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ADDRESS

DELIVERED AT THE OPENING OF THE FIFTY-EIGHTH SESSION  
OF THE FACULTY OF MEDICINE OF MCGILL UNIVERSITY,  
OCT. 1ST, 1890.

By R. CRAIK, M.D.,  
Dean of the Faculty.

GENTLEMEN :—It has long been the custom in this as in other medical schools, for the teachers in turn to deliver to the students and others, two discourses or addresses in each year. One usually known as the valedictory, at the end of the winter session, and more or less of a retrospective character, dealing with the session which has passed, and offering words of kindly counsel and good wishes to the graduates who are then to leave us. The other at the beginning of the following session, and more or less prospective in character, welcoming the new as well as the older students, and mentally shaking hands with each of them, preparatory to joining in the mutual labors of a busy session.

It has fallen to my lot to be asked to deliver this opening address, and it is with feelings of sincere pleasure that I offer to every student, on behalf of the professors and teachers, a cordial welcome and our best wishes for their welfare, physically and socially, as well as professionally.

In the remarks which I propose to address to you to-day, I have thought it might not be amiss to depart somewhat from the beaten path of introductory lectures, and to take a somewhat retrospective, as well as a prospective, view of the changes which medical education in general has undergone

during the present and perhaps the preceding generation, and the changes which it may be expected to undergo in the generation which is to follow. In doing so I may be pardoned if I take my examples and illustrations largely from the experiences of our own school; for I think I may fairly claim for it that, so far at least as this continent is concerned, it has always since its commencement maintained a leading position, in the thoroughness of its teaching, in the high and advanced standard of its curriculum, and in the reputation and prestige which its graduates have carried with them to every part of the world.

Medical education half a century ago was a much more primitive and simple process than the elaborate and complex systems of to-day, and yet no part of the present system is superfluous or could be omitted without producing dangerous weakness, and if we are to keep pace with the present rapid progress of medical science and medical discovery, we must be prepared for the same development and increase in the future as we have experienced in the past.

Up to a comparatively recent date, the system of medical apprenticeship formed an important part of medical education, and indeed necessarily so, for in the absence of the present facilities for hospital clinical instruction, no other means were accessible to the student, by which he could learn to apply in actual practice those principals and precepts which he had learnt from his books or in the lecture room. In the old-time curricula, one or two years of private study with a private practitioner was accepted as equivalent to the same time passed at the schools; and even at the present day the licensing board of this province concedes the privilege of one year's study with a private practitioner as an optional part of the full four years' curriculum. In the better equipped schools of the present day this system has passed almost entirely away, and has been replaced by the more systematic and skilled instruction in the hospital wards and in the laboratories. Didactic lectures also formed a far more important part of a medical course in former years than they now do, and indeed private medical instruction by private practitioners and didactic lectures in the class room, with perhaps a few demonstrations in anatomy and chemistry, may be said to have made up the sum

of medical education until within the last twenty or five-and-twenty years.

But such antiquated methods could not long withstand the contagious example of the modern processes of scientific investigation and research in other departments of natural science, and the dry lectures delivered in nearly or quite the same words and order from year to year, and which might with as much or more profit have been delivered directly from the text book, gradually began to be replaced by others of a more demonstrative kind, and to be illustrated by diagrams, plates and apparatus, and ultimately by specimens and instructive examples, both living and dead. It thus came about that the didactic lecturer, with his well-worn manuscript, and who found it no more difficult to lecture to four hundred students than to four score, began to find it necessary to improve his methods, or to find that his usefulness and his occupation were alike slipping away from him; while the practical teachers and the demonstrators found more and more calls upon their time and energies, and found that more students meant for them more labor and more responsibility, and after a time more help; so that the descriptive lectures were at first supplemented, and afterwards many of them replaced, by practical demonstrations and individual teaching, and the laboratories and working rooms gradually grew to be more numerous and important than the lecture rooms.

A similar change has also been going on in the methods of hospital teaching. The old-time custom of "walking the hospitals" is almost a thing of the past. The student no longer lounges through the wards as if his object were to kill time, if not the patients, and the attending physician or surgeon no longer hurries from patient to patient, contenting himself with the attentions and instructions to the patients themselves, which their safety demands. But the students are now taken into his confidence; they become helpers to him and to the patients, while they themselves receive help, experience and instruction which they could never hope to obtain in any other way.

It will thus be seen that the changes which have come about in the manner and methods of teaching medicine have been somewhat radical in their character, that, in fact, they have

turned the old system upside down, The practical and personal parts of the teaching which in the schools, at least, were subordinate to the descriptive and didactic, have now become the most prominent and important, while the more formal lectures as such, are mostly confined to those fundamental and elementary facts and principles, which must always form a necessary foundation for practical knowledge.

But if the changes in the methods of medical teaching have been great and have added greatly to its effectiveness, they have also rendered necessary a greatly increased expenditure. A systematic course of lectures once written out, and even when illustrated with plates and diagrams or simple apparatus, is a comparatively simple affair, and can be maintained year after year at little expense, and can be made to serve for three hundred as well as for three score; but with practical teaching and demonstrations it is entirely different. One teacher may be able to give proper personal attention to the practical work of say forty or fifty students, but if the number is increased to two hundred or two hundred and fifty, it will require five teachers instead of one to do the work. It does not necessarily follow that the expenditure must increase in the direct ratio of the numbers, for qualified assistants may often be employed at less expense, but in any case augmented numbers in practical classes means increased expenditure.

Laboratories also are expensive affairs. Their construction, equipment and maintenance are attended with great and continued expenditure. Technical apparatus is usually expensive on account of the comparatively limited demand and consequently limited supply, and is usually perishable and difficult to keep in order and requires frequent renewal, and the cost of maintenance, even with the greatest care, is always considerable.

Nor does it seem at all likely that there is to be in the future any material diminution in the cost of practical work in connection with medical education, and as practical work is still likely more and more to replace mere descriptive teaching, the necessary expenditure may be expected rather to increase than to diminish.

But, it may be asked, are not the fees from the students intended to meet these expenses, and has not the cost of a

medical education been increased to the student in proportion to the cost of providing it? The answer is, that medical teaching, properly so-called, has never been self-supporting, and is now less so than ever before. It is true that the aggregate amount of the student's fees is now greater by some twenty or thirty per cent. than it was five and twenty years ago; but in the same period not only has the aggregate of school expenditure been more than doubled, but in some of the departments it has been even trebled and quadrupled, and all this while practising the most rigid economy in every particular.

Nor does there seem at present to be any remedy for this disparity between the price paid for a medical education and the increasing cost of providing it; for the scale of fees is virtually controlled by those schools which have the fewest real advantages to give to their pupils, while their degrees have the same legal value as the best in the land. There are many and strong reasons, also for considering it most undesirable to attempt to impose any additional burdens upon the medical student of to-day. He has sufficient to contend with in the increased requirements of the ever extending curriculum in matters connected with his preliminary examination, and in the vexatious differences and re-examinations which are brought upon him by our absurd provincial medical laws.

Having thus endeavored briefly to outline the important changes which the system of medical education has undergone in the past, and is likely to undergo in the future, let me endeavor to show also very briefly how these changes have affected our own school, the Faculty of McGill University, and how we have been enabled to meet them.

I think it may be safely taken for granted that nearly every doctor worthy of the name, who loves his profession, also loves to talk about it, and being fully impressed with the noble character of his calling, he naturally longs to impart his knowledge to others. This is the true missionary spirit, and bearing this in mind it will be more easy to account for the fact that medical schools are apt to break out at most unexpected times and in most unexpected places, and are apt also to exhibit most wonderful vitality under adverse circumstances. They may be starved, they may be persecuted, they may be legislated against and they may seem to be blotted out,

but they will crop up again and go on with their work with a persistency and a dogged determination which are but the evidences of a powerful, though, perhaps, unrecognized impelling force. It was in some such way as this that our school first came into existence, and it has been in great measure the influence of some such impelling force, that has enabled it to overcome the many and great difficulties which it has had to encounter in the course of its career.

It was sixty-six years ago, that is in 1824, four earnest and energetic men, Drs. Robertson, Holmes, Caldwell and Stephenson, founded and opened the nucleus of this school, under the name of the "Medical Institution." It was continued under that name until 1829, when it became the Medical Faculty of McGill College. Of its early history little need be said. It was simply a struggle for existence, in which failure much of the time seemed quite as probable as success, and when, during the political troubles from 1836 to 1839, it was obliged to close its doors, it seemed as if its light had gone out forever.

But that inherent love for teaching which so largely pervades the ranks of our profession, and which had been sufficient to open the school in 1824, was again sufficient to revive it in 1840, when its classes were reopened, and shortly afterwards, in or about 1842, it was almost entirely reorganized, its corps of teachers considerably enlarged, its curriculum extended and improved, and comfortable quarters were provided for most of its classes in the central building now occupied by the Faculty of Arts.

Up to this time the assets of the school may be said to have been *nil*. There was neither museum nor library worthy of the name, and each teacher worked for his own hand, and furnished his own equipment of every kind, paying for it as best he could out of his few straggling fees, and trusting to his private practice to support himself and his family. But the school had now a local habitation and a name; it was the Faculty of Medicine of McGill College, and it was housed in the college buildings.

From this time its success was no longer doubtful. There sprang up an *esprit de corps* among the teachers, among the students, and among the graduates, which became an important factor in the work, and which has continued and grown

ever since, and has contributed in no small degree to the reputation and prestige of the school, and has encouraged and helped the faculty in its efforts to maintain the high standard of excellence at which it has always aimed.

At this period, and for many years thereafter, the teaching was wholly of the didactic kind. The only real exception was practical anatomy, which had its special demonstrator; and with the help of the advanced students a few lessons and experiments were given in operative surgery and in chemistry. In 1845 the chairs of Clinical Medicine and Clinical Surgery were established.

Encouraged probably by the continued and growing success of our school, the St. Lawrence School of Medicine was opened in 1851, with a strong staff of teachers and with its classrooms in the heart of the city. As the college buildings were at that time looked upon as being remote from the centre of the city and from the General Hospital, it was feared, rightly or wrongly, that the more central site of the new school might attract away from us some of our students. It was resolved, therefore, to remove our own classes also to a more central site, and as no university funds were available for the purpose of furnishing us with a building, three of the professors purchased a lot and put up the old brick building on Cote street, where, for twenty years, the work of the school was carried on, and where many, if not most, of the present staff of professors received their medical education.

Several important steps were taken and some important changes made while the work was being carried on in the old Cote street building. It was here that our beloved Principal, Sir Wm. Dawson, took his place at our head, and enrolled himself as one of our co-workers, as professor of botany and zoology. It was here also that the next step in practical teaching was taken, by the establishment of a chair of practical chemistry under Professor Girdwood, though for many years his work had to be carried on without the advantage of a college laboratory. It was here also that the members of the Faculty, not wishing to be outdone even in the ornamental aspect of their work by the more favored faculty of arts, founded the Holmes' gold medal in 1865, paying for the die out of their hard earned fees.



The history of these years was one of steady and continued progress, not only in the number of our students and graduates, but in the more thorough and practical character of the teaching, and in material improvements in the curriculum, more particularly with reference to the preliminary examinations and the division of the professional examinations into primary and final.

But the building which had served our purpose so many years had latterly been inconveniently overcrowded, and more room was needed, not only for the larger classes, but to accommodate the growing library and museum, and to afford room for contemplated improvements in the way of laboratories and working rooms in several of the departments. At this juncture, and guided chiefly by the wise counsel of Sir Wm. Dawson, we resolved once more to retrace our steps, and to ask the college authorities to receive us again into their classic precincts. The governors responded generously to our appeal, and in 1871 the front or main portion of the present building was built for us and placed at our disposal.

But, willing as the governors were to come to our relief, the means at their disposal for this purpose were very limited, only sufficient to give us the building with its bare walls, and without fittings or furnishings of any kind. These, with all the necessary equipment of laboratories, class rooms and other requirements for improved methods of teaching, had to be provided by the members of the faculty from their own personal means. Our late dean, Dr. Campbell, headed the list with one thousand dollars, and the rest of us followed as best we could with smaller sums, until a sufficient sum, amounting to a good many thousand dollars, was forthcoming, the building was made ready for occupation, and the work itself; under greatly improved conditions and surroundings, was begun in the new building in the autumn of 1871.

Closely following upon the opening of the new building came the next important forward step in the matter of practical teaching. Laboratory work was begun in 1874 in physiology, histology and pathology by Dr. Osler, one of our own graduates, and fresh from the laboratories of the most distinguished workers and authorities of Europe.

The improved methods of teaching and the increased facili-

ties had the effect of attracting to us a constantly increasing number of students, until it soon began to be apparent that our new premises, commodious as they seemed at first to be, were rapidly becoming too small for our steadily enlarging classes. The increased cost also of the practical teaching was beginning to tell seriously upon our resources, and we had again to look about us for the means of adapting our income to our increasing needs and to our increased expenditure. It was about this time that the faculty had the misfortune to meet with a very serious loss in the death of its dean, Dr. Campbell, one who for more than forty years had devoted his great talents and his great influence to the service of the faculty, and whose loss at the time seemed to the faculty to be almost irreparable.

But Providence, whose ways are often inscrutable, seemed even to overrule this misfortune for the good of the faculty; for it put it into the heart of our present noble Chancellor, Sir Donald A. Smith, while listening to a eulogy of Dr. Campbell, by his successor, Dr. Howard, to offer to the faculty the munificent sum of \$50,000 as an endowment fund, on the condition that the citizens of Montreal should contribute a like sum for the same purpose; the two sums to be called respectively the Leachon and the Campbell memorial funds. I need not say how gladly the Faculty accepted the generous offer, nor how eagerly they set to work to collect the stipulated sum from the citizens. Nor need I try to tell how well and generously they were met by many of the citizens, nor how they themselves personally tried to add their full share to the subscription. Suffice it to say that the amount was soon raised, the sum promised by Sir Donald was promptly paid over, and the faculty found itself apparently relieved of all its difficulties by the magnificent endowment of one hundred thousand dollars.

We found ourselves, therefore, in 1883 with a handsome endowment, with a growing reputation, with a large staff of practical and enthusiastic teachers, with a constantly increasing number of students, and with a building *too small* to accommodate them. It thus became necessary to take immediate steps to enlarge our building, and to provide additional accommodation for our growing classes. We again applied to

the governors of the college for the required additions to the building, hoping from the increased income from the endowment, to be able to meet the necessary expenses of fitting up and maintaining the new buildings. To our great disappointment, we found that the governors were without means at their disposal from which to carry out our wishes, and their only alternative, therefore, was to borrow from our fund the necessary sum required for the erection of the additional buildings, with a promise, of course, of the repayment of the amount so soon as the condition of the finances of the university made it possible to do so. The sum thus withdrawn from our fund amounted to nearly one-third of the whole, and the result has been a source of considerable embarrassment to us, for it has deprived us of a large portion of our expected revenue from this source, and has left some of our important practical departments without that material aid which we had hoped to give them, and has to that extent impaired their usefulness and interfered with the reputation and growth of the faculty as a whole.

But that is not all, nor even the worst. The buildings, which five years ago seemed large enough to serve us for a generation, are rapidly becoming full to overflowing, and we must look about us again almost immediately for increased accommodation. What is to be done? Are we to let students leave us for want of room? Are we to send them to places where their education will be less efficiently carried on? And are we to confess our weakness, and say to the world that we must shut our doors in the faces of those who are knocking at them for admission.

Gentlemen, I know that we shall do none of these things. It cannot be possible that we should be asked to do any of them. We will ask our friends to help us. If necessary we will take our hats in our hands and go through the streets and ask them to help us. And they will help us. They will not allow the tide of our success to flow backward. They will not allow the standard of our medical education to be lowered. They will not allow our doors to be closed to those who are seeking to come in; but they will help us to open them still wider. They will help us to raise still higher the high standard of our medical teaching, and they will help us in sustain-

ing before the world the reputation of our faculty and of our university, which are so dear to all of us.

And, gentlemen, if we are to ask and to expect our friends to come to our relief and to give us of their means to help us out of our difficulties, what have they a right to expect of us in return? Have they not a right to expect us to give full value for all we have received? Undoubtedly they have, and let us see to it that that full value is given in no stinted measure: Let our benefactors of the future, like those of the past, see that their benefactions have been put to the very best of uses, that they have neither been wrapped up in a napkin and buried in the earth to rot uselessly away, nor have they been squandered and frittered away in idle experiments or useless display. No, gentlemen, let us prove to them that we are in downright earnest in trying to make the most of the means which they have placed, and which they in the future, let us confidently hope, intend to place at our disposal.

And may we not reasonably claim for our profession that it does confer great benefits not only upon private individuals and public charities, but upon the community at large, upon the country itself, and even upon the race in every part of the world? Think of the millions of lives which Jenner has saved by his discovery of vaccination. Think of the benefits and the relief which Pasteur has bestowed upon his fellow-men by his researches into the cause of the failure of the silk trade by diseases in the silk worm, and latterly by his skill in robbing that most dreadful of all diseases, hydrophobia, of most of its terrors. Think of what the wise counsels of Mr. Simon, as medical adviser to the Privy Council, has done for the masses in sanitary and social matters in England. Think of the labors of Koch in unearthing the consumption bacillus, and in our own country, in matters political and social, as well as professional, let us think of the important part which they have played in the development and progress of our institutions, and of the influence which they have wielded among our young and growing communities. Look at the oldest of our graduates, Joseph Workman, who probably did more than any man now living to ameliorate the condition of the insane in our asylums. Look at Dr. Maurice Bucke, another of our graduates, at the head of the asylum near London, following

closely in his philanthropic footsteps. Look at Dr. Church in our Legislative Assembly, on the Bench, on the Board of Governors, an honored and trusted counselor. Look at Sir Charles Tupper, our High Commissioner and framer of treaties; and look at our graduates scattered throughout the growing towns and villages of our great Northwest, and each a centre of culture, intelligence and influence, whose advice is sought on almost all subjects, and who probably do more in a young country to impress their ideas and individualities upon the plastic elements of the growing population around them than any other class of persons whatsoever.

But to come down to our own institution, to the Medical Faculty of McGill College, what is it that gives to its graduates the high rank to which they attain wherever they may go? It is due to no one cause, but to a combination of causes. It is due first to the fact that we strive to make their education as thorough as possible from beginning to end. It is due also to the fact that we try as much as possible to keep the whole training of the student in their own hands, and that we do not encourage him to wander about from school to school, taking a little from one and a little from the other, to the confusion of his ideas and the weakening of his character. But, lastly, and most of all, we aim at making our graduates not mere medical and surgical automata, not mere empirics and slaves to authorities, who prescribe for diseases according to their names, or because some Professor This or some Doctor That has said that it is the proper thing to do; but we aim to make them thoughtful and philosophical men; men who are accustomed to think for themselves, and who are able to give a sufficient reason for the faith that is in them.

We endeavor also to impress them with a full sense of their great responsibilities—that their sins of omission may be quite as serious as their sins of commission—that it is their duty not only to save life, but to save health and to save organs, and that the man who knowingly allows a curable disease to permanently damage a heart or a lung, or who allows a continued high temperature to inflict serious injury upon a sensitive brain or nervous system, is quite as much to blame as the surgeon who would lop off a limb which a little more skill or

trouble might have saved, or who would risk a dangerous operation to relieve some temporary inconvenience.

Gentlemen, time will not permit me to pursue this subject further. I have endeavored to show the effect which changes in the methods of modern teaching have had upon our school. How it has increased our expenditure, while it has also largely increased our efficiency. I have endeavored to call attention also to our efforts to cope with our difficulties, and I have endeavored to show the crippling effect which want of means is likely to produce in the near future. Our most pressing needs are, first, the restoration as soon as possible, of the sum borrowed from our former endowment. Second, a provision for the endowment of a chair of Practical Pathology, which is greatly needed; and third, a sum set apart for building extensions which must become necessary in the near future. There are other matters which I would fain mention, such as a residence for medical students, and extensions of practical teaching in other departments; but these must not be insisted upon at present.

In conclusion then, let us endeavor to accomplish our wishes by all acting together, and laboring to the same end. We will look to you, students, to show yourselves diligent and earnest in your work; we, your teachers, will endeavor to do our full share. There shall be no drones among our workers and no drags upon our wheels of progress; and we will look to the generous public and to the large-hearted men and women, who have so often before come to the relief of our distressed educational institutions, and let us hope and pray that Providence may put it into the heart of some of them to lift us out of our present difficulties, and set us up again on the high road to progress and prosperity.

PERI-URETHRAL CELLULITIS AND URETHRAL  
FISTULA.\*

BY SIR JAMES GRANT, M.D., K.C.M.G.

There are two varieties recognized of this disease, one of which occurs in isolated patches of small size in and about the penile portion of the urethra; and a second, forming one continuous mass between the layers of the triangular ligament behind the bulb. In the latter the inflammation is much greater than in the first, and although it may result from blows or falls on the perineum, it may also be the result of a small point of follicular ulceration behind a stricture, the urethral wall becoming gradually pierced, resulting in the rapid spread of inflammation in the superjacent cellular tissue,—in fact, *urethral cellulitis* with its circle of associations, as in the following case I now present to this assembly.

*Feb. 16th, 1879.*—R. W., æt. 40 years; regular conformation of body, moderate stature, spare habit generally; facial expression indicative of anxiety. Scrotum and perineum much swollen, quite tender over a considerable part of their surfaces, the evidences of inflammation, the result of urinary escape and infiltration being undoubted. Said to have voided urine naturally the day previous, but being dull and languid at the time was unable to give any positive information. Tongue coated; pulse 110; temperature 102°; bowels inactive, and hypogastric region also considerably swollen and painful on pressure. From the 15th to 18th peritonitic symptoms were well defined, associated with feeble pulse. Without delay free incisions were made in the perineum and linseed poultices regularly applied, which afforded great relief. At this stage I found it impossible to introduce a catheter into the bladder. Turpentine fomentations over the abdomen as necessity demanded.

*History.*—In 1869 contracted gonorrhœa, which was unusually acute in its character, having continued more or less for a period of full three months. In 1874 observed a gradual lessening of power in urination, the stream being small, divided and

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\* Paper read before the meeting of the Canadian Medical Association, at Toronto, September. 1890.

irregular. At this date he resided in Western Canada, and was treated for stricture. On the night of Feb. 15th, '79, he was attacked with cold chills, followed by high fever and entire suppression of urine; severe pain in the perineum associated with the well-defined indications of urethral rupture and urinary infiltration. The great difficulty in passing urine and the sudden relief marked a history undoubted as to character. Ordered a saline enema and inflamed part well sponged with warm water. Free escape of urinary secretion through incisions.

*Feb. 21st.*—Quite a large portion of the integument of scrotum and perineum sloughed, gangrenous discoloration having indicated that termination. An opening in the membranous urethra fully three-quarters of an inch in length was the result of this destruction of tissue. The floor of the urethral canal was freely exposed, from which urine escaped quite freely. System well supported by liberal diet and, in addition, the free administration of iron and quinine. After the complete separation of the sloughs, febrile symptoms gradually subsided and the improvement as to general health was very marked. Rupture and extravasation having taken place prior to coming under my care, free incisions were at once made and poultices applied constantly.

*Feb. 27th.*—Febrile symptoms having about subsided, and the functions of the stomach and bowels become moderately normal, the question now arose how best to close the *urethral fistula*. The extensive loss of tissue from the urethral channel, consequent on the sloughing process, the result of decomposed urine, rendered the operation of "urethroplasty" very difficult. Having observed a most marked disposition towards the formation of soft, pultaceous and yet vigorous granulations, giant-like in character, about the seat of the urethral opening. I accepted the condition and continued the free use of poultices for several days longer, until the growth of granulation tissue was sufficient to cover the opening *in toto*. This being accomplished I decided to test the vigor of the newly-formed structure, plastic in character and evidently ready to be moulded into urethral form, aided by nature's conservative power and energy.



*March 1st, '79.*—A number seven elastic catheter passed into the urethra, entered slowly through the pouting granulations and almost unexpectedly reached the bladder, the flow of urine through the instrument being quite free and natural. Taking advantage of the position, the catheter was retained *in situ* for about three days, during all of which time little or no urine escaped from the fistula. In order to promote firmness and strength of tissue, and give it direction in the formative process, the surface was brushed several times with a mild solution (nitrate of silver). At the end of third day catheter removed, and urine voided through natural channel, unattended by escape otherwise. The integument over the scrotum and perineum formed rapidly, and in three months from this date he entered upon his usual duties.

In a lecture by Wheelhouse of Leeds, Eng. (Dec. 9, 1888), on stricture, he observed: "Hitherto no true method of permanent and lasting cure has been reached. We may dilate; we may burn out; we may split; we may cut strictures, from within and from without; but up to the present time we cannot cure them—that is, both take away the obstruction and restore the parts to their *primitive condition of original health*. Whatever form of treatment we may employ, however good a result we may obtain, we never overcome the tendency inherent in every *stricture* and inveterate to recontraction." No statement could possibly be more thoughtful, verified as it is in the practice of every-day life.

In June, 1884, the cicatricial tissue which formed and closed the urethral opening had so contracted, owing to neglect in carrying out specified directions as to the free use of bougies while absent in Western Canada, that internal urethrotomy became necessary, which had the desired result. In this particular instance the opinion of Wheelhouse is verified to the letter. Granulations cultivated and supported in their efforts become a very beehive of industry towards the reparation of other tissues, and as factors in that direction we require to note carefully their modelling and constructing power even under the most adverse circumstances. The completion of the healing process, even

with the plastic power of granulation tissue, was doubtless greatly facilitated by the non-escape of urine by the fistula for fully three days, while the catheter was in the bladder. Sir Henry Thompson lays great stress on this point, to obviate which he frequently educates his patient in the habitual use of the catheter while treatment is in progress.

In the treatment of urinary fistula, it appears to me that, prior to adopting operative means for its closure, every possible degree of care should be bestowed upon the efforts of nature in the production of granulation plastic reparative power, which doubtless takes an important part in the relief of suffering humanity.

## Hospital Reports.

### MONTREAL GENERAL HOSPITAL.

#### CONDENSED REPORTS OF CASES IN DR. MACDONNELL'S WARDS.

(Reported by R. E. McKEOUSIE, House Physician.)

*Oct. 6th.*—The classes in Clinical Medicine were opened on the 4th October with a general introductory lecture, after which the 3rd and 4th year were divided into their separate classes and ward work begun. There are a considerable number of typhoid cases at present in the wards, viz., seven men and five women. The cases, with a few exceptions, have not been very severe. The following are some of the interesting features presented by the cases at present under treatment.

*Unilateral Sweating.*—In the case of a strong young Englishman who had contracted the disease at Lachine, and who was admitted on the 4th day of a fairly severe attack, there was well-marked unilateral sweating of the face observed the day after admission. On the 7th day of the disease, when he was examined before the class, this sweating was absent.

*Scarlatiniform Rash.*—In one case a diffuse pale rash was noticed within a short time of admission. The neck and shoulders were the parts affected, and disappearance was complete in a few hours. No medicines had been administered.

Moore, in the *Dublin Journal of the Medical Sciences* (Dec. 1888), describes four distinct eruptions which are met with in typhoid fever. These are erythema fugax, miliary eruptions, erythema simplex vel scarlatinale, urticaria. When the scarlatiniform rash does appear it is most likely to show itself at the end of the first or in the third week, and when early it is apt to give rise to a difficulty in diagnosis, but the prodromata of scarlatina are absent, and so far as I have observed these rashes, they are of a much lighter colour, and less rough and punctiform than are those of the exanthem. They are more of a blush than a rash, and are probably connected with a disturbed vasomotor system.

*Urticaria in a young girl.*—In the third week of a mild attack, urticaria in distinct wheals manifested itself.

*Pustules on the Abdomen.*—In the case of William H., aged 23, whose case was very severe, there was extreme meteorism and turpentine stupes were applied. The typhoid spots, which were very numerous, took on a pustular form, and to the number of about a dozen formed large superficial abscesses containing half a drachm to a drachm of pus. I have twice seen this result from the use of turpentine stupes in fever.

*Typhoid Fever in a Pregnant Woman; Jaundice.*—Mrs. W, aged 33, was admitted at the end of the second week of the fever. She was six months pregnant. The fever took an unusually protracted form, lasting some eight weeks. In the fourth week there was an attack of jaundice, which lasted three days. She made a slow recovery and left the hospital, expecting every day to be confined. The foetus was alive when she left the hospital.

*Aneurysm of the Innominate Artery.*—A man, æt. 33, was admitted Oct. 7th with the symptoms and physical signs of an aneurysm of the innominate. An important point in the history of these cases is their mode of commencement. In three other cases of which I have notes, the disease showed itself first by pain in the right side of the neck, running up behind the ear, affecting also the shoulder and the right arm. In all four cases there had been, previously to admission to hospital, a prolonged

course of treatment for neuralgia, consisting, in this case, of baths, electricity, etc. The pressure signs are very well marked. There is brassy cough and tracheal stridor. The aneurysm has itself blocked up the carotid and subclavian arteries. No pulsation in the right radials, right brachial or right common carotid. An interesting point in connection with the neuralgic pain is that he always suffered an exacerbation of pain on coughing, or on making any exertion with his arms, efforts increasing the pressure of the blood and consequently that on the nerve.

*Cirrhosis of the Liver with Ascites; Repeated Aspiration.*—L. G., the patient whose history was reported a year ago,\* came to the clinic on the 10th October. There was evidence of fluid in the peritoneum. Two hundred ounces were withdrawn. Since February, 1889, no tapping had taken place, that is, for twenty months, and during that period he had been working daily at his butcher's stall. A return to alcoholic habits was the probable cause of reaccumulation.

*Sudden Coma; Subnormal Temperature; Albuminuria; Death.*

Maria D., aged 30, was brought to the hospital by the ambulance on July 14th, 1890. The case was at first thought to be one of heat prostration, of the cardiac variety. The woman, with her baby, was walking on the wharf to take the ferry to St. Helen's Island when she suddenly fell, and became pale and partially unconscious. She vomited on the way to the hospital. On admission she was unconscious and very pale; surface cold; pulse 66 and very weak; breathing laboured; temperature 95° in the axilla and 96° in the rectum. Patient was perfectly helpless, as though her extremities were paralysed. Stimulants were given and heat applied externally. In a couple of hours power returned in the right side and she became restless, but left side remained paralysed throughout the remainder of the case. Knee jerk absent. The pupils remained equal throughout, and reacted both to light and accommodation. Towards night she became very restless, tossing her head about, rubbing her forehead violently with the right hand as though the part were

\* The Medical News, Oct. 12th, 1890.

very itchy, and screaming violently. The pulse was now strong (99), and temperature  $101^{\circ}$ .

The following day, with the exception of a short interval of doubtful lucidity, the patient remained unconscious. The urine was passed involuntarily; a specimen obtained was found loaded with albumen. The left leg remained flaccid, but the left arm was rigid and pupils somewhat contracted. The temperature ranged from  $98\frac{1}{2}^{\circ}$  to  $101^{\circ}$ .

On the third day both arms were rigid, although the right was moved occasionally; the muscles of the neck were rigid, causing retraction of the head and turning the face towards left shoulder; the abdomen was retracted. The bowels throughout were very constipated. The coma deepened during the day; the pulse, not reacting to stimulants, became 130 and very weak, the lungs filled with moist râles, the temperature increased to  $104^{\circ}$ , and patient died. No autopsy was allowed.

On the day she was brought to the hospital a large mass of enlarged glands was noted extending from the angle of the jaw on right side half way down to the clavicle. These were of tubercular nature, giving a clue to the nature of the case, which was probably acute tubercular meningitis.

#### *Copious Purulent Expectoration in Empyema.*

D. M., aged 42, a lumberman, was admitted on June 10th, 1890. Last November, after exposure to cold and wet, he was attacked with severe pain in the left side, with cough and shortness of breath. He stopped work and kept his bed for two weeks. The pain then ceased for some days, but the cough and shortness of breath continued. He now went to work about the lumber camp, doing light work, as he was weak. In the middle of January, as he was shovelling snow, he coughed while stooping, and a large quantity of pus was expectorated with but little effort, and formed a pool at his feet. He felt much better after this, and both cough and expectoration at once diminished. In the middle of February, after a fresh exposure to cold, he had another attack, this time in the right side, with severe stitch-like pain, feverishness, loss of appetite, cough, and shortness of

breath. The pain ceased in a few days, but the cough persisted, and was soon accompanied by expectoration, which gradually increased till, on admission, it amounted to about thirty ounces daily. He rapidly lost flesh and strength, the appetite remained poor, and he felt himself rapidly failing.

On admission, there was extreme emaciation, frequent cough, and copious purulent expectoration; the temperature ranged between  $100^{\circ}$  and  $102^{\circ}$ , but was not of a hectic type. The pulse was 120, regular, and easily compressed; heart sounds normal; respirations 27 per minute, expansion  $\frac{3}{4}$ -inch at the nipple level; the right side of the chest, at the same level, measured half an inch more than the left. Cough was noted to be worse and expectoration more free when patient was lying on his back. On the right side, behind, there was dulness from the spine of the scapula to the base, which dulness extended into the axilla as far as the anterior axillary line and as high as the level of the nipple. Changes in posture did not alter the line of dulness. Over this area there were weak breathing, absence of vocal fremitus, and diminished vocal resonance, which was nasal near the angle of the scapula. On the left side, behind, from the spine of the scapula down, there were friction sounds both in inspiration and expiration. Nowhere could be made out any moist râles, while a few dry râles were heard in front on both sides. The liver dulness, vertically, in the right mamillary line extended from the 6th rib to one inch below the costal margin.

The patient was given good diet and an expectorant mixture. On the 16th June the right side of chest was aspirated below the angle of the scapula and 10 ounces of thick pus withdrawn before the needle became blocked. Both this pus and the sputum were examined microscopically for tubercle bacilli, as there was a family history of phthisis, but none were found. After the aspiration the expectoration diminished to about 10 ounces daily. The general condition improved at first; he ate and slept better; but the improvement soon became stationary, and he was transferred, eighteen days after admission, to the surgical wards, under Dr. Shepherd, who, three days later, resected a portion of the 9th rib, below the inferior angle of the scapula, opened

the pleura and evacuated about a quart of thick stinking pus. The expectoration at once lessened, and three days afterwards amounted to only a couple of ounces in twenty-four hours. The general condition of the patient at this time was slightly better and the cough much decreased in frequency. The liver had slightly diminished in size, its dulness vertically, in right mamillary line, extending from 6th rib to half an inch below margin of the ribs. The discharge from the opened pleural cavity is moderate.

*Oct. 16th.*—Patient left the hospital to-day, to return weekly to have his side dressed. There is still a large fistulous opening in right side, behind, discharging a moderate quantity of pus. He has not gained strength very fast, as he is still far from being in a good state of nutrition, but he is much stronger than at the time of the operation. There is dulness in lower half of right side of chest, behind, extending around into axillary area and covering about the same area as before the operation. Breath sounds are weak over this area, and there is depression of the intercostal spaces on inspiration in the neighbourhood of the wound. No moist sounds in dull area. At right apex there is slight prolongation of expiration, and behind an occasional crepitation. Down the back, on the left side, there is absence of the friction previously described. There is exceedingly little expectoration, not half an ounce per day, and that principally mucus. Pus from the wound and the sputum were examined for tubercle bacilli, but none found. Liver dulness appears normal in extent, coming only to edge of ribs. Air enters lungs apparently to edges of wound.

*Remarks.*—There are some interesting points connected with this history. 1. It is plain that a double purulent pleurisy existed, the left side being first attacked, and that spontaneous cure occurred. I see no other way of explaining the history of pain in the side, followed after a considerable period by the sudden expectoration of a large quantity of pus. In addition, we found evidence of old pleurisy in the left lung, in the presence of friction sounds. 2. The expectoration of large quantities of almost pure pus while under our observation in hospital. Although

many have attempted, no one has succeeded in explaining satisfactorily this frequently observed occurrence, the passage of pus from the pleural cavity to the external air without the existence of a bronchial fistula. No doubt it is an attempt at a cure on the part of nature, and in the case of the left lung she seems to have succeeded. The diminution in the quantity of pus expectorated after the aspiration is noteworthy, but it has been observed long ago. In this case the temperature was remarkably low, and fell after the expectoration became copious, so that I felt inclined to await events and not advise surgical interference. The man seemed very weak, however, and having the means of relieving him at hand, it seemed cruel to delay. The effect of the operation in reducing the quantity of pus expectorated was very remarkable. In these days of early removal of pus by thoracotomy we do not often see the remote results of empyema as they were observed by a former generation. Perforations of the chest wall, bronchial fistulæ, and pulsating pleurisy have become very rare.\* 3. The diminution in the size of the liver as the dyspnœa was relieved. The liver was noted on admission as extending from the 6th rib to a point 1 inch below the costal margin in the right mammary line. On his discharge, the limits of hepatic dulness were normal. Enlargement of the liver in empyema was noted some forty years ago by my late father in a paper in which this very subject of copious purulent effusion was dealt with. It would seem that in this case there was a real hepatic enlargement and not a displacement, inasmuch as the upper limit of the hepatic dulness remained stationary throughout.

#### CASES UNDER THE CARE OF DR. RODDICK.

(Reported by Dr. W. E. INKERTER.)

CASE I.—*Tubercular knee joint; Extensive necrosis of lower end of femur; Amputation; Recovery.*

C. E., æt. 15, admitted February 8th, 1890, complaining of

\* Vide MacDonnell, Robert Lea—On Contributions to the Diagnosis of Empyema. Dublin Journal of the Medical Sciences, March, 1844.

Truiz, Ges: Abhandlungen, vol. iii, p. 44, 1872.

Celer. Canada Medical and Surgical Journal, vol. xi, p. 744.



general weakness, swelling, pain and fixation of the right knee, with several running sores about the joint.

Patient was always a delicate boy. When three years of age he had what was called an attack of "rheumatic fever" which was confined entirely to the right knee. This, which was in all probability a tibial abscess forming, was followed by disease of the tibia which lasted about eighteen months, during which time several pieces of bone escaped through openings in the leg. When five years of age, the left leg above the ankle became swollen and tender (no doubt another bone abscess). This was lanced, and finally a sequestrum was discharged.

At seven years of age abscesses formed over the great trochanter of the left femur and the right shoulder. These were allowed to rupture spontaneously, and healed without discharging any bone. Had a similar abscess on back a year and a half ago. Right knee was swollen and its motions limited ever since the attack of so-called rheumatism; and the flexion and fixation gradually increased, the pain being more acute at varying intervals. Three months before admission he had a feverish attack with gastric symptoms. At the same time the knee became very painful and swollen, and a sinus formed in the popliteal space, which discharged a large quantity of pus. A few days later two sinuses formed on the inside of the knee, which also discharged considerably.

On admission, patient was greatly emaciated; skin dry and harsh; temperature irregularly elevated. Diminished resonance with increased vocal fremitus over right pulmonary apex. The right knee was flexed at about a right angle, and a uniformly dense enlargement extended from three inches below the joint to about the same distance above it. The joint allowed free lateral and antero-posterior movements accompanied by grating sounds, shewing complete disorganization. A sinus in the popliteal space led down to necrosed bone. Owing to the extent of disease and the wretched general condition of the patient, excision was considered out of the question; amputation was therefore decided upon.

*Feb. 13th.*—Patient etherized and thigh amputated with anti-

septic precautions about six inches above the knee, by an anterior skin flap and posterior transfixion flap. A large rubber drain was introduced at the outer angle of the wound, and the stump dressed with Lister's double cyanide gauze.

On examination of the amputated limb, an abscess was found extending from the joint nearly up to the point of amputation. The joint surfaces were completely eroded and the bone found very soft and brittle. The temperature became normal on the morning after operation, and remained so throughout.

*Feb. 18th.*—General condition markedly improved, appetite hearty, no pain in stump.

*Feb. 22nd.*—Stump dressed for the first time; the wound found remarkably healthy; sutures and drains removed.

From this time out the progress was uninterrupted and he gained flesh rapidly. He was discharged Nov. 6th, 1890, with the stump entirely healed; stouter and in better health than he had been for years previous.

CASE II.—*Perineal abscess; Sloughing of urethral wall; Subsequent urethrotomy; Recovery.*

J. H., aged 32, waiter, admitted Sept. 8th, 1890, complaining of weakness, pain and swelling in perineum, frequency of micturition, considerable constitutional disturbance. Had chancre in 1880, and gonorrhœa two years later. Until about six months ago he drank freely. About a month before admission he first noticed difficulty and frequency of micturition. About a week previous to admission these symptoms became greatly exaggerated and a silver catheter was passed occasionally by his physician. The use of this instrument caused great pain, and the swelling appeared in the perineum shortly after its first passage. On admission there was a fluctuating tumour, about the size of a man's fist, situated along the scrotal and perineal portion of the urethra; penis and scrotum very œdematous; alkaline urine voided in drops every few minutes and contained a large quantity of pus; patient pale and exhausted; temperature 103°.

*Sept. 9th.*—Patient etherized; a sound was passed down the

urethra into the tumor, but could not be made to reach the bladder; considerable narrowing of entire penile urethra. Tumor incised freely in middle line of perineum, and exit given to about four ounces of thin foetid pus. All attempts to find the deep urethra and thus enter the bladder having failed, a large rubber drainage tube was introduced into the abscess cavity and held *in situ* by an ordinary safety pin passed through the edge of the wound. Iodoform and a pad of sublimated gauze constituted the dressing, the wound being first thoroughly irrigated with sublimate solution (1-2000). The temperature fell to normal immediately after the operation and so remained.

At first the urine was all passed through the perineal wound; but as this gradually healed, it began slowly to flow forwards. The tube was removed on the sixth day. At the end of four weeks the perineum was healed, but a strictured condition remained. Patient was again etherized, and after some difficulty a whale-bone guide was passed into the bladder, and the urethra freely scored with Guion's urethrotome. Sounds were then passed freely up to No. 16 English scale. At present the patient is well, and large sounds can be passed without difficulty.

CASE III—*Congenital syphilis; Periostitis appearing for the first time in the fourteenth year.*

A. C., æt. 16, admitted to hospital Sept. 18th, 1890, complaining of a painful swelling on the front of right leg; no history of injury or of acquired syphilis.

In 1887 a small hard growth appeared in the site of the present enlargement. This disappeared under the influence of rest and a few applications of iodine. About a year later, 1888, the swelling again appeared and has gradually increased in size, varied treatment having no effect. On admission the front of the tibia had a bowed appearance from a dense tumor occupying half the length of the bone with its greatest prominence about the middle of the leg. The skin over it was inflamed and looked as if about to suppurate; very tender and painful.

Patient is an only child; parents living and healthy. His physiognomy was, however, somewhat striking; face long;

bridge of nose rather flat; eyes small and weak; incisor teeth, both upper and lower, slightly notched, and the arch of hard palate very high, giving the voice a nasal tone.

Syphilitic periostitis (congenital) being diagnosed, the patient was put upon large doses of the potassium iodide, twenty grains thrice daily, to be gradually increased. The pain and swelling rapidly diminished until at the expiration of ten days the former had completely disappeared, and nothing remained but the thickened condition of the tibia, the result of the old osteitis.

### Reviews and Notices of Books.

**A Manual of Modern Surgery for the Use of Students and Practitioners.** By JOHN B. ROBERTS, A.M., M.D. With five hundred illustrations. Philadelphia: Lea Brothers & Co. 1890.

Dr. Roberts has succeeded in writing a very practical book, giving especially the operative methods of the best surgeons of the day, and discussing briefly the most modern but well-established facts of surgical science. The illustrations are, on the whole, good and well selected from standard works, while not a few are quite original. The chapter upon "Diseases and Injuries of the Nervous Centres and Nerves" is one of the best in the book, the diagrams here being especially good. The affections of the abdomen and pelvis are likewise very thoroughly discussed.

In our opinion the work is more suited to the busy general practitioner than the student, being a book of ready reference rather than a text-book. We therefore commend it highly to the general profession.

**Transactions of the American Surgical Association.**  
Volume the Eighth. Edited by J. EWING MEARS, M.D.,  
Recorder of the Association. Philadelphia: P. Blakiston,  
Son & Co. 1890.

This volume is rather less bulky than many of its predecessors, although a glance at the contents shows that any decrease

in the quantity of material offered is amply counterbalanced by the quality. It is impossible here even to name the titles of the several papers (there being twenty in all), although we have read many of them with great interest. Dr. William Bull of New York, in an exhaustive paper on the "Radical Cure of Hérnia," offers some interesting conclusions on that much debated subject, namely, the best method of operating. He says: "My own results are no better by the complicated method of suture of the ring only, or of the ring and canal, than by the simpler method of excision of the sac after ligature." Speaking of relapses he makes the remarkable statement that between the months of January and October, 1889, forty-five relapsed cases applied for trusses at the Hospital for Ruptured and Crippled, and that in the past nine months there have been as many more. He concludes his article by stating that "all methods of radical cure will be found unsatisfactory." There are also papers by Conner, Morton, Keen, Bradford, and others of note in their special departments of surgery. These transactions should be in the hands of every surgeon.

## Society Proceedings.

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, 3rd Oct., 1890.*

G. E. ARMSTRONG, M.D., PRESIDENT, IN THE CHAIR.

*A Case of Hodgkin's Disease.*—DR. R. L. MACDONNELL exhibited a male patient aged 25, a freight checker, the subject of Hodgkin's disease. Up to four years ago the patient had enjoyed good health, but about that time he suffered from a severe and prolonged attack of what was called "bronchitis." There were severe attacks of dyspnoea, which came on exertion as well as when he was at rest, and cough was very severe and brassy. He made a good recovery and continued well until two years ago, when he began to notice the presence of lumps in his neck. These have gradually increased in size. Two months ago the breathing became seriously embarrassed, and suffocative attacks of the most severe kind occurred, especially when in a recumbent position. In the beginning of August he presented himself at the Montreal General Hospital, suffering from attacks of dyspnoea and from a bad brassy cough. On Aug. 11th a chain of glands was removed from the front of the trachea. These were found to extend very deeply into the chest, and were continuous with other glands in the mediastinum. He made a good recovery from the surgical operation and since then has not suffered from attacks of dyspnoea, though his breath is short on exertion, and he still suffers from cough. When a boy he remembers that frequently there were large painful lumps in the armpits. Epistaxis has been frequent during the last six months. No history of any venereal disease. The glands in the left side of the neck are enlarged, prominent; distinct from each other; loosely attached; of firm structure. There are two or three enlarged glands in each axilla, but none in groin. The spleen is enlarged but cannot be felt below ribs. The liver is of normal size. Examination of the urine yields negative result. The skin generally is clammy, but always on the left side of the forehead and face there is very free perspi-

ration. The left pupil is much larger than the right. Examination of the heart and lungs negative. Temperature, in afternoon, has generally been  $1^{\circ}$  or  $1\frac{1}{2}^{\circ}$  above normal. Pulse is always between 100 and 110. No member of his family has suffered from enlarged glands. Examination of blood reveals a large excess of white cells. But one count has been made. For the last month Fowler's solution has been taken regularly with apparent good result. About a fortnight ago, the patient experienced a sudden seizure which he described as follows:— He was lying upon a sofa when he felt as if some fluid were running up in his throat; he coughed, and immediately becoming insensible fell over on the floor, injuring his head in the fall. He was said to have remained unconscious for a few minutes.

DR. MILLS thought that the case was one that if it did not teach some lessons in human physiology, at least, confirmed the conclusions derived from an experimental study of the lower animals. Believing, as he did himself, that the whole of the metabolism (nutrition) of the body was directed by the nervous system, he was led to ask, Was the disease of the glands owing to primary disease of the nervous system, or were the symptoms referable to the iris, the sweat glands and the heart, the consequence of irritation of the sympathetic nerves supplying these parts? It was possible to explain them all in the latter way. It had long been known that stimulation experimentally of the cervical sympathetic led to dilation of the pupil and facial sweating. More recently it had been shown, by himself and others, that in all the animals thus far examined the accelerator nerves of the heart were derived from the sympathetic and were given off either from the first thoracic ganglia or from the inferior or middle cervical. In man it was likely that the most important branches were derived from the middle cervical ganglion. Sympathetic fibres ran also in the vagus stem itself. It was possible to understand the cardiac acceleration from an irritation of these fibres, and this was in harmony with the sweating and dilation of the pupil. The syncope referred to might arise from inhibition by the inhibitory fibres proper in the vagus or from exhaustion consequent on the undue action

of the sympathetic, and the latter seemed in the present instance the more likely. The case had proved very instructive to himself physiologically.

DR. BIRKETT said: I examined this patient for the first time on 6th June last, who then complained of hoarseness which had been present for the last two weeks; there was also considerable dyspnoea. Laryngoscopic examination proved the presence of a small superficial ulcer situated on the middle third of either vocal cord, and directly opposed to each other. The base of each ulcer was pale, and the surrounding tissues slightly hyperæmic. The pharynx was decidedly anæmic. The lymphatic glands in the neck were found to be enlarged, especially those about the sterno-mastoid muscle; the three lobes of the thyroid were also found to be enlarged. Thinking that this was a case of tuberculosis with laryngeal manifestations, I proceeded to examine the lungs, but a careful examination failed to discover any lesion in this region. The temperature was slightly elevated ( $100^{\circ}$ ) and the pulse 96. This, in conjunction with the foregoing laryngeal condition, led me to regard the case as one of localized tuberculosis, due, probably, to a caseating degeneration going on in the enlarged glands of the neck; but to have more satisfactory proof, Dr. Johnston kindly examined the sputum and reported the absence of either tubercle or elastic tissue. Upon this evidence I regarded the laryngeal condition as one of chronic laryngitis, in which superficial ulceration had taken place. Before I received the report from Dr. Johnston, I treated the case as one of tuberculosis, and used lactic acid of varying strengths, namely, 20% to 80%, with the result that the ulcers healed within two weeks. At this time I thought I had cured a case of tuberculosis of the larynx, but the result of the examination of the sputum put this idea to one side, and I regarded it in the light previously expressed, that it was a case of ulcer of the vocal cords occurring in the course of a chronic laryngitis. About the 1st of August the dyspnoea began to increase, and laryngoscopic examination showed that there was pressure on the anterior wall of the trachea due, undoubtedly, to an enlarged gland situated on the middle lobe of the thyroid. As the dys-



pncea continued to increase I advised surgical interference, which was undertaken by Dr. Shepherd and followed by considerable relief to the distressing symptoms.

After the members of the Society had fully examined the patient, Dr. MacDonnell stated that the diagnosis was not doubtful. The history of indolent enlargement of gland, extending along the course of the great vessels and following the route just as described by Hodgkin, involving first the cervical and then travelling downward, together with the altered composition of the blood, and the enlargement of the spleen, combined to complete the clinical picture. But the most interesting point in the case was the interference with the cervical sympathetic, as was shown by the dilated pupil, the unilateral sweating of the face, and the accelerated pulse. Interference with cardiac innervation probably accounted for the attack of syncope.

*Fragilitas Ossium.*—This patient was exhibited by Dr. Roddick, who said that the boy, aged 13 years, had received a fracture of the right thigh when one year old, and when three years old, Dr. Roddick had set a second fracture of the same thigh. Up to the present time the boy had had no less than twenty-seven fractures of the lower extremities, the left thigh being at present ununited. He purposed at a near date amputating both limbs, as they are, in their present condition, quite useless.

DR. HUTCHINSON, who had frequently attended this patient, verified the statement that there is entire absence of pain in the setting of these fractures.

DR. MILLS thought the case illustrated the continuation of a sort of embryonic condition of the bones after birth; want of proper development of osseous tissue rather than lack of growth, or atrophy from disease; though, of course, this was to be taken into account also. The bones of the upper extremities, trunk, and especially of the head, were not defective. An analagous, though less marked, defect was often seen in certain of the larger breeds of dogs, such as St. Bernards, mastiffs and great Danes, which were now being bred of enormous proportions. The quantity of bone produced seemed often to be out of proportion to the quality, hence imperfect osseous development in puppyhood and

often deformities of a permanent character in consequence, especially in the hind limbs. The head was very large in these dogs.

DR. SHEPHERD thought that the atrophy or brittleness of the bones were due to disuse, and cited a case of a patient who, confined to bed for a very lengthened period, fractured one thigh from a slight injury.

DR. SMITH thought that such conditions were brought about entirely through imperfect dieting.

DR. JOHNSTON asked Dr. Roddick if there were goitre present in any of the members of the family, as this form of bone affection is extremely common in Switzerland, where goitre is also frequently met with.

DR. RODDICK in reply said that no such condition was present in any member of the family.

*Genu valgum and genu varum.*—DR. J. BELL exhibited photographs of these cases before operation, and the patients themselves, showing the brilliant result of operative measures. The ages of the patients are respectively three and five years.

DR. JOHNSTON exhibited, for Dr. W. Gardner, two specimens—(1) *interstitial myoma of uterus*, (2) *myo-sarcoma of uterus*. The first concerned a patient thirty-five years old, whom he had examined years ago and advised the removal of the appendages. The tumour was a very large one and very closely adherent to surrounding structures from which it was extremely difficult to separate without a great deal of hemorrhage. In the second case, the age of the patient was forty-two years; the tumour had grown rapidly and was removed without difficulty.

DR. ALLOWAY remarked that the interesting feature in the second case was the condition of the umbilicus; this was distended, and protruding one inch above the level of the skin. Such a state is only found when fluid is contained within the abdomen.

*Fibro-cystic of Ovary.*—DR. JOHNSTON exhibited this specimen for Dr. Shepherd. In this case the tumour was found to be freely moveable, hard and painful; the pelvis blocked with an immovable mass. The tumour was found covered by in-

testines or very intimately adherent to adjacent structures. The recovery of the patient was uninterrupted. Dr. Johnston reported that the nature of the tumour was fibro-cystic, although the macroscopic appearance was like that of a papilloma.

*Tuberculosis of the heart.*—Exhibited by Dr. Johnston. This specimen was from a child who had died of general tuberculosis. The heart had become attacked, as evidenced by a small tubercular nodule in one of aortic valves; tubercular endocarditis is a condition rarely met with.

*Case of sudden death.*—DR. M. MCGANNON of Brockville briefly related a case of a young girl who for about a week had complained of feeling poorly, dizzy, and at times suffering from headache. The abdomen was slightly distended and without pain; temperature  $102^{\circ}$ ; slight delirium. Was suddenly called one morning as the patient grew worse, and before reaching the house she had died. Unfortunately no post-mortem examination was allowed.

DR. MACDONNELL remarked that sudden death in typhoid he had seen once and regarded it as unusual; syncopal attacks, however, were common. It might possibly have been a case of tubercular meningitis with irregular symptoms.

Dr. MILLS thought that the condition of the heart in typhoid was often overlooked, and thought that cases of sudden death in such were due to fatty degeneration of that organ.

DR. F. W. CAMPBELL said that Fagge attributes the suddenness of death as due to paralysis of the medulla.

## Selections.

**In Memoriam.**—JAMES MATTHEWS DUNCAN, M.D., F.R.S., ETC.—This great obstetrician died at Baden-Baden on September 1st. His fame was so widespread, his work so valuable, and his individuality so marked, that a short review of his professional career and opinions will doubtless prove of interest to our readers. His personal character, his manly bluntness harmoniously blended with wit and geniality, and other equally admirable qualities, earned for him profound love and esteem amongst his relatives and pupils. His memory requires no vulgar and tedious panegyric, nor need we dwell on the numerous academic honors which were showered upon him from an early stage of his career. They were the result of the fame reaped from his labors, and it is with those labors that we have to deal.

Dr. Matthews Duncan was born in April, 1826, in the city of Aberdeen, where his father was engaged in mercantile pursuits. Educated in his native city, he early displayed scientific instincts. His professional studies were carried on in Edinburgh and Paris; in 1846 he took the degree of Doctor of Medicine at Marischal College, Aberdeen. Paris, in those days, afforded the industrious student unusual opportunities for studying pathology. The mortality was high, the facilities for obtaining necropsies were great, and the system of medical education did not force study on the unwilling, at the expense, perhaps, of the able and industrious. Young Duncan eagerly sought every case of death after pregnancy or after labor, in times when obstetrical pathology would hardly be said to exist. He thoroughly examined the pelvic viscera, connective tissue, and peritoneum in these victims of the relative ignorance which then prevailed. Thus was founded his fame as a scientific authority in obstetrics and gynecology. Thanks to him and to certain excellent French tutors and fellow-students who were associated with him in his labors, humanity gained invaluable knowledge of the treatment and prevention of diseases of the puerperium.

Attracted by his merits, Sir James Simpson engaged Dr. Duncan as his private assistant. The history of the introduction of anesthesia is familiar to every American. Our readers are, therefore, doubtless aware that, when Simpson began his experiment on chloroform, Dr. Duncan was the first person who submitted to be placed under the influence of that compound.

Dr. Duncan at this period commenced private practice in Edinburgh. He was appointed physician to several institutions, and in 1853 he began a course of lectures on midwifery at the Extra-Mural School which rapidly established his reputation as a teacher.

When thus settled in Edinburgh he soon attracted the attention and excited the admiration of the profession by the valuable contributions which he made to science and to medical literature. A fair review of all his work, would fill a whole number of this JOURNAL, but some notice must be taken of his best known theories and doctrines. The first of his writings appeared in April, 1853, in the *Monthly Journal of Medical Science*, and was entitled "The Theory of Menstruation in Early Pregnancy, Superfetation, and the Site of Insertion of the Ovum." He brought forward anatomical proof of the possibility of menstrual fluid being naturally or easily derived from the living membrane of the cavity of the uterus, up till the end, at least of the second month. The mucous plug which sealed up the os uteri might easily become displaced. In 1855 appeared "The Statics of Pregnancy." This work contained certain deep researches into the natural philosophy of gestation. The section on the position of the fetus was a fine specimen of sound scientific work. With regard to the uterus, he held that, both in the horizontal and in the erect position of the woman, the pregnant uterus was in an oblique position. By this arrangement the uterus was preserved in a uniform condition free from many statical variations which might otherwise affect it suddenly and injuriously. Dr. Duncan also created a sensation in the anatomical and obstetrical world by the theories expressed in his "Pelvis studied with a View to Obstetrics." In this paper he demonstrated that the sacrum was not a wedge, nor was it the

keystone of the so-called "pelvic-arch." It was a strong transverse beam, curved on its anterior surface, its two ends, the auricular surfaces, coming into contact with the corresponding parts of the iliac bones. From its position it could not, in Dr. Duncan's opinion, act as a wedge. In a series of "Papers on the Female Perineum" Dr. Duncan insisted that at first labor an inevitable posterior laceration of the vaginal orifice took place. He favored the practice of supporting the perineum in labor. He considered that laceration of the perineum was not, in any strict sense, a cause of prolapse or procidentia. It favored complete descent of the uterus, so that restoration of the perineum was useful to resist the progress of the descending uterus, but the operation did not remove the cause of displacement. In 1869 appeared a work which was perhaps the most characteristic production of his mind and pen. This was the famous "Practical Treatise on Perimetritis and Parametritis." We all know how he drew sharp pathological and diagnostic distinctions between the two diseases. His conclusions remain contested to the present day—indeed, his theories on gynecology were never so widely accepted as were his doctrines on pregnancy and labour. The work, however, won the admiration of its readers on account of the extreme clearness with which the author expressed his propositions and conclusions. It was the forerunner of his "Lectures on the Diseases of Women," compiled throughout in the same scientific and literary style. The most remarkable, though not the most characteristic, of Dr. Duncan's works was his "Pecundity, Fertility, and Sterility," which first appeared in 1866, and formed the basis of his Galstonian Lectures "On Sterility in Women," delivered in the Royal College of Physicians in 1883. This valuable publication was the fruit of very subtle researches into questions of age, sexual temperament, and other factors in relation to barrenness and the reverse condition. In 1870 Dr. Duncan brought out an essay "On the Mortality of Childbed and Maternity Hospitals."

In 1870 Sir James Simpson died, and a contest took place for the vacant chair of midwifery in the University of Edinburgh.

Dr. Duncan, Dr. Keiller, and Dr. A. R. Simpson, were candidates, and the opinion of the profession was strongly in favor of Dr. Duncan, but Dr. Simpson was the successful candidate. This election caused a great deal of stir at the time, and there can be little doubt that Dr. Duncan's disappointment was intense; nevertheless he continued to work for seven years longer in Edinburgh with unabated energy.

The British Empire is controlled by a race whose instincts are essentially averse to extreme centralization; nevertheless British talent nearly always gravitates to London. Dr. Matthews Duncan was drawn to the metropolis through the fame of his reputation as a teacher, and also through his own inclination, for London was a new field for the indulgence of his favorite resource—the education of pupils. Dr. Greenhalgh retiring in 1877, Dr. Duncan was appointed in his stead Physician-Accoucheur and Lecturer on Midwifery to St. Bartholomew's Hospital, an institution with which is associated the largest medical school in London. The peculiar system which prevails alone in the British capital is open to certain objections, but it greatly favors voluntary enterprise and individual action. Dr. Duncan took full advantage of his liberty. Not only did he teach in the wards with great energy, but, holding that the regulation course of systematic lectures on midwifery was insufficient, he increased their number, delivering a lecture on every week day in the summer session. In winter he gave a clinical lecture once a fortnight—the foundation of his famous "Lectures on the Diseases of Women," a work which has passed through several editions. His discourses proved highly popular and drew large audiences, partly composed of qualified men. His pupils soon began to distinguish themselves before boards of examiners, but the still greater good which he effected by instilling high principles of professional morality into the minds of his disciples was incalculable. Of his attitude in respect to operative gynecology more will be said presently, as it needs special consideration.

During his residence in London, which lasted from September, 1877, till his death, Dr. Duncan's private practice became

large and fashionable. He attended H.R.H. the Duchess of Albany in her confinement. Notwithstanding his practice and his hospital duties, he found time to get through plenty of scientific work. He was an almost constant attendant at the meetings of the Obstetrical Society of London, of which he was president in 1881, and contributed yearly one or more memoirs. They mostly related to the physics of labour, and have appeared in abstract in this JOURNAL. Perhaps the most important were the exhaustive monographs on "Lupus of the Female Generative Organs." The author caused a fine series of water colors to be prepared, taken from life; they illustrated the appearances of several varieties of disease which he classed together as "lupus." These drawings were presented to the museum of the Royal College of Surgeons of England.

Dr. Matthews Duncan's health became greatly impaired during the early part of last spring. He suffered from gouty eczema and attacks of angina. He lectured on obstetrics as usual and with undiminished energy till the middle of June. Early in that month he spoke for the last time at the Obstetrical Society. At the end of June, however, he broke down completely and gave up all hospital work. A month later he went to Blankenberghe, a seaside resort in Belgium, where he enjoyed the company of Sir William Turner. His health improved and he bathed in the sea. Early in August he went on with his family to Baden-Baden. For long he believed that his symptoms were neurasthenic; but his father had died of heart disease, and now unmistakable signs of cardiac mischief set in. On August 17th, 18th, and 19th violent attacks of angina occurred, and edema of the lungs, albuminuria, and anasarca developed. Under the care of Dr. Gilbert, of Baden-Baden, and Dr. Aldren Turner he improved, the pulmonary and renal symptoms subsided after cupping, and it was decided to remove him to London on September 2nd. At 5 o'clock on September 1st, however, he died suddenly when lying in bed comfortably supported by pillows.

The funeral took place on September 8th. The first part of the ceremony was held at St. Mark's Church, North Audley Street,



London, near the residence of the deceased in Brook Street. The clergyman who officiated was the Rev. R. Borrodale Savory, rector of St. Bartholomew's the Greater, and son of the eminent surgeon. Notwithstanding the time of the year—for London doctors take their annual holiday about this season—the church was crowded with members of the profession, including Sir William Savroy, Sir Spencer Wells, Sir Crichton Browne, Dr. Quain, who represented the Queen, a large portion of Dr. Duncan's colleagues from St. Bartholomew's Hospital, and more than half the senior and junior obstetric physicians from the eleven medical schools in the British metropolis. There were besides a large number of old pupils, English, Scotch, and Irish, and many doctors unassociated in any way with the deceased. The interment took place at a cemetery at East Finchley, to the north of London. The day was warm and bright.

Dr. Matthews Duncan died just upon the eve of his retirement from his hospital and teaching appointment. The instruction of his class was to him not so much a labor of love as an intense pleasure, and he certainly did not look forward to retirement with enthusiasm. The loss which his family and the profession have sustained is indeed irreparable. To his wife and children he was devotedly attached, and all must sympathize with them in their bereavment, sustained at a time when they were looking forward to days which he might have spent more freely in their company than during the period of his arduous though congenial academic duties. The profession, too, will sorely grudge the loss of many spare hours which he assuredly would have utilized for their benefit. As the writer of these lines can testify, no member of the profession, particularly of that branch with which this JOURNAL is concerned, could fail to be the better for the amount of medical knowledge, medical lore, and medical ethics which flowed from Dr. Matthews Duncan's lips in the course of an hour or two spent in his company.

Dr. Matthews Duncan will best be remembered as a teacher in the widest sense of the word, an educator of unqualified youths, and an instructor of his profession. Many men on the staff of medical schools have, of their own accord, devoted much more

time to clinical teaching than was demanded by the regulations of the curriculum. Few, very few, however, have ever gone so far as Dr. Duncan, and of their own free will increased the number of systematic as well as clinical lectures required by the terms of their professorship. The natural result of his disinterested industry was the intense reverence with which his name was and is held by his pupils. None of us can fail to admire the energy with which he continued his self-imposed professional work and severe physical exhaustion due to failing health.

Science must, we believe, most commend Dr. Matthews Duncan as an obstetrician. His skill in the lying-in chamber was well known. He was second to none of his compeers in doing all that is possible to maintain obstetrics as a science and at the same time as a profession suited for men of culture, refinement, and education. He thoroughly investigated the physics of pregnancy and labor. His contributions to literature on the subject of the position of the fetus are amongst the best evidences of his correct method of research. He experimented on the normal fetus out of the uterus, placing it in fluids of the same specific gravity as the liquor amnii, and found that it floated in such fluids in the same position as it naturally assumed in the uterus. When the fetus became decomposed it floated in a different manner, just as, under the same circumstances, it tended to lie in a different position in the uterine cavity. Thus Dr. Duncan trusted to direct experiment, instead of beginning by an assumption that a vital force in the uterine walls or some mechanical arrangement in the bony pelvis forced the fetus into the right position, and then setting to work to prove the assumption.

Dr. Matthews Duncan held that the obstetrician should devote himself to the treatment of pregnancy, labor, and the puerperium, undertaking at the same time the management of diseases of non-pregnant women as far as therapeutic aid would avail. He distrusted the practice of abdominal sections by obstetricians. "Nobody can be a Sir Charles Locock and a Sir Spencer Wells at the same time," he would say; and he acted up to his convictions, although his most distinguished pupils have not all

followed his example. This matter leads to another subject—Dr. Duncan's powers and opinions as a gynecologist. Most assuredly the profession in general never held him to be so recognized an authority in diseases of women as in obstetrics. He was none the less one of the soundest of pathologists and the best of clinical observers. His saying above quoted will clear away a great deal of misunderstanding; being a practical obstetrician, his bent was toward obstetrics. He never attempted "major" gynecology. As to practical "minor" gynecology, he cannot be blamed for treating it with distrust when we bear in mind what the term implied in the days of his youth. We cannot be surprised if he occasionally overlooked what might be good when he had to deal with so much that was bad. It was inevitable that his training and surroundings must lead him to condemn operations which other good men practised on grounds which they deemed perfectly justifiable. This explains his aversion to trachelorrhaphy. Again, Dr. Duncan's peculiar views on gynecological ethics were the results of his instincts as a teacher. He considered that the student must first learn the nature of the parts with which he has to deal, and then acquire the art of detecting the diseases with which those parts are affected. This was his education, and when thus educated, and not till then, he could see an operation performed with profit; not till then was he competent to judge whether the operation was justifiable. Dr. Duncan strongly objected to a system which teaches the bare steps of major operations and justifies them on the score that a few experts can claim successful results. The student, however, is ever eager to see and hear of big surgery, and we all know the teacher must cool such pernicious ardor and show him that he has many things to learn before he can profitably study and practise operations. Dr. Duncan constantly acted as the good teacher in this respect. The consequence was that many of his remarks which were meant for the classroom were sometimes taken as unjustifiable criticisms on operators of high experience. His real views on ovariectomy and allied operations may be better judged by the admiration which he often expressed for the work of his friend Dr. Keith.

We must not harbor the impression that Dr. Matthews Duncan distrusted ovariectomists to the last because his system discouraged any ill-advised efforts to manufacture Wellses and Keiths. —*American Journal of Obstetrics.*

**A Case of Retro-Peritoneal Hemorrhage.** (By DR. JAMES MCLEOD, of Charlottetown.)—Mrs. —, aged 52, a woman of splendid physique and healthy appearance, consulted me on July 17th, 1890, for pain in the epigastrium, which had persisted for a day or two. Her previous health had been almost invariably good, and she declared that she had never felt better than for the last five or six months. Early in the same month she complained of pain in the region of the right ovary, but which was accompanied by no constitutional disturbance whatsoever. This pain, I may say in passing, disappeared upon the onset of the epigastric distress. On the morning of the 18th I found her suffering from great pain in the epigastrium, aggravated by toast and tea which she had taken for breakfast, but which she soon rejected. There was no constitutional disturbance; tongue clean, pulse and temperature normal, inspection and palpation giving a negative result. At noon I saw her again. Pain still increasing; no medicine or food taken, as she dreaded a return of the suffering caused by the ingestion of food in the morning. I ordered morphia, and to be repeated as required. I was soon again sent for and found her in extreme collapse, extremities cold, face ashen, pulse slow and feeble, and temperature subnormal; and so intolerable was the pain that the patient declared it would kill her if not relieved. With the application of hot bottles and the administration of morphia hypodermically, and brandy and beef peptonoid per rectum, the patient slowly rallied, and two hours later the countenance assumed its natural expression, the pulse rose to 60, full and regular, and she expressed herself as feeling comfortable. On the morning of the 19th I found the patient weaker, pulse 80, but she had been disturbed once or twice apparently from the rectal alimentation. She still absolutely refused all food and drink by the mouth. The lower part of abdomen was free from

any pain, palpation and deep pressure being well tolerated. Later on, finding no improvement, I proposed a consultation. At 3 P.M. held a consultation with Dr. Richard Johnson. The patient then complained of a bearing-down pain in rectum and uterus, and pain was elicited on pressure over lower part of abdomen also. Upon making a vaginal examination I found the uterus fixed and tender to the touch. The symptoms rapidly become more severe; vomiting set in, first bilious in character, then duodenal, then dark coffee-ground, the pulse meanwhile becoming more and more rapid and feeble. Death ensued at one o'clock on the morning of the 20th, immediately after the patient had vomited a large quantity of dark fluid blood. A hasty post-mortem two hours later revealed the following: Abdominal adipose tissue about two inches thick; omentum fully one inch thick; stomach, liver and spleen normal; no peritonitis. Upon raising stomach and liver the retro-peritoneum was found dark-red and remarkably bulging forward, but not perforated. One gland behind the stomach was found indurated, and felt and cut like scirrhus. Upon penetrating the retro-peritoneum, hemorrhage was found to have taken place in and around the pancreas and extending into the retro-peritoneal tissue down to the pelvis. The indurated gland, which was not, unfortunately, preserved, if cancerous, would appear to point to a primary cancer of the pancreas as the exciting cause of the profuse and fatal hemorrhage; but, on the other hand, the absence of a knotty, uneven swelling or of small tumors in the organ, and also the absence of any of the diagnostic symptoms of primary cancer as described in *Ziemssen* and the *Annual of the Universal Medical Sciences*, 1889, such as digestive troubles, cachexia, emaciation, progressive liver disease, vomiting, jaundice, dropsy, etc., would seem to exclude the hypothesis of cancer in this case. In the *British Medical Journal*, Sept. 1888, is recorded a case "the chief features of interest of which were the great accumulation of fat, etc.," "but here also the patient was anæmic and slightly jaundiced, etc." This present case would seem to be of a kind with the four cases reported by Klebs and Zenker, and described in *Ziemssen*, vol. viii, pp. 622, 623, all of whom were corpulent,

and Friedreich adds "that fatty degeneration of gland cells are always found along with general obesity—or, in other words, a hæmorrhagic pancreaticus, which, according to Shattuck (*Annual of the Universal Medical Sciences*, 1890), proves fatal in from two to four days.—*Maritime Medical News*.

**Palpable Kidneys**—KUTTNER (*Berl. Klin. Woch.*) has four papers on "palpable kidneys." He distinguishes four principal forms in which those organs are accessible to bi-manual palpation.

1. The kidney shows a clearly demonstrable respiratory mobility with unimportant amount of displacement.

2. Or it shows a dislocation of the first degree—that is, one-third, one-half or two-thirds of the organ can be felt; it is mostly mobile during the respiratory act, can be pushed out of place by the hands, and is dislocated more or less forward.

3. Or it shows a dislocation of the second degree; the kidney can be felt in all its extent, is easily pushed about, moves with respiration, lies near the anterior belly-wall, or can easily be brought thither.

4. Or the kidney is dislocated and fixed in its abnormal position.

Many of such dislocated and fixed kidneys are congenital and of slight clinical importance, but often this condition is acquired when a mobile dislocated kidney becomes fixed by the development of local inflammatory processes. To understand how one degree can be evolved from the other, it is requisite to have a clear view of the etiological moments which condition the origination of palpable kidneys. In the first line we have to take into account the factors which are in a position to loosen or destroy the connections of the kidneys, and so bring them into other than normal relations with the neighboring organs. A few authors suppose that the disappearance of the fat of the capsula adiposa renis is a likely cause. Experience agrees with this view; movable kidneys are frequently met with in the progress of diseases attended by a general loss of fat, as in phthisis, carcinoma, etc., or in acute diseases with high fever, as in typhoid,

malaria, etc. Should the fat of the adipose capsule disappear, and be replaced by a slack, wide-meshed connective tissue, the kidney loses its firm support and sinks downwards by reason of its weight. The tolerably equable pressure it formerly exercised on the peritoneum becomes one-sided and downward, the elastic peritoneum yields and stretches; a sort of renal mesentery is thus gradually formed, and allows the organ to make similar excursions to those we see normally in organs furnished with a lengthy mesentery. To complete this condition time is required. In proportion as the fat of the adipose capsule vanishes, and the kidney assumes a lower position, its respiratory excursions increase in extent and become more and more accessible to the palpating fingers. While the kidneys sink downward, they recede gradually from the direct influence of the diaphragmatic contractions, and on the right side become affected by the respiratory depression of the liver, which still further continues the dislocation downward. Perhaps this is one reason why right-sided movable kidneys occurs most frequently. As Cruveilhier has pointed out, tight-lacing is also a powerful factor in the production of floating kidneys.

Of not so much importance, in the author's opinion, are frequent pregnancies, abortions, pendulous abdomen, and the supposed causation of hyperæmic swelling of the kidneys occasioned by menstruation (as a consequence of the connections between the plexus ovaricus and plexus renalis) as has been asserted by several authors. Occupation, the doing of hard work or none at all, does not seem to have any influence on the production of movable kidney. Traumatism, such as falls, blows, gymnastic exercises, etc., have also been credited with bringing about this condition. Probably the mobile kidney was present before the accident which was supposed to originate it had happened. All that has been advanced as casual does not explain the floating kidneys of children and young girls. All the causes cited can only be "opportunity causes" which lead up to movable kidneys or make movable ones more mobile only in a certain predisposition, but of themselves are not able to remove a kidney from its normal place permanently or temporarily, and give to it a cer-

tain amount of mobility. The frequency of this condition, which was once considered an anatomical curiosity, is much greater among women than men. Out of 667 cases tabulated from various authors, 584 occurred in females and 83 in males. It may happen at any age, the greatest number of cases happening from thirty to forty years. It occurs oftenest on the right side; out of 727 cases, 553 were right, 81 left-sided, and in 93 both organs were affected.

If the causes of *rena mobilis* are obscure, so also the complex of symptoms occasioned by it are uncertain and doubtful. Sometimes no inconvenience is felt; at others pains of a dragging, pinching and boring character are complained of, limited to the affected side or radiating to the other, or to the loins, and between the shoulder blades; they are paroxysmal, brought on by slight exertions, or may take on the form of neuralgia, especially sciatic and intercostal. The annoyances increase during menstruation. Many patients are highly nervous, hysterical, and hypochondriac. The urine is sometimes albuminous and (rarely) bloody. Disturbances of digestion are more frequent; but it is doubtful whether the relation is casual or mere coincidence. Constipation may be caused by the mechanical pressure of the displaced kidney. The occurrence of icterus is explicable by mechanical functional disturbances of the gall-bladder, but the author has never seen this complication in any of his cases.

Patients with movable kidney are subject to sudden attacks of abdominal pain, feeling of anguish, vertigo, vomiting and fever. The cause of this has by some been attributed to strangulation of the kidney in the surrounding connective tissue and peritoneum, giving rise to a more or less circumscribed peritonitis; others blame torsion of the renal vessels, especially the veins, and consequent acute congestion; others attribute it to intermittent hydronephrosis. Slighter urinary disturbances are relatively frequent, colicky pains during micturition, frequent desire to urinate, and slight polyuria; these are generally unimportant and transient. As authors differ about the etiology and symptomatology of this disorder, so they deviate from each other as to its cure. Some see the only possible cure of *rena mobilis* in



its extirpation, some in nephrorrhaphy, and others object to all operative interference. The author would limit himself to nephrorrhaphy in the very worst cases threatening life and destroying all comfort. Properly constructed bandages are useful, and most in cases accompanied by pendulous abdomen. The author describes one he has found useful. Narcotics and narcotic salves, poultices, and so on, may be needed for the pains, and the stomach disturbances must be treated specially.—*Edin. Medical Journal.*

### **Koch on Treatment of Tuberculosis.—**

In concluding his address on bacteriological research before the tenth International Medical Congress, Dr. Robert Koch said :—  
“ I am convinced that bacteriology will one day be of the greatest importance from the therapeutical point of view also. It is true, I look for relatively smaller therapeutical results in the case of diseases with a short incubation period and a rapid course. In these diseases, as, for example, in cholera, the chief reliance will always have to be placed on prophylaxis. I am thinking more of diseases of less rapid course, as these offer more points of attack to therapeutical enterprise. And there is scarcely a disease which, partly on this ground, partly on account of its far surpassing all other infectious diseases in importance, so challenges bacteriological investigations as tuberculosis. Moved by these considerations, very soon after the discovery of the tubercle bacilli, I set about seeking for substances which could be used therapeutically against tuberculosis, and I have pursued this search, which has, of course, been often interrupted by my other occupations, perseveringly up to the present. In the belief that there must be a remedy for tuberculosis I do not by any means stand alone. Billroth has in one of his last writings expressed himself with all possible distinctness to the same effect, and it is well known that the same object is aimed at by many investigators. It seems to me, however, that the latter have not as a rule followed the right way in their investigations, inasmuch as they have begun their experiments on man. To that I ascribe the fact that everything which people have believed themselves

to have discovered in that way—from benzoate of soda down to hot-air treatment—has proved to be a delusion. Experiments must in the first place be made not on man, but on the parasites themselves in their pure cultures; even if substances have been found which have the power to check the development of tubercle bacilli in the cultures, man should not forthwith be chosen as the subject of experiment. But the question whether observations which have been made in a test-tube hold good also in living animal bodies should first be settled in animals. Only if the experiments on animals have proved successful should the method be tried on man. Proceeding according to these rules, I have in the course of time tested a very large number of substances to see what influence they would exert on the tubercle bacilli cultivated in pure cultures, with the result that not a few substances have the power, even in very small doses, of hindering the growth of tubercle bacilli. More than this, of course, a remedy cannot do. It is not necessary, as has often been erroneously assumed, that the bacteria should be killed in the body; in order to make them harmless to the body it is sufficient to prevent their growth, their multiplication. I have proved the following substances to be remedies which hinder such growth even in very small doses (to mention only the most important). A number of ethereal oils; among the aromatic compounds, naphthylamin, paratoluidin, xylidin; some of the so-called tar-dyes, namely, fuchsin, gentian violet, methyl blue, chinolin yellow, aniline yellow, auramin; among the metals, mercury in the form of vapor, silver and gold compounds. The compounds of cyanogen were especially conspicuous, their effect surpassing that of all other substances; even in a dilution of one to two millions they checked the growth of tubercle bacilli. All these substances, however, remained absolutely without effect if tried on tuberculosis animals. In spite of this failure I have not allowed myself to be discouraged from prosecuting the search for growth-hindering remedies, and I have at last hit upon a substance which has the power of preventing the growth of tubercle bacilli, not only in a test-tube, but in the body of an animal. All experiments in tuberculosis are, as every one who has had experience of them

has sufficiently discovered, of very long duration ; my researches on this substance therefore, although they have already occupied me for nearly a year, are not yet completed, and I can only say this much about them, that guinea-pigs, which, as is well known, are extraordinarily susceptible to tuberculosis, if exposed to the influence of this substance, cease to react to the inoculation of tuberculosis virus, and that in guinea-pigs suffering from general tuberculosis even to a high degree, the morbid process can be brought completely to a stand-still without the body being in any way injuriously affected. From these researches I, in the meantime, do not draw any further conclusions than that the possibility of rendering pathogenic bacteria in the living body harmless without injury to the latter, which has hitherto been justly doubted, has been thereby established. Should, however, the hopes based on these researches be fulfilled in the future, and should we succeed in the case of this bacterial infectious disease, in making ourselves masters of the microscopic, but hitherto victorious, enemy in the human body, then it will soon also be possible, I have no doubt, to obtain the same result in the case of other diseases. This opens up an oft-promised field of work, with problems which are worthy to be the subject of an international competition of the noblest kind. To give even now some encouragement to further researches in this direction was the sole and only reason why I, departing from my usual custom, have made a communication on a research which is not yet completed. Allow me, therefore, to conclude this address with the expression of a wish that the nations may measure their strength on this field of labor, and in war against the smallest, but the most deadly foes of the human race, and that in this struggle for the weal of all mankind one nation may always strive to surpass the other in the successes which it achieves.—*Philadelphia Med. and Surg. Reporter.*

**Osteogenesis.**—Prof. Ollier read a paper on the above subject at the late International Congress (*Jour. Am. Med. Ass.*) He began by considering the growth of bone in general, and gave a full account of his researches into these questions, in which,

by a series of experiments performed on animals, as well as in consequence of the numerous operations which he had performed on man, he had been led to the following conclusions: New bone could in reality be formed from the periosteum alone, and only under certain well known conditions. It was perfectly hopeless to expect any complete and permanent growth of bone to take place unless the periosteum surrounded it. It was, indeed, true that if the parts were aseptic for a time, the new bone, or implanted bone, as the case might be, seemed to grow, but this was only for a time. Within six months necrosis took place, and the dead bone, if loose, was thrown off, or might remain encysted in some instances, and, if it did no harm, was certainly of no advantage to its possessor. This was a fact which had been known for many years, and there was, he believed, notwithstanding what had been said to the contrary, no exception to it. If a more minute examination were made of the implanted bone, it would be seen that the changes which took place in it were as follows. It was penetrated by blood-vessels from the surrounding bones and tissues, but these vessels played no part in its nutrition, but served only to further its absorption. Perhaps no more striking evidence of the value of the periosteum could be given than the following. On one of his patients, a young woman, he had operated three times, resecting her elbow-joint on each occasion, but the periosteum had been retained, and on each occasion she made an excellent recovery. Practically there were three kinds of plans which might be employed, which might be styled (1) autoplasmic, in which the same bone was used to repair some deficiency in itself, and the bone was only partially severed from its connections—as, for example, where a piece of bone was turned down from the forehead to make a new nose; (2) the second of these plans was well described as homoplasmic—that is, when the graft is taken from the same individual, but not from the same bone; (3) the third, or heteroplasmic, plan is applied to those cases in which a bone of some other individual or animal is made use of. The first and second plans were all but useless, and the third quite so—that is to say, the implanted bone could not ever grow. With regard to the question of excisions, it was, of course,

a case for either movement or ankylosis. He had nothing to say, except that in the lower limb we must always have ankylosis, and in the upper movement, though an exception might, perhaps, be made in the case of the wrist, where a fixed or partially fixed joint would be more useful to the patient than a movable one.—*St. Louis Med. and Surg. Journal.*

### **Antisepsis and Asepsis in Surgery.**—

At the recent meeting of the French Association for the Advancement of Sciences (session of Limoges, Aug. 13th), Terrier of Paris read a communication on "Antisepsis and Asepsis in Surgery." Like Lister, he has abandoned the spray, or if he uses it at all, it is before abdominal operations, when he "pulverizes" a certain quantity of water in the operating room to facilitate the disappearance of the particles of dust contained in the air. As antiseptic, he employs exclusively the bichloride of mercury, a 1-1000 or 1-2000 solution. With these solutions he washes the part that is to be the seat of the operation; his own hands and those of his assistants, after having previously been scrubbed in hot soapsuds and the nails scraped, were washed in the same solutions. The sponges are boiled and otherwise rendered aseptic. For ligatures, he employs only pressed silk, boiled before each operation in a 1-1000 bichloride solution. All the instruments, except the bistouries, are sterilized by dry heat, the dry stove of Poupinel being employed for this purpose; in this apparatus the instruments are kept without injury for 15 to 30 minutes at a temperature of 160°-180.6°C. As for the cutting instruments, they are first soaked and washed in chloroform, then boiled in sterilized water. The compresses which serve to protect the parts surrounding the field of operation, to cover coils of intestines, etc., are sterilized in the autoclave at a temperature of 120°C., according to the directions of Pasteur; before being used, if found too hot, they may be dipped into tepid water which has been boiled, and thus sterilized. Terrier says that by means of these precautions he has performed a great number of grave operations (ablation of abdominal tumors, cholecystotomies, gastrotomies, etc.) with no untoward result.

As for the dressings which he uses, they are extremely simple. He employs exclusively sterilized wadding—not antiseptic, but prepared by heating in the dry stove, according to the method of Quenu.—*Coll. and Clin. Record.*

**Surgery of the Lateral Ventricles of the Brain.**—In a paper read before the recent International Medical Congress on this subject by Prof. W. W. Keen of Philadelphia, the following conclusions were arrived at:—

1. Injuries involving the ventricles, the result of compound fracture or of trephining, and involving great disturbance of the cerebral substance, are not necessarily fatal, for 10 of the 26 cases reported have recovered. In these few cases compound fractures and extensive injuries, unless primarily fatal, seem to be less dangerous than rupture of the ventricle from simple fracture. They should be treated antiseptically by drainage and the usual treatment of wounds in other regions. If pus follows, or if the cerebro-spinal fluid becomes dammed back, causing symptoms of pressure, incision and free drainage should be resorted to.

2. In cases of simple fracture involving the ventricles, experience would seem to indicate that it would be wise not to attempt any operative procedure unless threatening symptoms intervene. If necessary to interfere, the cyst containing cerebro-spinal fluid should be continuously and slowly drained by a small bundle of horse-hairs, rather than by free evacuation. In the majority of cases constant pressure and but little active treatment may be all that is necessary.

3. Abscess of the brain burrowing into the lateral ventricle has been thus far uniformly fatal, and demands the promptest treatment possible. The suggestion made for immediate bilateral trephining and irrigation of the ventricles can at least do no harm, although the possibility of its doing good is but slight in so serious a condition.

4. Hydrocephalus, whether acute or chronic, is usually a fatal disease. Surgical procedures for tapping the ventricles for its relief are easy, and certainly do not, per se, involve great danger. Whether they will cure the disease is, as yet, not determined.

5. In acute effusions, tapping, with or without drainage, as may be thought best, will certainly save some lives otherwise doomed to be lost; and, in the chronic form, long-continued slow drainage at an early period is at least worthy of a trial, with a reasonable hope of success in a few cases.

6. The methods here described for performing the operation, especially by the lateral route, are at least worthy of a trial, with a view to determine the value of such surgical procedures.

7. After trephining and tapping the ventricles, irrigation of the ventricular cavities from side to side is not only possible, but it does no harm. In abscess involving the ventricle, and possibly in other conditions, it may possibly do good. The fluid used for such irrigation should not contain anything which, if retained and absorbed, might do harm. An artificial cerebro-spinal fluid or a simple boric acid solution would seem to be the best for such use.

8. Convulsions, due to too rapid withdrawal of the cerebro-spinal fluid, may be checked by injecting an artificial cerebro-spinal fluid, or such other innocuous fluid that is available.

9. In either irrigating or injecting the ventricles, it is probably desirable that the air should not enter, but such entrance of air does not seem to be productive of mischief.

10. In hemorrhage into the lateral ventricle, at least of traumatic origin, immediate trephining and evacuation of the clots should be done, which in a few cases will probably be followed by a cure, unless the injury of the cerebral tissue is so great as to be incompatible with life.

**Operative Treatment of Carcinoma of the Rectum.**—(By CHRISTIAN FENGER, M.D.)—As to the part of a discussion of the subject of malignant disease of the rectum, I shall first say that the results of palliative and operative treatment cannot very well be compared, because each one serves its own limited field of usefulness. The palliative operations will be used where total extirpation of the carcinomatous tissue is either impossible or too dangerous to the life of the patient. Total extirpation should be resorted to whenever there

is a possibility of removing all of the diseased tissue without taking the life of the patient. We will first discuss the palliative operations, which all have the intention of doing away with symptoms of stenosis.

1. Linear rectotomy, as devised by Nélaton, and extensively practised, especially in France, by Verneuil, Trolat and others, consists in division of the posterior wall of the rectum for carcinoma in the median line backwards to the coccyx, and is done with either the knife or the cauterly, the cauterly giving more security against hemorrhage and sepsis. The effect of the operation is often a very beneficial one, in reducing the frequent, painful passages to few and painless ones. As to its dangers, Verneuil estimates the mortality from the operation at about five per cent., and he states that the suffering from incontinence is small. This operation can only be made use of in low carcinomas, where the finger can reach the upper border of the tumor, and the peritoneal cavity is in no danger of being opened. It should be limited to cases where the wall of the bladder, the prostate gland, the uterus or the fornix of the vagina have been invaded by carcinoma, making total extirpation inadvisable. In regard to this matter, Esmarch states that in the majority of the cases of carcinoma low down, total extirpation is not only possible, but easy, and consequently ought to be preferred.

2. Opening into the rectum from the ischio-rectal fossa above the carcinoma, as devised by Marshall, is practically making a posterior artificial anus above the carcinoma. Spontaneous fistulous openings in this place had taught Marshall that relief from stenosis symptoms took place. This operation, however, has never been resorted to to any extent.

3. Curetting of the carcinoma with the sharp spoon and cauterization of the scraped surface with Paquelin's cauterly is another method. The curetting was devised by Simon and the cauterization of the curetted surface by Küster, who has practised this method of late extensively. He advocates the method very strongly, saying that it affords great relief in inoperable cases. Of from twenty-five to thirty patients, only two died from peritonitis, and Küster estimates the mortality from the



operation at about 8 per cent. Many of his patients lived more than a year, and in a comfortable position. Küster has for years never performed colotomy in low carcinomas. The operation just described is applicable only to tumors low down in the rectum, because in the carcinomas above the line of the peritoneum surgeons always run the risk of opening into the peritoneal cavity. Esmarch has seen cicatrization of a large carcinoma take place after this operation, but still calls attention to the dangers of hemorrhage and collapse following this method.

4. Lumbar colotomy, as devised by Amussat and Callisen, has been extensively practised by English surgeons, but is now rapidly losing ground and being replaced by the more modern modifications of inguinal colotomy. The mortality from the old statistics was high, between 30 and 40 per cent. This mortality has decreased considerably of late, so as to enable Crippa to report fourteen cases without a death. There are certain objections to the method, sufficient to prevent its future use. Prominent among those objections is the difficulty of finding the colon and opening into it at a place not covered by the peritoneum. The descending colon frequently has a mesentery, and it often necessitates great distension to find sufficient space to open into the bowel without opening the peritoneal cavity. The wound is always a deep one, and the artificial anus is in an inconvenient place for cleaning away the fæces, except in patients who are unable to get out of bed. It is impossible to prevent part of the fæcal matter from passing down to the carcinoma and causing the usual irritative effect on the ulcerated surface; and, consequently, it does not relieve the pain and tenesmus. The advocates of the operation, such as Henry Morris, claim for lumbar colotomy a wider application, as, for instance, in carcinoma of the sigmoid flexure or lower portion of the descending colon, where inguinal colotomy would give no relief. Knies' modification of inguinal colotomy is practicable on the transverse colon as well as on the cæcum and ascending colon, thus making this claim of advantage somewhat doubtful.

5. Inguinal colotomy, as devised by Littré, or laparo-colotomy, is rapidly gaining favor. The mortality of the operation was in

early times (Batt and Van Frkelen) even higher than in lumbar colotomy, being from 46 to 53 per cent. This was the consequence of opening into the peritoneal cavity without antiseptic precautions. The introduction of antiseptic methods here, as in all other intra-abdominal operations, reduced the mortality to the neighborhood of 5 per cent. König reports twenty cases with only one death from peritonitis; Cripps twenty six cases with only one death.

The attempts to perfect inguinal colotomy had in view, besides guarding against infection of the peritoneal cavity, to effect complete evacuation of the fæces in the place of the artificial anus, so as to prevent any fæcal matter from passing down into the carcinoma, thus preventing irritation and painful tenesmus, and, furthermore, to facilitate the washing out of the carcinomatous bowel from above. Closure of the lower bowel, as devised by Madelung, was thus abandoned, and Knies' method, as modified by Maydl, is the one now-a-days, mostly adapted to fulfill all the indications. When it can be performed in two stages it must be considered almost without danger from peritonitis, and its advantages, as stated by König, are the following: The operation is done openly, mostly outside of the peritoneal cavity, no fæcal matter can pass over the carcinoma, and this can be easily irrigated and kept clean.

6. The radical operation—that is, the total extirpation of carcinoma—should always be done when it is possible to remove all of the diseased tissue without too great danger to the life of the patient. It is the only hope of a radical cure, and a number of permanent recoveries are on record. In the earliest period only low carcinomas were operated upon, as the dangers to life became almost insurmountable the higher up the carcinoma was located. Modern modifications, especially the sacral method of Kraske, has greatly reduced the dangers for the high carcinomas. The removal of part of the sacrum or its osteoplastic—that is, temporary—resection, as devised by Hocheuegg, gives ample space for the removal of carcinomas even above the rectum and in the lower portion of the sigmoid flexure. Nevertheless it cannot be disputed that a considerable amount of preliminary operating in

the high or sacral operation causes additional danger from hemorrhage, collapse and peritonitis in patients already reduced in vitality by the disease. If we want to consider the danger of the radical operation for carcinomas from a statistical point of view, we meet with a difficulty yet in the literature that the authors did not distinguish sharply enough between high and low operations.

In comparing the low and high operations, we find that the enormous mortality before Volkmann's time of over 70 per cent. has come down to 36 per cent. By comparing statistics from the literature in 1887, I have collected 272 cases, with a mortality of 22 per cent. In the hands of other operators, however, after that time the mortality has been lowered considerably. Thus König gives us a mortality of his operations, for the last six years, of 16 per cent., and von Bergmann gives us a series of forty-six operations with only three or four deaths; Cripps' thirty operations with two deaths; Hochenegg twelve operations (from Albert's clinic) with no deaths; Hardenheuer thirteen cases with two deaths. It may be reasonable to conclude that the mortality of to-day, with proper selection of cases, may be estimated at between 10 and 15 per cent.

As to the number of radical cures, it is impossible from the literature to give an estimate, but I should expect a radical cure in about 10 per cent. of the patients that survived the operation.

As to the functional disturbance, comparatively little is known, from the fact that little mention is made of the patient's condition in after years. König takes a rather gloomy view of the condition of those patients, and states that the functional results after the high operation are better than those after the low operation. Of twenty-one patients, he considers fifteen in an unsatisfactory state; always unclean except when constipated; and only six had tolerably good power of retaining the fæces. Von Bergmann takes a brighter view of the condition of such patients, and so do most other authorities; so much so that the functional condition of the patient is not permitted to interfere with the choice of operation between palliative and radical when there is a possibility of saving the life of the patient with the latter method.—*Med. and Surg. Reporter.*

**On the Nature and Treatment of Eczema.**—UNNA writes on the above subject in the *British Journal of Dermatology* for August, 1890, and makes a strong plea for the specific nature of the disease. He believes that the true and essential cause is the inoculation of a germ, probably of vegetable nature. The germ, however, proliferates in the epidermis and its appendages, only when the soil is suitable for its growth. The various predisposing and exciting causes which have previously been regarded as the sole causative factors must now be regarded only as preparing the nutrient basis for the reception and proliferation of the germ. The congenital nature of the skin (heredity), supervening diseases, especially those which alter the skin secretions (rheumatism, gout), changes in the skin tissue such as take place at the various periods of life (dentition, menstruation, climacteric), and other intercurrent diseases of the skin (acute exanthemata)—can be all considered as predisposing causes, or, better, as pre-existing improvements of the nutrient base. External warmth and moisture, simple inflammations and stases, as well as all external irritants, may be described as exciting causes, or better, as accidental improvements of the nutrient base. The parasitic theory, then, instead of denying all the previous observations which have been made on the ætiology of eczema, requires them as essential auxiliary causes. In defining eczema, Unna modifies slightly the definition of Erasmus Wilson, and calls it “a chronic parasitic catarrh of the skin, with desquamation, itching, and the disposition to respond to irritation by exudation and well-marked inflammation.” The author concludes his interesting article as follows:

1. The treatment of chronic eczema may be considered with advantage under two heads: (a) By the use of antiparasitic measures the germ itself is attacked. This is the direct treatment. (b) On the other hand, by it the epidermis, which is the nutrient soil, becomes less suitable for the growth of the specific germ. This is the indirect treatment.

2. The radical treatment of eczema aims at the destruction of every single germ in the depths of the epidermis.

A disappearance of the eczema efflorescence is by no means

equivalent to a thorough cure of the disease, which is, however, always attained by the prolonged and continuous use of specific measures.

3. There are various chronic eczemas, which may be distinguished with certainty by their clinical symptoms and course. They do not by any means always pass through the so-called "stages" of eczema, of which we hear so much, but each form has its own type, its own variations, and of course its own specific treatment. As examples I may quote the eczema of scabies, the seborrhoic eczema, follicular eczema, and papular eczema.

4. As the therapeutics of these ætiologically different eczemas is not the same, I will limit myself to special suggestions for that variety which is the most common—viz., the seborrhoic eczema. This begins as a desquamative erythema, similar to pityriasis, and continues as such, or develops either into an oozing eczema or into squamous or crusted psoriasis-like eruptions. When it becomes vesicular it is chiefly from the effect of external irritation.

For the treatment of this eczema we possess as specifics strong alkalies, several metallic oxides, and the reducing group of medicinal agents. In this series of specific remedies the most worthy of mention are caustic potash, zinc oxide, lead oxide, mercuric oxide, sulphur, resorcin, pyrogallol, chrysarobin, and the various kinds of tars.

5. The choice of the remedy and its form of application are determined in seborrhoic eczema, as in all forms of eczema, by the degree of inflammation which is present.

When the inflammation and oozing are pronounced, the milder specifics are indicated, such as zinc oxide, lead oxide, sulphur, resorcin, in the form of powders, lotions, pastes, and glycerin gelatines. When the inflammation is less and the dryness greater, the stronger specifics, such as chrysarobin, pyrogallol, tar, and mercuric oxide, are indicated, especially in the form of salves, salve mulls, plaster mulls, and waterproof dressings.

6. It may be taken as a general rule that among the remedies and modes of application those must be selected for each case which will produce the most powerful effect on the specific germ (direct or indirect) without exciting an artificial inflammation.

A really "irritating" treatment is not necessary, even in the case of the oldest and driest eczemas ; if only provision is made for thinning down the horny layer (an ordinary sequence), the specific agents will have the desired effect without any irritation whatever. Indeed, an irritating mode of treatment of eczema is only justified on principle when it is used as a test to spots which are apparently healed, in order to recognize the presence of any surviving germs which they may still contain. The alternation of anti-eczematous and provocative treatment corresponds to Tyndall's interrupted sterilization.

7. The only internal remedy which exercises any specific though limited influence on seborrhoeic eczema, and especially on its drier forms, is arsenic. All other forms of treatment of the general organism, and of other organs which have a direct association with the skin (such as the bowels, uterus, kidneys), all dietetic cures, all baths (except sublimate baths), may be considered only in so far as they may possibly assist the local treatment of the skin in an indirect way.

8. In the search for new specifics against the various forms of eczema their harmlessness for the general organism must be taken into consideration, and with regard to the reducing medicinal agents in particular it-must be noted whether there is an absence of irritating properties in their oxidation products.—*Journal of Cutaneous and Genito-Urinary Diseases.*

**On the Diagnosis of Pityriasis Versicolor from Syphilitic Eruptions.**—“ Few errors are more common in reference to syphilitic eruptions than to mistake common chloasma for such. It is so definitely copper-tinted, that when it occurs to a person who has formerly had syphilis, an erroneous diagnosis may easily be made both by the patient himself and his adviser. A little care is, however, all that is needed, and such an error, if the case be well characterized, can never happen to one well accustomed to skin diseases. There are, however, certain very rare forms of cryptogamic (?) eruptions on the skin which may puzzle even the most experienced. In most of these the microscope is an easy and conclusive

means of clearing up doubt. Not, however, always. I am familiar with cases that present patches which look exactly like ringworm of the naked skin, and which occur without symmetry and apparently multiply from a single parent, just as ringworm does, and which yet never show any fungus. These cases usually happen to be those who have had syphilis, and the difficulty always is to say whether the eruption is or is not specific. The patches are, I think, usually cured by local applications of mercury, whether in lotion or ointment."—*Mr. Jonathan Hutchinson in Archives of Surgery*, April 1890.

**Early Maternity.**—Dr. Barton Cooke Hirst, Professor of Obstetrics in the University of Pennsylvania, contributes a short article to the August number of the *University Medical Magazine* which goes far to show that, from the point of view of the mother's health, precocious maternity does not involve the evils that are usually ascribed to it. He gives brief notes of the cases of twenty girls who were delivered at ages varying from 14 to 16 years in the Maternity Hospital, four of them under his own observation. In each of the four cases under his own care the labor was easy and uncomplicated, the infant was well developed, and the mother's supply of milk was ample; and he infers from the absence of any record to the contrary that the sixteen others were normal also.—*N. Y. Med. Journal*.

**Syphilis Hereditaria Tarda.**—Heinrich Neu understands by *syphilis hereditaria tarda* all syphilitic phenomena which have their origin in hereditary infection and appear at a more or less advanced age. He, however, does not deny the possibility that in single cases hereditary syphilis may remain latent for a long time, perhaps until puberty, and only then present severe specific phenomena. As a proof that in such cases heredity, and not syphilis which has been acquired during the first few years of life, was in question, the author considers the grave and general disturbances of nutrition and development which present themselves in such patients, and which are never offered to such a degree by acquired syphilis. The grayish-

white color of their complexion and their earth-colored, leather-like skin he also considers a proof of hereditary syphilis. In regard to the diseases of the bones, the frequently observed solution of continuity between diaphysis and epiphysis (so-called pseudo-paralysis), as well as the equal thickening of the anterior border of both tibiæ and the increased transverse diameter of the skull, are to be regarded as characteristic of hereditary syphilis. On the other hand, neither the affections of the joints nor those of the skin or mucous membranes offer anything which could be differentiated from acquired syphilis. Again, the three abnormalities set forth by Hutchinson—*i.e.*, certain diseases of the eye, ear and teeth—are pathognomonic of hereditary syphilis. As regards the eye, keratitis interstitialis profunda is nearly always the result of hereditary syphilis. Disturbances of hearing may be caused indirectly by suppurative processes in the naso-pharynx and Eustachian tubes, or directly by a purulent otitis media, and finally they may also consist in a suddenly appearing deafness without any prodromal phenomena. The development of the teeth is inhibited and their structure changed. At the end of his work the author quotes seven cases of grave tertiary syphilitic affections occurring in middle-aged persons, the histories of which do not mention any specific manifestations shortly after birth or during the first years of life; that in these cases syphilis was in question was proved, besides the objective signs, by the successful therapy: that it was hereditary syphilis was evidenced by the presence of the above-described anomalies in the development of the whole body, as well as in that of certain separate organs.—*Jour. Cut. and Genito-Urin. Diseases.*

**Lactation in a Male.**—Dr. W. M. Donald reports the following case in the *Medical Age*, which we reproduce on account of the comparative infrequency of such cases: J. V., French Canadian, male, aged 21, married, was brought to Dr. Donald by some friends, more as a curiosity than for treatment, they stating "he gave milk like a woman." On examination he found a well-developed and robust man, with mammæ of normal size, and nothing to indicate any uncommon power. But



on pressure of either breast there was a flow of rich-looking milk, which could be squirted several feet away from the body. He has been aware of this remarkable power for about two years, discovering it as follows: One day when rubbing himself about the chest he found a few drops of milk on the nipples, which, exciting his curiosity, caused him to press upon them, with the result of producing quite a flow. Since then he has often exhibited this power for the curiosity of friends, and finds the milk secreted very readily. Though married two years, he is childless, though his sexual power is good.—*St. Louis Medical and Surgical Journal*.

**The Pathology and Operative Treatment of Goitre.**—DR. BERRY (*Birmingham Medical Review*, June, 1890) divides innocent forms of goitre into two classes—those in which the whole gland is more or less uniformly enlarged, and those in which the enlargement is due to the development of one or more definite cysts, or solid tumors, generally in one lobe only of the gland. The former is usually met with in young people, and may be regarded as the first stage in the development of nearly all goitres. The goitre consists in some cases of a mere hypertrophy of all parts of the gland, but in most the enlargement is due chiefly to increase in the amount of colloid material in the thyroid vesicles. Each vesicle, instead of containing a small amount of colloid material, as in the normal gland, is much dilated and contains a greatly increased amount of secretion. In fact, it would be correct in most cases to look upon the enlargement as being due to a hypersecretion of colloid material into all the vesicles of the gland. There is also some increase in the connective tissue and glandular elements. That this hypersecretion is brought about, in the great majority of cases, by some material introduced into the body by means of drinking water, admits of but very little doubt. This form of goitre rarely produces any very serious symptoms, although sometimes these arise from pressure upon the trachea, recurrent laryngeal nerves, and other structures in the neck. Death may result from pressure upon the trachea.

As a rule, goitres involving the whole of the gland compress the trachea in such a manner as to cause lateral rather than antero-posterior flattening. The operative measures for the cure of parenchymatous goitre, excluding injections, the use of setons and ligature of the thyroid arteries, which the author regards as worthy of discussion, are the following :

1. Division of the isthmus with or without removal of a portion of it.

2. Resection as recently introduced by Mikulicz of Cracow, which consists in removing all the goitre except a small piece on each side of the trachea.

3. Extirpation of one-half or more of the gland.

Division of the thyroid isthmus was first performed in this country by Mr. Holthouse, at the Westminster Hospital, in 1874; but for some years it attracted little or no attention until revived by Mr. Sydney Jones, of St. Thomas' Hospital, in 1883, since which it has been extensively practiced. Mr. Jones pointed out that the operation not only gave relief to the dyspnoea, but caused a remarkable diminution in the size of the goitre by inducing atrophy of the lateral lobes. Dr. Berry does not endorse the view that the relief to the dyspnoea is due to the mere mechanical separation of the two halves of the gland, but to the shrinking of the lobes which follows the operation, consequent on the oozing away of the viscid colloid secretion contained in the vesicles of the gland. He has noticed that division of the thyroid isthmus in truly fibrous goitre gives little or no relief to dyspnoea, and is not followed by diminution in the size of the growth as in the more common colloid variety. The relief afforded by the division of the isthmus in the colloid variety may be permanent, but frequently the goitre reappears when the wound has healed and the secretion is again pent up in the gland. In many cases where very urgent dyspnoea is present a mere division of the isthmus will not afford relief sufficiently quickly. It is then necessary to do some further operation, either tracheotomy or the removal of a considerable portion of the goitre, the latter being the more advisable.

Resection, as performed by the Polish surgeon, Mikulicz, is

particularly suited to parenchymatous goitre. He performs the operation in the following manner. He first isolates one lobe of the goitre in the ordinary way, as if he were about to remove it, but takes care to leave untouched the connections on the inner side where it is in contact with the larynx, trachea and recurrent laryngeal nerve, and where the inferior thyroid artery enters. In this region a good-sized piece of gland—enough to carry on the functions of the organ—is left intact, all the rest of the lobe being cut away. The same proceeding is then executed, if necessary, on the other side of the neck. In this operation the dangerous region above mentioned is not interfered with, consequently there is no fear of injuring the recurrent nerves. The goitre is almost completely removed, but the small portions left behind obviate any danger of the supervention of cachexia strumipriva (so-called artificial myxœdema). Twenty-three cases of this operation are reported in Langenbeck's *Archives* for 1888. In twenty the wound healed by first intention; in two suppuration occurred, which delayed the healing process; and one patient died from recurrent hemorrhage, the ligature having slipped from the superior thyroid artery.

The remaining operation which may be performed in bilateral parenchymatous goitre, viz., removal of one lobe of the gland, is more easily performed than any operation by which large portions of both lobes are removed. It has the disadvantage, however, that the opposite lobe almost always undergoes some degree of subsequent hypertrophy, causing displacement of the larynx and trachea.

The second class, which may be termed unilateral goitres, never consist of simply hypertrophied gland tissue. The enlargement is due in all cases to the development in the gland of one or more distinct tumors, either cystic or adenomatous growths of some kind. They less often cause death by suffocation than do bilateral parenchymatous goitres. Still they are frequently a source of considerable inconvenience, and even of some danger, to the patient. Hence at times they call for removal, and this may be performed with very little danger. There are two methods of operating—enucleation and extirpa-

tion. The former consists of removal of the tumor alone from the interior of the gland, everything else being left behind, and is applicable only to those cases in which the goitre forms a well defined tumor embedded in the gland. The latter consists in removing the whole of the affected lobe of the gland. The author gave details of cases in which he had operated for unilateral goitre by enucleation, and also one case of extirpation, the tumor weighing 18 ounces, the results in each being satisfactory. The discussion of other methods of treating cystic goitre by tapping, injecting, etc., was outside the scope of the paper.—*London Med. Recorder.*

**Exophthalmic Goitre.**—When the classical triad of symptoms—rapid heart, protruding eyeballs, and enlarged thyroid gland—is present, nothing is easier than the diagnosis of the affection to which English authors attach the name of Graves, and German writers that of Basedow. Quite different is it, however, if one or more of these signs should be absent or so slight as to escape notice unless searched for. The writer of this article remembers very well a case in his early practice which he mistook for phthisis on account of the repeated occurrence of hæmoptysis; and he has now under his care a case also attacked by pulmonary hemorrhages, which had been variously diagnosed as phthisis, nervous dyspepsia, and hypertrophy of the heart. These two cases further agreed in the absence of exophthalmos, and in the fact that the thyroid enlargement was not perceptible upon casual observation, being hidden by the clothing of the patient, and very slight withal. The early recognition of the affection, however, is a matter very often of prime importance; for it may be stated that, as a rule, the favorableness of the prognosis as to cure varies inversely with the duration of the disease. The difficulty of diagnosis is sometimes as great when the goitre presents itself as a prominent symptom, as when the goitre must be sought for; the most important of the three symptoms being the disturbed condition of the heart. In any case of overacting heart, especially in a neurotic subject, and more especially when associated with other phenomena of

of vasomotor ataxia, Graves's disease should be taken into consideration in the diagnosis and should not be lightly excluded. Even in the absence of demonstrable goitre, a thrill felt within, or in the immediate neighborhood of, the suprasternal notch, associated with a soft systolic blowing murmur, though not pathognomonic, is significant. When this symptom is found, careful observation will often bring to light the existence of a condition of intermittent enlargement of the thyroid gland, which would render the diagnosis certain.

Seeligmueller (*Deutsche medicin. Wochens.*, May 29, 1890) has collated the most recent observations upon the symptomatology, pathogeny and therapy of the disease. According to this author, tremor, to which attention was first directed by Charcot in 1883, has assumed considerable importance as an initial symptom; thus Lewin observed it in 13 out of 27 cases as the first manifestation of the disease. One of his patients, a boy of 9 years, after a severe fright, suddenly exhibited muscular trembling and stuttering speech, while the full clinical picture of exophthalmic goitre did not present itself until the patient reached his seventeenth year. In the case of a hysterical girl, 17 years old, who came under the writer's care at the medical clinic of the Jefferson Medical College Hospital, nystagmus had existed since childhood; goitre and cardiac disturbance suddenly developing after a fright consequent upon a fall from a step-ladder. In this case exophthalmos developed under observation. Diminution of electrical resistance of the skin, first observed by Vigouroux and confirmed by Charcot, Eulenberg, von Martius, and Kahler, while not pathognomonic, is an important symptom. It is plausibly attributed to increase of moisture, the result of insensible perspiration. Irregular temperature is another indication of vasomotor instability which may be an aid in the diagnosis. Complications with epilepsy, tabes, ophthalmoplegia externa, irregular bulbar paralysis, polio-encephalitis, paralysis of the limbs, diabetes, polyuria, hysterical paralysis, etc., are reported. The importance of hysterical symptoms in diagnosis has long been known. Of the more recent theories of pathogenesis, only two demand attention:

that which places the origin of the affection in the medulla, and that which seeks it in the thyroid gland. Durdufi has repeated Filehne's experiment upon animals, and has succeeded in producing protrusion of the eyeball by section of the medulla at the level of the auditory nucleus, though he was not able, as Filehne was, to produce goitre and cardiac disturbance.

Hale White has reported the results of an autopsy on a patient who died from pneumonia, after having for years suffered with exophthalmic goitre, in which he found in the floor of the fourth ventricle a number of small hemorrhagic infarcts. These he attributed to the influence of the circulatory sequelæ of the pulmonary inflammation, upon a plan of lowered resistance.

Paul Moebius first put forth the idea that disturbance of thyroid function is the primary stage in the general clinical features of the affection, thus making the disease correlated with myxœdema and cachexia strumipriva. Gautier upholds this theory by citing cases in which surgical operations upon the goitre have caused the disappearance of all symptoms. The study of early cases, however, must negative this view—at least in the eyes of the clinician. In the matter of therapy, recent contributions do not help us much; although instances of recovery under various methods of treatment continue to be reported. In our own experience, picROTOXIN, as recommended by Bartholow, has proved of service.—*Medical News*

### **Intubation of the Larynx in Croup.—**

D'Heilly (*Archiv f. Kinderheilkunde*) reports thirteen cases of intubation for croup, the symptoms being such as usually require tracheotomy, namely, persistent dyspnoea, recession of the epigastrium, and commencing asphyxia. The youngest child was nine months old, the oldest four years. Two of the children were too near death to be benefited by any treatment; of the remaining eleven only two were saved. In spite of this high mortality the author formed a favorable opinion as to the value of the procedure. It involves no loss of blood and no wound, it can be carried out easily, and serious and unexpected accidents are not likely to occur. An unsuccessful intubation can

be repeated, and, if continually unsuccessful, tracheotomy can be performed. Neither shock nor rise of temperature attends the operation, and the air is not cold when it reaches the lung as it is when inspired through a tracheotomy tube.

On the other hand, the tube is frequently obstructed by false membrane, when it must be quickly removed and as quickly reintroduced. American authors recommend that the patient be allowed to cough the tube out, but this was never allowed in d'Heilly's cases. Another objection to intubation is the difficulty of swallowing that it produces, which of necessity interferes with nutrition. Especially is this difficulty experienced in the administration of liquid food, which may be inspired and cause pulmonary disease. Feeding through the nose by means of a catheter may obviate this difficulty, but is attended with others.

The author thus summarizes the conditions in which the method may be used :

1. In very young children in whom tracheotomy offers only slight chances of recovery, and in whom even a slight loss of blood would be harmful.

2. In mild cases of croup which seem likely to continue as such and for which tracheotomy is a severe remedy.

3. In very severe cases of toxic diphtheria in which the patient is already much weakened.

4. In cases of croup following measles, in which tracheotomy is never successful. Intubation in such cases offers a slight chance of success.

5. In all cases in which tracheotomy is impossible or dangerous.—*Archives of Pædiatrics*, October, 1890.

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THE ADDRESS ON MEDICAL EDUCATION BY THE  
DEAN OF THE FACULTY OF MEDICINE,  
MCGILL UNIVERSITY.

Our age above all others is characterized by the rapidity, number, and thoroughness of the changes that are passing over its entire civilization. In these, every branch of education, every department of investigation has shared. Within the last quarter of a century, and more especially within the last decade, so great and so radical have been the changes in ways of thinking and modes of procedure in consequence, that it may be said without the least exaggeration that the science and the art of medicine are now being *revolutionized*. Corresponding destructive and contemporaneous constructive processes are going on in the literature and science of the profession. If we were to attempt to express in a word the meaning of all this, we would say that medicine is being recognized as a branch of that widest of the natural sciences—biology. Whatever the final issue of the investigations on micro-organisms, so far as the actual direct effect on medicine, we believe that the highest good to this department of human thought and activity will be the clear recognition, by even the mass of practitioners, that scientific medicine is none other than the consideration of the great laws of living things in general, viewed in the light of deviations from what we call a normal condition; but which, from another point of view, are perfectly natural *under the circumstances*. It is the business of the physician primarily to understand the normal, the deviations from it, and the circumstances under which they



occur ; secondarily, to use his art to make it easier for the affected organism to return to the norme. On this hang all the law and the phophets in medicine, as we understand it.

If this be a correct view of the case as it presents itself in our age, it is clear that medical education must undergo changes still more profound than any that have yet affected it. The student must either begin his studies with a fair knowledge of the laws of general biology, legitimately derived from practical study, or he must acquire this early in his college course. Anatomy must become morphology, and be comparative in no small degree if it is to be educative, without losing anything in the extent to which its practical aspects are considered, *i.e.*, its immediate applicability to the practice of medicine and surgery. The student must be prepared to grasp pharmacology and physiology by a sound knowledge of chemistry, both organic and inorganic, as well as physics. Physiology must be comprehensive and scientific. It must rest on foundations as broad and deep as general biology. The human organism can never be understood when isolated from the rest of the animal kingdom, as has been too much the custom up to the present. Every leading medical truth of the day, in so far as it has a scientific foundation at all, takes us outside of ourselves, and explains what we are by lower organisms. There is in medicine the application of the great laws of living things and the methods of their development—in other words, of evolution—organic evolution.

After such a preparation as this, the student enters the hospital ward to study diseased organisms with the spirit of a naturalist. He is, however, a naturalist whose aim is not only to know, but to do ; or, we may say, to know still more by his doing and at the same time relieve suffering, and advance indirectly the moral and intellectual welfare of his race ; for it must be more and more apparent to the thoughtful that the nature of man is a unit, and that the good of one part involves the good of the others, and the reverse.

Nor will the practitioner who hopes to attain the highest results be content with the study of disease in any one animal, even though that be man himself. Medicine is one, because

animal organisms have common laws. Our distinctions into human and comparative (or veterinary) medicine are purely arbitrary and conventional, and their isolation at present is robbing each profession of much helpful light. We look for a closer union of these departments in thought (not in practice of course) as one of those consummations devoutly to be wished. McGill is to be congratulated on the fact that a large step has been taken in this direction by making the Veterinary School of this city, so favorably known over the whole continent for nearly a quarter of a century, the Faculty of Comparative Medicine and Veterinary Science of the University; with a continuation of that close connection in teaching which has long existed between the two faculties. But how are these ideals of medical education to be realized? We believe that the first great requisite for all high achievements is a *profound conviction* of the value of what is undertaken, and that the value depends on the ideal being a true and worthy one.

Buildings will be required in which the practical work of teaching and investigation can be adequately carried on,—in a word, laboratories well equipped with both books and apparatus, so that the investigator may know what has been already done, and have also the appliances for carrying out his experiments on the one hand, and teaching the student practically and *individually* the elements of those sciences he especially needs to know, and preparing him to become an investigator himself, for such in spirit he should be from the first. But a greater need than buildings, books or apparatus is a body of men able to guide, criticise, stimulate and inspire the young workers; in other words, professors capable, enthusiastic and energetic, with a sufficient number of junior assistants so that the heads of departments will not be unduly occupied with minor details that can be well enough looked after by less valuable and expensive helpers. The professor must be left free enough to enable him to keep abreast with the age himself, and give the best that he knows to the *whole profession* in a form it can assimilate. Plainly, the time has come when a professor of any primary branch must be a man of special tastes, education

and capabilities; in fact an expert in the true sense of the term. The great schools of medicine must seek for the best men, and not any longer encourage those occupying subordinate positions to believe that if they only hold on long enough they must needs drop into the professorial chair when the present occupant drops out. The mere hangers-on must be discouraged as much as possible. All appointments should be for a definite period, even to the professorial chairs. In this age, such is the rapidity of progress that even the most industrious specialist can scarcely keep up with the tide of knowledge. Provision must be made to enable men to retire when they are no longer able to maintain the pace. Salaries should be liberal, and a pension fund would be one of a university's best investments, for it would remove some of the hindrances to progress. Men would not be so tempted to hold to their chairs that, as O. W. Holmes says, they can scarce be hoisted from them by the explosion of a petard. The time is not far distant when even clinical chairs must be endowed in this country, if we will keep fully abreast with the age.

But where is the means to come from with which such provisions are to be made? We cannot, as in Germany, look for any such wise foresight on the part of the Government. McGill is a remarkable example of an institution supported almost entirely by the bequests of the liberal and enlightened citizens of Montreal. We place no limit to their good deeds. As yet, little has been done for her Medical Faculty it is true, but sufficient has been accomplished in this direction to show that the people of Montreal believe in the principle of assisting this faculty as well as others.

We congratulate Dr. Craik, the Dean of the Faculty of Human Medicine, on the clearness and correctness of his mental perspective. His address shows that he understands the tendencies of the day, and that, with a hopefulness and determination that would do honour to the youngest man of the Faculty, he is determined to battle for the realization of those high ideals which McGill throughout her whole career has striven to uphold. He has not forgot to mention those worthies who in

the past have done their share nobly to place their *Alma Mater* at the front ; nor those who had the insight and generosity to open their purses to meet her needs ; and it is cheering to realize that McGill's latest medical Dean is so keenly alive to her immediate and future requirements. The graduates of the Medical Faculty of McGill throughout the world, noted as they are for their loyalty, will rejoice at these recent utterances, and will think of the grand old institution with feelings of fitting pride.

It was unfortunate that the University could not furnish the buildings required a few years ago, and that the, as yet, small endowment fund of the Medical Faculty had to be invaded for this purpose. Let us hope that the \$30,000 diverted for building purposes may be restored many fold by generous men, who, perchance, may see as we do the relations of progressive medicine to the civilization of the age.

A Chair of Practical Pathology, which shall be as broad as possible, and occupied by an able investigator and teacher of matured thought and experience, would indeed be a great boon, not only to McGill but the whole country. But McGill's needs in other directions are also great, when we adopt the highest conception of medical training. It cannot be expected that men of the very best class can be either secured or retained to give all their energies to the work for any such incomes as are usually available. The same ability used in the practice of medicine brings in a vastly better financial return. It is not good policy to starve the fountain-heads of knowledge, or exhaust them by an endless routine of work that can be equally well done by junior assistants. May the Dean's and our own conceptions of McGill's wants be speedily and fully met. We believe that they will.

## Medical Items.

—The latest definition of kleptomania: A taking form of insanity.

—The recent International Congress was attended by 8,831 persons, made up as follows: Germans, 5,561; ladies, 1,379; non-medical, 116; Americans, 623; English, 353; French, 171; Italians, 140; Russians, 471; Turks, 12; Portuguese, 5.

—The late Prof. Gross, after advising the class of the utility of *koumiss* as a nutriment during the inflammatory process, gave the following directions for preparing it: Dissolve a half ounce of grape sugar in four ounces of water. Dissolve twenty grains of yeast cake in four ounces of milk. Pour both into a quart bottle and fill nearly to the top with milk. Cork tightly, fastening the cork with wire. Put into a cool place and shake two or three times daily for three days. *Keep for use no longer than six days.*—*College and Clinical Record.*

**ERROR OF A HOSPITAL ATTENDANT.**—Dr. L., passing through the Military Hospital, perceived the belly of Major K. to be tremendously swollen. "Ah!" exclaimed the doctor, "you are very ill, Major. Your abdomen is swollen to excess. You appear to have dropsy." To which the Major retorted: "No wonder after that nurse gave me twelve one-quart injections successively." The physician proceeded to inquire into the case, and discovered that the nurse, in place of writing down one injection for number twelve, had written down twelve injections for number one.

**A PRUDENT PATIENT.**—M. de Montlurin, of Pont de Veyle, loved his bottle; he fell sick and called in a physician. The doctor was cruel; not only did he interdict wine for his client, but he prescribed hot water in large quantities. Madame de Montlurin, desirous of carrying out the prescription of the physician, soon after the departure of the latter, appeared at her husband's bedside with a large glass of limpid and beautiful hot water. The patient rose in bed and taking a swallow, commenced to gag; after handing the glass back to his wife, said, reproachfully, "My dear, keep the remedy for another time. I have always heard it said that it is dangerous to trifle with medical remedies. Hand me the brandy and soda. If I must die, I do not desire death by drowning." The patient recovered without the hot water or a physician.

**THE SPANK CURE.**—The *Chicago Inter-Ocean*, quaintly but sensibly, remarks: "Among the good old customs which are falling into disuse, that of spanking the coming generation into behaving itself is leading the procession. There are no such spankings now as there used to be in my time, and I am sorry for it. Things in the spank line are certainly degenerating, along with the drama, the flavor of strawberries, and phenomenal weather, as the years go by. Children just entering the heated, base-burning epoch of spankhood now have "nerves," and must be humored. They get to balking and skulking, and the family physician is called in when the good old housewife remedy of a warm application of slipper is all that is needed. The spank cure is not appreciated in this generation as it was in the last. Looking back on a stormy and tempestuous career in the woodshed with Jones *pere* at the helm, I now feel like writing him a kind and encouraging testimonial on the efficacy of his unapproachable spank treatment, although at that time I felt more like kicking him in the shins, and, I regret to say, sometimes gave vent to my emotions."

—A "Surgeon," who had used alum, belladonna, bismuth, and boracic acid for sweating feet, with little good result, wrote to the *British Medical Journal* (quoted in *N. Y. Med. Abstract*) and received the following replies: 1. Wear low shoes, wool socks, and dust the feet over twice a day with iodol; they will soon be as hard, sweet and comfortable as one could wish. 2. Wash the feet at night with very hot water, put on white cotton socks, and immerse the feet, thus covered, in methylated spirit, poured into a basin; wear the socks all night; they will soon dry in bed. During the evening wear cotton socks and common felt slippers, and keep the socks constantly saturated with spirit. In a week the cure will be complete. The best ventilated boots are made of stout canvas. 3. Liq. plumb. diacet., acid carbolic,  $\bar{a}\bar{a}$   $\bar{5}j$ ; aquæ ad,  $\bar{3}j$ ; M. One teaspoonful to be mixed with a pint of warm(ish) water, and the feet washed every morning and dried with a soft towel. 4. Wash the feet night and morning with soap and water, and after careful drying sponge them over with the following lotion: Plumbi acet.,  $\bar{5}j$ ; acet. destil.,  $\bar{3}j$ ; sp. vini methylat.,  $\bar{5}j$ ; aq. ad  $\bar{3}xvj$ . Sig.—Ft. lotio. I have found this so efficacious that I use no other treatment. Shoes are preferable to boots, but whichever are used I recommend those of buckskin, which is very soft and easy to the feet. The inner sole has several perforations communicating with the outer air by a tube in the heel. Patients have expressed the greatest comfort from the use of these boots.

—*College and Clinical Record.*

## Literature.

LIST OF PAPERS, ETC., PUBLISHED BY WESLEY MILLS, M.A., M.D., L.R.C.P. ENG., D.V.S., ETC., ON EXPERIMENTAL PHYSIOLOGY, CHEMICAL PHYSIOLOGY, ZOOLOGY, COMPARATIVE PSYCHOLOGY, ETC. (original papers).

### I.—PHYSIOLOGY.

*Published in the Journal of Physiology, of Cambridge, England.*

1. An Examination of Some Controverted Points of the Physiology of Voice, especially the Registers of the Singing Voice and the Falsetto.
2. Some Observations on the Influence of the Vagus and Accelerator nerves of the Heart of the Sea-Turtle.
3. The Innervation of the Heart of the Slider Terrapin (*Pseudemys Rugosa*).
4. The Heart of the Fish compared with that of Menobranchus, with special reference to reflex inhibition and independent cardiac rhythm.
5. The Secretion of Oxalic Acid in the Dog under a varying diet, (a Modification of "Ueber die Ausscheidung der Oxalsäure durch den Harn," published by the author in Virchow's Archiv).
6. Notes on the Urine of the Tortoise, with special reference to Uric Acid and Urea.

*Published in Medical News, Philadelphia.*

7. Uric Acid—(a) Its Medical Relations.  
(b) A Reliable Method of Quantitative Estimation.

*Published in the Journal of Anatomy and Physiology, Edinburgh, Scotland.*

8. On the Physiology of the Heart of the Alligator.
9. The Rythm and Innervation of the Heart of the Sea Turtle (published contemporaneously in the *Canadian Record of Science*).
10. Physiology of the Heart of the Snake.

*Published in the Canada Medical and Surgical Journal, Montreal.*

11. The Causation of the Heart-beat and other Problems in Cardiac Physiology.

*Published in the N. Y. Med. Journal.*

12. Influence of the Nervous System on Cell Life.
13. The Blood and Bloodvessels in Health and Disease.

### III.—ZOOLOGY.

*Published in the Canadian Record of Science.*

1. Life in the Bahama Islands.

## II.—COMPARATIVE PSYCHOLOGY.

*Published in Popular Science Monthly, March, 1887.*

1. Comparative Psychology: Its Objects and Problems.  
*Published in Science, May, 1887.*
2. Reply to Criticism of the above.
3. The Habits and Intelligence of Squirrels (Proc. Roy. Soc. of Canada).
4. Comparative Psychology (Journ. Comp. Med.).

## IV.—TRANSLATION.

Professor Hoppe Seyler's Address at the Celebration of the Opening of the Institute for Physiological Chemistry, (Ueber die Entwicklung der Physiologischen Chemie und ihre Bedeutung für die Medicin), published in the *New York Medical Journal*.

## V.—BOOKS.

1. Outlines of Lectures on Physiology (as delivered in McGill University).
2. A Text-Book of Animal Physiology (large 8vo., 700 pp., D. Appleton & Co., New York).
3. A Text-Book of Comparative Physiology (small 8vo., 630 pp., D. Appleton & Co., New York).

## VI.—REPORTS OF INVESTIGATIONS WITH CRITICAL DISCUSSION.

*Published in the Journal of Comparative Medicine and Surgery, Philadelphia.*

1. Snake Poison from a Chemical-Physiological Point of View.
2. Elasticity as a Conservative Force in the Animal Organism.

*Published in the Canada Medical and Surgical Journal, Montreal*

3. Hæmodynamics and Blood-Pressure.
4. The Blood and Blood-forming Organs.
5. Heredity.
6. The Heredity of Acquired Peculiarities.

And many other shorter communications.

## VII.—MEDICAL SUBJECTS (CHIEFLY ORIGINAL).

*Published in the British Medical Journal, London.*

1. Report of a Case of Poisoning from the Local Application of Ergotin.

*Published in the Canadian Journal of Medical Science, Toronto.*

2. Some Mistakes to be Avoided in Dealing with the Diseases of the Nose and Throat.

3. Report of a Case of Congenital Ectopia of the Abdominal Organs.

4. Two Cases of Malignant Disease of the Stomach.

*Published in the Canada Medical and Surgical Journal, Montreal.*

5. Notes of a Trip to Colorado.
6. The Voice in Diagnosis and Prognosis.



7. Fatality in Typhoid Fever.
8. Chronic Pyæmia following Urethral Dilatation.
9. Clinical Notes on Atropine Poisoning.
10. Obstetrics of the Hamilton City Hospital for Two Years.
11. On a Case of Thrombosis of the Left Ventricle.
12. Tonsillotomy and Uvulotomy.
13. London Letter: Surgical and Anatomical Notes.
14. " " Jottings on Gynæcology.
15. " " Notes on Dermatology.
16. " " Abstract of a Clinical Lecture by Dr. Wilson Fox.
17. Innervation of the Heart of the Slider Terrapin (Medical Aspects).
18. On the New Strassburg University.
19. Physiological and Pathological Reversion.

*Published in the Medical News, Philadelphia.*

20. The Berlin Laboratories.
21. Surgical Puncture of the Heart.

*Published in various Journals.*

22. A Case of Extreme Enlargement of the Tonsils causing Urgent Symptoms (*Archives of Laryngology*).
23. Pathological Notes from a Breeding Station (*Journal of Comp. Med.*).
24. A Physiological Basis of an Improved Cardiac Pathology (*N. Y. Med. Record*).
25. Case of Lightning Shock with Recovery, with Drs. Buller and Paige (*Med. News*).
26. Valedictory Address to Grad. Class in Medicine of McGill University (*Montreal Medical Journal*).
27. Retention and Loss of Hair (*Can. Record of Science*).

#### VIII.—OF A SEMI-POPULAR CHARACTER.

*Published in the Canada Educational Monthly, Toronto.*

1. The Structure and Physiology of the Eye.
  2. Some Thoughts on School Hygiene.
  3. Exertion and Over-exertion.
- Papers on Literary and Educational Topics, and others not specified.

#### SUMMARY.

On Experimental and Chemical Physiology, Zoology and Comparative Psychology .....	18 papers.
Translation .....	1 "
Critical Reports of Scientific Investigations .....	6 "
Papers on Medical subjects.....	27 "
" of a semi-popular character.....	3 "
Total .....	55
Books .....	3