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ADDRESS

DELIVERED TO THE GRADUATES OF THE MEDICAL FACULTY OF  
MCGILL UNIVERSITY, AT THE ANNUAL MEETING OF  
CONVOCATION, APRIL 1, 1891.

By G. P. GIRDWOOD, M.D.,  
Professor of Chemistry, McGill University.

*Gentlemen Graduates*,—The ancestral acres unscored by the plough have been left by you. You have not been allured by the dust and excitement of the Olympian games, with all the pomp and circumstance of war. In vain old Neptune has spread before you the great and varied enticements of a "life on the ocean wave." The blandishments of the forum and the quibbles of legal fiction, with all its subtleties, its narrowing down of argument to the one hypothesis, have had no attraction for you. The mysteries, superstitions and narrow bigotries of theologians need exponents of a different metal to that of which you are made. Instead, you have registered yourselves as students of Minerva, as worshippers at the shrine of Hygeia, and have but just now been admitted as brethren in the priesthood of the temple of Æsculapius. With truth, wisdom and health for your science, and healing for the practice of your art, I wonder not at your choice. The varied sciences you have to cultivate gives you a breadth of study and basis upon which to form your opinions possessed by no other profession. Like a man engaged in mixed farming, his knowledge of the art is greater than if he confine his energies to one kind of produce only, so as you press

into your service every kind of science as aid, assistant or minister to your own, do you enlarge its scope and usefulness. In the present day the division of labor is carried to a great extent, so much so that fifty years ago we had shoemakers who could make a pair of shoes from beginning to end, and we had shoes; but now-a-days to make a shoe requires about twenty men, women or children, each one runs a machine and becomes perfect in that work, but can do nothing else, and the shoemaker will soon be a man of the past. So with other trades; and thus also is it rapidly becoming in the medical profession. We have specialists for almost every part of the human frame, and who start out and practice their specialty from the first. If this goes on unchecked, we shall arrive at special hospitals, special treatment, special everything until the good old general practitioner becomes a man of the past. I warn you, therefore, gentlemen, to study all parts of your profession equally, and if in course of your practice, from circumstances or inclination, you desire to treat or become more familiar with any particular kind of disease that man is heir to, then you will be at liberty to take up the specialism. Another matter: We used, in my young days, to seek a specialist with our patient. He gave his opinion, and the general practitioner saw that this special treatment was carried out; there was a mutual understanding between the family attendant and the specialist. Now the specialist asserts himself as something superior to the family physician and ignores him altogether, although for the welfare of the patient a mutual confidence may be necessary. Be warned, therefore, against such practice in time, and if you desire to practice a specialty, do so only after a time spent in the study of the human system under treatment for disease in general, so that you may be able to understand better what special aberrations may require, what constitutional treatment, and what special lesions may be the result of constitutional infirmity; and in this matter seek the advice of the family physician, who is familiar with the history of your patient.

It is now nearly twenty years since the Faculty of Medicine did me the honor of asking me to address the then graduating

class, and again revolving years have brought me before the present class of graduates to offer on behalf of the teaching staff their congratulations on the attainment of the measure of success you have so hardly earned, the degree you are justly entitled to as the climax of your four years' hard study, and which has just been conferred on you. A fortnight ago you were in the agony of confident certainty, confident hope, hope, misgiving, doubt, despair at the prospect of the result of the test of merit you were about to undergo, alternating from moment to moment, as some brother student asked a question or propounded a problem which you either answered glibly or were unable to solve. But now, having answered to the satisfaction of your examiners, and taken the oath of your college degree, and gone through the formality of having the mortar board and tassel shaken over your heads, you are dubbed "doctor," and away you go to put in practice, on your suffering fellow-man, woman or child, those principles of your art you think you have mastered. But e'er you go and we see but little more of you we would say a few words at parting.

The curriculum laid down for the pursuance of the student of medicine in this University requires to be completely worked out by him. If he would be successful in his practice he must be a constant observer and student of nature,—nothing is too small, too insignificant to be passed by or neglected by him. From the smallest circumstance the greatest results may arise. Man with his erect stature, wonderful mechanism and diversity of mental attainments, together with the varied forms of all animal life, the beautiful and complex forms we see in the wonderful carpet of verdure with which Nature clothes and adorns the earth, the marvellous interwoven forms of crystals glistening with the splendors of the rainbow as they reflect the light at different angles,—all are but the development of the potentiality of the single spherical mass of matter acted upon by opposing forces in different directions. The study of these spherical cells and the forces acting on them externally and internally are the objects and conditions for your investigation. You must not consider that now you have taken your degree your studentship is over ;

it is but just beginning ; you have only learned to observe, how to observe, and what to observe ; you have only thus far the experience of others to guide you, you have to add thereto your own experience, that you may increase the general store of knowledge, and hand down principal, with compound interest, to your successors. The oft-told tale of how to conduct yourselves in the course of your career I need not repeat, but will refer you to other addresses, and with your permission, and in order that I may the better fulfil the request of my colleagues to " cut it short," pass on to some other considerations that come to my mind. You have been four years with us and are now leaving. During that time you must have seen that there is a large amount of practical work exacted in your career, and that this is supplemented by didactic teaching. You must have noticed that the majority of students come but ill-prepared to carry on the work before them, that to a large extent they are like the militia recruit joining the regular army, of whom the drill sergeant said, " Lor' bless you, sir, the militia aint no place to teach a man 'is drill. Why the fust thing as I 'as to do is to unlearn 'im what 'e 'as-been teached." And so you find that the teaching of the schools is for the most part theoretical and not practical ; in fact, that the majority have not been educated but " teached." I am not speaking of those bright students who come knowing what to do from the first, from the first make their mark amongst their fellows, and who, at the end of the curriculum, appear as the honored captains, but of the general run of students who come fresh from school and who scrape through their matriculation examination to find that they ought really to be going to school and learning how to learn, instead of being at college. I think you will agree with me that we want a higher standard of matriculation and of school education that young men may be better prepared for all walks of life. Passing onward, you must admit we do a great deal of practical work, but that more would be advisable, that some of our didactic work might, perhaps, make way for practical work, or, at any rate, more practical work got in somehow with advantage.

Twenty years ago we emerged from chrysalis form and burst

the shell of our then faculty, the accommodation having become too small, and blossomed out in the front half of our present buildings; but with additional room and added classes our numbers grew, and again we burst our shell, and this time keeping part of the old shell we enlarged it to its present dimensions, and even now you see it is not more than half large enough for our present accommodation, and if our numbers go on increasing as they must, and the increasing demands of education require greater facilities and an increased teaching staff and room for original research, we must again burst our shell and occupy tents around the home.

Our duty to the public requires us to keep pace with the improvements of the age. Fifty years ago, reasoning from analogy, our teachers of that day had recognized the similarity between ferments and disease, so that the specific fevers were looked upon as the result of ferments acting in the system. The advancement made in the manufacture of microscopes has enabled the workers of the present day to see and recognize the individual ferments producing those diseases, but the microscopist unaided could scarcely have made out these minute organisms but for the assistance of the chemist supplying the numerous dyestuffs, which have enabled the microscopist to stain the parts of these minute structures and thus to learn somewhat of their life and history, and thus to ascertain the causes of the diseases he has to treat. Knowing the cause, the physician may be able to find a remedy. The recognition that that fell disease, consumption, is the result of the attacks of a micro-organism, a bacillus, or a species of ferment, and its consequent communicability from one to another, has led to numberless experiments as to how to destroy the pigmy enemy, individually of no account, but by the immense development of the race becoming formidable by numbers. Under ordinary health man's own vitality enables him to resist the attacks or the insidious inroads of these hidden dangers, breathed or swallowed daily and hourly by all of us, and only when some predisposing cause weakens that vitality do we become subject to their influence. Hence it becomes necessary for you, as disciples leaving these halls of

learning, to preach to the public prophylaxis as the great means of obtaining longevity. How? By keeping the body healthy, by cleanly habits, preventing the growth of these microbes in a virulent type, starve them by leaving little or nothing for them to grow and develop upon, good healthy out-door exercise, moderate use of all luxuries, and such other means as you have been taught; but to do this you will have to be prepared with evidence to support you, and with pride you may turn to the results of the efforts of your predecessors, how the longevity of the race has been increased in places, as is evidenced by the decreased death rate and the decrease in the cost of life insurance. You have a noble fight before you; you have to be in front of the battle, fighting not only disease, but the ignorance and superstition of your fellow-man, and often at the risk of your lives.

You are now leaving your Alma Mater, and will in all probability find your occupations in all parts of the world. Keep a lively and loving remembrance of her and add to her renown in any way you can. Wherever you go you will find your path made easy by the reputation that has preceded you, a sequence of the good work done by your predecessors. See to it that you follow on in their footsteps, only stepping aside for a moment to gather more flowers of knowledge wherewith to adorn your Alma Mater. As disciples, you can help us by assisting in supplying her wants, and as you know them you can urge them whenever occasion presents itself. One of our graduates, Dr. Clemesha, has, out of the fullness which an active professional career has brought to him, presented us with a prize for clinical therapeutics. In the matter of prizes and scholarships we are badly off, and although medals are not considered of much use as incentives to exertion, we have always a number of hard-working students of limited means to whom a prize of a microscope or other implements he can ill afford to buy, or money scholarships to visit other schools after graduation, would be a boon. When you have the opportunity you may recommend some such remembrance of your Alma Mater to your wealthy friends or grateful patients. If it were optional with the student

to take a bronze medal in lieu of a gold one, and obtain the value in books or something more useful, as is done in the case of the Holmes medal, it would be a great improvement. By this and every other assistance you can render we hope to establish in this Faculty of our Alma Mater such an energetic potentiality as will develop a voltage sufficient to yield a constant million ampere current that will enable it to overcome the million ohm resistance of ignorance and superstition, sweeping away all obstacles, and, borne on by the resistless current of knowledge, at last be able to explain what now seems incomprehensible.

On referring, I find that twenty years ago I advised the then graduating class to get married. I have in those twenty years seen no occasion to alter that advice, but my expressed opinion on that point has been strengthened. How can you appreciate the tale of woe of a lost or wilful child if you have none of your own? How can you feel for the broken-up home of some reprobate, leaving his mate and little ones to the blighting influence of a cold, unsympathizing world, unless you feel the contrast? How can you feel for the little orphan, deprived of a parent's care, unless you have looked into the smiling face of your own innocent child? How can you feel for the bereft father of a family, deserted by their mother, unless you have felt the affection of your own well ordered home? These are some of the sorrowful tales which, as medical men, you may be asked to listen to and to act as advisers of the forsaken. How can you, bachelors, conjure up in imagination half the anguish which drives your unfortunate patient to the oblivion of the mad-house or of self-inflicted death? "How canst thou minister to a mind diseased unless thou knowest the malady," and have felt the exquisite pleasure of a home full of love and trust? You will be made the confidant of, and asked to sympathize with, every human suffering, whether of body or mind, and how can you do so unless you have felt the love of some one dearer still and still more dear than life itself? But when you have laid upon you such a burden as such a confidence will produce, you will find it lightened on going home to the "sweet, sweet love of daughter, of sister, or of wife."

Remember at all times if you want assistance your Alma Mater will always be ready to give it. Your interest and hers are identical. And now, in parting, we wish you all the health, happiness and prosperity you can wish yourselves. Fare-ye-well.

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## NOTES ON THE INSANE AND THEIR TREATMENT.\*

By WESLEY MILLS, M.A., M.D., L.R.C.P., LOND.,  
Professor of Physiology, McGill University, Montreal.

Perhaps in nothing is progress in civilization, and especially in practical medicine, better illustrated than in the great change that has taken place in our estimate of the real nature of insanity, and in the treatment of a class now universally believed to be of unsound nervous system. We cannot blink the fact that within comparatively recent times the behaviour of the insane was referred, not to organic or functional disease of the nervous system, but to agencies over which the medical man is supposed to have no control. And even yet the verdicts of juries and the decisions of learned judges are at times sufficiently astonishing.

While the change that has taken place is part of a general progress, it is especially due to the insight, the persistence, and the courage of a comparatively small part of the medical profession. In Canada this is especially true of one man, Dr. Joseph Workman, who has for a long period, through evil and through good report, upheld views which are now at last, happily in his own life-time, being extensively adopted.

Theoretically, it may be difficult to lay out the limits of sanity and insanity; but, practically, there is seldom any hesitation in the mind of the expert as to whether a given individual is fit to mingle with his fellows at large, or whether he requires a special environment such as can be furnished by an asylum or special hospital alone.

The view of insanity advanced by Dr. Hughlings Jackson has impressed me as being in harmony with sound views of the physiology of the central nervous system. He believes that

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\* Read before the Medico-Chirurgical Society of Montreal.

insanity is essentially a lack of balance or an imperfect co-ordination of parts, rather than a positive disease of the whole brain. Certain centres may be normal, certain others more than usually active, with some decidedly disordered, and in forming a judgment on the case, the condition of the first two sets of centres must be considered as well as that of the latter.

My own personal experience with the insane is very limited. But last summer I had the opportunity of spending two weeks with the superintendent of the Kingston asylum, Dr. C. K. Clarke, and what I then became cognizant of, taken in connection with my own studies, impressed me greatly; and inasmuch as nothing has been brought before this Society on the subject of insanity for some years, it occurred to me that an account of some points in the treatment, more especially, of the insane might prove suggestive and helpful to the general practitioner. I believe I am correct in stating that there is no asylum in America more advanced in its treatment of the insane than this institution, a fact which is to be attributed largely, if not entirely, to the individuality of the man who is at the head of Rockwood Asylum. He believes that the insane can be treated entirely without personal restraint; and as a matter of fact, restraint, as commonly understood, is unknown among the six or seven hundred patients of the institution.

The treatment, so far as I can generalize it, seems to be based on the view that in the insane there is a tendency to very imperfect nutrition, and an undue concentration of the mind on certain ideas, a pronounced nervous instability, or great mental enfeeblement. These factors act and react on each other. At all events, the best results are not obtained from the use of drugs, but from special feeding, occupation, and amusement. This will appear from the detailed statements now about to be given. As to occupation, the superintendent says: "We endeavor to find something for every one to do, and on week-days have over 80 per cent. at work. Work has taken the place of restraint. The following occupations are pursued: farming, gardening, carpentering, quarrying, cabinet-making, broom-making, brush-making, shoemaking, tailoring, carpet-weaving, mat-making, blacksmith

work, tinsmith work, painting, bookbinding, etc., etc. The occupations above enumerated are followed by men exclusively, but, in addition, those patients who cannot be trusted outside are kept busy in the wards, and nearly all are drilled in classes and trained in calisthenics—such as dumb-bell exercise, parallel bar, etc. The brass band also furnishes occupation for about twenty, and these men are taught music, and, with one exception, the patients have received their rudimentary instruction here. The women are employed in the laundry, at sewing, knitting, spinning, mat-making, in the kitchen, milking, and picking fruit and small vegetables in the garden; but, of course, general ward-work and sewing are the chief things. We have no sewing-machines in the wards, and if a patient is not capable of much development she is given a little simple knitting and the work is pulled out at night. A great deal of fancy-work is done. The women also have a calisthenic class, are dressed, when exercising, in proper gymnastic suits, and made to march, go through bar-bell and dumb-bell exercises, etc., to music.”

I am told, and it was perfectly evident, that one of the greatest difficulties in carrying out the modern methods of asylum treatment is to find occupations for all which are really suitable; and happy is the superintendent who has considerable practical knowledge of different trades, etc.

I was especially interested in watching the lowest class of the insane, the class that is also most dangerous, those with homicidal and suicidal tendencies, going through their drill exercises. A look at these people is sufficient to convince one that their brain development is very imperfect. They reminded me of the dogs I saw from which Professor Goltz had removed a considerable portion of the cerebral convolutions. They are in a large degree mere reflex mechanisms. They cannot possibly have the ideas and the control of human beings with more fully developed brains. Plainly, they are animals on an entirely different level. Yet drill has been found one of the most effective agencies in keeping them in as healthy a state as possible. Drill implies attention, volition, prompt obedience, co-ordination individual, and in relation to many others. It recognizes a head, marks off

the superior and inferior. The whole is closely related to manual training, and this will no doubt be eventually recognized as a most important means of developing both the sane and the insane. It is often found in schools that the best way to manage the over-active, the restless, the mischievous, or it may be the dull (for book-learning) boy, is to make him a monitor, or in other words, provide for the orderly expenditure of his energies instead of allowing them to become a source of disorder or positive evil. Probably the Greeks were not far wrong when they employed exercises with music to develop the perception of the harmonious in life.

But the insane, even more than the sane, must be amused,—diverted from fixed ideas. Fixed ideas do for strong minds. The genius is a man of fixed ideas; but even he will make more progress with occasional diversions from his engrossing pursuits. Are not the vagaries of genius often attributable to this violent breaking away from absorbing ideas that exhaust and so disorder the nervous system. Is not the judicious apportionment of work, rest and amusement one of the most difficult and important problems of life with every man? Below is given briefly Dr. Clarke's own statements in regard to amusements for the insane at Kingston: "Amusements are regarded as a very important part of the treatment, and in the winter months at least two nights in the week, and sometimes three, are devoted to the entertainment of the patients. Experience has taught us that we can supply a better class of amusements ourselves than outsiders can hope to do, and as a rule we do not encourage outsiders unless professionals to come here. Every Tuesday night we have what we call an 'At Home' in the Amusement Hall. At this all sorts of games are played—cards, draughts, etc.—and in addition a concert is given, selections by the band and orchestra, and songs by the employees and patients. Occasionally the patients themselves give excellent entertainments and supply the whole of the programme. At the "At Homes," coffee and cakes are supplied at the close of the concert, about 9 o'clock P.M. Friday night is devoted to dancing—7 to 9 o'clock P.M. All nurses and attendants must dance with patients

and square dances fill the programme. Patients, with one or two exceptions, are not permitted to dance with one another, and love scrapes are surprisingly few; nearly all see each other's infirmities and ridicule them. We have a flourishing minstrel troupe, a large brass band of 22 or 23 pieces, and a large orchestra. A musical nurse devotes her time to the amusement of the patients, drilling the calisthenic class, reading in the wards, etc. In the summer, one or two afternoons are devoted to baseball, one afternoon being given up to the patients alone to indulge in this popular sport and also croquet. Generally a steam yacht is supplied for the patients. There are weekly band concerts on the grounds, with occasional pic-nics, etc."

I had the gratification of hearing the brass band play very fair music, every musician being a patient. A large proportion of the inmates of the asylum, both male and female, were moving about on the green sward under the shade of the trees, and there were very few indeed that did not seem to be more or less under the influence of this soothing, yet healthfully stimulating mode of treatment. In a word, they seemed to be affected in the same way as I was myself.

I made special inquiries in regard to the treatment of sleeplessness, as it is plain that the nutrition of no organism can long remain natural without the influence of Nature's "sweet restorer." On this point Dr. Clarke summarizes as follows: "This is one of the difficult things to deal with. If possible we do without hypnotics,—use sulphonal, hyoscyamine, hot milk at bed-time, hot whiskey, and hot baths. Hypnotics are never employed continually; if good effects do not show at once, they are stopped. We depend more on the "gospel of fatness" than anything else. Warm baths continued for half an hour or more sometimes give wonderfully good results, as well as hyoscyamine, hyoscine and sulphonal."

In the entire management of an asylum for the insane under such advanced methods as those indicated in this paper, manifestly a great deal must depend on the individuality of the head of the institution; and I have no doubt myself that much of the success of Kingston asylum is attributable to the fact that the

present superintendent is a man of wide culture and many accomplishments. Apart from being abreast of the times in medicine, it is no small advantage that the superintendent is a good athlete, handy with tools, an accomplished musician able to lead the asylum orchestra, and endowed with a literary and histrionic ability that fits him to be the director of those forms of stage entertainment which are found most effective in the treatment of the insane; and last, but not least, one who believes that human beings, even those whose mental balance is disturbed, are bettered by being kindly treated and *trusted*. I think it is one of the highest sources of gratification to any man to feel that he is regarded with an almost affectionate esteem by hundreds of unfortunates.

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## PELVIC ABSCESS.

BY DR. M. A. MCFARLANE, ASHTON, ONT.

(Read before the Bathurst and Riverview Medical Association, July, 1890.)

In bringing this subject before your observation to-day, I do so only with the hope of directing your attention to the profound obscurity that may surround this condition in some cases, and yet how disastrous and fatal may be its consequences to the patient if not early diagnosed and radically relieved before the systemic forces become overpowered, as they were in this case whose history I will now briefly relate.

*April 2nd, 1889.*—I was first called to see this patient, a pale, delicate lady, of small stature, extremely feeble, very much emaciated, and presenting all the general characteristics of a long and habitual sufferer. Her complaints at this time were as follows: general weakness and lassitude, headache, anorexia, thirst, nausea and vomiting with annoying gaseous eructations, constipation, pain during menstruation, which was regular but scanty, constant heavy pain in the back, down the left thigh, and pointedly in the same hip and knee joints, stiffness and inability to straighten or walk upon the same leg, afternoon chilliness, with fever and night sweating. Family history exceedingly good. Married, with a family of four; no miscarriages. Never

had any serious illness, and enjoyed excellent health until six months ago—three months after the birth of her last child,—when, from exposure at her brother's funeral (killed by C.P.R. accident), she was taken ill with chills, followed by what was regarded as "inflammation of the bowels"; from this she partially, but never fully, recovered.

When I first saw her I found her condition about as follows: skin dry and harsh; eyes dull and heavy; expression careworn and anxious, with lines drawn about the mouth; tongue slightly covered with grayish fur, but red and fiery at the tip and edges; temperature  $101.5^{\circ}$ ; pulse 110, small and hurried; considerable anæmia, with blowing bruit in the vessels of the neck; heart, lungs and kidney normal; liver and bowels sluggish, with great irritability of the stomach and restlessness at night.

Vaginal examination revealed considerable heat, very little discharge, and no odor. To the left, behind, and advancing somewhat in front, the womb was surrounded and firmly fixed by a mass of induration, hard and unyielding, which could be distinguished externally in the region of Poupert's ligament. The womb was crowded down, forward, and to the right, with shortening and flattening of the fornix; otherwise, the vagina, cervix and uterus were apparently healthy. The same mass could be detected per rectum, but it of itself was not involved. The left thigh was somewhat flexed and adducted, and could not be extended on the pelvis. Walking across the floor, the left leg dragged perceptibly, while the patient stepped upon the toe with considerable discomfort.

My diagnosis was now dimly centred round a pelvic cellulitis, which, if not actually suppurating, was at least accompanied with many septic symptoms. My treatment therefore I directed toward the following points: (1) Rest in bed. (2) Increased nutrition; this I endeavored to attain by first allaying the stomach irritability. I gave sodii bicarb. with dilute hydrocyanic acid simply before meals, with 5i doses of glycerine after meals; broths, beef-tea, ext. malt, etc. (3) Intercepting the septic symptoms; for this I administered quinine and dilute sulph. acid after meals, keeping the bowels and kidneys gently active.

(4) The promotion of absorption, hot douche twice daily for 20 to 30 minutes, pot. iod. t.i.d., blistering externally over the mass, and internal applications of iodine to the cervix and vagina, followed by glycerine tamponade.

I will now give brief notes taken from my case-book.

*April 9th.*—Stopped applications to-day, as considerable inflammatory action and evidently increasing it. Great heat in the vagina. Patient actually worse. Temperature  $102\frac{2}{3}^{\circ}$ ; pulse 120. Stomach symptoms somewhat improved.

*April 17th.*—Tried applications again to-day. Temperature  $101^{\circ}$ ; pulse 104. Still chilly and feverish in the afternoons.

*April 28th.*—Stopped applications again to-day. Temperature  $102.5^{\circ}$ ; pulse 118. Great heat and throbbing in the vagina. Marked afternoon chills with rising temperature, followed by increasing night sweating.

No bogginess can be detected. More convinced of my diagnosis. Communicated my apprehensions and advised removal to the hospital for operation. As a result of this disclosure, Dr. Wilson of Richmond was called in consultation. After a careful examination we were unable to locate signs of abscess, and the doctor advised me to continue on as I was doing.

*May 9th.*—Continued the applications to-day. Temperature  $101\frac{1}{2}^{\circ}$ ; pulse 120. Sweats and chills still continue. Gave atropine sulph.  $\frac{1}{120}$  gr., increasing to  $\frac{1}{60}$  gr.

*May 15th.*—Sweats checked, as under the physiological effects of atropine. Chills not so annoying. Eats better and stomach not so troublesome.

*May 31st.*—Have continued the applications internally, with iodine externally. Considerably improved. Quit the soda and hydrocyanic acid, as stomach quite settled. Chills and sweats arrested. Feeling generally better. Temperature  $100\frac{2}{3}^{\circ}$ ; pulse 115. Has not menstruated since April.

*June 11th.*—Continues to improve; stomach settled. Tired of malt, changed for beef peptonoids.

*July 1st.*—Improving slowly; temperature  $99.5^{\circ}$ ; pulse still rapid and small (115).

*July 15th.*—Not much change; becoming tired of treatment.

Allowed to sit up for a while during the afternoons. Some bronchial irritation, recommended Scott's emulsion.

*Aug. 1st.*—Considerably stronger and better. Temperature  $99^{\circ}$ ; pulse 112. Very anæmic. Gave sacc. carb. iron 12 gr. doses after meals. Left applications to nurse. No return of menstruation.

*Aug. 15th.*—Looks remarkably better. Color vastly improved. Has gained four pounds in flesh and feels stronger. Temperature almost normal; pulse 104. Continued the iron.

*Aug. 23rd.*—Attacked with diarrhœa. Does not look so well. Complains of pain in the back. Quit the iron.

*Sept. 17th.*—Again attacked with diarrhœa. Has lost very much of the color she had regained. Pain in the hip and thigh again very troublesome. Temperature  $101\frac{1}{2}^{\circ}$ ; pulse 123.

*Oct. 4th.*—Find the old trouble gradually returning in all its phases. Stomach and bowels very irritable. Inclined to attacks of diarrhœa.

*Oct. 15th.*—Diarrhœa and chills, with evening rise of temperature; pulse 136. Failing in every sense.

*Oct. 24th.*—Dr. H. P. Wright of Ottawa called in consultation. The mass was found still firm and unyielding, the womb firmly fixed, but no bogginess or other positive signs of abscess detected. The uterine sound was passed, and other than slight hyperæmia, the womb was pronounced healthy. On examination per rectum, the mass could be felt, but the bowel itself was certainly not involved. After a careful and thorough examination, we found ourselves without any really convincing diagnostic signs of abscess, and the diagnosis remained open between malignant disease and a chronic pelvic suppurative cellulitis.

*Oct. 30th.*—Gluteal region swollen, red, and œdematous. Gaseous crepitation and bogginess can be detected beneath the finger. I administered stimulants and opened the abscess without the aid of an anæsthetic. From one to two ounces of abominably fœtid pus and a small quantity of gas escaped along with large sloughs of cellular tissue, which I drew out by the aid of the dressing forceps. I passed a probe deep into the cavity by the great sciatic notch, and introduced a large drainage tube,

about  $4\frac{1}{2}$  inches long, which entered without much difficulty, and syringed out with weak carbolic solution. I dressed the wound with iodoform gauze and dust. This I repeated daily, cleansing the tube. Ordered stimulants, beef tea, etc.

*Oct. 31st.*—Temperature  $101^{\circ}$ ; pulse 120. Some vomiting last night.

*Nov. 1st.*—Opened another œdematous and crepitating spot just in front of the trochanter. Some pus and gas escaped. Drained by small tube.

*Nov. 3rd.*—Made another small incision below the wing of the ileum and drained; pus escaped. Pulse very weak and rapid (133); temperature  $101\frac{2}{3}^{\circ}$ . Some vomiting. Made vaginal examination. Mass somewhat softened and apparently less fullness. Wounds becoming cleaner and odor almost gone, but no indications of healing.

*Nov. 6th.*—Has kept on much the same. Decidedly less pain along the course of the nerves. Complains now mostly of a burning sensation within the pelvis and in the region of the wounds. Some œdema of the left leg and vulva. Temperature ranging from  $101^{\circ}$  to  $102^{\circ}$ , pulse from 124 to 130 and very weak.

*Nov. 9th.*—Found my patient in a semi-comatose condition, tossing restlessly, and moaning heavily.

*Nov. 12th.*—Died in an unconscious state.

A remarkable feature of the case, it seemed to me, was the complete lack of vital energy within the tissues. The wounds, though sweet and clean, and not discharging excessively, yet showed not the slightest signs of granulations, the edges remaining as clean cut as the day on which they were opened.

On proceeding to a discussion, permit me, once more, to direct your attention to the marked obscurity of this case, the more particularly so, when we consider that, just six days previous to the manifestations of pointing, Dr. Wright and myself were unable to detect anything absolutely indicative of the condition present. However, notwithstanding the extreme difficulty of diagnosis, we find ourselves standing face to face with the fact that abscess developed within the pelvis, pointed in the gluteal

region, and was opened. That it did not burrow its way around and between obstructing bones and muscles from the depth to which my probe was passed in six days I think may be admitted, and, therefore, must have been present at the time of our examination. This I base on consideration of the extreme difficulty with which pus usually makes its escape from this region.

The question then arises as to the nature, cause and course of this abscess, and here, unfortunately, we are thrown, partially at least, upon the field of conjecture—a post-mortem having been refused. In any case, it was certainly retro-peritoneal, and probably bound down beneath the deeper pelvic fascias, thus increasing the difficulties of diagnosis. I think, however, it may be fairly discussed under three heads—

I. Psoas abscess,—so called in connection with spinal or sacral joint disease.

II. Fœcal abscess.

III. Abscess the result of a breaking down primary inflammatory exudation—a pelvic cellulitis.

I. In reference to psoas abscess, I have seen the same flexion and adduction of, and inability to extend, the thigh, the pain, the tumor, etc., but accompanied by its apparent cause, which I may briefly say in this case was positively eliminated. Again, the constitutional symptoms are generally much less marked. Pus following along the sheath and embedded beneath the psoas muscle, from whatever cause, will manifestly explain the concurrence of these symptoms. I might mention that morbis coxi was simulated in many respects, but need not be further considered.

II. In reference to fœcal abscess, we have to speak more cautiously, but still, I think, with some degree of certainty. To determine this, however, it is necessary to have definite ideas of the original cause, because fœcal abscess must in every case be secondary to some other pathological condition. If, then, it were fœcal abscess, it must of necessity be due either to ulceration or laceration of the bowel, with escape of fœcal matters into the surrounding tissues. Let us look, then, for the indications of these. But in doing so we must not lose sight of this mass

of indurations existing for months. With this in view, fæcal abscess can only be thought of under three circumstances—

- (a) Ulceration of the bowel from some previous trouble with escape of fæcal matter, setting up chronic abscess surrounded by this mass.
- (b) Malignant disease, producing laceration of the bowel, etc.
- (c) Abscess breaking through the bowel and ultimately becoming fæcal in character.

(a) The first condition would have been preceded by symptoms of ulceration, which it was not, the patient being in good health until seized with inflammation. Again, speaking roughly, as we must do for brevity, the most frequent seat of ulceration is the cæcum or appendix. We find the mass on the opposite side. Not conclusive, of course, but space prohibits fuller discussion.

(b) As to malignancy, we found the mass not invading the uterus, vagina or bowel. Yet the abscess was certainly within the true pelvis, and I cannot conceive of the bowel being involved to such an extent as to produce laceration in this region and yet not be detected by the examining finger.

(c) The last condition is possible, but as not affecting materially the points under discussion, need scarcely be referred to. Still, I am not inclined to think that such was the case, for the reason that pus was never observed to have been discharged by the bowel, that I could not discover any purely fæcal matter in the discharge from the wounds, that within a few days they lost their fæcal odor, and that we know abscesses in the region of the bowels take on this feculant odor, accompanied, possibly, with an accumulation of gases within its cavity.

III. Finally, we have to consider pelvic abscess, the result of a breaking down cellulitis. This, I am inclined to think, was the condition of this patient, for the following reasons: A previous history of a pelvic inflammation resulting from exposure, the origin of all her troubles. I mark this point as of considerable importance. Again, the prolonged course of septic symptoms. Such septic symptoms must be due to septic absorption, such septic absorption must have a focus, such focus must in all

probability be at the seat of affection, which was certainly within the pelvic cavity. Again, the lull in the onward and downward course of the disease, a fact which, probably, we would hardly expect in a fatal and progressive disease like cancer and her allies; and, finally, the lack of invasion of the uterus, bowel and vagina, the abating of the pain along the nerves pressed upon, the partial fall of temperature, the subsidence of chills, and the softening of the mass after the escape of its contents.

That abscess may arise from the breaking down of a mass of inflammatory exudation within the pelvis; that it may remain pent-up or burrowing for months or even years; that it may be present as a mass, firm and unyielding, being bound down by the deeper fascias; that this condition will be accompanied by chills, fever, sweating, etc., and pain along the course of the nerves involved or pressed upon; that it will, in time, almost of a certainty, burrow in some direction until it finds an exit; that there may be gaseous crepitation beneath the tissues at the region where pointing takes place; that the discharge may at first be extremely foetid; and, finally, that early diagnosis is extremely difficult and uncertain, are all conditions which we know may accompany retroperitoneal abscess within the pelvic cellular tissues whose primary origin may have been simply an inflammatory action therein.

Granting, then, that it was originally retroperitoneal abscess, or, even admitting there is still room for doubt, I would ask the question—under the existing chain of symptoms during the month of April—would it not have been justifiable and even expedient to have made an exploratory incision when we consider the great risk of earlier rupture into the peritoneum, and the almost inevitable result if left alone to burrow far and wide in search of exit which, it seems to me, should be furnished it before the system becomes shattered and the vital activity utterly overpowered, as it was in this case. Our profession is to assist Nature. Nature here is struggling to relieve herself of a foreign substance, a source of extreme erethism to her very existence, and I cannot see our duty clearer than in cases of this kind. In a few moments with the knife we may accomplish what will

take months of suffering and agony on her part to achieve, and even then, unfortunately, most imperfectly, so much so, that widespread sinuses and profuse suppuration generally removes the patient by hectic and exhaustion. In my brief experience I have seen four such cases. Three were left to Nature's guiding hand—three died, riddled with sinuses and pitted with abscesses. The fourth was my own cousin, whom I saw with Dr. McKinley of Bristol. It was originally a fœcal abscess, probably from ulceration of the cæcum or appendix, intraperitoneal, bounded below by peritoneum which could be detected per rectum bulging down, firm and tense, above by matted and coiled intestines. It was tapped, but immediately refilled, and we had him removed to the Montreal General Hospital, where Dr. Bell, after aspirating three times without finding pus, still, under the advice of the hospital staff, proceeded to perform an exploratory laparotomy, and succeeded in evacuating a large quantity of foetid pus with a complete and satisfactory recovery. Pardon me if I venture to express it as my opinion, that if this case, too, had been left to Nature, I would to-day have been serving you up a full bill. Further, I would say that it seems to me more the principles of quackery than the instincts of an honorable member of an honorable profession to stand by, with folded arms, professing to be doing our utmost for the patient before us, while we, possibly, inwardly and conscientiously conceive him to be drifting onward, slowly but almost certainly, to a fatal, agonizing, and most loathsome termination; while, on the other hand, in risking operative interference, we risk little more (probably less, when we consider the possibility of peritoneal complications) than what Nature will of herself, in time, most stubbornly perform, even at the cost of the total disorganization of the very seat and structure of her habitation; and, when again, manifestly there will be this gain—the preservation of a vast amount of extraordinary vital forces consumed in months of constitutional struggle wherein the powers of recuperation are being daily sapped to their very sources. These months of suffering and misery must not be overlooked.

In conclusion, I would like to notice one feature in the line

of treatment pursued, viz., the administration of iron. You will have noticed the pleasing effects of this drug at first. I am inclined to think it was a two-edged tool, and I must say I was wary in its use. In it I conceive a remedy which, while improving the condition of anæmia, was at the same time fanning into renewed activity the smouldering process of suppuration. Looking on the pathology of such a case for a moment, I think I may make my reasons clear. First, injury to the tissues from exposure or otherwise, a flushing of blood to repair damages, an abundant oozing of its cellular and plasmic constituents, excess of this, death of a portion of the involved tissue from altered nutritive relations or possibly strangulation of circulatory supply from the very pressure of excessive exudation into its meshes. At this stage comes into force another great law of Nature, viz., that any portion of the system, being deprived of its vitality, at once becomes a foreign body, a source of irritation; and Nature immediately proceeds to remove it. This she attempts first by the ordinary means, viz., *absorption* and *elimination*. This is fully manifested by all the excretory organs—sweats, diarrhoeas, disorders of kidneys, etc. Failing in this, however, she brings into force what I may be allowed to call simply an *extraordinary process of elimination*, viz., *suppuration*; the cells proliferate at the expense of tissue, these soften, burrowing proceeds in the line of least resistance, until exit is made and the irritant removed. But let us notice that in all inflammations there is a stage when the excessive exudation may become absorbed and natural recovery occur, (the liver may become encysted); further, that, even after pus formation has commenced, this is still possible, though, we must admit, extremely rare. Look, now, at the action of iron in such a case. Suppuration has occurred, but inflammatory action has become chronic, vitality is lowered, anæmia is present, circulation ebbs feebly, metabolism is torpid, absorption holds its own, and what I have called *natural recovery*—that is, recovery without further injury to or loss of substance—seems still possible. At this critical time iron is administered. What follows? The blood thickens, the heart and vessels are stimulated by a more solid and invigorating fluid, circulation is

invigorated throughout the entire system, oxygenation is increased, metabolism is aroused. These crippled and degenerative tissues, from lying amid tissues in a state of nutritive torpidity, are now surrounded by nutritive activity. Corresponding activity is prohibited. The more vividly, then, are they present as a source of irritation, and the more energetically does Nature proceed to regain or to remove them. Vascular excitement is again established, exudation and proliferation are renewed in excess of nutritive requirements, excess accumulates, the absorptive powers are strained to their utmost (as marked in this case by the attacks of diarrhœa, etc.), but without success, and suppuration is again in process. That there are other forces upon which iron exerts some peculiar subtle influence I believe. Trousseau tells us that it frequently hastens disintegration of tissue in tubercular deposits, yet these are distinctly non-vascular growths. He does not tell us why. This matter is worthy of consideration, more particularly so in female pelvic troubles, where we know iron is such a pronounced vascular excitant of the viscera in that region.

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N.B.—Since reading the above paper, I have had occasion—assisted by Dr. Preston of Carleton Place—to operate on a female child, 9 years of age, suffering from suppurative typhlitis. As soon as septic symptoms manifested themselves, I explored with the needle and obtained pus. I immediately decided upon operation, and, although performed nine miles from home, and under circumstances of poverty and uncleanness that almost prohibited it, I am pleased to say, with a speedy and most satisfactory recovery.

## GRANULAR CONJUNCTIVITIS.\*

By F. BULLER, M. D.,

Professor of Ophthalmology and Otology, McGill University; Ophthalmic and Aural Surgeon to the Montreal General Hospital.

The term "granular conjunctivitis" has been applied to several morbid conditions of the conjunctiva which differ very materially in their clinical features, not only in regard to the appearances presented by the conjunctiva, but especially in the greater or less tendency to develop pathological changes in adjacent structures. Besides the changes which take place in the structure of the conjunctiva itself, most important alterations are, in a certain class of cases, apt to be met with in the substance of the eyelids and in the cornea.

Of the former, shrinking and distortion of the eyelids, with consequent alteration in the position and appearance of the eyelashes, are the most conspicuous to the observer and the most troublesome to the unfortunate subject of such changes. They may, indeed, be the chief factor in the production of corneal disease which so often complicates the form of granular conjunctivitis which I propose to deal with in this paper. Were it not for corneal complications the disease in question would remain a comparatively harmless affair.

In practice, we frequently meet with granular conjunctivitis in which there is little or no tendency to corneal complications, even where the disease has lasted for months or years. In such cases there is apt to be considerable swelling of the conjunctiva, which is, in addition, decidedly moist and succulent; in other instances the palpebral conjunctiva, especially that of the upper lids, appears thick and voluminous, and beset with florid or pale, smooth, hard-rounded prominences—fibrous granulations. We may as well pass by all these, as well as all acute primary cases of granular or blenorrhœic conjunctivitis, and take into consideration only that class of cases which are known to be especially rebellious to treatment and dangerous to the integrity of the organ affected.

The important feature we have to deal with, then, is the ten-

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\* Read before the Medico-Chirurgical Society of Montreal.

dency to implication of the cornea, the upper part of which, as a rule, is the first to be affected, and hence presents in varying degree infiltrations, erosions, and the development of blood-vessels, these changes gradually descending lower and lower, that portion habitually covered by the upper eyelid often becoming densely clouded and vascular; sometimes the entire cornea becomes more or less hazy and vascular. This vascularity, known as pannus, may therefore be partial or complete. In severe, neglected or badly treated cases the cornea may ulcerate and perforate, giving rise to prolapse of iris and other still more disastrous complications. Extensive ulcerations or infiltrations of the cornea are also apt to be attended with iritis, with severe pain and intense irritation. In this class of cases, the characteristic feature is the liability to attacks of acute inflammation. During such attacks the patient's suffering will be extreme, and with the severe pain there is intense photophobia and lachrymation. These are the cases which now-a-days ultimately fall into the hands of specialists, but, unfortunately, they too often only come when the exhausted resources of unskilled advisers have left the eye badly maimed or hopelessly wrecked. Most of them come with a forlorn history of suffering and sorrow, prolonged over many years, the greater part of which might have been avoided by skilled and careful treatment. It is, however, but just to say that some, a small percentage I believe, will go wrong despite all that even the most experienced ophthalmologist can do to help them.

It is just this class of bad cases which forms the great bulk of granular lids as we see them in hospital practice, and from their persistence they seem to exist in relatively greater numbers than is actually true. I know of one such who was a faithful attendant at the Montreal General Hospital for ten years or more, and has finally made a satisfactory recovery.

For centuries it has been the ambition of every ophthalmic surgeon to find some speedy and certain means of relieving this opprobrium to our art. How have they succeeded? Fifty years ago McKenzie, then and for years later undoubtedly the greatest ophthalmic surgeon of the time, gives but a meagre

account of the treatment of this disease. For granular conjunctiva he recommends scarification, lunar caustic, sulphate of copper, strong lunar caustic salve, red precipitate salve, vinum opii, and the expressed juice of the *holcus avenaceus*. These, he says, assist in clearing the cornea, as well as repressing the trachoma of the conjunctiva. Besides these things, he blistered the nape of the neck and gave tonic medicines, especially sulphate of quinine, and in some instances he removed exuberant granulation masses with the knife. Later ophthalmic surgeons often practised syndectomy or removal of a conjunctival and subconjunctival strip all around the cornea, an operation which is still frequently practised with more or less benefit when there is pannus. The latter condition was also found to be curable by inoculating with the pus from ophthalmia neonatorum, both granulation and pannus disappearing like magic (in favorable cases), with the vast inflammatory effusion which attends the acute blenorrhœa thus excited. The results were sometimes brilliant; disaster was not uncommon. Fortunately the same result is now frequently attainable in a more peaceful way.

The discovery of Sattler, in 1881, that in trachoma or true conjunctival granulations certain characteristic bacteria are present, gave a new impetus to the search for more efficient remedies in this disease.

The trachoma coccus is found in the tissue of the conjunctival follicle or granulation. Morphologically, it is "a diplococcus of the shape of a double roll, and distinguished by its minuteness and the slight development of a dividing line. It stains with all basic aniline colors and possesses no individual movement, though, on the other hand, a rotary and oscillating movement can be demonstrated. Inoculation with particles of pure culture, by puncturing the human conjunctiva, produces typical trachoma."

This discovery has led to the more systematic use of so-called germicides in the treatment of granular ophthalmia, and apparently with favorable results.

There are, of course, many remedial agents which may be employed on account of their supposed germicidal properties. Foremost among these stands corrosive sublimate, a drug which

has had an established reputation in the treatment of conjunctival inflammations long before the germ theory was known. The same may be said of the red oxide of mercury ointment, which probably owes its curative properties to the transformation which it undergoes in the conjunctival sac into corrosive sublimate or some other active salt of mercury.

Solutions of corrosive sublimate has been used in varying strength, from 1-120 to 1-10,000. In using the strong solutions, cocaine has been employed to allay undue irritation. Personally I have never used stronger solutions than 1-1000, and have found considerable benefit from the free use of weaker solutions, as 1-3000 to 1-5000, several times daily. Carbolic acid in solution, or applied pure to the everted lids once daily, is often extremely efficacious; none of the pure acid, however, should be allowed to come in contact with the ocular conjunctiva. This may be avoided quite readily by making the application carefully to the everted lids and washing off with water before they are replaced.

Resorcin I have used in the same way with advantage, but, as far as my experience goes in this direction, it is inferior to pure carbolic acid.

Boric acid in fine powder, rubbed thoroughly into the palpebral conjunctiva, has been strongly advocated by some ophthalmic surgeons, but I have failed to satisfy myself that it is a desirable remedy used in this way.

Recently pyoctanin has been much praised. Certainly its unirritating qualities are a point in its favor, if the vaunted germicidal properties should turn out what they are claimed to be.

But the two remedies I have had most satisfaction from in the last few years are jequirity, and the operation of squeezing out the granulations. The former plan of treatment is only applicable in a certain class of cases, such as were formerly deemed suitable for treatment by inoculation. That is, old, inveterate cases with considerable corneal vascularity and rather firm trachomatous infiltrations, the conjunctiva being rather the reverse of moist and succulent.

The large and numerous round, or flattened and smooth,

fibrous granulations already alluded to are not amenable to the jequirity treatment. In favorable cases, one or two applications of a four per cent. solution of jequirity freshly prepared sets up a pretty active croupous conjunctivitis, which often becomes distinctly purulent in character, and the subsidence of this in a few days is followed by a rapid and often complete recovery. We must, however, be prepared to meet with disappointment in some instances, the granulations and pannus failing to disappear where the indications seemed clear for the use of this drug, and the reaction it caused quite after the normal type. I have only twice seen it cause troublesome ulceration of the cornea, and occasionally a dacryocystitis.

The operation of pressing out granulations is best done with Prince's ring forceps. The larger and more pulpy and gelatinous-looking the granulations are, the more thoroughly they can be eradicated in this way. Immediately after the operation the conjunctiva should be freely washed with a pretty strong solution of perchloride of mercury, and a weaker solution used several times daily until the abraded conjunctivitis heals. The results of this treatment are, as a rule, exceedingly satisfactory.

I do not mean to imply that the old standard remedies for granular ophthalmia are to be supplanted by the more recent ones, for they still play an important part in the treatment of more recent cases, and, in fact, the judicious use of nitrate of silver, copper sulphate, alum, oxide of mercury, tannic acid, and some other remedies will generally suffice to cure ordinary recent cases, and it is only when too zealously and persistently employed that they are likely to prove hurtful. This is, perhaps, especially true of the silver and copper preparations, which should never be persevered with in the face of an augmenting irritation.

The true secret of success in the treatment of this disease in any of its forms lies in a careful observation of details, both local and general, and a nice adaptation of the remedy to the requirements of each case, rather than any attempt at routine practice.



## CASE OF GLYCOSURIA—RECOVERY.\*

By J. H. B. ALLEN, M.D., MONTREAL.

Miss E. C., aged 62. Was called in to see patient April 5th, 1890, who had been suffering during the past three days from vomiting. Was told she fasted on the 3rd and took a seidlitz powder, which gave her some relief. She is a stout, flabby, slightly anæmic old lady. Has a dry, harsh skin; pulse regular and full; temperature 100° in mouth; tongue dense white fur; bowels confined; suffering from incessant vomiting, ejecting clear, bilious fluid with great difficulty; no trace of blood found. Experiences an uneasy feeling about head, but no actual pain; free elimination of urine; no chemosis; œdema over both tibiæ; slight hyperæsthesia of lower extremities. Has perfect use of limbs and can sit up. No albumen found in urine. Slight tenderness on pressure complained of in epigastrium, which could be traced round to the spine on either side. No deformity or special tenderness of the spine detected. Chest and abdominal organs are apparently normal on physical examination. In August, 1889, she had a large bullæ on ring finger, followed by several others round the original, attended with great pain. She has always been what one would call a neurotic individual. Her appetite has been noticed to be excessive for some time, although leading an inactive life.

*April 6th, 1890.*—Vomiting was greatly relieved by sinapism to epigastrium; small amounts of milk and soda water followed by calomel and soda operated freely. Still slight œdema in legs; temperature 100° in mouth; thirsty.

*April 8th.*—No vomiting since the 6th, or œdema since the 7th. General hyperæsthesia, which causes her to call out when limbs are at all roughly handled; can stand erect without assistance, but on attempting to sit down, falls heavily into the chair.

*April 10th.*—Dr. Roddick saw case in consultation to-day. Friends say she lies in bed like a log, muttering, and will not speak to them, but when I called, had no difficulty in eliciting answers to questions.

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\* Read before the Medico-Chirurgical Society of Montreal.

*April 13th.*—Vomited once during the night. Sibilent râles noted over back and front of chest. Morning temperature, 98.3°; evening, 99°. Pulse 85, regular and somewhat soft. Great pain localized over lower dorsal region; hyperæsthesia tends to move. Had an attack this morning, throwing up limbs, arching back, speechless, looking intently at friends—all being over in a minute. Uric acid crystals, no albumen. Jaksch's Phenyl Hydracin test failed yesterday and to-day; Fehlings revealed presence of sugar. Has been taking Tr. Nucis Vom. ℥x; Potassium Bromid. gr. x, t.i.d.

*April 14th.*—Pruritus of vulva noticed first yesterday; was drowsy; no inclination to take food; pain most marked down right side of abdomen. Towards evening on the 13th experienced a tight feeling and spasm about neck, speechless, slightly curved spine, all passing off in a very short time, less thirst, chest clearer, and uses limbs better. Gluten bread (made by E. Conor of Paris) ordered, with chicken, beef-tea, etc., no starch or sugar being allowed.

*April 17th.*—Hyperæsthesia less; limbs can be rubbed roughly and tibia percussed without eliciting pain; fingers and toes feel as if a tight glove were drawn over them; restless, sleepless, and excessive pain complained of in frontal bone; sugar diminishing. Was seen in consultation with Dr. Ross, after which it was decided to give codeia  $\frac{1}{4}$  grain t.i.d. and watch result.

*April 25th.*—Slept well the last eight nights; skin acting freely, starting at ankles and wrists, while face, shoulders and neck were covered with sudaminæ for several days. Pains greatly relieved, but still persist in right shoulder, which has been very troublesome during the entire attack.

*May 20th.*—Has been up about house for the last three weeks, and only a trace of sugar was found on the 12th and 15th with Fehlings test.

*July 30th.*—Examined urine every two days, no trace of sugar being detected; no pain; still tight feeling in fingers and toes. Appetite poor; only takes coffee at meals, no liquids between. Iron tonic ordered, and codeia reduced to three days per week.

*Aug. 30th.*—On the 20th, after worrying, a very slight trace of sugar was noted for a few days, which passed off, codeia being given daily.

*Dec. 30th.*—No sugar has been found since August, urine being examined every two weeks. Diet has been extended the last three months, several kinds of fruit and vegetables being allowed; no wheat bread.

The temperature in this case is very interesting, always taken in mouth, being elevated at times during the first week, subsequently subnormal for some time, frequently being  $96\frac{1}{3}^{\circ}$ . Fagge mentions cases where elevated or subnormal temperatures were noted, but I see none where a combination was noticed in the same case. He looks upon subnormal temperatures with nervous phenomena as very unfavorable for prognosis. Nervous phenomena were very marked in this case, judging from the amount of hyperæsthesia, weakness in limbs, and two slight convulsive attacks. Fagge also speaks of pain in right shoulder being frequently noted in hepatic disorders, and, if you remember, I stated that patient suffered constantly from pain in right shoulder long after pains in other parts were entirely relieved. Gastric disturbance, rapid loss of power, drowsiness, nervous phenomena were, I think, the starting point for coma. Regarding sugar, it is worthy of note that it was not reduced very materially until after codeia was given, after which, in twenty-four hours, we had the skin acting freely and sleep restored, general improvement of all symptoms setting in soon after.

## Correspondence.

## LETTER FROM BERLIN.

BERLIN, April 4th, 1891.

To the Editors of THE MONTREAL MEDICAL JOURNAL.

I enclose you a programme of the Twentieth Congress of the German Surgical Association, which has just concluded its labors here. The congress was formally opened in the aula of the University on Wednesday, the 1st of April, at 12 o'clock noon, by the President, Prof. Thiersch of Leipzig. The large hall was packed by an attentive and enthusiastic audience of, I should say, about five hundred surgeons. The interest was manifested throughout all the subsequent meetings without any abatement, and at the morning sittings, which were held in the Royal University Surgical Klinik (von Bergmann's), from 10 A.M. to 1 P.M., both the amphitheatre and the floor of the klinik were filled, so that standing room could hardly be obtained by those who came a few minutes late. The programme, as will be observed, was arranged so that patients and preparations (of which there were a great number) were presented at the morning meetings in the klinik. Noticeable features of the meetings were: The practical nature of the papers, which were usually short, and in most cases accompanied by demonstrations of patients or preparations (in many cases brought from a considerable distance); the character of the discussions, which were short and to the point; the regular and steady attendance of the older members, as well as the amount of work shown by the younger ones; and the punctuality with which the meetings were opened and brought to a close. As was naturally expected, the use of *tuberculin* (as it is called here) came in for a good deal of discussion, a special discussion having been arranged for at the first meeting. I shall not attempt to give any details of this discussion, which was opened by von Bergmann, as you will already have had telegraphic reports, and in due time the proceedings will be published in full. At the first morning meeting in the klinik several cases (four or five) of lupus of long stand-

ing which had recovered under the tuberculin treatment were shown. Prof. Hahn presented one case and Dr. Sonnenburg two cases of phthisis which had been treated with tuberculin, and in which pulmonary cavities had been opened. In two of these cases the cavities were still open and plugged with iodoform gauze. Prof. Liebreich was also present and addressed the meeting, presenting the claims of his new anti-tubercular remedy, but did not seem to make much impression upon his hearers.

As usual, the morning demonstrations at the hospitals were among the most interesting features of the Congress. On Wednesday morning a large number of visitors were escorted through the surgical wards of the Charité by Prof. Bardeleben and Dr. Kohler. Several cases of surgical tuberculosis were shown which had been treated with tuberculin, but nearly all had been subsequently operated upon,—notably three or four cases of tubercular glands in the neck. A case of leprosy, which had been treated with tuberculin, was also shown, but did not seem to have been affected by the treatment. The patient was a German, 41 years of age, who had contracted the disease in Brazil, and who presented all the characteristic features of the malady. On Thursday morning Professor Hahn gave a similar demonstration at the Friedrichshain Hospital. This fine hospital, which is situated in the Friedrichshain park, contains an excellent surgical klinik and a most conveniently laid out and perfectly equipped operation building, completely isolated from the wards. Many most interesting cases were shown here also. On Friday morning Dr. Sonnenburg gave a demonstration at the Moabit Hospital, which was largely attended. Among other interesting cases shown here were several cases of temporary resection of portions of the skull for cortical epilepsy and similar cerebral conditions. The operation had been done (in each case) by making an elliptical incision and cutting through the bone, then chiselling through the bone at the base of this semi-ellipse, subcutaneously, and reflecting the piece of bone with skin and periosteum attached. After the brain had been explored, and in two cases cysts removed, this piece of bone was replaced, and healed under one dressing, leaving no evidence of operation

beyond the cicatrix in the soft parts. Many tubercular cases were also shown which had been treated by tuberculin, notably a pulmonary case in which a large cavity had been opened, and at the bottom of which the pulsation of some of the great vessels could be distinctly seen by reflected light. This hospital has also an excellently equipped operating room. On Saturday morning Dr. Rotter gave a demonstration at the St. Hedwig's Hospital. This is a Roman Catholic institution under the direction of the Sisters of Mercy. It contains a large number of surgical patients, and is also excellently equipped for operating. Many interesting cases were also shown here. On Friday morning Dr. Körty gave a demonstration at the Urban Hospital, and on Saturday morning Prof. Bardeleben gave a second demonstration at the Charité, but I was unable to attend them.

Altogether the meeting was calculated to impress the foreign visitor most favorably. The morning sessions lasted from 10 A.M. to 1 P.M., and the afternoon sessions from 2 to 4 P.M. The dinner was held in the Central Hotel at five o'clock P.M. on Thursday, April 2nd.

J. B.

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### Reviews and Notices of Books.

**Manual of Bacteriology.** By EDGAR M. CROOKSHANK, M.B. Third edition; 8vo, pp. 460. London: H. K. Lewis. 1890.

The special feature of Professor Crookshank's book is that it comprises a description of the more important bacteria in addition to describing the methods employed in bacteriology. As far as we know, all other English text-books on this subject deal with methods alone. The present edition is substantially the same as the last, brought up to date. An appendix has been added, containing an account of actinomyces and the parasites of malaria. We notice that no attempt has been made to leave out a large number of details long since discarded in some laboratories. No mention is made either of such common and widely used articles as Petri's dishes for plate cultures and Esmarch's method of employing ordinary test-tubes for this pur-

pose. No directions are given for making anaerobic cultures. In short, the technical part is not nearly so full and carefully prepared as the descriptive part. The paper is somewhat lighter than in the first edition, but the get-up of the work is excellent, and the colored plates, though diagrammatic, are clear and striking. The woodcuts are carefully made. As already said, the book is the only one giving a descriptive as well as technical part, which makes it indispensable to anyone obliged to confine his reading to English works on the subject.

**A New Medical Dictionary:** Including all the Words and Phrases used in Medicine, with their proper Pronunciation and Definitions. Based on Recent Medical Literature. By GEORGE M. GOULD, B.A., M.D., Ophthalmic Surgeon to the Philadelphia Hospital, etc. Philadelphia: P. Blakiston, Son & Co, 1012, Walnut street. Montreal: William Drysdale & Co. 1890.

Within the past year no less than four different medical dictionaries have been issued in America, all useful and creditable to their authors. We have the two great works of Foster and Billings respectively, reviews of which have appeared in this JOURNAL within the past few months. The third in size is that of Dr. Gould's. It includes the numerous words and phrases added to medicine during the past ten years, special attention being paid to accurate descriptions of the new words coined in connection with bacteriology, electro-therapeutics, pathology, and the various specialized branches of modern medicine and surgery. We have tested the work by looking for a number of the more recently coined words, and in every case with success. There is a very useful appendix on the mineral springs of the United States by Dr. Judson Daland of Philadelphia.

**The Daughter: Her Health, Education, and Wedlock.** Homely Suggestions for Mothers and Daughters. By WM. M. CAPP, M.D. Philadelphia and London: F. A. Davis, publisher. 1891.

It is a somewhat remarkable fact that in the plans for the

education of the young a knowledge of the constitution of our own bodies has till lately found no place ; and even yet a man may pass through some college courses and receive what is termed a liberal education without acquiring any knowledge of the structure and functions of his own body. So absurd has been the education for girls that a young woman often found herself a wife, and perhaps a mother, without the slightest knowledge of the duties devolving upon her, and on the wise discharge of which the interests of the family so much depend. The present work does not pretend to give all that instruction which furnishes the young woman for her future. It does, however, give a great many useful hints on matters which have hitherto been too persistently ignored. The task Dr. Capp has undertaken has been performed with much discretion, which is the most difficult part in the whole. This book will probably do no harm and much good. It paves the way for something more elaborate and complete ; and if it does no more than arouse mothers to a sense of their duty to their children, especially their daughters, it will accomplish a good purpose.

**A Manual of Auscultation and Percussion: Embracing the Physical Diagnosis of Diseases of the Lungs and Heart and of Thoracic Aneurysm.** By AUSTIN FLINT, M.D., LL.D. Fifth edition, thoroughly revised by J. C. WILSON, M.D., Lecturer on Physical Diagnosis in the Jefferson Medical College. Philadelphia: Lea Brothers & Co. 1890.

The work before us has been frequently reviewed, and it is well known to every practitioner in the land as affording reliable aid in the study and practice of the difficult art of physical diagnosis. The task of revision and republication has been performed with skill and good judgment. It will be noted, on glancing through the pages, that there has been more revision than enlargement. Many editors of the later editions of the works of great men seem to be unable to resist the temptation of inserting long paragraphs in brackets, which do not increase the value of the work, though they add to its size and weight.

In reading a reproduced work of this kind we wish to ascertain the opinions of the great authors upon the point unaltered and unmodified by the views of any revisor or editor.

Though it is useless to recommend *Flint on Auscultation* to a profession already aware of its great value, yet we can certainly say that this fifth edition is well worthy of all commendation.

**Twelve Lectures on the Structure of the Central Nervous System.** For Physicians and Students. By DR. LUDWIG EDINGER, Frankfort-on-the-Main. Second revised edition. With 133 illustrations. Translated by WILLIS HALL VITTUM, M.D., St. Paul, Minn. Edited by C. EUGENE RIGGS, A.M., M.D., Professor of Nervous and Mental Diseases, Univ. Minnesota. Philadelphia and London: F. A. Davis. 1890.

Dr. Edinger's work is the standard treatise on the anatomy of the central nervous system in Germany. The English translation is from the recent revised and improved second edition, and is in every respect carefully done. The profession in this country and England certainly owe a debt of gratitude to the translators for placing within their reach an accurate and plain account of one of the most difficult of subjects. The difficulties of the subject are, however, to a considerable extent overcome through the liberality of the publishers in reproducing the numerous and well-executed diagrams to be found in the German edition.

**Elements of Practical Medicine.** By ALFRED H. CARTER, M.D., Lond., Physician to the Queen's College, Birmingham. Sixth edition. London: H. K. Lewis. 1891.

The fact that this epitome of the Practice of Medicine has arrived at its sixth edition proves that it supplies a want that is really felt. The *Elements of Practical Medicine* were published some ten years ago with a view to providing the student with a simple introduction to the study of systematic medicine. The effort of the author has plainly been successful. We find in

the volume before us a resumé of all that is important in the practice of medicine. All that a junior student requires is given him in what may not inaptly be termed a digestible form, and although the compass of the work is limited, no matter of any importance has been omitted.

We commend the work as being well suited for the use of junior students beginning their hospital career. They will find it a useful and perfectly trustworthy guide in the earlier stages of their clinical work, and if they devote to it the due amount of time and attention they will find themselves well repaid for their trouble.

**Saunders' Pocket Medical Lexicon** : Being a Dictionary of Words and Terms used in Medicine and Surgery. By JOHN M. KEATING, M.D., Fellow of College of Physicians, Philadelphia ; Editor of the "Cyclopædia of Diseases of Children," etc. ; and HENRY HAMILTON. Philadelphia : W. B. Saunders, 913 Walnut street. 1890.

Saunders' Medical Lexicon is a work intended for the student. In his daily work the student is constantly hearing new words and phrases, the meaning of which at the time would be a great assistance to him. This handy pocket lexicon will answer this purpose well.

**The Physician's Hand-book for 1891.** By ALBERT D. ELMER, M.D. New York: G. P. Putnam's Sons, *The Knickerbocker Press*. 1891.

The Physician's Hand-book, now in its thirty-fourth year of publication, in addition to the usual contents of a visiting list, contains many features which will render it very acceptable to the busy practitioner. There is a very copious index to the more important symptoms and treatment of both internal and external diseases.

**The Year-Book of Treatment for 1891.** A Critical Review for Practitioners of Medicine and Surgery. Philadelphia : Lea Brothers & Co. 1891.

The volume of the Year-Book for 1891 is in all respects equal,

if not superior, to previous issues. The authors of the different articles are men who are thoroughly conversant with their subject and with the needs of the general practitioner.

### Society Proceedings.

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, February 20th, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT IN THE CHAIR.

*Perforated Vermiform Appendix.*—DR. SHEPHERD exhibited this specimen, which he had removed from a patient aged 29. A portion of the wall of the appendix had sloughed, causing a perforation, through which protruded a concretion the size of a white bean. The patient, three days before the operation, had been seized with sudden pain, vomiting, and tenderness in right iliac fossa. The appendix was found without difficulty in a pus cavity. The patient made a rapid and uninterrupted recovery.

DR. MACDONNELL had seen the patient previous to operation. This disease, which formerly had been so rarely met with, was now quite frequent. He considered the hardness of the abdominal parietes, particularly on the affected side, one of the most characteristic features. He had noticed that the symptoms frequently improved after the first shock was over, and, notwithstanding that the character of the symptoms in many cases was that of general peritonitis, the lesion was local. This he had corroborated in three cases, two after operation and one at the autopsy. In one case of interest which he now had under observation, the pulse remained low and the abdominal symptoms improved whilst the temperature was increasing.

DR. BULLER referred to the relative frequency of appendicitis amongst the Germans, which Virchow had attributed to their larger consumption of vegetable food, which dilated the appendix.

DR. SHEPHERD remarked that the only animals possessed of an appendix were the higher apes, the wombat, and man.

*Comparative Pathology.*—DR. SHEPHERD showed the skeleton of a parrot with a fracture of the left femur, which had produced

much shortening of the limb. The right side of the pelvis was well developed, but the left was atrophied, in consequence, no doubt, of the disease of the muscles of that side caused by the shortened limb.

*Chronic Pyosalpinx.*—DR. H. D. HAMILTON exhibited the specimen. The pelvic organs were found matted together by old adhesions, and were adherent to the abdominal parietes on the left side. The left ovary contained a multilocular cyst about the size of an orange; from the left cornua of the uterus extended a winding sinus which communicated with the rectum. The patient was 26 years of age; married at 17, and had up to that time been in good health. She was taken very ill shortly afterwards with considerable pain in the left side of the abdomen, which invalidated her for six months. She was never afterwards absolutely free from pain in the left inguinal region, and subject, at long intervals, to acute exacerbations. The patient was operated on, in the Western Hospital, in 1885. On 1st January, '91, she was admitted to the General Hospital under Dr. Molson. She was then in a very weak condition, and complained of considerable abdominal pain. Erysipelas of the face appeared the second day after her admission, which subsided on the seventh day. The patient died on the thirteenth day with uræmic symptoms.

*Puerperal Septicæmia.*—DR. JOHNSTON exhibited the uterus from a patient who had died two months after confinement with symptoms of puerperal septicæmia. There was chronic proliferative endometritis. A pelvic abscess was found outside the peritoneum on the left side, chiefly about the left common iliac vein, which showed septic thrombo-phlebitis with extension of thrombus to the vena cava. There was also multiple embolic pneumonia of the right lung, with septic fibrino-purulent pleurisy on the right side.

DR. GARDNER, who had examined the patient shortly after her admission to the hospital, discovered the uterus displaced backwards, and somewhat limited in its movements, with slight tension of the left broad ligament. The temperature was decidedly septic, though no signs of pus could be discovered anywhere.

There was no pain, tenderness, or abdominal distension. A careful examination of the external parts of the pelvis, the various foramina and orifices through which pus could burrow, had been made. As there was nothing to guide the introduction of instruments, he had not thought it justifiable to operate.

DR. SHEPHERD thought that surgical interference in such a case would probably be of no avail.

*Tubercular Testes.*—DR. JOHNSTON showed, for Dr. Jas. Bell, two specimens of tubercular testes which had been removed from patients subsequent to the treatment of injections of tuberculin. The first testicle exhibited was small. There was an abscess the size of a bean in the epididymis, and the vas deferens and tunica vaginalis were thickened. The disease was confined to the epididymis and the spermatic cord, the body of the testis being free from disease. In the second specimen, the testicle was considerably enlarged; great thickening of the tunica vaginalis and of the cellular tissue about the epididymis. The whole of the epididymis was transformed into a continuous mass. Some firm, greyish-white, opaque, miliary tubercles were scattered throughout the body of the testis—about a dozen being seen on a cut surface. There was no appearance of hyperæmia or diffuse infiltration about these. Both organs showed nothing unusual which could be attributed to the action of the tuberculin.

DR. JAS. BELL remarked that he had reported to the Society the result of the treatment in the first of these cases four weeks ago. Since then, the patient had been given three injections with the usual reaction. The last injection was on Feb. 15th, which was followed by pain in the epididymus at the lower part of the right testicle, which subsided with the fever. This patient had also been the subject of tubercular ulcerations of the bladder (*vide* report of Jan. 23rd, Case No. 4). The patient from whom the second specimen had been removed had received but two injections, which produced a severe reaction in the diseased organ, considerable heat and pain. The presence of the miliary tubercles he did not attribute to the lymph, but to the active condition going on previous to its use.

DR. RONNICK asked if any effect was produced on the bladder in the first case referred to.

DR. G. T. ROSS inquired if there was any disease in the lungs in these cases.

DR. BELL replied that the bladder disease had existed for five years, but that the patient had been entirely relieved from acute symptoms since October 2nd, 1890. No pus or change in the urine had been noticed after the injection. There was no trace of tubercular disease in the lungs. This patient (the first one) had received eight injections before any reaction appeared in the right testicle.

*Sarcoma of the Testis.*—DR. RODDICK, who exhibited the specimen, remarked that the patient, a man aged 40, had first noticed swelling in the scrotum nearly two years ago. Hydrocele had persisted throughout the case, for which the scrotum had been tapped nine times, and once injected with iodine. When he came under examination, a tumor, in the left side of the scrotum, could be felt through the fluid—a hard, oval shaped mass, with a nodular feel, producing no tenderness on pressure. There was no implication of the cord. The tumor had all the appearances of a chronic sarcocele. There was no history of syphilis or cancer. It having been decided to operate, Dr. Roddick, on cutting down, found the cord soft, yielding and not enlarged. There was an enormous hydrocele. The testicle proved to be sarcomatous. The whole of the diseased mass was removed.

DR. JOHNSTON, who reported upon the pathological appearances, remarked that the testicle was about the size of a small apple. There were extensive adhesions and thickening about the tunica vaginalis. In the epididymis, a firm, caseous mass as large as a cherry was shown, with smaller masses in the neighborhood, evidently old inflammatory deposits. In the body of the testis, near the lower extremity, was a soft, smooth, medullary-looking tumor, pinkish-gray in color, its borders made out with difficulty. The cut surface was smooth, and yielded, when scraped, a grayish turbid juice, which, under the microscope, showed large round cells lying within large spaces, with a delicate fibrillated structure surrounding each individual cell. The vas deferens was not involved. Diagnosis: alveolar (large round cell) sarcoma.

*Carcinoma of the Breast.*—DR. RODDICK related the following clinical history: The patient, a young woman, aged 27, single, had come to the hospital complaining of a hard lump in her left breast. She had had typhoid fever two years ago; with this exception, her health had always been good. There was no history of cancer in the family. The mother probably had had lupus. No history of injury. The patient first noticed the lump in her breast two years ago, which had slowly increased in size during the past two months. A little pain had been felt in the tumor, but not lancinating in character. On examination, a tumor was felt, somewhat circular in outline, with a diameter of about three inches. It was situated with its lower border just above the nipple, and between it and the sternal end of the clavicle. It was not painful on handling, and felt firm and somewhat nodular, giving an impression of hardened gland tissue. The tumor was freely movable over the subjacent tissues, not attached to the skin, and the nipple not retracted. From these signs and the age of the patient, it appeared more, as Dr. Roddick remarked, like an adenoma-fibroma, or an adenoma-sarcoma. At the operation, on cutting into the tumor, it was so evidently malignant that the whole breast was removed. Several glands in the axilla which were found slightly enlarged were also removed.

DR. SHEPHERD had examined the patient previous to the operation, and had also thought it a benign growth, though suspicious of some enlarged glands in the axilla. He had seen one case of carcinoma in as young a patient. He believed that all tumors of the breast should be removed in young or old.

*Urinary Calculi.*—DR. RODDICK exhibited two calculi removed from a man aged 71. Owing to the patient's age, he had selected the lateral operation in preference to the supra-pubic. The perineum was very deep, which made it somewhat difficult to reach the bladder. The large stone weighed four drachms and thirty-eight grains, the smaller sixteen grains. Symptoms of stone had existed for one year only.

*Enlarged Bursæ.*—DR. BELL brought before the Society a man aged 38, farmer, with enlarged bursæ in each ham, beneath

the inner head of the gastrocnemius. These had been aspirated several times without benefit. Dr. Bell had made an exploratory incision with the intention of removing the bursæ, if practicable. He found that these had a direct communication with the knee-joint, and appeared somewhat like a hernia of the synovial membrane of that joint.

DR. SHEPHERD considered a dissection of the bursæ in these cases very difficult, with possibly no good result.

*Glycosuria.*—DR. J. H. B. ALLEN read a report of a case of glycosuria, which appears in this number of the JOURNAL.

DR. JAS. STEWART asked if the knee-jerk had been tested, and if any paresis had been noticed. He thought the case one of multiple neuritis, which may occur with glycosuria.

*Molluscum Fibrosum.*—DR. BELL showed to the Society a case of molluscum fibrosum which had followed a peculiar course. The patient had developed sarcoma of the sciatic nerve, which was removed last December, but recurred; and the limb was amputated three weeks ago. Such cases were very rare; two only were mentioned in *Virchow's Archives*. Dr. Bell had met with three cases within two and a half years.

*The Diagnosis and Treatment of Epilepsy.*—DR. JAMES STEWART read an interesting paper on this subject, which was published in the April number of this JOURNAL.

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*Stated Meeting, 6th March, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

*Notes on the Insane and their Treatment.*—DR. WESLEY MILLS read a paper of interest on the above subject, which appears in the present number of this JOURNAL.

*The Diagnosis and Treatment of Epilepsy.*—DR. JAMES STEWART gave a synopsis of his paper read at the previous meeting of the Society.

*Discussion.*—DR. LAPHORN SMITH had noticed a loss of will power in epileptics, in whom slight irritation produced fits. He narrated the case of a woman, an epileptic, with dyspeptic symp-

toms, who had considerably improved upon suitable diet. In the medicinal treatment of epilepsy, he used bromide of sodium in preference to bromide of potassium, as being less irritating, and less apt to produce acne. He considered hystero-epilepsy a modification of epilepsy.

DR. ALLOWAY, referring to the application of forceps to the head in difficult cases as a factor in the production of epilepsy, thought the results now obtained by the Cæsarian operation worthy of consideration; besides, avoiding the great liability of injury to the pelvic floor and the danger to the child. By the Sanger-Leopold methods of operating, the mortality had been reduced to five per cent. Dr. Kelly, of Baltimore, had had four cases of Cæsarian section with good results.

DR. ARMSTRONG wished to know if there were any statistics to prove that the majority of epileptics among children, apart from heredity, was found amongst those who had been delivered by forceps. He considered this of importance to the general practitioner. He had knowledge of two cases of epilepsy in children on whom forceps had been used. One,  $3\frac{1}{2}$  years of age, had died a short time ago from pneumonia. The post-mortem, performed by Dr. Johnston, failed to reveal any signs of injury which could be attributed to the forceps. The skull, membranes and brain appeared normal. He considered Cæsarian section too severe and dangerous an operation to adopt in such cases where forceps could be used.

DR. MCCONNELL believed that most cases of epilepsy could be traced to some reflex irritation. By some, the cause was believed to exist in an ocular defect. He asked if it were not possible, in all cases of epilepsy, to find some cause of irritation, which, if removed, would bring about a cure, without the use of bromides.

DR. FOLEY considered that diet was more important than bromides in the treatment of epilepsy.

DR. JAS. STEWART, in his reply, in answer to Dr. Smith, remarked that, with regard to the beneficial action of the different bromides, it was practically of little difference which was used, as they were all converted into sodium bromide. Some bromides,

however, were more irritating than others. The production of acne was not due to any particular salt used, but to the decomposition of the bromide and the elimination of the bromine. In reply to Dr. Armstrong, he had mentioned the forceps as one of the rarer exciting causes of epilepsy. Sometimes the slightest injury, without effecting any gross change, produced a molecular disturbance which was sufficient to cause epilepsy. Dr. Stewart referred to the interesting nature of Dr. Mills' paper and the good results that were being obtained by the line of treatment advocated.

DR. MILLS based treatment on causation. He attached much importance to afferent impulses. Taking as a unity the nerve cell with its afferent and efferent nerves, we get what exists in all complicated organisms. These are subject to disturbance whether produced by disease or not. A brain may be perfectly normal as far as the eye or the microscope can detect, and yet be abnormal. Dr. Mills referred to the instability of the nerve cells mentioned by Dr. Stewart. When tired, the nerve cell became irritable, which called for rest. He believed that incoming impulses modified outgoing impulses. So in treating the insane we should alter the environments, give good food, and prescribe rest. He considered the drill exercises excellent. It sets energy off and cultivates the will.

DR. DUQUET agreed with Dr. Mills in the treatment of the insane. It was not by the use of drugs that the greatest progress was to be made, but by suitable amusement and employment. He believed that the curable should be separated from the incurable. He praised the system of housing the insane practiced in Basle, and since adopted in Ogdensburg, N. Y. Three separate buildings were erected—a hospital for curable cases, an asylum for chronic cases, and an infirmary for the weak-minded.

DR. ALLOWAY exhibited the following pathological specimens:

(i) *A Small Ovarian Cystoma and Hydrosalpinx of Left Side; Hæmatosalpinx with Cystic Ovary of Right Side.*—The subject of this specimen was referred to him by Dr. Buller. She complained of asthenopia, no organic disease of the eye

existing. She was referred to him for examination of pelvic organs. Under ether, considerable enlargement of the left ovary was detected, but nothing abnormal was apparent on the right side. The specimens exhibited showed how much disease of this nature could exist with so few subjective symptoms. The patient, now nine months since the operation, writes to say that her eyesight is sufficiently improved to allow her to read and do needle-work, and that her general health has been quite restored.

(2) *A large Interstitial Fibro-myoma with Necrotic Centre.*—

This patient was 50 years of age, and suffering, when brought to Dr. Alloway, from septicæmia. She was bloodless, high temperature, rapid pulse, unable to stand from exhaustion, and, generally speaking, in a dying condition. Had spent the past two years off and on in foreign hospitals for the relief of menorrhagia. Examination revealed a large myomatous mass about the size of a child's head at term, occupying the vagina. At its lower extremity was an opening leading to a necrotic centre with intensely foetid discharge. Urine was albuminous, with fatty and granular casts. Loud cardiac bruit with dilatation. Dr. Alloway stated that at first he refused to operate under these unfavorable circumstances, but was eventually importuned by the relatives of the patient to give her a chance of recovery by removal of the tumor. The operation was completed as rapidly as possible, piece-meal, by the scissors and vulsellum. Very little blood was lost, but she died comatosed twenty hours after the operation. There was complete suppression of urine during this time.

(3) *Small Pedunculated Myoma.*—This patient was unmarried, aged 37; suffered from metrorrhagia during the past three months. The small growth was twisted off with the vulsellum. The cavity of the uterus was dilated, thoroughly curetted with a sharp instrument, and packed with iodoform gauze. Patient left hospital in three weeks, restored to health.

*Tuberculosis of the Knee.*—DR. JAMES BELL exhibited a specimen of the synovial membrane from a case of tuberculosis of the knee in a child. The patient had previously been treated with injections of tuberculin. On opening the joint two suppu-

rating points were noticed, one on each side. There was a good deal more hyperæmia, and the tissues were much more fragile than is usually seen in such cases, and separated more easily from the surrounding tissues.

DR. JOHNSTON reported that the pus was more like muco-pus, probably due to an admixture with synovial fluid. It contained no tubercle bacilli, nor were there any micrococci, which was unusual when pus was found. The gelatinous changes were well marked. There was no eruption of miliary tubercles.

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*Stated Meeting, March 20th, 1891.*

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

*Thrombosis of the Portal Vein.*—DR. J. A. SPRINGLE exhibited this specimen from a patient, aged 30, who had died with symptoms of peritonitis. There had been ascites and hæmatemesis. At the autopsy was found an extensive adhesive peritonitis. The hepatic artery was considerably dilated, and its walls thickened. The portal vein appeared as a flattened fibrous cord about the thickness of a slate pencil, sending fibrous branches to the under surface of the liver. The condition seems to have been a thrombosis at the junction of the superior mesenteric and splenic veins from peritonitis. Dr. Springle would report the case in full at a later date.

*Appendicitis, Abscess of Pancreas and Liver, and Phlebitis.*—DR. G. E. ARMSTRONG, who exhibited these specimens, remarked that the patient, a young man aged 35, had first complained of abdominal pain one year ago, which had lasted but a few hours. On the 31st of January he suffered from a second attack, which disappeared without any ill effects, when on the 2nd March he had a third and more severe attack. The temperature, which, shortly after the onset, had fallen to normal, rose again for the following ten days. There was no abdominal distention, no difference in outline, and pressure was well borne. The symptoms became severe on the twenty-fifth day of his illness, when Dr. Armstrong, assisted by Drs. Roddick and Perrigo,

operated. The appendix, containing one drachm of pus, was removed. There was nothing else visible. The symptoms became worse, and the patient died the third day after the operation. At the post-mortem was found what he believed to be the cause of the pyæmic condition. The lower border of the omentum had become adherent to the anterior wall of the abdomen, near the pelvis, and was gangrenous. A septic phlebitis had thus extended along the mesenteric veins up the portal and splenic veins to the liver and the spleen. Metastatic abscesses were found in both the liver and the pancreas. He had had a similar case ten years ago.

*Appendicitis.*—DR. G. E. ARMSTRONG also exhibited a second specimen of appendicitis. The appendix, in this case, had been removed seventy hours after the onset of the symptoms which had been typical of the disease. At the operation one pint of pus was removed, and the whole of that side of the abdomen thoroughly washed out and drained. The operation failed to relieve the patient. The post-mortem showed extensive septic inflammation of both the visceral and the parietal layer of the peritoneum. There was no perforation or strangulation. Although the operation here had been performed early, the cavity thoroughly cleansed and free drainage provided, it had, nevertheless, proved unsuccessful.

DR. LAPHORN SMITH remarked that it was difficult to know, in cases of appendicitis, when to operate and when not to operate. He asked the probable cause of the gangrene of the omentum, and whether Dr. Armstrong was in favor of the median or lateral operation.

DR. GEO. ROSS said that the existence of the great danger from septicæmia and pyæmia from appendicitis was well recognized. Pyelo-phlebitis, septicæmia and pyæmia frequently occurred from the absorption of purulent matter into the veins. He did not see how we would be justified in attributing the chief cause of pyæmia, in the case mentioned, to an adhesion to a structure surrounding a sloughing appendix.

DR. SHEPHERD explained the sudden disappearance of symptoms in cases of appendicitis, such as acute abdominal pain and

vomiting, by the pus which got into the appendix possibly getting back into the intestine. Many cases of appendicitis, he believed, were fatal from the first.

DR. ARMSTRONG, replying, remarked that the site of the incision he selected depended upon the case,—the lateral when the disease was localized; the median when the affection had already extended. He believed that recurring cases should be operated on. In the two cases which he had met with of appendicitis with pyelo-phlebitis, there had been an adhesion of the omentum at the site of the sloughing appendix, which led him to think that this condition had had something to do in the causation.

*The Koch Treatment of Tuberculosis.*—DR. McCONNELL read, at some length, a paper on the above subject, giving a report of the cases he had witnessed treated in the Berlin hospitals. He referred particularly to the cases of tuberculosis of the lungs.

DR. RODDICK stated that the treatment had been discontinued in the Montreal General Hospital. In surgical cases the reaction had proved too violent and sometimes disastrous. He mentioned the case of a child with tuberculous disease of the ankle-joint, limited to the outer part of the tarsus, in whom, after three injections of tuberculin, rapid destruction of the bones had occurred, showing the great necessity for caution.

## Selections.

**American Inventions and Discoveries in Medicine, Surgery and Practical Sanitation.** (By DR. JOHN S. BILLINGS, United States Army.)—In connection with this celebration of a century's work of the American Patent System, I have been requested by the Advisory Committee to prepare a brief paper upon inventions and discoveries in medicine, surgery and practical sanitation, with special reference to the progress that has been made in this country in these branches of science and art. It would be impossible to present on this occasion such a summary as would be of any special interest or use, of the progress which has been made in medicine and sanitation during the century, either by the world at large or by American physicians and sanitarians in particular; and I shall therefore confine my remarks mainly to the progress which has been made in these branches in connection with mechanical inventions and new chemical combinations, devised by American inventors,—which will require much less time.

The application of the patent system to medicine in this country has had its advantages for certain people, has given employment to a considerable amount of capital in production (and to a much larger amount in advertising), has contributed materially to the revenues of the government, and has made a great deal of work for the medical profession.

So far as I know, but one complete system of medicine has been patented in this country, and that was the steam, Cayenne pepper and lobelia system—commonly known as Thomsonianism,—to which a patent was granted in 1836. The right to practise this system, with a book describing the methods, was sold by the patentee for twenty dollars, and perhaps some of you may have some reminiscences of it connected with your boyish days. I am certain I shall never forget the effects of "Composition Powder," or of "Number Six," which was essentially a concentrated tincture of Cayenne pepper, and one dose of which was enough to make a boy willing to go to school for a month.

From a report made by the Commissioner of Patents in 1849, it appears that eighty-six patents for medicines had been granted up to that date ; but the specifications of most of those issued before 1836 had been lost by fire. The greater number of patents for medicines were issued between 1850 and 1860. The total number of patents granted for medicines during the last decade (1880-1890) is 540. This, however, applies only to "patent medicines," properly so-called, the claims for which are, for the most part, presented by simple-minded men who know very little of the ways of the world. A patent requires a full and unreserved disclosure of the recipe, and the mode of compounding the same, for the public benefit when the term of the patent shall have expired ; and the Commissioner of Patents may, if he chooses, require the applicant to furnish specimens of the composition and of its ingredients, sufficient in quantity for the purpose of experiment. The law, however, does not require the applicant to furnish patients to be experimented on, and this may be the reason why the commissioner has never demanded samples of the ingredients. By far the greater number of the owners of panaceas and nostrums are too shrewd to thus publish their secrets, for they can attain their purpose much better under the law for registering trade-marks and labels, designs for bottles and packages, and copyrights of printed matter, which are less costly, and do not reveal the arcanum. These proprietary medicines constitute the great bulk of what the public call "patent medicines."

The trade in patent and secret remedies has been, and still is, an important one. We are a bitters- and pill-taking people ; in the fried pork and saleratus-biscuit regions the demand for such medicines is unailing, but everywhere they are found. I suppose the chief consumption of them is by women and children, —with a fair allowance of clergymen, if we may judge from the printed testimonials. I sampled a good many of them myself when I was a boy. Of course, these remarks do not apply to bitters. One of the latest patents is for a device to wash pills rapidly down the throat.

According to the Census of 1880 there were in the United

States 592 establishments devoted to the manufacture of drugs and chemicals, the capital invested being \$28,598,458, and the annual value of the product \$38,173,658, while there were 563 establishments devoted to the manufacture of patent medicines and compounds, the capital invested being \$10,620,880, and the annual value of the product \$14,682,494.

A patent automatic doctor, on the principle of "put a quarter in the slot and take out the pill which suits your case," has been proposed, but this patent is said to be of Dutch and not of American origin. The idea of this may have come from Japan, for an old medicine case from that country, which I possess, has four compartments filled with pills, and the label says that those in the first compartment are good for all diseases of the head, those in the second for all diseases of the body, those in the third for all diseases of the limbs, and those in the fourth are a sure vermifuge.

From the commercial and industrial point of view, the great importance of patent and proprietary medicines is connected with advertising. The problem is to induce people to pay twenty-five cents for the liver-encouraging, silent perambulating, family pills, which cost three cents. Some day I hope that the modern professional expert in advertising will favor us with his views as to the nature and character of those people who were induced to buy Jones's liver pills or Slow's specific by means of the huge display of these names on the sides and roofs of barns and out-buildings, which display forms such a prominent feature in many of our American landscapes, as seen by the traveller on the railway. I suppose there must be such people, for I have a high estimate of the business shrewdness of the men who pay for these abominations. I should also like to know how much a farmer gets for allowing his buildings to be thus defaced. He must be hard-up; indeed such a display indicates that the place is probably mortgaged and that the poor man is heavily in debt.

Even the soap advertisers are not as guilty as the nostrum-makers in this particular style of nuisance, although they far exceed the latter in viciousness when it comes to applying art to ignoble purposes. The connection between progress in medi-

cine and soap advertisements may not be clear to you, but it exists nevertheless, for many of these soaps make work for the doctors by producing skin troubles.

Upon the whole, I should think that the number of people who would take some trouble to avoid purchasing an article which is thus advertised must be rapidly increasing, so that such displays will soon be no longer profitable. The great importance of advertising does not relate to the placard or chromo business, but to its relations to periodical literature,—to the daily and weekly press and the monthly magazines and journals. To the establishment and support of some of our newspapers and journals, medical as well as others, these proprietary and secret medicines, cosmetics, food-preparations, etc., have no doubt contributed largely.

I am sorry to say that I have been unable to obtain definite information as to the direct benefits which inventions of this kind have conferred on the public in the way of cure of disease or preventing death. Among the questions which were not put in the schedules of the last census were the following, namely: Did you ever take any patent or proprietary medicine? If so, what and how much, and what was the result? Some very remarkable statistics would no doubt have been obtained had this inquiry been made. I can only say that I know of but four secret remedies which have been really valuable additions to the resources of practical medicine, and the composition of all these is now known. These four are all powerful and dangerous, and should only be used on the advice of a skilled physician. Most of such remedies have little value as curative agents, and some of them are prepared and purchased almost exclusively for immoral or criminal purposes.

In France, the sale of secret and patent medicines is not allowed unless they have been examined and approved by the National Academy of Medicine, and the same general rule holds good in Italy and Spain.

The Japanese have followed the French method, and their experience is interesting. The Central Sanitary Bureau established a public laboratory for the analysis of chemicals as a medi-

cine. The proprietors of each of such medicines were bound to present samples, and the names and proportions of the ingredients, directions for its use, and explanations of its supposed efficacy. According to a report in the *British Medical Journal*, during the first year there were 11,904 applicants for license to prepare and sell 148,091 patent and secret medicines. Permission for the preparation and sale of 58,638 different kinds were granted, 8,592 were prohibited, 9,918 were ordered to be discountenanced, and 70,943 remained to be reported on. The great majority of those which were authorized were of no efficacy, but few being remedial agents; but their sale was not prohibited, as they were not found to be dangerous to the health of the people. I do not vouch for these figures, which throw our records entirely in the shade.

In 1849 a special committee of the House of Representatives reported to the House a bill to prevent the patenting of medicines, accompanied by a report. This bill provided that after the passage of the act, letters patent shall not be granted for any article whatever as a medicine, provided that this shall not apply to machines, instruments or apparatus. When the matter came before the House for consideration, the bill was laid on the table.

You are all aware that the great majority of the medical profession consider it to be improper and discreditable for a physician to patent a remedy. The Medical Code of Ethics declares that it is derogatory to professional character "for a physician to hold a patent for any surgical instrument or medicine; or to dispense a secret nostrum whether it be the composition or exclusive property of himself or others. For if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and if mystery alone give it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them." Like all legislation, this is a formal declaration of the customs of the profession, which customs are of great antiquity. The prin-

ciple upon which it is founded is thus expressed by Lord Bacon : " I hold every man a debtor to his profession ; from the which, as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves by way of amends to be a help and ornament thereunto."

The rule, however, is not always adhered to by physicians, the most notable exception having been, perhaps, the use of Koch's lymph before its composition was revealed. As regards the patenting of surgical instruments and apparatus, the opinion of the great majority of physicians is in accordance with the rule just stated, but there are some who question its propriety, although they obey it—and there are few who would not use a patented instrument in a case to which they thought it was applicable. The total number of surgical instruments and appliances patented during the past decade has been about 1,200, the patents having been in almost all cases taken out by manufacturers. With these may be classed dentists' tools and apparatus, of which about 500 have been patented during the last ten years, and in this field of invention the United States leads the world. The same may be said with regard to artificial limbs, of which our great war gave rise to many varieties.

As you know, the law prescribes that a patent may be given for a " new and useful art, machine, manufacture, or composition of matter." I used to think that the word " useful" in this law had its ordinary meaning, and, therefore, wondered exceedingly as to why the Patent Office examiners allowed patents to certain things which came under my notice. One day, however, I received an article from the Patent Office, with the request for a report as to whether it was useful in the sense in which that word was used by the Office, namely, " not pernicious or prejudicial to public interests—capable of being used"—and then for the first time I understood one of the first principles of the patent law of the United States ; that is, that it does not take into consideration the degree of utility in the device, or, in other words, that " useful" means " harmless."

If a patent is granted to a medicine, it must be as a composition of matter as a special article of manufacture. The practice

of the Patent Office in these matters is not generally understood. It does not now consider that medical prescriptions are inventions within the meaning of the law, or that a mere aggregation of well-known remedies to obtain a cumulative effect is a patentable composition of matter. A certain number of claims for government protection in the form of patents or trade-marks are made for medical compounds or for apparatus, under false pretences; that is to say, the claim is for a new remedy for rheumatism or dyspepsia, or displacement, with a warning against their use under certain conditions, the real design being that they are to be used under precisely these conditions in order to procure abortion, etc. These are sometimes difficult cases for the Patent Office to treat properly, for the law does not allow a large discretion for refusal on mere suspicion, and when there is ostensible and possible utility (in the Patent Office sense) it can hardly reject the claim on the ground that the invention *might* be used for immoral purposes.

I said in the beginning that I cannot, on this occasion, give any sufficient account of the progress of invention and discovery in medicine and sanitation during the century just gone. The great step forward which has been made, has been the establishment of a true scientific foundation for the art upon the discoveries made in physics, chemistry and biology. One hundred years ago the practice of medicine, and measures to preserve health, so far as these were really efficacious, were in the main empirical—that is, certain effects were known to usually follow the giving of certain drugs, or the application of certain measures, but why or how these effects were produced was unknown. They sailed then by dead-reckoning, in several senses of this phrase.

Since then, not only have great advances been made by a continuance of these empirical measures in treatment, but we have learned much as to the mechanism and functions of different parts of the body, and as to the nature of the causes of some of the most prevalent and fatal forms of disease; and, as a consequence, can apply means of prevention or treatment in a much more direct and definite way than was formerly the case. For

example, a hundred years ago nothing was known of the difference between typhus and typhoid fevers. We have now discovered that the first is a disease propagated largely by aerial contagion and induced or aggravated by over-crowding, the preventive means being isolation, light and fresh air; while the second is due to a minute vegetable organism, a bacillus, and is propagated mainly by contaminated water, milk, food and clothing; and that the treatment of the two diseases should be very different.

The most important improvements in practical medicine made in the United States have been chiefly in surgery in its various branches. We have led the way in the ligation of some of the larger arteries, in the removal of abdominal tumors, in the treatment of diseases and injuries peculiar to women, in the treatment of spinal affections and of deformities of various kinds. Above all, we were the first to show the uses of anæsthetics—the most important advance in medicine made during the century. In our late war we taught Europe how to build, organize and manage military hospitals; and we formed the best museum in existence illustrating modern military medicine and surgery. Our contributions to medical literature have been many and valuable; and our government possesses the largest and best working medical library in the world. We have more doctors and more medical schools, in proportion to the population, than any other country, and while this is not good evidence of progress, I am glad to be able to say that the standard of acquirements in medical education has been, and is now, rising, and our leading medical schools are now being equipped with buildings, with apparatus, with laboratories, and, most important of all, with brains, which enable them to give means of practical instruction equal to any to be found elsewhere.

As regards preventive public medicine and sanitation, we have not made so many valuable contributions to the world's stock of knowledge,—chiefly because, until quite recently, we have not had the stimulus to persistent effort which comes from density of population and its complicated relations to sewage disposal and water supplies; nor have we had the information

relative to localized causes of disease and death which is the essential foundation of public hygiene, and which can only be obtained by a proper system of vital statistics. We can, however, show enough and to spare of inventions in the way of sanitary appliances, fixtures and systems for house drainage, sewerage, etc.; for the ingenuity of inventors has kept pace with the increasing demands for protection from the effects of the decomposition of waste matters, as increase of knowledge has made these known to us. The total number of patents granted for sanitary appliances during the last decade (1880-1890) is about 1,175. If good fixtures necessarily involved good plumbing work, we could easily make our houses safe so far as drainage is concerned; but a leaky joint or a tilted trap makes the best appliance worthless. The impulse to improvements in this direction has come mainly from England, where most of the principles of good work of this kind have been developed; but we have devised some details better adapted to our climate and modes of construction, and while many of the patent traps and sewer-gas excluders are only useful in the patent-law sense, and some not even in that, it is nevertheless true that the safety, accessibility and good appearance of plumbers' work has been largely increased during the last few years by patented inventions. Much the same may be said with regard to heating appliances, including ventilating stoves and fireplaces, radiators, etc., but I am unable to express my enthusiasm with regard to what are commonly called patent ventilators.

No doubt the greatest progress in medical science during the next few years will be in the direction of prevention, and to this end mechanical and chemical invention and discovery must go hand in hand with increase in biological and medical knowledge. Neither can afford to neglect or despise the other, and both are working for the common good. If the American patent system has not given rise to any specially valuable inventions in practical medicine or in theology, it must be due to the nature of the subjects, and not to any fault of the system.—*Boston Med. and Surg. Journal*, April 9, 1891.

### The Malarial Element in Oöphoralgia.

—The terms “oöphoralgia” and its hybrid synonym “ovaralgia” have been used somewhat vaguely to describe pain in the region of the ovary which does not seem to be due to actual disease of that organ. Olshausen is the only writer on diseases of the ovaries who devotes a separate chapter to oöphoralgia, which, with Charcot, he seems to regard as a hystero-neurosis. Now, I know no reason which we should not regard certain pains in the ovarian region as purely neuralgic in their character, even though they may be primarily due to disease in or around the ovary which is not appreciable clinically. The question of the anatomical cause of ovarian pain I have discussed at length in a paper in *Wood's Reference Handbook*; it is sufficient to state that I believe it to be more frequently of extra- than of intra-ovarian origin—*i.e.*, it is due rather to the inclusion of nerves in perimetrial adhesions than to the pressure upon terminal filaments by cicatricial tissue within the diseased gland, as is shown clinically by the relief afforded by separating such adhesions without removing the affected ovary. The subject of ovarian pain, whether menstrual or inter-menstrual, assumes no little importance from its bearing upon abdominal section, though happily it is now, *per se*, seldom regarded as a sufficient indication for laparotomy. Contributions to the palliative treatment of ovarian troubles should always be welcomed, and this is my excuse for presenting the following case:—

Mrs. M., aged 20 years, was first seen by me four years ago, soon after she had had an abortion at six weeks. She was suffering with severe pain in the right ovarian region, unaccompanied by evidences of acute inflammatory trouble. Examination showed well-marked anteflexion, with prolapse of the right ovary, the gland being neither much enlarged nor especially tender. Her husband, himself a physician, treated her locally, and she was soon up and about. She had had moderate dysmenorrhœa before marriage, which continued afterward, but was relieved by dilating the os internum just before the flow. Two years later she became pregnant again, and I delivered her by high forceps without local injury, except a slight laceration of the cervix. Her convalescence was normal. The prolapsed ovary gave her some trouble during

her pregnancy, but was not tender when I examined her three weeks after labor, and introduced a pessary in order to correct a tendency to retro-displacement and prolapsus. I treated her several times for the ovarian tenderness, but after a few months the pessary was removed, and she menstruated without pain, provided that the os internum was dilated, as before, previous to the flow, for the anteflexion still persisted. Eight weeks ago I was called to see her. She had been in excellent health for several months, menstruating regularly and without pain. Her monthly flow had begun the day before, and was followed by severe lancinating pains in the right ovarian region, which radiated down the back of the thigh and across to the opposite groin. The patient is more than usually courageous, and certainly did not exaggerate her symptoms. She possessed a marked tolerance for analgesics, and was given large doses of morphine, antipyrine and antifebrin, with only temporary relief. On palpating the abdomen I found extreme tenderness over the right ovary, while by the vaginal touch the organ could be felt distinctly enlarged and very sensitive. No rise of temperature or acceleration of the pulse. Diagnosis: Congestion of the ovary, the cause being unknown. I advised hot applications over lower portion of abdomen, hot vaginal doses, and phenacetin 10 grs., to be repeated in an hour. No relief was obtained, and it was necessary to give *Majendie* ℥xx during the night, to render the pain bearable. Next day the mild galvanic current was employed, one sponge being placed over the sacrum, the other over the right ovarian region; it increased the pain, and was discontinued. As menstruation had ceased, glycerin tampons were used with the idea of supporting the enlarged ovary. They afforded only temporary relief. The patient at this stage became very much discouraged, and began to wonder if oophorectomy would not be necessary. After three or four days of ineffectual treatment, I noticed that the pain seemed to be most severe in the afternoon, that it reached its acme during the night, and gradually subsided during the morning hours. Careful inquiry developed the fact that the patient had had a well-marked attack of intermittent fever of the quotidian type a few months before, which yielded to 20-gr. doses of quinine in two or three days. The chill occurred in the afternoon. There had been no history

of malarial neuralgia since then, but, noting the apparent periodicity and neuralgic character of the ovarian pain, I determined to test the value of quinine. On the following day 20 grs. were given in the forenoon; the pain was much less severe, so that the patient was able to sleep without an anodyne. A repetition of the dose on the next day resulted in a complete disappearance of the usual sharp, lancinating pain, only a soreness remaining at its former site. On the third day the dose of quinine was reduced to 15 grs., and on the following day to 10, which was given daily for a week. *The pain did not reappear.* The patient came to my office at the end of ten days and reported herself as doing well, and able to walk half a mile without pain or weariness. Local treatment (tampons and galvanism, with hot douches) was employed for a few days and then discontinued. The next menstrual period was unattended by pain in the ovarian region. At the time of writing the patient is feeling as well as ever.

A somewhat extended search through the literature has failed to reveal a similar case of ovarian neuralgia which showed such an evident paludic origin, and yielded so promptly to pure anti-periodic treatment. In all other treatment in which quinine was employed it was given in small doses (2 or 3 grs.), combined with morphine, aconite, or muriate of ammonia, and there was no malarial history. While the paroxysms of pain in the case reported were doubtless, at the outset, due to ovarian congestion, it does not militate against the fact that they showed a marked periodicity in their onsets. The fact that they were absent at the succeeding period is, in my opinion, a proof that the malarial poison had been overcome by the thorough course of quinine. It might be attributed solely to the effect of the local treatment during the intermenstrual period, were it not for the fact that the patient had been under similar treatment before, and felt perfectly well up to the time of her attack of dysmenorrhœa.

It seems to me that we are justified in regarding this case as one of malarial neuralgia affecting the nerves in and around the ovary, and comparable with similar neuralgia of the tri-facial, except that here the pain was undoubtedly due to actual organic disease; but it assumed a periodical character through malarial influence, and was controlled by quinine.—*Dr H. C. Coe in American Journal of the Medical Sciences.*

**Micro-organisms in Great Cities.**—Prof. Tarnier, in his course of lectures on obstetrics, in 1890, referred to M. Miquel's researches on the relative abundance of micro-organisms in different places. One to the cubic metre of air is the proportion at the top of a high mountain. In the Parc de Montsouris, in the south of Paris, M. Miquel found 480 micro-organisms to the cubic metre of air, whilst in the Rue de Rivoli the proportion was 3,480. In a new room in the Rue Censier he found 4,500 to the cubic metre; more, that is to say, than in the centre of Paris in the open air. In a room in the Rue Monge he counted 36,000, in the Hotel Dieu 40,000, and in the Pitié, an older hospital, 319,000 micro-organisms to the cubic metre. At the Observatory, Montsouris, 650,000 microbes were found in a gramme (15 grains) of dust; in the room in the Rue Monge the amount was 2,100,000. In the hospitals the proportion was so high that counting the number of microbes in a whole gramme of dust was found to be impossible. The dust is the great conveyer of micro-organisms. At 2 A.M., when a city is most quiet, the fewest germs are to be found in the air: at 8 A.M., the industry of domestic servants and dustmen has already made the air teem with germs. At 2 P.M., the proportion has again greatly fallen; at 7 P.M., it is once more high, for many houses are being "tidied up"; besides sundry kitchen operations are unhygienic. Thus the "small hours," unfavorable in many respects to patients hovering between life and death, are the least septic of the twenty-four. The day proportions indicate that household duties cause more septic diffusion than is excited by traffic and industry.—*British Medical Journal.*

**Mr. Edison's Explanation of the Ampere and the Volt.**—During a recent examination a lawyer put the following question to Thomas A. Edison:

"Explain what is meant by the number of volts in an electric current?" To which he replied:

"I will have to use the analogy of a waterfall to explain. Say we have a current of water and a turbine wheel. If I have a turbine wheel and allow a thousand gallons per second to fall from a height of one foot on a turbine, I get a certain power, we will say one-horse power. Now the one foot of fall

will represent one volt of pressure in electricity, and the thousand gallons will represent the ampere or the amount of current. We will call that one ampere. Thus we have a thousand gallons of water or one ampere falling one foot or one volt or under one volt of pressure, and the water working the turbine gives one-horse power. If, now, we go a thousand feet high, and take one gallon of water and let it fall on the turbine wheel, we will get the same power as we had before—namely, one-horse power. We have got a thousand times less current or less water, and we will have a thousandth of an ampere in place of one ampere, and we will have a thousand volts in place of one volt, and we will have a fall of water a thousand feet as against one foot. Now the fall of water or the height from which it falls is the pressure or volts in electricity, and the amount of water is the amperes. It will be seen that a thousand gallons a minute falling on a man from a height of only one foot would be no danger to the man, and that if we took one gallon and took it up a thousand feet and let it fall down it would crush him. So it is not the quantity or current of water that does the damage, but it is the velocity or the pressure that produces the effect.”

It has been calculated that the electromotive force of a bolt of lightning is about 3,500,000 volts, the current about 14,000,000 amperes, and the time to be about 1-20000 part of a second. In such a bolt there is an energy of 2,450,000,000 watts, or 3,284,182 h.p.—*Scientific American*.—(*North Carolina Medical Journal*.)

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## NATURAL MINERAL WATERS.

The efficacy of natural mineral waters as a medicinal agent has long been known to professional men; but it is only of late years that their real value as a medicine has become the object of exhaustive study. It is now universally claimed for them that they have a well defined and undoubted curative value; and for this reason medical men are fond of prescribing them to patients, and of assisting to their more general habitual use by others.

The fact that our Government is now, and for some years past has been, subjecting these waters, when imported from foreign countries, to a duty of 20 per cent. ad valorem is regrettable; and we are quite persuaded that its good sense will abolish altogether a tax that has the effect of qualifying the efforts of Canadian practitioners. In this connection it will be interesting to watch the fate of a largely signed physicians' petition to the Minister of Finance praying for the free admission into Canada of foreign natural mineral waters. Such a petition has been prepared, and is on the eve of presentation to the Ottawa Ministers. A somewhat similar one, signed by physicians in New York and other cities of the United States, and presented last year to the Senate and House of Representatives, had the effect of preventing, in that country, the imposition of a proposed prohibitive tax upon all mineral waters. It is not alone in the United States, however, that this interest of the medical profession commands Government sympathy; for it is general amongst European nations to accord freedom from taxation to

“Natural Mineral Waters.” That the Government of this country will, for long, maintain its present attitude of antagonism to an almost universally expressed principle, is not probable; and we, therefore, look for good results following upon the presentation of the petition to which we have referred.

We believe that the institution of the existing duty of 20 per cent. ad valorem resulted from the Government officials' confessed inability to discriminate between a mineral water that is “natural” and one that is “artificial”—and this may or may not continue to be a difficulty; but we think that the Customs Department blundered somewhat when, in 1883 (natural mineral waters being then on the free list), it made its non-gaseous, or only slightly gaseous condition the test of a natural water; for it was then, and is now, known that the carbonic acid gas which such waters contain is one of the main elements of their constitution: and that in the absence of this preventive agent the water would soon deteriorate, if not undergo absolute decomposition. Perhaps the confusion of thought that produced this error may also have been concerned in implying an absolute impossibility when only a relative difficulty existed. We cannot do more here, however, than merely to suggest a way out from that difficulty.

The mineral waters in most general demand in this country are imported from Germany, and it would not, we think, be difficult to obtain, from the nearest British consul, a certificate to the effect that such and such a water is the product of such and such a natural spring and is not a manufactured article. Let the authorities accept such a certificate as the ultimate test of the nature of the water.

A proper appreciation of the value placed upon natural mineral waters by the medical profession would remove a much more real barrier to their free admission into Canada, than the questionable one of a Custom-House official's inability (which may be only incompetency) to distinguish a natural from a non-natural water.

## TUBERCULIN.

Very conflicting reports are published as to the action of tuberculin. From some sources it is learned that its action in local tubercular processes is always salutary and beneficial; on the other side of the question, we hear that even in some German University centres its further use has been strictly prohibited. In Bonn, the prohibition is reported to include the cantharidate solutions also. The history of tuberculin, from its inception to the present time, shows how unwise and foolish it is to proceed on politico-commercial lines in order to establish the usefulness of a therapeutic agent.

The profession is far from being free from blame in the trend which the matter has taken.

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### A PROPOSED INTERNATIONAL AMERICAN MEDICAL CONGRESS.

At the coming meeting of the American Medical Association in Washington, Dr. Charles Reed, of Cincinnati, proposes to introduce a resolution to the effect that an invitation be issued to the different States and Colonies in North and South America to hold a medical congress in the United States.

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### PERSONAL.

—Dr. George E. de Schweinitz has been appointed Lecturer on Medical Ophthalmoscopy in the University of Pennsylvania.

—Dr. H. A. Hare has been appointed Professor of Materia Medica and Therapeutics in Jefferson College, Philadelphia, vice Dr. Bartholow, resigned.

—Dr. Nicholas Senn, of Milwaukee, has been appointed to the chair of Surgery in the Rush Medical College, Chicago, vacant by the death of Professor Parkes.

—Dr. James Bell, of Montreal, left for the Continent immediately after the termination of the clinical examinations at the General Hospital. He intends returning about the first of July.

## MEDICAL FACULTY OF MCGILL UNIVERSITY.

## FIFTY-EIGHTH ANNUAL CONVOCATION.

The 58th annual meeting of Convocation took place at 3 P.M., April 1st, 1891, in the William Molson Hall, which was crowded with the relatives and friends of those about to be admitted to the practice of medicine. The Chancellor (Sir Donald Smith) presided, and accompanying him on the dais were Messrs. J. H. R. Molson, W. C. McDonald, and S. Finley, Governors; Sir Wm. Dawson, Principal; Dr. A. Johnson, Rev. Dr. Cornish, Mr. J. R. Dougall, Rev. Dr. Murray, Mr. H. T. Bovey, Mr. J. S. Hall, Dr. Craik, Dr. Rodger, Mr. W. T. Skaife, Dr. Wesley Mills and Dr. McEachran (Fellows), Mr. J. W. Brakenridge (Secretary); Professors Wurtele, G. P. Girdwood, T. G. Roddick, C. E. Moyse, F. J. Shepherd, F. Buller, Jas. Stewart, G. Wilkins, G. H. Chandler, R. L. MacDonnell, D. Coussirat, J. Cox; Drs. Ruttan, Sutherland, Alloway and Birkett, officers of instruction; Rev. Dr. Shaw, Dr. J. H. Fulton, Dr. W. G. Stewart, Dr. L. O. Thayer, Mr. Chas. Fleet, B.C.L., Mr. C. W. Trenholme, B.A.Sc., Mr. E. H. Hamilton, B.A.Sc., Mr. F. W. Skaife, B.A.Sc., and Rev. Dr. Adams of Lennoxville.

The CHANCELLOR, in addressing the meeting, said: I consider, and I am sure you will cordially agree with me in the opinion, that I will best discharge the duties of my office on this occasion, this fifty-eighth year of the Medical Faculty of McGill, by being very brief indeed, and it is my intention not to detain you from the proper business of the day beyond a few minutes. You all know what the work of McGill in general has been for these many years back, and you also know that no more important work has been done than that which has fallen to the part of the Medical Faculty. (Applause.) We have been indebted, and very greatly indebted, to the support and to the help of the citizens of Montreal in all branches and in all faculties of the University, whether in Arts, in Science, in Law, in the latest faculty (that of Comparative Medicine and Veterinary Science), or in that with which we have now to deal, and I would wish to say that while in the past, when there were so very little means

of disseminating knowledge and of putting before the people and the world what was being done by scientific men, we have done well, it might be well to formally mention on such occasions as these all that has been achieved by this or that faculty. However, you know equally as well as I do the great work that has been done by McGill, and you know also the great support that has been given by the citizens of Montreal to McGill and its faculties, even to the youngest faculty, which the other day was endowed by a gentleman, not of Canada direct, but from amongst our cousins on the other side of the line, with a very excellent library and a donation of \$5,000. Yesterday we had the pleasure of recording our thanks to him. I would wish to say to-day that we do not reserve our gratitude only for favors to come, but McGill feels deeply grateful to all her benefactors, from the first who endowed it, and she will always hold them in her memory. We feel that to my friend on the left here (Mr. W. C. McDonald) we are indeed deeply indebted—(applause)—and we are also under very great obligation to the gentleman who sits by him (Mr. J. H. R. Molson), and to many other benefactors. It would not be desirable, nor would it be seemly, that we should obtrude our wants on all occasions on the people of Montreal. You know what McGill has done and what its wants are. We do not desire always to be calling for more, because we know that it is not necessary, and we know that generous givers do not always desire to be importuned, and we feel that those who desire to give to McGill and who are able to give will do it without much importunity on our part; we leave it to themselves, knowing, as they do, what has been done for this city and the whole Dominion by McGill as an institution of learning. We know that not only they will not allow it to go down, but they will give it the means of progressing and going on side by side with the first institutions of the country. That is our aim, that is our desire, and I am sure you will give to McGill the means of doing so.

The DEAN then announced that the total number of students on the register in the Medical Faculty during the past session was 261, of whom 104 came from Ontario, 83 from Quebec, 29

from New Brunswick, 16 from Nova Scotia, 14 from Prince Edward Island, 7 from the United States, 4 from Manitoba, 1 from Newfoundland, 1 from British Columbia, and 2 from the West Indies. He read the list of those who had passed the several examinations of the faculty, as well as those who had won prizes, the latter gentlemen stepping forward as their names were read out and receiving their reward at the hands of the Chancellor. The names of the graduates are :—

Alexander, W. W.....	Stanhope, P.E.I.
Beers, A. H.....	Montreal, Que.
Bennie, R.....	Riverfield, Que.
Berwick, R. H.....	Farnham, Que.
Bowie, R. A.....	Brockville, Ont.
Brown, W. A.....	Chesterville, Ont.
Busby, J.....	Pontview, Que.
Calkin, B. H.....	Kentville, N.S.
Carlaw, C. M.....	Campbellford, Ont.
Clemesha, J. C.....	Port Hope, Ont.
Clark, John.....	Troy, Ont.
Dewar, A.....	Ormond, Ont.
Farwell, W. A.....	Lennoxville, Que.
Fletcher, R. W.....	Londonderry, N.S.
Gibson, R. J.....	Clinton, Ont.
Grafton, E. A.....	Montreal, Que.
Hamilton, W. F.....	Sackville, N.B.
Harrison, J. D., M.A.....	Fredericton, N.B.
Hattie, W. H.....	New Glasgow, N.S.
Hayes, J., B.A.....	Nelson, N.B.
Hewetson, J.....	Riverside, Ont.
Holden, D. B., B.A.....	Montreal, Que.
Keir, E. J.....	Malpeque, P.E.I.
Kelly, C. I.....	West Flamborough, O.
Lambert, E. M.....	Ottawa, Ont.
Love, A.....	New Glasgow, N.S.
Lovering, W. T.....	Seattle, Wash. Terr.
Mader, A. I.....	New Canada, N.S.
Main, C. G.....	St. Andrews, N.B.
Martin, M. Mc.....	Brown's Creek, P.E.I.
Morrow, W. S.....	Halifax, N.S.
McMillan, J. H.....	Pictou, N.S.
McPhail, J. A., B.A.....	Orwell, P.E.I.
McCrimmon, A. A.....	St. Thomas, Ont.
Parke, G. H.....	Quebec, Que.
Robertson, E. A.....	Lennoxville, Que.

Robertson, T. F.....	Brockville, Ont.
Shirriff, G. R.....	Huntingdon, Que.
Sinclair, O. W.....	Bridgetown, N.B.
Sparling, A. J.....	Pembroke, Ont.
Spier, J. R.....	Lindsay, Ont.
Smith, C. F.....	West Winchester, Ont.
Smith, T. H.....	North Sidney, C.B.
Troy, W.....	Valleyfield, Ont.
Tunstall, C. A. . . . .	Montreal, Que.
Watson, N. M . . . . .	Williamston, Ont.
Webster, R. E....	Brockville, Ont.
Williamson, W. P.....	Chatham, Ont.

The graduates then took the prescribed oath, after which cap and tassel was waved over each by Sir William Dawson, their diplomas were handed them, with the exception of four, who are under age, but who will receive their degree on attaining their majority, and they returned to their seats full-fledged physicians.

DR. W. BROWN delivered the students' valedictory. He spoke of the professors as having been friends and teachers to those attending their classes, was averse to ladies being admitted to study medicine at McGill, referred to the advantages which the students had in hospital work, congratulated Miss Livingstone on the success attending her efforts in connection with the training school for nurses, and suggested the providing of a place in the hospital where the students, when attending their duties there, could obtain some light refreshment at a moderate price, the restaurants in the neighborhood not being all that could be desired.

PROF. GIRDWOOD addressed the graduates on behalf of the Medical Faculty. (*See page 801.*)

DR. CRAIK, Dean of the Medical Faculty, then delivered the following address:—Our fifty-eighth session which is now closing, although not in any important sense an eventful one in the history of our Faculty, has nevertheless been marked by some incidents and changes which are deserving of more than a passing notice, and which we trust may be considered not only as evidences of our steady and continued progress as a medical school, but also as earnest of a greater development of usefulness and efficiency in the near future. The number of students in attend-

ance during the winter session, though apparently less by one than during last year, is actually greater by seven, the apparent difference in favor of last year being due to the larger attendance upon the summer session and to the number of students presenting themselves for supplemental examinations. The actual attendance upon the classes, therefore, has shown a larger average than in any year in the history of our Faculty. But not only has the attendance at our lectures and in our laboratories been gratifyingly large, but the harmony and good-will among the students and teachers have been maintained without interruption, and the work of the session has been carried on with a degree of earnestness and diligence which has borne good fruit in the excellent results of our examinations. But while the results of the session as a whole have given us good cause for congratulation, there have also been some things that have caused us keen regrets. Our distinguished and highly esteemed Professor of Surgery, Dr. Geo. E. Fenwick, has found it necessary, from his advancing years and somewhat failing health, to resign the chair which he has so long held with such marked distinction to himself and benefit to this University. Professor Fenwick's reputation as a surgeon has penetrated to every part of the civilized world, and wherever scientific surgery has been taught his results and his opinions have been quoted as worthy of respect and emulation. His retirement, therefore, from the active duties of teaching cannot but be looked upon as a serious loss to the Faculty, but the position of Emeritus Professor of Surgery, which the Governors have conferred upon him, will enable us to utilize to our great advantage the many years of unofficial work which we hope and trust are still before him, and which his proverbial philanthropy and industry will not allow him to withhold from us. The vacancy created by the retirement of Professor Fenwick from the chair of Surgery has been filled by the appointment of Dr. Thomas G. Roddick to that chair, an appointment which we have every reason to believe is the very best that could have been made in the interests of all connected with the University. The promotion of Dr. Roddick to the chair of Surgery made it necessary to provide him with assistance in his allied

chair of clinical surgery, and this has been done by the appointment of Dr. James Bell as Lecturer on Clinical Surgery, an appointment which has also proved eminently satisfactory. At the commencement of this session, also, the Faculty met with a serious misfortune in the sudden and severe illness of Dr. Ross, Professor of Medicine and Vice-Dean of the Faculty. This made it necessary to make provision for the work of the chair of Medicine until such time as Dr. Ross should be able to resume it, and this was accomplished by his colleague, Professor MacDonnell, of the chair of Clinical Medicine, undertaking a large share of the work, assisted largely by Dr. Stewart, Professor of Therapeutics, and in a lesser degree also by myself. We have now the happiness of seeing Professor Ross again actively at work and rapidly regaining his health, and we hope long to have the benefit of his practical skill as a teacher and his ripe judgment as a counsellor, to the great advantage of his colleagues, of the students, and of the whole community. In the other departments of the Faculty the work has been carried on efficiently and well, measured, of course, by the standards of the past, as well, indeed, as we can hope to do it with our present appliances and resources. If the accepted system of medical education were to continue in the future after the same model as in the past, we would find ourselves in a very enviable position. With a staff of trained and skilful teachers, with laboratories, hospitals and other facilities for efficient teaching, which can scarcely be excelled; with an endowment conferred upon us not many years ago by our generous-hearted Chancellor and other good friends of the University, which seemed at the time to be ample for all our requirements, and with a reputation for thoroughness, built up by eminent and unselfish men after more than half a century of unremunerative work, it might well be asked, What is there that we still need to keep us in the van of medical progress? The question is one that scarcely admits of a definite answer. In conformity with the progressive spirit of the age the whole system of medical teaching has been, and is still, undergoing a profound and radical change. That the change is greatly for the better there can be no manner of doubt, and

on that account it is sincere matter for congratulation ; but, on the other hand, the change has also been in the direction of considerably increased expenditure. Practical teaching and demonstration are year by year and more and more taking the place of mere descriptive teaching, and it can readily be understood that the greater amount of individual attention required necessitates a much larger staff of demonstrators and assistants, as well as more apparatus and laboratory equipment, than the older and simpler methods. Another result of the changed methods of instruction has been the splitting up of several important departments into sub-divisions, which have themselves greatly increased in magnitude, some of them even rivaling in prominence and importance the parent branch from which they sprang. This has been more particularly the case with the allied subjects of physiology, histology, and pathology. All three of these were, not many years ago, included in the single department of Institutes of Medicine, and the teaching of all three was entrusted to one individual. To cover the same ground now in a proper manner and in accordance with modern scientific methods would require at least five teachers or demonstrators and ten times the amount of apparatus and appliances. It does not, of course, follow that the increased expense is in the same ratio, for skilled assistants can often be made to take the place of professors and demonstrators at less expense, but the increase in the individual and personal work, of course, means also additional outlay. Expansions and amplifications of a similar kind, though less in degree, have occurred in many, and indeed in most of the other departments, and while they have added greatly to the efficiency of the teaching, they have also added somewhat to the expenditure. Unfortunately, it has not been possible to meet this increased expenditure by a corresponding increase in the fees charged to students in medicine. When students are selecting the institution at which they are to receive their medical training, or when their friends or parents are making the selection for them, they are not always in a position to estimate correctly the value of the facilities offered by each, and knowing that they are all equal in the eye of the law, they are apt to be

drawn aside towards some of those that will enable them to obtain the necessary license to practice at the least expenditure of money, and this, of course, to the detriment of their future usefulness and of the public to which they are to minister. The greater amount of time and labor required in the practical teaching of such branches as physiology, pathology, and chemistry, not to mention others of equal importance, makes it almost absolutely necessary that the professors of those departments should devote the whole of their time to their teaching functions, and thus debar themselves from that portion of their income which they might otherwise derive from private practice; indeed it is difficult to see how in a prosperous school the work can be efficiently carried on in any other way. But if the Faculty is thus to demand a skilled professor's undivided services, surely he also is entitled to demand that he shall receive at least reasonable remuneration, and unless this be given him we cannot long expect to command his services. It must be remembered in connection with this part of the subject that in the departments of practical physiology and pathology, as taught in the best of the modern schools, the number of really valuable men who have devoted themselves to this kind of work, and have undergone the necessary preparations for it, is as yet comparatively small and their services are in active demand. Indeed, this Faculty, which was one of the first on this continent to inaugurate the new system, was also one of the first to suffer for it, for scarcely had it started in its new career of teaching physiology according to the most modern method, when its distinguished professor, Dr. Osler, one of its own graduates, was induced to accept a more lucrative position in connection with the University of Pennsylvania. It was fortunate for us that we had in Dr. Wesley Mills one in every way a worthy successor to Dr. Osler, and one who, in addition to a long experience in the art of teaching, brings to bear upon it an enthusiasm and a personal influence which have been of the greatest benefit not only to his own class, but to the Faculty as a whole. But here, again, we have been threatened with the same danger as before. We have, unfortunately, not been able to make the assured income of Dr. Mills

equal to what his value as a teacher should represent, and overtures have recently been made to him also tempting him to leave us and offering him increased remuneration elsewhere. Such recurring dangers have really been a source of much anxiety and discouragement to us, and have caused us to look eagerly around for some means of averting the threatened calamity, and it gives me great pleasure to be able to announce that a promise of very material help in this matter has been made to us from a source which makes it particularly gratifying, being in a manner closely connected with the department of physiology itself. Mr. Walter Drake, of Montreal, being aware of our pressing need, and realizing that, in such circumstances, "he gives twice who gives quickly," has promised, in grateful remembrance of his brother, the late lamented Dr. Joseph M. Drake, formerly a distinguished professor of physiology in this University, to place an annual sum of \$500 at the disposal of the Faculty for purposes in connection with the chair of Physiology. This sum is to represent the interest at five per cent. on a capital sum of \$10,000, the annual payments of interest to be redeemable at any time within five years by the payment of the capital sum itself. I cannot at present speak further as to Mr. Drake's generous intentions, as the matter has not yet been fully discussed nor laid before the Board of Governors, but those of us who know Mr. Drake best may reasonably hope that, having put his hand to the plough, he will not be likely to look backward until he has placed the chair of physiology upon a secure basis. But serious as have been our anxieties in connection with the chair of physiology, they are even more serious in relation to the department of practical pathology. This department is coming rapidly to the front in the best systems of medical education, and is probably doing more to bring our profession prominently before the public than any of the other departments of medicine, as witness the recent excitement with regard to Professor Koch's experiments in tuberculosis. But although our Faculty has always recognized the supreme importance of establishing the department of practical pathology on a sound and efficient basis, it has not yet been able to accomplish its wishes in this respect,

and the prestige of the school must soon suffer, if it has not already suffered, from this deficiency. I might go on to point out other and pressing needs connected with our Faculty, such as some provision for the early extension of our present buildings, and more particularly the early restoration to our endowment funds of the amount necessarily borrowed from them in 1885 for the same purpose ; but I fear I have already dwelt too long on the depressing subject of our wants and wishes. It is not for me to say how these wants are to be supplied. I feel that I may safely leave that to those true friends of progress who have always come to the relief of our University in its pressing needs, but I should be remiss in my duty if I failed to point out that they are real and pressing wants, and that we ask them to be supplied not to enrich ourselves, but to strengthen an institution which has done good service in the past, and which hopes to do still better service in the future in the interests not only of the University of which it forms a part, but of the profession with which it is connected and the cause of suffering humanity wherever it may be found.

The following gentlemen have passed their Primary Examination, which comprises the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Physiology, Histology, and Botany:—

Aylen, E. D.....	Aylmer, Que.
Blunt, H. V.....	West Bolton, Que.
Bostwick, W. E.....	Montreal, Que.
Brown, J. A.....	Sarnia, Ontario.
Coburn, A. D.....	Keswick Ridge, N. B.
Cameron J. D.....	L'Orignal, Ont.
Deeks, W. E., B. A.....	Williamsburg, Ont.
Dewar, A. T.....	Kertch, Ont.
Dewar, G. F.....	New Peril, P. E. I.
Du Vernet, E.....	Gagetown, N. B.
Fleming, G. W.....	Chipman, N. B.
Fulton, J. A.....	Franklin Centre, Que.
Girdlestone, C. W.....	Winnipeg, Man.
Goff, H. N.....	Newport, P. E. I.
Gunter, F. B.....	Fredericton, N. B.
Henderson, J. A.....	Orangeville, Ont.
Hewetson, S. W.....	Georgetown, Ont.
Holden, D. B.....	Montreal, Que.
Jamieson, W. H.....	Montreal, Que.
Lawrence, J. W.....	Lower Dumfries, N. B.
Lindsay, W.....	St. Marys', Ont.
Livingstone, H. A.....	Montreal, Que.
Martin, S. H.....	Savage Mines, Que.

Mackay, R. B., B.A.....	Toronto, Ont.
Mackenzie, S. R.....	Montreal, Que.
McArthur, A. D.....	Kenmore, Ont.
McCann, A. E. A.....	Montreal, Que.
McLennan, K.....	Dunvegan, Ont.
McMillan, W.....	Alberty Plains, P.E.I.
McMorrine, R. F.....	Richmond, Que.
McPhail, J. A., B.A.....	Orwell, P. E. I.
Patterson, W.....	New Glasgow, N. S.
Rorke, R. F.....	St. Thomas, Ont.
Semple, E. J.....	Montreal, Que.
Seguin, J. W. A.....	Rigaud, Que.
Scane, J. W.....	Chatham, Ont.
Shaw, G. F.....	Ottawa, Ont.
Shaw, T. P.....	Montreal, Que.?
Smith, T. H.....	North Sidney, N. S.
Tomkins, J. E. C.....	Coaticook, Que.
Walker, J. L.....	Montreal, Que.
Walsh, T. N.....	
Watson, N. M.....	Williamstown, Ont.
Wilson, R.....	Montreal, Que.
Wilson, R. D.....	Derby, N. B.
Yearwood, C., B.A.....	Barbados, W. Indies.

#### MEDALS, PRIZES AND HONORS.

The Holmes Gold Medal for the best examinations in all the Branches comprised in the Medical Curriculum is awarded to William Arthur Brown, of Chesterville, Ont.

The prize for the best examination in the Final Branches is awarded to William Fawcett Hamilton, of Sackville, N.B.

The prize for the best examination in the Primary Branches is awarded to William Edgar Deeks, of Williamsburg, Ont.

The Clemesha Prize in Clinical Therapeutics is awarded to William Stairs Morrow, of Halifax, N.S.

The Sutherland Gold Medal is awarded to John Alexander Henderson.

The following, arranged in order of merit, deserve honorable mention :

*In the Primary Branches*—J. A. Henderson, R. B. Mackay, C. Yearwood, K. McLennan, J. W. Scane, A. T. Dewar, W. Patterson, E. D. Ayles, Robt. Wilson, J. D. Cameron, R. F. Yorke, W. E. Bostwick, and A. D. McArthur.

*In the Final Branches*—W. H. Hattie, W. S. Morrow, R. A. Bowie, J. C. Clemesha, J. Hewetson, Wm. Troy, J. Busby, A. Dewar, E. A. Robertson, E. A. Grafton, T. F. Robertson, J. R. Spier, C. F. Smith, C. I. Kelly.

*Professor's and Demonstrator's Prizes*—Botany, Allan Davidson; Senior Anatomy, John Alexander Henderson; Junior Anatomy, Andrew Armour Robertson; Clinical Chemistry, Benjamin Furlong Boyce.

## Medical Items.

—Drs. E. A. Robertson and W. A. Farwell have been appointed Resident Medical Officers to the Montreal Maternity for the ensuing year.

—Drs. Hamilton, Morrow, Spier, Grafton and Tatley have been appointed Resident Medical Officers to the Montreal General Hospital for the ensuing year.

—Any qualified practitioner desirous of succeeding to a lucrative practice in one of the most flourishing cities of the North-West, can obtain particulars by applying to the Editors of this JOURNAL.

—The J. B. Lippincott Company of Philadelphia announce that during the present month they will issue the first number of a quarterly periodical to be known as "International Clinics." This work will comprise clinical lectures on general medicine, surgery, and the different specialties delivered in the leading medical schools of the United States, Great Britain and Canada. The object is to furnish the busy practitioner and medical student with the most advanced and practical clinical thoughts of the day. Each volume will consist of over 350 octavo pages, illustrated with photographic reproductions of important cases.

COMPULSORY LATIN.—To the controversy as to the continuance of Greek as a compulsory subject at the Universities, raised by Mr. Welldon's paper at the Head Masters' Conference, Prof. J. Stuart Blackie has contributed a remarkable letter, published by the *Times* on January 21st—remarkable in itself, and still more remarkable as coming from one whose great reputation was made as a teacher of Greek. As to the necessity for learning Greek in order to obtain a reasonable standard of culture, Prof. Blackie employs a most pungent argument. "The Greeks," he writes, "learned no language but their mother tongue, and were nothing the less the wisest people in the ancient world and the teachers of wisdom to all generations." But he goes a good deal further than the head masters of Harrow and of Rugby; he calls in question the supreme

value of Latin as an element in education. Two or three centuries ago Latin was the key to storehouses of knowledge not otherwise accessible; but "it is not so now. The most rich and various storehouses of all sorts of knowledge, both speculative and practical, are open to a modern British man without any key but his mother tongue; and an Englishman or a Scot, in the latter end of this nineteenth century, three hundred years after Shakespeare, has no more need of going to dead languages for the sake of the culture that belongs to a well-educated gentleman than a Newcastle man has to send to the end of the world for coals which he has at his own door. . . . What was once an anomalous necessity has now become an absurd anachronism, a scholastic tradition." Prof. Blackie is for requiring from the candidate for an ordinary pass degree in arts—as to medicine he appears to reserve his opinion—a familiar knowledge of some one foreign tongue, ancient or modern, for he writes: "Even on the supposition that linguistic training is the very best possible for a youth of good promise in this nineteenth century, it is quite certain that German is as good for this purpose as either Latin or Greek, with this immense advantage—that the language of Goethe and Bismark, if once learned, will likely be used, while in the case of Greek and Latin, it seems an undeniable fact that nineteen out of twenty British youths who have gone through the traditional routine of a classical education forget easily in three months all that they have painfully acquired in as many years." Dr. Wade, in his presidential address to the Association at Birmingham, was thought by many to have been overbold when he maintained that the question whether Latin should be retained as a compulsory subject in the curriculum of medical students was one which might be debated; it was said that his action would tend to hasten the fulfilment of the prophecy that within a few generations medicine would cease to be a liberal profession. But he found a powerful ally in Prof. Huxley, and now it would seem that Prof. Blackie is prepared to back Prof. Huxley; and if these two representative men are not men of culture, some new definition of that much abused phrase must be devised.—*British Med. Journal.*