and suggested that it might be due to the presence of a nematode worm. Very soon after, filariæ were discovered in the fluids. The filariæ were of interest pathologically as well as surgically, for it was probable that cachectic malarial diseases would be found to be related to them. As to the characters of the “lymph” he had seen it of a specific gravity of 1020; of variety of colours, but generally faintly pink; and coagulating rapidly. The abstraction of this fluid caused as much depression as if it had been blood. Lewis had suggested that the worms caused mechanical obstruction in the ducts. Whether this disease was identical with true elephantiasis or not (for the dilatation of the lymphatics might be insignificant) was doubtful. He had seen as much as sixteen ounces of fluid come from punctures in the scrotum in a few minutes. Removal of the growth was attended with relief of the symptoms.

The President asked whether filariæ had been found in non-nævoid elephantiasis.

Sir Joseph Fayrer replied that they had not, so far as he was aware, but their discovery might be expected. He had himself seen specimens of the blood-worms discovered by Dr. Sonsino, of Cairo, in some cases of hæmaturia.

Dr. Cobbold said that Wucherer, of Bahia, first discovered

the filaria in chyluria. Two years later, Lewis found it in the urine in chyluria; and two years afterwards, Dr. Cobbold himself found it in a case from Natal. Still later, Lewis made the discovery of the worm in the blood. But it was Bancroft of Australia, that first saw the sexually-mature worm. Dr. Bancroft, he understood, was now able to diagnose filarial disease in patients from the presence of small tumours in the armpits, face, etc. In one of his letters he had remarked that he should not be surprised if it were found that mosquitoes sucked up the filariæ. He had failed, however, to prove this; but Manson of Amoy had really and truly observed this, and had traced the various stages throughout. In one mosquito Manson had counted as much as 120 filariæ in its stomach. Within its host the filaria threw off the outer tunic, and became transformed into a sausage-like body; and thence it passed into a third form. Having fed upon blood the mosquitoes betook themselves to water, on the surface of which they deposited their eggs, living for five days only. By the end of this time the filariæ within them had reached to the length of one-thirtieth of an inch. From the water they found their way into man. Dr. Cobbold urged the necessity of more precision in the description and nomenclature of worms in man; otherwise much confusion arose, and ungracious remarks were sometimes made.

Dr. Crocker said that he had lately examined the blood for filariæ in a case of elephantiasis with dilated lymphatics, secondary to erysipelas, where the subject had never been abroad. No filariæ could be found.

Mr. Coles said that a very low microscopic power must be used in searching for the worm, which was one-thirtieth of an inch in length. Mr. Coles' specimen was referred to the Morbid Growths Committee.—*Medical Times and Gazette.*

### **Renal Calculus Containing Indigo.—**

Dr. ORD showed a renal calculus containing indigo. He said that indigo was sometimes found in the urine unaltered by chemical agents; and all urine contained a material that yielded indigo-blue. But indigo-blue had never hitherto been

found in calculi. The specimen was sent to Dr. Ord, by Dr. Bloxam with the kidneys; and was found in the pelvis of the right kidney, the left being sarcomatous, and containing a calculus of carbonate and phosphate of lime. The calculus containing indigo was partly of a dark-dirty-brown colour, and partly crusted with a blackish-blue matter which coloured paper blue. When heated the calculus gave off a sooty smell, like that of burning indigo, a great part of it disappearing in smoke. Dr. Ord found that the blue portion gave a blue solution with hydrochloric acid; that when heated in a test tube to a degree below redness, it gave off a bulky vapour resembling iodine vapour, which deposited crystals on a cool surface; and that the crystals so deposited were characteristic, being elongated six-sided tablets with pointed ends. Powdered and rubbed up with strong sulphuric acid, the substance yielded a blue solution, and this, when diluted and filtered, furnished a beautiful blue fluid. Spectroscopically examined, this fluid stopped the yellow by a defined band, the centre of which corresponded to the sodium-line. On all this evidence Dr. Ord considered the substance to be true indigo. The next question was—How came indigo to appear in a calculus? Was it from the food? Many plants yield a juice which, on fermentation, gave indigo-blue; but there had been nothing peculiar in this man's food. Carbohc acid, again, had been supposed to form indigo; and this man had taken a considerable quantity of creosote before his death. But Jaffé had shown that indigogen is formed in the urine of animals whose food is altogether non-vegetable, and had connected indigo in urine with indol in the body. Indol could be formed artificially from indigo; and it might be derived from albuminous matters. It occurred *e. g.*, in fæces. The subcutaneous injection of indol in dogs increased the amount of indican, or indigogen, in the urine. Therefore, the two bodies were normally connected. Schunk had another idea—he had separated indican from indigo-yielding plants, and showed that, when it was subjected to acid, it was decomposed into indigo-blue and indiglucline. Arguing from this, Schunk supposed that a similar body is formed in animals, and makes its appearance in the

urine. Certain affections might be associated with the presence of indigo in the urine, such as colic; it also frequently appeared in cholera, and in suppuration, especially that connected with the urinary passages. Pus itself was greenish, and in the presence of ammoniacal decomposition indigo might be formed from it. In the present case this might have been its mode of origin in the calculus. There was no natural exit for the products of disease in the left kidney, on account of obstruction of the ureter; certain of these products might therefore have been absorbed into the blood, and excreted by the opposite kidney as indigo blue.

The President said that whatever might be the explanation offered of the mode of formation of the calculus, the Society had to congratulate Dr. Ord on the discovery of the first indigo-calculus on record.

Dr. Thudichum said there was no question as to the substance being indigo. He had himself examined it, and confirmed all Dr. Ord's conclusions. Indigo-yielding urine might be perfectly colourless, as in cholera, where indigoferous substances were more abundant than in any other condition. He believed that Dr. Ord's theory of the mode of formation of the calculus in the present case was quite satisfactory until a better should be offered. Dr. Ord's discovery would direct more attention to substances that occurred in the body in very small quantity, but were none the less important on that account. Schunk's theory might be correct, but it was probable that the matter in the urine was not identical with the substance in indigoferous plants.—*Med. Times and Gazette.*

### **Cystic Disease of the Thyroid Gland.—**

Mr. JAMES WOOD showed a specimen of cystic disease of the thyroid gland, which he had removed by operation from a woman of twenty-three, in King's College Hospital. The tumour had been growing for fourteen years, but had lately increased rapidly in size. It was very large, extending from the upper border of the thyroid cartilage to the middle of the sternum, and overlapping the sterno-mastoid on either side. It was

manifestly adherent to the thyroid structures ; could be lifted up from the other parts that it covered ; and several arteries could be felt entering it. To the hand it was semi-elastic and tense ; but on either side it felt more solid. There was neither exophthalmos nor cardiac disturbance ; and the general health was good. The growth was variously treated. Iron, cinchona, and ergot were given internally ; the cystic portions were tapped several times ; galvano-puncture was also employed ; and iodine was injected. At last the tumour, considerably reduced in size, was removed *en masse* by Mr. Wood, under the antiseptic spray. The operation exposed the trachea, the carotid sheath, and the sterno-mastoid muscles. The wound was dressed antiseptically. Recovery was delayed by painful swelling of both legs. On examination of the tumour it was found to possess three capsules—first, the capsule of the gland proper, on which the smaller arterial branches were distributed, and from which the interlobular septa dipped down ; secondly, a looser capsule external to the first ; and thirdly, a thick covering externally, on which the large branches of the arteries ran ; it was on the third capsule that the vessels were ligatured. The interior of the cyst presented curious projections, some of which were probably the remains of septa. Fibrin was deposited in places on the serous internal lining. The microscopical structure of the growth was still undetermined.—*Med. Times & Gazette.*

**Large Gall-stone, with Ulcerative Escape.**—Mr. BARKER showed a very large gall-stone, from a lady of fifty, who had been a patient of Dr. Quain's and Mr. Erichsen's. In October last the patient had suffered from malaise and night-sweats, with some tenderness in the right hypochondrium. She continued to complain somewhat up to Christmas, passing several stools daily of a fatty appearance. At Christmas she went out freely. On February 4th last, pain commenced in the right iliac region, followed by vomiting. Four stools were passed at this time ; but no more up to her death. The vomiting afterwards became stercoraceous. On February 10th no hernia could be discovered, and in a few days

she died, the vomiting persisting to the last. Post-mortem no acute peritonitis was found. In the upper part of the ileum a large solid body could be felt, lying in the right iliac region; and this proved to be a biliary calculus, four inches and a half in circumference. It consisted of layers of cholesterine and biliary colouring matter. There were thin faeces above and below the calculus in the gut. The anterior margin of the right lobe of the liver was adherent to the colon; and a ragged cavity occupied the region of the gall-bladder. The ductus communis choledochus was not obstructed, but dilated. Fourteen or fifteen large calculi were found in the cavity. The absence of general peritonitis was remarkable. Undoubtedly the symptoms of last autumn were referable to ulceration and suppuration about the gall-bladder. These had culminated in ulceration and escape of the calculus. In February it had probably been arrested in its passage at the ilco-cæcal valve, though it was not formed there.

—*Medical Times & Gazette.*

**Removal of Port-wine Mark by Scarification.**—Mr. BALMANNO SQUIRE read notes of two cases of Port-wine Mark, treated with a view to obliterating the mark without scar. The one case was that of a man aged thirty; the other that of a woman aged fifty-five. In both the port-wine mark was confined to its commonest situation—viz., the right half of the face; and in each case treatment was carried on long enough to produce nearly complete obliteration of the mark. Scarification was adopted in both cases by means of parallel incisions with a frozen scalpel, the skin being also frozen by means of the ether spray: the cuts involved the entire thickness of the skin, and were made about one-sixteenth of an inch apart, and as soon as this had healed (within three or four days) a second set of parallel incisions were made obliquely to the direction of the first set; and so on with a series of operations. This procedure gradually resulted in the fading of the port-wine mark, and its final complete obliteration without leaving any scar. Mr. Squire showed drawings of these cases, and of an instrument he had devised (made for him by Messrs. Weiss) for executing a



series of incisions at one stroke. It was a scalpel with 16 parallel blades, placed so closely together that eight of them only measured half an inch across. He also described an apparatus, consisting of a number of parallel needles fixed in a plaster-of-paris handle, so that the handle contained thirty-six needle points in the half inch square. These should only be heated to a black heat on their insertion into the skin, for if heated to redness they produced complete sloughing of the entire area of skin operated on.—The President (Professor Erasmus Wilson) said that the operation was obviously as yet only in its infancy, but that the process of linear-scarification as proposed by Mr. Squire appeared to him to promise good results. Certainly no other satisfactory mode of dealing with port-wine marks had as yet been proposed.—Mr. Malcolm Morris stated that he had attempted an operation on port-wine mark with the single scalpel as at first advocated by Mr. Squire, but had found difficulty in executing the incision with the requisite nicety. He had accordingly devised a multiple scarifier, which he exhibited (made for him by Mr. Hawksley). He had tried this instrument on lupus erythematosus, and also in cases of acne rosacea.—Mr. Wordsworth agreed with Mr. Squire in preferring a black heat to a red heat in operating by the needle process. He had long employed, —viz., for twenty years—in cases of port-wine mark, a solitary needle bearing a ball of steel around the needle placed at about three-sixteenths of an inch from the point so as to retain heat. This ball enabled a rapid series of punctures to be effected with the needle without the needle losing its heat.—Mr. Davey had treated a case of port-wine mark with some success on Mr. Wordsworth's plan. Mr. B. Squire replied that in order to succeed in effecting neatly close parallel incisions, some practice in pencil or in pen-and-ink drawing was a considerable advantage, and that those practitioners who happened to have this kind of training would find but little difficulty in the matter. However, the multiple scarifier he had devised would effectually dispense with the necessity for that kind of accomplishment. He had tried multiple linear scarification in lupus, but preferred the results he had obtained in that disease by erosion with a minute

sharp steel spoon. The spoon in such cases had also been tried with good results by Professor Auspitz and by Hebra junior. In the "telangiectasis" which often accompanies acne rosacea, he had employed linear scarification as proposed by himself with better results than the multiple punctiform scarification recommended in such cases by Hebra senior. Professor Vidal, of Paris, had recently adopted Mr. Squire's method of linear scarification in cases of lupus vulgaris, with apparently good results. Dr. Dubini (of Italy) and after him Professor Volkmann (of Halle) had proposed multiple punctiform scarification in cases of lupus vulgaris, but no one, so far as could be ascertained, had proposed the bolder method of linear scarification in lesions of the skin, and this was more uniform and more thorough in its effect. Moreover scarification of any kind as applied to port-wine mark was, he believed, as yet untrodden ground.—*The Lancet*.

**College of Physicians and Medical Women.**—The position taken by the Fellows of the Royal College of Physicians, London, in deciding not to grant their license to practice physic to women is both clear and intelligible. They were careful to show that they do not so much oppose the creation of medical women as they are unwilling to lend any assistance to, or to co-operate with, those who are anxious to introduce women into the medical profession. Above all, they do not wish to make women constituents of the College.

Sir Joseph Fayrer made an important explanation, which demolishes one of the arguments on which the advocates of medical women have been wont to rely. It had been said that medical women were needed because medical men were denied access in their professional calling to women in India. This was contrary to his experience. He had never any difficulty in entering the zenanas when real sickness existed. Medical men were, with few exceptions, admitted freely everywhere in India. The contrary opinion at present prevalent in the public mind was of purely English origin.—*Lancet*.

CANADA

# Medical and Surgical Journal.

MONTREAL, APRIL, 1878.

## ANNUAL CONVOCATION, MCGILL UNIVERSITY.

The annual convocation of McGill University for conferring degrees in the Faculties of Medicine and Surgery, and Law, was held in the William Molson Hall of the University on Saturday, 30th March, 1878. There was a large assemblage of the friends of the University present. Shortly after three o'clock the members of the Convocation, who had assembled in the Library, entered the hall and took their seats. The chair was taken by the Chancellor of the University, the Honourable Charles D. Day, LL.D.

The proceedings were commenced by the customary prayer by the Rev. Professor Murray, after which the Secretary, W. C. Baynes, Esq., M.A., read the minutes of the last meeting of Convocation.

By request of the Chancellor the following report of the Medical Faculty was read by the Dean, George W. Campbell, M.D., LL.D.

The total number of students enregistered in this Faculty during the past session was 161, of whom there were from

Ontario,	90	New Brunswick,	3
Quebec,	47	P. E. Island,	4
Nova Scotia,	4	West Indies,	1
		United States,	12.

The following gentlemen 40 in number have passed their Primary examinations on the following subjects: Anatomy,

Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology. Their names and residences are as follows :

NAME.	RESIDENCE.
Brown, J. L.....	Chesterfield, O.
Burwash, Henry J.....	St. Andrew's, Q.
Butler, Billa F.....	Stirling, O.
Carman, Philip E.....	Iroquois, O.
Carman, John B.....	Iroquois, O.
Chisholm, Murdoch.....	Loch Lomond. N.S.
Feader, Henry C.....	Iroquois, O.
Gray Thomas.....	Brucefield, O.
Groves, George H.....	Carp, O.
Gurd, David F.....	Montreal, Q.
Hart, George C.....	Osnabrook Centre, O.
Hanna, Franklin.....	Harlem, O.
Heard, Charles D.....	Charlottetown, P. E. I
Henwood, Alfred J.....	Brantford, O.
Imrie, Andrew W.....	Spencerville, O.
Inksetter, David G.....	Copetown, O.
Jackson, Joseph A.....	Lawrence, N. Y.
Jamieson, Charles E.....	Ottawa, O.
Lawford, John B.....	Montreal, Q.
Lefevre, John M.....	Toronto, O
Lloyd, Hoyes W.....	Strathroy, O
Lyford, Charles C.....	Roscoe, Ill.
McArthur, John A.....	Underwood, O.
McCully, Oscar J.....	Sussex, N.B.
McCullough, George.....	St. Mary's, O
McEachran, William.....	Montreal, Q.
McGuigan, William J.....	Stratford, O.
McNee, Stuart.....	Perth, O.
Menzies, John B.....	Almonte, O.
Scott, John G.....	Ottawa, O.
Seymour, Maurice M.....	Chesterville, O.
Shaw William F.....	Ottawa, O.
Small, Henry B.....	Ottawa, O.
Smith, John.....	Torbolton, O.
Spencer, Richmond.....	Montreal, Q.
Smiley, Jonathan.....	St. Lambert, Q.
Stevenson, Hans.....	Wakefield, O.
Sutherland, William R.....	Montreal, Q.
Weagand, Clarence A.....	Dundas Co., O.
Willistor, Hedley V.....	Newcastle, N.B.

The following gentlemen, 27 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from

this University. These exercises consist in examinations both written and oral on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene,—and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:—

NAME.	RESIDENCE.
Beckstead, Morris.....	Grantly, O.
Bell, Robert.....	Montreal, Q.
Cameron, John D.....	Glengarry, O.
Chisholm, Alexander.....	Lochiel, O.
Collison, Robert.....	Matilda, O.
Faulkner, Daniel W.....	Holloway, O.
Fortier, Louis A.....	Philipsburgh, Q.
Fraser, John R.....	Hawkesbury, O.
Gardner, Henry H.....	Orillia, O.
Gibson, William B.....	Dunham, Q.
Greenwood, Fred. S.....	St. Catherines, O.
Guerin, James F.....	Montreal, Q.
Hutchinson, John A.....	Bluevale, O.
Howey, William H.....	Delhi, O.
McCann, John J., B.A.....	Milbury, Mass.
McCrimmon, John.....	Woodville, O.
McCrimmon, Milton.....	Ancaster, O.
McKinley, John K.....	Perth, O.
McNeill, Ernest.....	Montague, P. E. I.
Mills, Thos. W., M.A.....	Hamilton, O.
Neilson, William J.....	Perth, O.
Setree, Edward W.....	Prescott, O.
Smith, Daniel F.....	Listowell, O.
Stafford, Fred J.....	Montreal, Q.
Vineberg, Hiram N.....	Montreal, Q.
Webster, Arthur D.....	Kentville, N.S.
Wright, John W., B.A.....	Cressy, O.

Of the above named gentlemen, Messrs. Greenwood and Gardner, are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only await their majority to receive their degree.

The following gentlemen have passed in Anatomy:—

Bruce L. Riordan,	Thomas Ambrose,	John E. McEvenue.
R. R. McCorkill,	Henry E. Poole.	

## The following gentlemen have passed in Physiology :—

Thomas Ambrose,	Alex. F. Pringle,	Bruce I. Riordan,
Milton McCrimmon.	Alex. F. Poaps.	

## The following gentlemen have passed in Chemistry :

T. L. Brown,	R. T. E. McDonald.	E. H. Smith,
F. W. Church,	R. R. C. McCorkill,	J. O. Stewart,
John J. Church,	M. McNulty,	T. W. Serviss,
D. K. Cowley,	R. J. Mass,	G. T. Ross,
James Cahalan.	L. D. Mignault.	A. M. Ruttan,
J. O. Dibblee.	F. W. Pulford,	B. L. Riordan.
William Dulmage,	A. F. Pringle.	

## The following gentlemen have passed in Materia Medica :

Thomas Ambrose,	Andrew Henderson,	W. J. Prendergast,
Thomas L. Brown,	R. T. E. MacDonald,	Allen M. Ruttan,
F. W. Church,	E. A. McGannon,	James Stewart.
Wm. R. Dulmage,	Louis D. Mignault.	

## Students who have passed in Botany :

## CLASS I.

E. J. Rogers	} 1st	S. E. Joseph,	T. A. O'Callaghan,
C. M. Gordon,	} Prize.	J. E. Heyd,	A. D. Struthers,
J. H. Carson,	2nd Prize,	J. W. Ross,	J. C. Shanks,
W. C. Perds.		W. L. Gray	* N. L. Cressey,
W. Moore,		T. W. Reynolds,	E. Fritz.
		K. McKenzie.	

## CLASS II.

E. C. Fielde,	J. J. Hunt,	W. Cormack,
W. A. Shufelt,	W. J. Derby,	R. H. Klock,
W. H. Snow,	J. McLain,	* G. A. Parkinson,
J. McKay,	J. B. Harvie.	E. Laurin,
R. B. Struthers,	W. A. Lang.	H. A. Higginson.

## CLASS III.

M. Chisholm,	J. M. Skeffington,	A. Harris,
R. Shaver,	T. Tupper,	G. C. Wagner,
V. Dafoe,	H. D. Fraser,	M. R. Cuzner,
A. McDonald.	A. H. Dunlop,	M. S. Brown,
J. A. Jackson,	* P. Cummings,	W. H. Drummond,
M. Jakeman,	C. Beer,	A. F. Pringle,
	E. White,	

\* Marked thus are Veterinary Students.

The Medical Faculty Prizes are four in number :

1st. The Holmes Gold Medal, awarded to the student of the graduating class who receives the highest aggregate number of marks for the best examination, written and oral, in both Primary and Final branches.

2nd. A prize in books awarded to the best examination, written and oral, in the final branches. The gold Medallist is not allowed to compete for this prize.

3rd. A prize in books awarded for the best examination, written and oral, in the primary branches.

4th. Sutherland Gold Medal awarded to the student who passes the best examination in Theoretical and Practical Chemistry, with creditable passing in the Primary branches.

The Holmes Gold Medal was awarded to Hiram N. Vineberg, of Montreal.

The prize for the Final Examination was awarded to Thos. W. Mills, M.A., of Hamilton.

The prize for the Primary Examination was awarded to William R. Sutherland, Montreal.

The Sutherland Gold Medal was awarded to John M. Lefevre, Toronto.

The following gentlemen arranged in order of merit, deserve honourable mention.

In the primary examination : Messrs. Lawford, J. L. Brown, Imrie, Shaw, Stevenson, Gurd, Lefevre, Gray, Williston, J. Smith, McCully and McGuigan.

In the Final Examination :—Messrs. Neilson and Gibson.

### PROFESSOR'S PRIZES.

BOTANY, - - - - -	{ Rodgers and Gordon, 1st ;
	{ Carson, 2nd.

Special Prize for collection of Plants, Beaumont Small.

### PRACTICAL ANATOMY.

#### SENIOR CLASS.

*Prize.*—JOHN B. LAWFORD.

The following gentlemen deserve honourable mention in order of merit; Lyferd, Small, Imrie, McArthur, Gray, Stevenson, Smith, J. Sutherland, Gurd and Brown, (J. L.)

JUNIOR CLASS.

*Prize.*—WILLIAM L. GRAY.

Honorable mention in order of merit;—Beer, Joseph, Moore, Harvie and Cormack (equal), Ross and B. E. McKenzie (equal), Rodgers, Heyd and McLain (equal), Struthers (R. B.) and Laurin (equal).

Practical Chemistry *Prize*, A. D. WEBSTER.

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Obituary.

THE LATE JOHN BELL, A.M., M.D.

Again we are called upon to record the death of a brother practitioner, but on this occasion it is one of our junior members. Dr. Bell had been in active practice in Montreal for some eleven years, he was a young man of more than ordinary ability, and may be said to have died in harness. He was a very busy practitioner, and after a hard day's labour he left by train for Hamilton to see a near relative who was at the point of death. Arriving at Toronto it was noticed by a friend that the Doctor was himself ill, and he was induced to stay over for a few hours. He, however, went on by the next train, and on arriving at Hamilton he was obliged to take to his bed, which he never left in life, in the course of a short week he succumbed to a severe attack of Pneumonia.

Dr. Bell was a most excellent practitioner, careful and reliable; a thorough Christian gentleman, he was a general favourite with his fellow practitioners, and gained their esteem by the amiability of his character, and the scrupulous uprightness of his conduct. He acted for one year as Secretary to the Medico-Chirurgical Society of Montreal, but was forced to relinquish those duties as they were too onerous, but he always took a deep interest in the society, and was seldom away from our meetings. He has contributed several papers of great



interest, which have from time to time appeared in our journal. Practically, he was a good surgeon, performing operations with coolness and dexterity, and in one of his communications published in the August (1875) No. of this periodical, he proposed a new method of securing the pedicle in ovariectomy. His last contribution to medical literature appeared in February (1878) number of our periodical, on a case of diphtheria, in which tracheotomy was performed, and which was successful. Dr. Bell was an M.A., of Queen's College, Kingston, he was an excellent botanist. and he graduated at McGill University, in 1866, receiving the degree of M.D., C.M.

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PHOSPHORUS PILLS.—We have received from Messrs. W. R. Warner & Co. of Philadelphia, a box containing a number of samples of their sugar-coated phosphorus pills. These are most excellent preparations, the phosphorus being in combination with other drugs. This process with great skill and care is affected while in solution, and the pills are perfectly protected from oxidization by the sugar coating. We learn that the mass is soft, has the odour of phosphorus, is luminous in the dark, perfectly homogeneous, exhibits no particles of undivided phosphorus.

The pills may be had containing phosphorus only, in doses of from 1-50 to 1-100 of a grain, or the phosphorus can be procured in combination with iron, cannabis indica, cantharides, strychnine, quinine, nux vomica, and various other medicinal substances, a list of the various combinations, and the quantity of phosphorus in each case can be seen by referring to the advertisement of Messrs. Warner & Co,

These preparations are perfectly reliable, they have been found by analysis to contain the exact quantity in each pill as indicated on the label. We commend these preparations to our readers; the value of phosphorus as a nervine is fully recognized. In these pills the drug is presented in an elementary state, and is free from those repulsive qualities which have so greatly militated against its use.