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Original Address.

VALEDICTORY ADDRESS DELIVERED TO THE
GRADUATES IN MEDICINE AT THE ANNUAL
CONVOCAION OF THE MEDICAL FACULTY
OF MCGILL UNIVERSITY, APRIL 5TH, 1894.

BY JAMES BELL, M.D.,

Assistant Professor of Surgery and Clinical Surgery.

GENTLEMEN OF THE GRADUATING CLASS,

It is my privilege to address you to-day for the last time as students, and to wish you, on behalf of my colleagues, the fullest measure of success in the careers upon which you are severally about to enter, and for which you have so long and so earnestly laboured to prepare yourselves. I wish also to congratulate you upon the successful completion of a protracted and exacting course of study, and I trust that all of you realize the responsibilities which will devolve upon you from this hour. It is my privilege, and it is, I am fully aware, expected of me, that I should offer you on this occasion some advice, which may be helpful and useful to you, when, freed from the guiding hands of your teachers, you find yourselves for the first time dependent upon your own resources. Gentlemen, I stand before you appalled by the sense of my inability to make use of the opportunities now afforded me as I could wish. Would that I could condense and crystallize the experience which I have bought, much of it dearly, in the seventeen years which have

elapsed since I stood where you stand to-day ! Would that I could write in indelible characters upon your brains the lessons these years have taught me ! But alas ! it is not ordained that knowledge or experience should be so transmitted. Each one must pass through the ordeal for himself. In this respect, at least, all men are equal. It is scarcely necessary that I should point out to you, at the very outset, the importance, nay, the absolute necessity of leading healthy, normal lives, and of conducting yourselves with absolute uprightness in every relation of life, in order that, with sound minds in sound bodies, and meriting the trust and confidence of your clients, you may always be prepared to give the best advice and to render the best aid. You must aim not only at being good physicians and good surgeons, but also at being exemplary men and good citizens. The modern physician stands before the public as a teacher and an authority on all matters pertaining to health and disease, and he must, therefore, teach by example as well as precept. He owes, and must recognize, duties to the state and to society, and while dealing with the individual, he must not overlook the interests of the community. We now know that most, if not all, the great death-dealing scourges are preventible, and it is our duty to be ever watchful to arrest the outbreak or to prevent the spread of epidemic or contagious disease. The co-operation of the public is essential to such results, and to co-operate intelligently they must be educated. The grotesque and fanciful views of medicine and of disease which still prevail in all ranks of society, are evidences at once of the necessity for education of the public and of the too great limitation of the efforts of our profession in the past. Let it be known that we claim no mysterious powers, that we recognize no mysterious nor supernatural agencies, that we aim only at acquiring a knowledge of disease and of the best methods of dealing with it, and that we are prepared to learn from any source. Standing now, as you are to-day upon the threshold of your careers, it is all important that you should enter upon your life-work with proper conceptions of your duties and responsibilities, and that you should begin at once to cultivate and develop habits of industry, patience, perseverance and self-denial, without which,

let me assure you, the life of the physician can be neither a happy nor a satisfying one. Up to the present time your studies have been prescribed within a narrow range, but we send you forth to-day, with, we trust and believe, sufficient knowledge and sufficient ambition to enable you to take your places and speedily make your influence felt in your respective spheres of labour. In the pursuit of knowledge by accurate observation, thought and experiment, such delights will accrue to the scientific mind as will more than compensate for all the self-denials involved. Let nothing seem beneath your notice or too trivial to observe. Remember that the greatest enemies of the human race—more potent to destroy than famine or war or the convulsions of nature, can only be seen through the microscope and by the trained eye! Let all your observations be accurate and thorough and expressed in terms of precision. Bring all your senses into requisition and educate them to the highest degree. Weigh and consider all your observed facts with judicial fairness before arriving at conclusions. By the formation of such habits, together with economy of time, punctuality and system in work, it is surprising what can be accomplished in a single lifetime. The literature of medicine is filled with records of splendid achievements, well calculated to stimulate your energies. Be encouraged by the work and influence of such men as Pasteur, Lister, Koch, Horsley, Ferrier and hundreds of others, who still living and working have, by their scientific labours, changed the whole aspect of modern medicine and surgery, and whose published works afford more fascination to the scientific student than the most startling works of fiction. Look back and be encouraged by the life and work of John Hunter who, in an age of few opportunities, when compared with the present, immortalized his name in surgery. Never in the history of the world were there such opportunities for scientific work in medicine and surgery and the allied sciences as there are to-day! Never was there such a demand for workers! You will not all find laboratories ready made and equipped to your hands, but remember that the best work has generally been done by those who made their own opportunities. Many great problems still remain to be worked out in physiology and

physiological chemistry. Bacteriology, though as yet but a new science, has already greatly enriched our knowledge of disease and of morbid processes, and has become indispensable to both the physician and the surgeon. What can be more fascinating than the thought that by a knowledge of bacteria and their products we are enabled to differentiate diseases ; to demonstrate their primary morbid elements, and to study their action in the laboratory ? It is but a step further to the discovery of methods for the destruction of these morbid agents within the body and thus striking at the root of many diseases. This step has indeed already been taken, although not successfully by Koch, in the discovery of tuberculin. Who can doubt that these discoveries are but the earnest of much greater and more important ones ! Thanks to such discoveries and the practical application of the knowledge thus obtained by thoughtful and philosophical physicians and surgeons, the whole field of medicine and surgery has been enlarged and expanded in every direction. Disease processes are better understood, and many conditions formerly considered beyond the reach of aid are now remedied with ease and certainty by the surgeon or the physician. Chemistry, too, has contributed much in late years, not only to our knowledge of disease, but also to pharmacy and therapeutics. New drugs and new combinations have taken the place of older and cruder ones. In short, exact knowledge and rational methods are rapidly replacing theories and empiricism. But while dwelling upon the great opportunities for purely scientific work and the rewards which it promises, I do not forget that most of you will depend upon the practice of your profession for your livelihood. I would ask you, however, to remember that the cultivation of the scientific habit of mind is not only compatible with, but is absolutely essential to the successful practitioner of medicine. The day has happily disappeared when eccentricity, boorishness, or a " good bedside manner " were the passports to fame and fortune in the practice of medicine. In the general enlightenment of this nineteenth century the public looks for knowledge and skill in the medical as well as in the other professions, and when to these are added tact, courtesy, kindness and patience in the person of the cultured and broad-minded

gentleman, we have before us a type of the ideal physician. In assuming the responsibilities of practice, you will be confronted with many complex problems relating to the environments of patients, such as have not heretofore occupied your attention. The measures necessary for isolation, disinfection and quarantine, in arresting the progress of an epidemic disease, will give you food for much thought. The stamping out of tuberculosis, one of the great questions of the immediate future, will afford abundant opportunities for good work. Infant feeding, and in fact the whole question of dietetics, is another field in which there is much to be done, both in the application of the knowledge which we already possess, and in the acquisition of further knowledge by experimentation and chemical research. Truly, in this respect the child is the father of the man, and it is simply appalling to reflect upon the ignorance and indifference which prevail upon this subject, and the far-reaching effects of such ignorance upon growth and development, and upon the mental and moral perversions which fill the world with misery, and which have contributed to all the great social problems of all ages. The education of children physically and mentally, the earlier recognition of disease, especially of those diseases which lead to deformity, in order to prevent, what we too often cannot remedy, and the closer observation of the physiological action of drugs are all problems of the highest importance. Finally the work of each day will suggest new and interesting problems for solution. There is ample scope for tastes and talents of every kind. The very extent and variety of the possibilities offered to the medical graduate have seemed sometimes to bewilder him and cause him to stand still, unable to decide which path to follow. You cannot afford to rest on your oars! If once you fall behind in scientific work and interest, you will never recover the ground thus lost. This is, perhaps, the greatest danger which threatens the young graduate. Wearied perhaps by college work, elated perhaps by college successes, he is tempted to relax his efforts for a time. Having no definite duties, meeting perhaps with some discouragements (who does not?) apathy steals upon him, and almost unconscious of the fact, he drifts aimlessly along in the wake of progress,

until some day he finds himself, like Rip Van Winkle, rudely awakened from his slothfulness and confronted by a new order of things in which he can claim no part and to which he cannot reconcile himself—or sadder still, the awakening may never come. Such experiences are unfortunately not very rare. Beware then of this critical juncture in your lives! These dangers are best combatted by immediately taking up definite lines of work and by frequent intercourse with professional brethren, especially in medical societies. There is no influence so beneficial, none which so stimulates thought, alertness and acuteness of observation and promptitude of action, as full and free discussion of the problems which engage our attention from day to day. There is none so well calculated to soften the asperities of life, to lessen the possibilities of misunderstandings between one another, to fire the ambitions and to increase mutual respect and good will. Begin early to put your work on record, to form and express opinions concerning it. Believe me, honest reports of your work with your opinions candidly and modestly expressed cannot fail to advance you in the good opinion of your fellow-workers, who alone are capable of judging it. I trust you are each prepared for a life of labour, labour which will be lightened by its ever-increasing interest and by the steady acquisition of knowledge, by the satisfaction born of doing good, by the approval of your consciences and by the esteem of your fellow men. Fame and fortune come only to the few. Success from a material standpoint seldom exceeds a decent livelihood. True success, however, which is never of mushroom growth, will come in greater or less measure to all who persevere in honest and conscientious work.

I will not dwell upon the reverse of the picture! Worry, anxiety and slavish exactions, ingratitude, suspicion and the ignorance which places the mountebank before you in public esteem, you will all experience. But strong in your consciousness of right, of independent mind, self-contained and resourceful, you will surely rise superior to all such petty annoyances. Keep before your minds the words of Longfellow—

Let us then be up and doing
With a heart for any fate.
Still achieving, still pursuing,
Learn to labor and to wait.

In conclusion, gentlemen, it will behoove you to be as wise as the serpent, in order to avoid the many pitfalls which will beset your paths during the early part of your professional lives. Do not be tempted by the glamour of greater and more immediate rewards into the by-ways of "pathies" and "isms" and "cures" and other methods of the charlatan. Be on your guard against lending your names to doubtful enterprises. Be chary of giving testimonials. Remember you have the honour of your Alma Mater in your keeping. But gentlemen, with the Golden Rule as the basis of your conduct, with high ideals, with a strong and clear sense of your duties and responsibilities, and lastly, with the rudiments of a good medical education, you need have no fear for your future. We have none !

Original Communications.

AMŒBIC ABSCESS OF THE LIVER.*

BY F. G. FINLEY, M.B., (Lon.) M.D.,

Lecturer in Medicine, McGill University, Physician to Montreal General Hospital.

AND

J. G. ADAMI, M.A., M.D.,

Professor of Pathology in McGill University, Pathologist to Mont. General Hospital.

The patient, a negro, æt. 37, was admitted to hospital upon January 31st, 1894, complaining of pain in the right side and weakness. The chief facts relating to his medical history were that he had lived for eleven years in Texas, that he had acted as cook on a vessel trading between Quebec and South America, and that he had also spent some time in Australia. He had never suffered from diarrhoea for more than a day or two at a time, and had never had dysentery. He had, however, two febrile illnesses, each lasting about three months, some years previously.

The present illness began a month previous to admission with febrile symptoms and diarrhoea. Some pain in the right side and weakness, together with nausea and vomiting were also present, but he had not taken to bed before his admission to hospital.

On examination the temperature was 101½, the tongue was coated; there was no jaundice.

The intercostal spaces over the liver were full, and there was marked tenderness in the right epigastric region. Hepatic dulness began at the 5th rib, extending down for about 6 inches. Posteriorly there was dulness from the angle of the scapula downwards. Friction could be detected over the right infra-mammary region. The abdomen was otherwise normal. The urine was of a deep sherry color, 42 ozs. in 24 hours; it contained no bile, albumen or sugar.

During the ten days that the patient was under observation the temperature remained almost constantly at 102, and there were no chills or sweats. The hepatic dulness during this period rose to the 3rd rib, and pus was withdrawn by the

* Read before the Montreal Clinical Society, February 23rd, 1894.

aspirator. Upon February 12th, Dr. Bell, after preliminary aspiration, opened the abscess posteriorly in the 9th space and resected the rib, allowing about 50 oz. of pus to escape. The patient did fairly well for some days, but sank rather rapidly and died upon February 18th, six days after the operation. Numerous actively moving amœbæ were found in the pus, together with much debris and a few leucocytes and red blood corpuscles.

The stools were examined for amœbæ during life with a negative result.

It is unnecessary to give all the details of the autopsy which was performed upon the day of death. Suffice to say that upon external examination there could be seen a wound in the ninth interspace and posterior axillary line in the right side ; this led through the region of the resected ninth rib to the liver, and from it could be expressed whitish necrosed tissue together with some pus.

Upon opening the thorax the right lung was found firmly adherent over all its surface, and greatly contracted and diminished in size. The adhesions were firm and close. It was found that the incision into the right lobe of the liver had passed through the diaphragm, but in consequence of the firm nature of the adhesions between diaphragm and costal wall, the pleural cavity presented no signs of acute recent disease, and had apparently been in no wise disturbed by the passage across of the contents of the hepatic abscess. The liver, which weighed 2650 grm., was greatly enlarged, both upwards and downwards. It extended three finger breadths below the costal margin ; was of a fawn colour, and presented here and there upon the upper surface of the lobes frequent small white patches—necroses or abscesses—averaging 2 mm in diameter. The falciform ligament was well to the left of the ensiform cartilage, the right lobe being especially enlarged. In the substance of the right portion of the right lobe was a large abscess, with thick necrosed walls and irregular and shreddy internal surface. This extended from the under surface of the organ to within 2 cm. of the upper and outer surface of the lobe ; its breadth from side to

side was 12 cm., and from above downwards it was 15 cm. (6 inches) across. Throughout the rest of the right lobe there were scattered a few other secondary abscesses; the largest of these was 15 mm. in diameter.

The intestines were markedly congested. In the jejunum were a few subcutaneous hæmorrhages. Upon examination of the large intestine no signs could be made out of any dysenteric lesions. Close to the ileo-cæcal valve was a small whitish patch, which gave rise to the suspicion that there was a cicatrix, but upon closer examination the most that could be discovered was that here the mucous membrane was softened and thin, with no ulcerous or old inflammatory conditions. Here, then, as not unfrequently occurs, the amoebic abscesses of the liver were present without any indication of dysenteric intestinal lesions, either during life or at the autopsy. It is to be noted, however, that the hepatic flexure of the colon was in close contact with, and, in fact, adherent to that portion of the under surface of the right lobe of the liver, which was undergoing necrosis.

Beyond that the heart presented the condition of early pericarditis, and that the kidneys showed some acute parenchymatous nephritis, the condition of the other organs does not call for remark.

Stained sections of the liver and slough showed the presence of amoebæ; these were best shown by staining with methyl-blue and were faintly stained by hæmatoxylin. In the abscess cavity and its walls were numerous masses of streptococci. These were evidently of secondary growth, for the abscess contents were singularly free from pus cells, being mainly formed of broken down cheesy matter. Microscopic examination of the walls of the colon showed no evidence of necrosis.

In this case, therefore, the presence of fever, of hepatic enlargement, pain and tenderness, suggested the presence of purulent inflammation in the neighbourhood of the liver. That this was so was confirmed by the result of aspiration. Whether the abscess was sub-diaphragmatic or in the liver substance was determined by the discovery of the amoebæ in the removed

fluid. These indicated clearly that the origin of the disease was in the liver itself.

The failure to find amœbæ in the fæces was explained at the autopsy by the absence of any dysenteric ulcers or necrosis in the colon.

This case gains an additional interest from the fact that so far as we know, it is the first recorded in Canada in which the amœbæ coli have been demonstrated in an hepatic abscess, if not in the living body generally.

SYNOPSIS OF ONE HUNDRED CASES OF SCARLET
FEVER.*

By J. R. SPIERS, M.D.

The first one hundred cases treated in the Montreal General Hospital during the present epidemic may be divided into the following classes :—

(a) Of mild cases, showing all the symptoms of scarlet fever with a moderate fever and a little failure of the general health, there were forty.

(b) Of moderately severe cases, with a high temperature, a severe angina and intense rash, with considerable depression, there were twenty-nine.

(c) Of severe cases with a continued high temperature, ulceration and destruction of the tissues of the throat and involvement of the glands of the neck, there were thirty-one.

In over 50 per cent. of the mild and moderate cases convalescence set in on the fourth or fifth day by crisis, the temperature falling in a few hours two or three degrees, then by lysis reaching normal by the end of a week or ten days. In a few cases the temperature fell to normal in twenty-four hours. The remainder of the cases reached the normal by a gradual lysis in from five to ten days.

The rash in many cases, presented peculiar appearances. In many of the mild cases it was apparently absent or very transient, or appeared only in certain parts of the body, chiefly on the neck and chest, in the form of erythema. In three cases minute red spots without a general redness appeared.

In the moderately severe cases the rash, as a rule, presented the appearances generally described, but two or three presented a distinctly papular rash, these papules being especially distinct on the back of the hands and forearms.

Among the severe cases anomalous rashes were common. One case presented a papular hæmorrhagic rash over the whole body without any distinct coloration of the skin between. Two or three cases had very numerous small vesicles over the whole

* Read before the Montreal Medico-Chirurgical Society.

body. The case of a young child presented the appearance of an acute exfoliative dermatitis.

The throat in mild cases showed as a rule redness and some slight swelling of the soft palate and tonsils. In the severe cases the whole palate, pharynx and tonsils were intensely red and covered with sticky mucus. In the most severe cases ulceration and destruction of the tissues occurred, accompanied by a foetid odour. In these cases also the glands of the neck became swollen and inflamed, frequently running on to suppuration. A general pyæmia has been frequently set up.

In one case sloughing of the tonsils and cellular tissues of the pharynx occurred, leaving the muscles of the pharynx clearly dissected out. In another case an abscess developed behind the soft palate, which was evacuated by an opening through it with immediate relief.

A large number of cases presented a diphtheritic appearance. This was most common among the moderately severe cases, but was also common in the very severe cases. They were always accompanied by enlargement of the glands of the neck which very occasionally went on to suppuration. This diphtheritic condition occurred in 8 per cent. of the cases.

The digestive system was not, as a rule, much disturbed, except the appetite was lost. Vomiting was persistent for four or five days in four cases. Diarrhoea was troublesome in three cases early in the disease. In fatal cases it frequently set in during the last three or four days.

The complications and sequælae have been numerous and varied.

The most frequent and most dangerous was inflammation of the glands of the neck. This occurred in 19 per cent. of the cases. The most dangerous was that form with an ulcerated condition of the throat. It generally ran on to suppuration and was by far the most frequent cause of death, five deaths occurring from this cause, while only three recovered.

A less important form was that accompanying the pseudo-diphtheritic angina. This only went on to suppuration in one case and caused no deaths. These two forms have occurred in

the first two weeks of the disease. Three per cent. of the cases suddenly developed an acute inflammation of these glands during the third week of convalescence. It set in with chill and high fever and a rapid enlargement of the glands took place. In two cases complete recovery took place by the third day, but one ran on to suppuration.

Acute nephritis occurred in 8 per cent. of the cases coming on insidiously in the third or fourth week. Death occurred in two cases with complete suppression of urine and convulsions. In five cases apparent complete recovery took place after two to three weeks. One case, the only one in which dropsy was markedly present, became chronic.

Otitis media occurred in 6 per cent. of cases, most frequently with the pseudo-diphtheritic angina, but occasionally with the mildest cases. It may occur at any time during the first four weeks of the disease.

True diphtheria has been present in four cases, but cases have been frequent coming into the hospital suffering from diphtheria, and evidently only shortly convalescent from scarlet fever.

Arthritis was common following this disease. A large number complained of slight pain in one or more joints. Three per cent. have suffered from severe attacks resembling acute rheumatism with fever and swelling of the joints. In one case double hip joint disease rapidly developed with dislocation of the heads of both femurs upwards and backwards. There was no evident formation of pus.

In another case a so-called white swelling became purulent ; rapid and extensive destruction of the joint followed.

Mitral disease developed in 2 per cent. of the cases.

A purulent discharge from the vagina occurred in two young children during the fifth week, which disappeared in a few days.

A distinct relapse occurred in one case at the end of the first week of convalescence. The whole course of this second attack was very severe, while the primary attack was very mild.

Ten per cent. of the cases treated died, the causes being as follows :

Nephritis, two deaths ; ulcerated condition of the throat with involvement of the glands and pyæmia, five deaths ; diphtheria, one death ; pneumonia, one death ; and one death due apparently to the intensity of the poison.

All but one death have occurred among young children, though fully 25 per cent. of the patients have been adults.

The adult who died was a chronic drunkard.

Tabulation of Cases.

Mild	40
Moderately severe.....	29
Severe	31
	100

Complications.

Well marked inflammatory enlargement of the glands of the neck	19
Acute nephritis	8
Otitis media.....	6
Diphtheria	4
Severe arthritis simulating acute rheumatism	3
Mitral disease	2
Pneumonia	1
Relapse	1

Deaths.

Malignant scarlatina	1
Acute Nephritis	2
General pyæmia	5
Diphtheria.....	1
Pneumonia	1
	10

TWO CASES OF COMPLETE DOUBLE URETER.*

BY J. G. ADAMI, M.A., M.D.

Professor of Pathology, McGill University, Pathologist to the Royal Victoria Hospital.

AND

J. L. DAY, B.A.

Although the condition of multiple ureters is one of comparatively frequent occurrence, it would seem that in nearly all the cases recorded of this abnormality fusion of the ureters, forming a single canal, had taken place before perforation of the bladder wall. The entrance into the bladder of accessory ureters by separate openings, is a condition which authorities on the subject are unanimous in regarding as extremely rare.¹ Gangolphe² states that in his search of medical literature, he was able to find only two examples. His search must have been incomplete, for we have met with about a dozen recorded cases in all—sufficiently few, however, to merit that the two cases in hand be described.

Of these one was discovered in a recent autopsy at the Royal Victoria Hospital on the body of a man aged 65. The right kidney in this case was normal; the left exhibited more than one abnormality. There were two renal arteries. The upper of small size, was given off from the side of the aorta just above the level of the coeliac axis. This passed into the substance of the cortex³ of the upper part of the kidney upon its anterior and upper surface, and half way along its course gave off the left suprarenal artery. The main renal artery left the aorta at its normal point of origin, and divided into three branches, of which the lowest passed in front of the renal vein, and sub-divided into three branches.

The kidney presented two pelves. The ureter of the upper one, which was the smaller, passed down behind the vessels, and crossed in front of the inferior ureter. Half an inch before reaching the bladder wall the ureters became fused externally, but at the same time the canals remained distinct. It was not possible to pass a pin probe from one to the other, nor could fluid injected into one ureter be found to pass into

* Read before the Montreal Medico-Chirurgical Society, February, 1894.

¹ Klebs *Path. Anat.* ii, page 678 (1876); Rokitsansky *Path. Anat.* Syd. Soc. ii, p. 211; Foerster *Path. Anat.* p. 523 (1865).

² Lyon Médicale, No. 26, 1883.

³ An artery piercing the cortex is said to occur in 1 in 7 bodies examined.

the other under any conditions. The ureter given off from the lower pelvis may be considered as the main duct, inasmuch as it was slightly larger, while its opening into the bladder was in the usual position, and corresponded to that of the single ureter of the right side. The superior and accessory ureter opened into the bladder by means of a small, but distinct, slit-like aperture, situated half an inch below, and to the inner side of the main orifice, in the line between that and the urethral orifice.

The second case is a specimen obtained from a female body by Dr. Shepherd, of McGill University. This has, for many years, been in the Museum of the Medical college, and has never been recorded.

With the exception that the kidney here presents a more clearly lobulated appearance, and that there is no arterial abnormality, the case is almost identical with the preceding. The reduplication occurs only on the left side, there are two pelves, the upper being the smaller, the superior ureter crosses in front of the inferior, and its separate orifice is also along the edge of the Trigone, in front, and to the inner side of the main orifice, between that and the urethra.

It is a curious fact that in nearly all the recorded cases of this peculiarity it has occurred in the *left* side. The two cases just mentioned are on the left side; 'Tangl's'¹ celebrated case, and Gangolphe's² likewise occurred on this side. Baum³ has lately published a case in which it occurred on the right side. There may be no special significance to be attached to this *left*-sided tendency, but still it appears to obtain.

¹ Virchow's *Archiv.* 118 (1889) p. 414.

² *Loc. cit.*

³ *Archiv. of Gynækol.* 42, p. 339 (1892).

Case Reports.

A CASE OF BOTULISM.*

By A. E. VIBOND, M.D.

Upon August 7th, 1893, I was called to attend Mrs. C., a large stout woman of about sixty years of age, who, for some little time, had been under my care, suffering from asthma. Upon arrival I found the patient in bed and evidently in considerable pain. She complained of intense irritation all over her skin, with pain everywhere, but chiefly in the abdomen. The cutaneous irritation was indicated by the rate at which she continued to scratch herself.

I was able to gain the following history: Shortly before the trouble began she had taken her tea. After tea she was seated sewing and feeling quite well, when suddenly she jumped up, began to scratch her arm violently, declared that she felt seriously unwell and must go to bed, but already before she was ready for bed the whole surface of the body was reddened and itching horribly. In a few minutes the face began to swell and next the tongue and glottis became swollen, so that becoming thoroughly frightened at her condition she sent for me.

I found the face much swollen and intensely red; the ears also were greatly swollen and red, especially the left, which had a badly frost-bitten appearance. The pupils were normal in size. The body was covered by a general erythema with urticarial lumps here and there.

The patient was quite rational, though the tongue was so swollen that she could scarcely speak. Placing my finger in her mouth I found that the floor of the mouth, the root of her tongue and the glottis were in the same swollen condition; this rendered respiration a matter of grave difficulty, and added to this, upon examination of the lungs I detected whistling râles, evidently due to a corresponding congested and œdematous condition of the mucous membrane of the bronchi.

The subjective symptoms were not very important. Vomiting was absent, the bowels moved freely just before my arrival;

* Read before the Montreal Clinical Society, Feb. 3rd, 1894.

the pulse was 86 and regular, but so weak that I could not count it at the wrist. The heart sounds were faint, the temperature normal.

I thought that the symptoms were caused by something that she had eaten. On inquiry they stated that she had only taken her ordinary food. She took no oysters, no shell fish, canned goods, etc. On questioning more closely, I found that she had eaten Bologna sausage to her tea. It seemed that this had caused the trouble. I emptied the stomach by giving a hypodermic of apomorphia, which brought on free vomiting. For the itching I bathed the body with vinegar, and this soon brought relief. I happened to have cocaine with me, so rubbed this over the tongue after which I swabbed the tongue and throat with dilute tannic acid and made her swallow pure vinegar. The swelling soon got less and patient could speak distinctly in a short time. The heart's action and general condition soon improved. I ordered a purge to be followed by powders of bismuth and soda. Next morning she was much better and in a day or two felt quite well.

I regard this as a case of ptomaine poisoning, the variety known as sausage poisoning or Botulism. The symptoms were due to gastric irritation causing a reflex vaso-motor paresis. The poison seemed to attack mainly the vaso-motor system, indeed the weakness of the pulse and heart would seem to have been due to the sudden flooding of the peripheral vessels. The general disturbance was slight, there was no vomiting and no rise of temperature. So far as I can learn the swelling of the tongue and glottis is not common in these cases.

A RARE FORM OF STOMATITIS WITH CUTANEOUS COMPLICATIONS.*

By H. D. HAMILTON, B.A., M.D.,

Laryngologist to the Montreal Dispensary.

James C., aged 18 years, applied at Dr. Major's clinic for diseases of the nose and throat at the Montreal General Hospital upon the 3rd of March, 1893. He came complaining of sore throat and mouth.

On examination, the mouth showed a severe form of stomatitis affecting all the lining mucous membrane as far back as the soft palate and uvula. The mucous covering was shedding in large sheets of yellowish-white colour, leaving here and there isolated raw patches, about the size of a split pea, specially noticeable on the edges of the tongue. The tonsils were not shedding their covering, and were only slightly injected. These appearances would not have been of so much interest in themselves, had not the examination of the fingers, hands, wrists and ankles shown well-marked patches of Herpes Iris (or Erythema multiforme) about to be described.

The history of the attack was as follows: The patient had been awakened four days previously by a prickling sensation on the palate and edge of the tongue. He was able to go to his work in spite of feeling heavy and languid, but at noon had to return home. He could not swallow without pain, and his eyes were weak and inflamed. Upon the morning of the second day of illness, he first noticed small itchy red points on the backs of both hands and wrists. During the course of the day these points developed into minute water blisters (vesicles) surrounded by discs of varied tints; the largest of these was about the size of a 10c. piece. "Cold-sores," appeared on the lips, and a few small vesicles on the cheeks and chin, rapidly becoming crusted over with yellowish scabs. On the 2nd and 3rd days, he was unfit for work, and on the 4th, he felt so miserable that he applied for relief at the hospital, where he had been treated the year before for a similar condition of the mouth by Dr. Major.

* Read before the Montreal Clinical Society, Feb. 3rd, 1894.

Upon investigation it was found that besides the local lesions of the mouth and skin already described, there was very marked constitutional disturbance. When seen at the hospital, he gave one the impression of being a very sick boy, having a bright flush on his cheeks, dry, cracked lips (with yellowish crusts covering what had been vesicles at first), small rapid pulse, a coated tongue, injected conjunctivæ, while (at 5 p.m.) the temperature under the tongue was $100\frac{3}{4}$. Accordingly he was recommended for admission and upon the next day (March 4th, 1893,) he came into hospital and thus afforded a better opportunity of enquiring into his previous condition.

It was now discovered that since his ninth year the patient has been subject to recurring attacks of inflammation of the mucous membrane and skin. The seasons in which he was generally affected were the spring and fall. Otherwise he had enjoyed good health. Amongst the causes assigned for the five preceding attacks were cigarette smoking (which had been indulged in before the present outbreak also), inhalation of sewer gas and the local irritation of a poisonous weed. There was nothing in the patient's occupation to act as a cause, and the family history threw no light on the case. That the general health is always run down at the time of an attack, is an important point, and has probably much to do with the etiology.

Description of the Cutaneous Complication.—The skin complication first appeared as small red pimples. In a few hours each of these formed a minute vesicle, or seemed to be nothing more than a small flattened or cupped area, around which appeared a pale ring, and outside this again there developed a slightly elevated ring of blue-white colour. A faint red areola separated the disc from the normal skin. During the course of the next few hours in place of the original central vesicle, a crust became formed. This eruption appeared 24 hours after the lining of the mouth had given evidence of being the seat of an eruption.

My diagnosis is based upon the following points: The well-defined coloured discs of various tints, around a central vesicle.

The symmetrical distribution ; the situation on backs of hands and insteps.

Types.—There are two types or varieties of Herpes Iris. One has a central vesicle (or bluish depression) surrounded by several rings of different shades, the other has a central bulla, and here the coloured rings become replaced by discs of distinct vesicles. It will be seen that the present case conforms to the first type.

Herpes Iris is in itself an uncommon disease, being found (according to Crocker) in but 1.6 of every 1,000 cases of cutaneous disease ; the association with stomatitis is still rarer, although it is well recognized. A very similar case is recorded by Dr. Fox, of New York, in the *Journal of Cutaneous and Genito-Urinary Disease*, for January, 1890.

The following characteristics of this disease are well borne out in this case :—

- (1.) The youth of the patient (erythema is most often seen in the young).
- (2.) The seasons of spring and autumn are most favourable.
- (3.) The recurrent attacks, predisposing to fresh outbreaks.
- (4.) Local irritation is an acknowledged factor, and here we have excessive cigarette smoking and poisonous weeds.
- (6.) Defective sanitation was proved by one observer to act as a cause in 12 cases exposed to sewer gas.

In the enumeration of situations where lesions were found, I may include the junction of the prepuce with the glans penis, and thus we have affected the mouth and lips, the conjunctivæ, the glans penis and the skin, besides a slight irritation of the nasal mucous membrane.

DEATH FROM SHOCK.

By J. A. GRANT, JR., M.D., Ottawa.

Death from shock, or heart failure, is, of course, an every day occurrence in organically diseased hearts, but is much rarer in hearts that are, as far as post-mortem examination goes, organically sound. To me, the case I here bring forward is interesting, not only from a medico-legal point of view—an inquest having been held and the case most thoroughly gone into—but also from a medical. I feel the subject is not only a big one, but that even yet there is much room for further knowledge. The factors in functional heart trouble, viz. : the pneumogastric, sympathetic, the cardiac centre in the medulla, the intrinsic cardiac ganglia and the heart muscle itself, possessing power of automatic action, although so long studied are still so ill understood, I feel that our prognosis must be almost hopelessly vague. In addition to giving the notes of this case, I have dwelt on a few points that seemed to me of interest in connection with it.

L.C., aged 38, married and has five children, all healthy. Wife never had a miscarriage. For years he was a cab driver ; he latterly had been a hotel clerk. He was a well built and fairly developed man, had never been a hard drinker, had never had rheumatism, scarlet fever, syphilis ; in fact his history was good, as was also his personal and family history. I learned from an old friend of his that he was a very nervous man. In January, 1893, he went to a dentist. As soon as he entered the room, he took off his coat, jumped into a chair and said : “ I want you to pull a tooth for me.” The dentist told him to open his mouth and show him the tooth ; while he was examining the tooth, the man gave a groan, and as he thought fainted. He immediately tilted the chair back, applied ammonia to the nostrils, and as this produced no effect, he sent for me. When I arrived a few minutes after, I found the man laying in the dentist’s chair apparently quite dead. I immediately gave a hypodermic of ether and performed artificial respiration, without causing the slightest effect. The post-mortem performed by

Dr. Chabot and myself, showed all the organs to be in a healthy condition, the heart's valves were perfect, the muscle substance was firm and of a good colour, no atheroma of the valves or vessels, no evidence of fatty disease, no dilatation of the heart cavities. At the inquest, the question of an anæsthetic having been administered was brought up, but it was clearly proved that none had been used. Had chloroform been given, death would certainly have been attributed to it, and it made me ask myself the question, how often is chloroform blamed for death when it is not the cause.

The *British Medical Journal*, of Nov. 7th, 1893, mentions a case of a young man of 25, suffering from varicose veins. He was very nervous about chloroform, and when twenty or thirty drops had been given, breathing and the heart's action stopped. All efforts to restore vitality failed. The chloroformist stated that at no time was the patient really under the anæsthetic, and death resulted from syncope. This heart failure may presumably be attributed to fear, and perhaps the chloroform may have acted as an adjuvant in the cardiac depression? Many instances are recorded in the older treatises of a patient who, when held down preparatory to operation, has died from fright, and it is a well authenticated fact that one of the first patients to whom chloroform was administered in Edinburgh succumbed to panic, no chloroform having been given. In Dr. Snow's "Treatise on Anæsthetics," published in 1858, several cases are given, in which death was attributed to fright, and not to chloroform, as quite a small quantity was given and freely diluted.

Another interesting case is given in the *British Medical Journal*, November, 1891: C.T., a mariner, aged 36, strong, robust; had a lipoma over left iliac crest; he walked to the operating theatre, and chloroform was administered by a drop bottle and towel. He struggled a good deal, and at the first sign of relaxation chloroform was stopped; just as the operation was to commence, the breathing ceased and all efforts at resuscitation failed. At the post mortem all the organs were

found healthy : the patient had been dreading the operation greatly.

These are only a couple of cases cited to show that there may be a condition of the heart, a condition of danger impossible to diagnose, a condition quite free from valvular lesion, dilatation and fatty disease, in which shock or fear alone can cause heart failure. The two factors to heart lesions are the muscular tissue and the nervous mechanism of the heart, provided the blood is normal. In all these cases I have mentioned the muscular tissue was not at fault, as shown by the post-mortem examination, so that we have to look to the pneumo-gastric, sympathetic and intrinsic cardiac ganglia for the cause of death. It certainly is a complicated nervous mechanism, and the poison of diphtheria often shows us how greatly it can be effected. Cases of diphtheria must be known to all of you, where a young patient with a sound heart, is attacked with the disease, the membrane disappears from the throat, and in spite of all efforts at stimulation the pulse gradually becomes slower and slower till the heart action ceases, or death may be instantaneous after some slight exertion, simply through the action of the diphtheria poison on the nervous mechanism of the heart. Recently the morbid action of the influenza poison, or grippal toxine, has been shown to be the cause, not only of grave irregularity and intermittence of the heart's action, but of sudden cessation and death. I think we can infer from these facts that we do have a condition of nervous heart, if I may so call it, a heart of apparently sound muscular and valvular structure, a heart free from organic lesion, but functionally hanging by the merest thread, that is liable to snap, should the slightest strain be given to this unstable nervous mechanism.

Reviews and Notices of Books.

The Physician's Wife ; and the Things that Pertain to Her Life. By ELLEN M. FIREBAUGH. With portrait of author and 44 photo-engravings of original sketches. In one Crown Octavo volume of 200 pages. Extra cloth, \$1.25 net. Special limited edition, first 500 copies, numbered, and printed in photo-gravure ink on extra-fine enamelled paper; bound in half-leather and vellum cloth, \$3.00 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

This book is written by one who knows, one who has had experience as a doctor's wife. It is most readable and entertaining, but more than this, there is a solid substratum of fact beneath all. It should be read by all who know the doctor, his trials and tribulations, but especially do we recommend it to any young lady who feels a special interest in some member of the medical profession and contemplates taking charge of him; to her the book will prove invaluable.

Sprains, Their Consequences and Treatment. By C. W. MANSELL MOULIN, M.A., M.D., Oxon., F.R.C.S., Surgeon and lecturer on Physiology at the London Hospital; late Hunterian Professor at the Royal College of Surgeons; Redcliffe Travelling Fellow and Fellow of Pembroke College, Oxford. Second edition, pp. 153. London: H. K. Lewis, 1894. Price, 4s. 6d.

The subject of the book is unfortunately one that does not receive the amount of attention that it deserves. Patients are always very much comforted when told that they are suffering from "only" a sprain, little thinking that the amount of disability is often greater after a sprain than after a fracture. This opinion is shared by many medical men, a fact to be much deplored. Dr. Mansell Moulin has endeavoured in this work to dispel this illusion and give to this class of injuries the importance they deserve. He treats the subject first in a general way, causation, pathology and treatment, and in the second part of the book takes up the individual joints, their injuries and the mode of treatment appropriate to each. He points out the damage likely to be done by the prolonged rest

treatment, and strongly advocates massage, insisting, however, on the selection of cases and the thorough carrying out of the process. Bone-setting is explained and the principle of forcible movement is recommended in order to rupture adhesions and bands of lymph which bind the bones together and limit motion in cases where the recovery after a sprain has been imperfect.

The subject is treated most thoroughly, and in the second edition, some changes have been made in the arrangement of the work with a view of making the appropriate treatment of individual cases more distinct, and also of making reference easier. We are sure that the favourable impression made by the first will be deepened by the present edition.

Syphilis in the Innocent (*Syphilis Insontium*) clinically and historically considered, with a plan for the legal control of the disease. By L. DUNCAN BULKLEY, A.M., M.D., Physician to the New York Skin and Cancer Hospital; Consulting Physician to the New York Hospital; lately Professor of Dermatology New York Post-Graduate Medical School and Hospital, etc. The essay to which the College of Physicians of Philadelphia in 1891 awarded the Alvarenga prize for the best memoir on any medical subject. New York, Bailey & Fairchild; pp. 398.

The author divides the subject of syphilis insontium into three heads, and of these he only takes up one, namely syphilis sine coitu, mainly extragenital syphilis. In spite of this restriction, the work covers a great deal of ground. Clinical records are given of one hundred and sixteen cases which have come under the observation of the author. A classification is made of the methods of infection in this form of syphilis in three main heads, namely:—1st. In connection with household and industrial life; 2nd. In the case of children; 3rd. In professional pursuits. Under these headings over one hundred modes of transmission are described. The principal epidemics of syphilis are referred to, as well as the various endemics which have occurred in various times and places. The different names by which the disease is known are also mentioned. A chapter is devoted to the medico-legal aspect of the disease, prophylaxis and the legal control. The book closes with a

synopsis of facts and literature relating to syphilis insoutium arranged in accordance with the classification of modes of infection, and analytical bibliography giving the names of the various observers, the cases observed and the reference to the article describing the case. From this brief account of the work it is easy to see its scope, and the thorough manner in which the task of compilation has been done is evident on the most cursory examination ; documents in all languages have been consulted and most of them by the author himself, with the result that an unrivalled collection of cases is presented and the book is a most complete exposition on what has been heretofore a rather neglected subject.

Annales de Optalmologia. 31 Enero, 1894. Año XVII., No. 1.

This is a journal published in Madrid, Spain, in the interests of ophthalmology. This is the first number under this title, the publication being formerly devoted to general medicine, under the name of *La Andalucia Medica*. It is printed in Spanish and contains original and selected articles bearing on diseases of the visual apparatus.

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- The Technique of Total Extirpation of the Fibromatous Uterus.** By GEORGE M. EDEBOHLS, A.M., M.D.. Reprinted from *The American Journal of Obstetrics*, Vol. XXVIII., No. 5, 1893.
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- The Operative Treatment of Complete Prolapsus Uteri et Vaginæ.** By GEORGE M. EDEBOHLS, A.M., M.D. Reprinted from the *American Journal of Obstetrics*, Vol. XXVIII., No. 1, 1893.
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- The Early Removal of Tubercular Foci of the Bone.** By B. MERRILL RICKETTS, M.D. Reprint from *Journal of Materia Medica*.
- Excision of the Hip-joint in Tubercular Disease.** By B. MERRILL RICKETTS, M.D., Cincinnati, O. A paper read before the Cincinnati Academy of Medicine, November 20, 1893.
- Bone Operation for the Correction of Club-foot, Based upon an Analysis of 435 Operations by 108 Operators.** By H. AUGUSTUS WILSON, M.D., Philadelphia. Reprinted from the Transactions of the American Orthopedic Association, September, 1893.
- Twenty-Sixth Annual Report of the New York Orthopædic Dispensary and Hospital.** 126 and 128 East 59th Street. 1894.

Retrospect of Canadian Medical Literature.

[The editors will be glad to receive any reprints, monographs, etc., by Canadian writers, on medical or allied subjects (including Canadian works published in other countries) for notice in this department of the JOURNAL.]

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- (1.) Purulent pleurisies.—J. E. Graham, p. 83.
- (2.) Climates favourable to consumptives—P. H. Bryce, p. 89.
- (3.) Suppurating myoma of the uterine wall followed by twin pregnancy—J. F. W. Ross, p. 108.
Cephalhæmatoma (case of)—H. Morell, p. 110.

Canadian Practitioner, March, 1894.

- (4.) The indications for operation in spinal lesions—G. A. Peters, p. 161.
Cocaine in surgery—L. M. Sweetnam, p. 172.
- (5.) Two obscure cases of abdominal surgery—W. Oldright, p. 178.
A confused case of ethics—E. H. Stafford, p. 182.
Acute inflammation of the middle ear following influenza—Dr. Butler, p. 186.
- (6.) Rupture of the heart (case of)—F. P. Drake—p. 196.
Recent experiences with traction forceps—W. Brinton (Baltimore, U.S.A.), p. 202.
Oyster poisoning (case of)—J. H. Howell, p. 205.

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- Revue statistiques des enquêtes tenues par la cour du coroner du district de Montréal pendant l'année 1893.
—Wyatt Johnson and G. Villeneuve, p. 57.
- Dé la valeur pathognomique du vomissement et de son traitement comme symptome—C. Verge, jr., p. 67.

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- Curabilité de la consommation—J. I. Desroches, p. 252.
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- (7) Rapport de l'inspection fait dans la ville de Montréal du 29 janvier au 3 février à l'occasion de l'épidémie régnante de fièvre scarlatine—J. A. Beaudry, p. 283.
Maladies contagieuses déclarées pendant le mois de janvier 1894, p. 302.

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- Diagnosis of pediculus capitis—D. W. Montgomery, p. 31.
Removal of pus tubes—A. Laphorn Smith, p. 32.
Puerperal fever with high temperature—J. A. Temple, p. 36.
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Decision concerning counter prescribing, p. 49.

Ontario Medical Journal, Feb. 1894.

- Inherited syphilis with reference to eye and ear disease—A. J. Horsey, p. 239.
Case of cholecystotomy—F. B. Wilkinson, p. 241.

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- (8.) Snow and Salt, p. 28.

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- John Hunter—W. C. Crockett, p. 243.
Strangulated inguinal hernia three days old in a woman 77 years old; operation and recovery—Murdoch Chisholm, p. 246.

Proceedings of the Eighth Annual Meeting of the Association of Executive Health Officers of Ontario, Held at Guelph, Ont., June 27th and 28th, 1893.

- (9.) Diphtheria epidemics; how propagated—C. A. Hodgett, p. 34.
Notes on the prevention of disease—A. Graves, p. 98.
(10.) The sanitary condition of factories in Ontario—R. Barber, Esq., p. 52.
Inspection of cheese factories—E. E. Kitchen, p. 67.
Sanitary needs of the farm—D. McRae, Esq., p. 76.
(11.) Pure water on the farm—F. T. Shutt, Esq., p. 79.
(12.) Toronto water supply—J. J. Cassidy, p. 88.
(13.) Epidemiology of outbreaks of specific diarrhoea—N. Walker, p. 104.

Defences of the Province of Ontario against cholera—J. Coventry, p. 127.

The sputa of consumptives as a cause of disease—W. H. Lowry, p. 94.

How to purchase safe dairy cows—J. H. Reed, V.S., p. 118.

The Public Health Act in rural districts—H. Shurton, p. 130.

(14.) Systems of sewerage for small towns and villages—A. Macdougall, C.E., p. 137.

Public abattoirs—J. Wallace, p. 144.

(15.) The danger of a small-pox epidemic—P. H. Bryce, p. 114.

(1.) *Empyema*.—Dr. J. E. GRAHAM (Toronto) calls attention to the rarity of mixed infection in cases of purulent pleurisy in spite of the fact that there may be present any one of a number of different organisms (streptococcus, pneumococcus, staphylococcus pyogenes, typhoid bacillus, etc). In one case, where the pus was of a distinctly greenish tint, the pneumococcus was the organism present. Compression of the lung from empyema may give physical signs simulating those of cavity. In left sided empyema the heart was not found to be so much displaced as in ordinary left-sided pleurisy with effusion. An excellent compilation of the more recent views on the subject of empyema is given in this paper.

(2.) *Climates Favourable for Consumptives*.—Dr. P. H. BRYCE, (Toronto) considers that the unfavourable condition of cold, moist external air is exaggerated by the excessive dryness of house air in Canada. The relative proportion of deaths from phthisis per 1,000 living in Ontario for 1890 is stated as follows:—St. Catharine's, 2.7; Toronto, 2.3; Ottawa, 2.2; Kingston, 2.1; Belleville, 1.5; Hamilton, 1.4; London, 1.2; Guelph, 0.7; showing that consumption is less frequent in localities not situated near large bodies of water and least frequent in the central plateau of Ontario. In these regions the air is drier than elsewhere in Ontario, and there is a larger proportion of clear sunshine. Dr. Bryce suggests that consumptive patients should be sent to moderately warm dry climates with equable temperatures, rather than to high altitudes subject to great temperature variations. It is the daily range of temperature rather than the variations with the

various seasons which should be watched, as it is the changes occurring within a few hours, not days, which affect health and constitution and may oblige the climate to be regarded as an extreme one, although the mean annual temperature may be relatively warm. Dr. Bryce does not mention any of the Canadian health resorts in his paper.

(3.) Dr. J. F. W. Ross's case of suppurating myoma is remarkable in that after the birth of a first child in May, 1891, an enlargement was noticed upon the right side low down, and five weeks after confinement a purulent discharge, thick and foul smelling, began to flow from the vagina. There was a large abscess in the labium majus, and an intramural fibroid as large as a child's head was discovered bulging into both the uterine and peritoneal cavities. This formed a large sloughing mass and was freely scooped out. Now, not three years after this extensive disturbance of the uterine walls the patient has been safely delivered of twins and has made a good recovery.

(4.) In the course of a very able article, based upon his own observations and upon the results obtained by McEwen, Horsley, Southam and other English observers, Dr. Peters discusses the indications for operation in spinal lesions, and expresses himself cautiously in favour of operative treatment, more especially in cases of compression due to Pott's disease. Dr. Peters is "strongly inclined to give (his) allegiance to the advisability of operating in all progressive cases which prove unresponsive to a few weeks conscientious treatment by rest, fixation and extension. We may, by following this rule, sometimes operate on a case which would have recovered if left alone, but it is certain," he thinks, "that many such cases must inevitably perish unless they are saved by operation." Referring to the removal of tumours from the neighbourhood of the cord, he calls attention to the difficulties and dangers from great implication of the dura mater, to the nervous symptoms, the respiratory and cardiac troubles which may occur if it is not possible to bring together the margins of the dura and prevent the draining away of the cerebro-spinal fluid.

(5.) Dr. OLDWRIGHT's two obscure cases are:—1. A localised encysted peritonitis occupying the median line, so subacute in its development that there had been no history of disturbance.

This had lead to adhesions and effusions of such a character as to form a central and symmetrical tumour planted upon an infantile uterus. 2. Distended gall bladder and biliary calculi with septic complications. The patient died a day after the gall bladder was opened, and at the autopsy three abscesses were found high up in the posterior portion of the right lobe of the liver.

(6.) Dr. DRAKE reports an instructive case of rupture of the heart which presents several points of interest. The history given is that of a well developed athlete of 35 years of age, who, during the course of a cricket match, in which he was between the wickets, while more than one hundred runs were being made, suddenly after a short run felt a slight pain in the chest. Next day while bowling hard the pain returned, causing great distress, so that he was persuaded to go to his hotel. His pulse was rapid and weak, the heart action laboured, there was great prostration and pain extended over the chest and down the arms. The next day, apparently, he was much better and was permitted to travel to his home, where for several days there were severe paroxysms of cardiac pain, with intense pains in the hips, abdominal and gluteal regions. These disappeared on the tenth day, to be followed by phlebitis (?) in both legs, with threatened abscess formation in the left calf and both arms. This condition lasted for five weeks, and was followed by good recovery. About five weeks before his death he lifted a great weight of 200 lbs. under circumstances of difficulty and excitement, but this did not bring on any recognizable trouble. A month later the old precordial pains suddenly manifested themselves. The patient died suddenly one hundred and forty-five days after the initial disturbance. The autopsy revealed no arterial or valvular lesion but rupture of the heart in the usual position, the lower anterior surface of the left ventricle, with hæmorrhage into the pericardial cavity. This rupture had, it would seem, been preceded by partial rupture, for there was evidence of earlier tearing apart of the more internal musculature, with small celled infiltration between the fibres, and associated with this an adhesive pericarditis, the parietal pericardium being attached to the lower two-thirds of the anterior surface of the left ventricle. This localised pericarditis might, it is true,

have preceded and led to the giving way of the ventricular wall, but on the whole it would seem that Dr. Drake's contention is correct, that the adhesions followed upon the partial rupture, or ventricular aneurism. The interest of the case lies in the long period which elapsed before the rupture became complete, and in the history of multiple emboli succeeding the aneurism. There is no satisfactory reason to be suggested why the repair of the heart, which had proceeded so satisfactorily for nearly five months, suddenly showed itself to be insufficient.

(7.) *The Scarletina Epidemic in Montreal.*—This paper contains the full text of Dr. Beaudry's report, of which a synopsis was published in the March number of the JOURNAL. (See page 709.)

(8.) *Snow and Salt as a Local Anæsthetic.*—B. recommends, in the absence of any of the usual local anæsthetics, the use of a mixture of powdered ice or snow and salt. In the extraction of teeth this may be applied to the gums, wrapped up in a napkin; it may be used on any other part of the body.

(9.) *Epidemic Spread of Diphtheria in Sparsely Settled Regions.*—Dr. HODGETTS (Toronto) gives some interesting details concerning the spread of diphtheria by personal communication during the epidemic of 1887-88 in the Parry Sound district, north of Muskoka. In Nipissing village a number of cases appeared to have arisen from the use of a certain "throat atomizer, which was kindly loaned to spray throats with a view of preventing the disease." During the winter of 1888, 140 cases with 55 deaths occurred in 46 families scattered throughout the district, and often twenty to fifty miles from any medical aid. Until the time when an official inspection was made no attempt was made to secure isolation or other precautionary measures. In one case two members of a family, returning, subsequent to the death of a relative, had the body disinterred in order to view it, and soon afterwards took the disease and died. Upon enforcing a quarantine of 14 days, with private and speedy disposal of the dead and careful disinfection of the houses, the epidemic was soon controlled. In October and November, 1892, an epidemic disease broke out in a lumber camp and a hotel in the vicinity of the township of Niven, North Renfrew. In less than four

weeks the disease had been carried into 7 townships among a scattered community. The number of persons attacked was 74, of whom 28 died. The isolation of the sick persons in the lumber camp and the removal of the healthy to a new building at once caused this disease to disappear, not a single new case appearing.

(10.) *Sanitary Condition of Factories in Ontario.*—Mr. BARBER, Provincial Inspector of Factories for Ontario, reviews the working of the Ontario Factories' Act, which also covers all workshops where six or more persons are employed. The commonest sanitary defect he found to be impure air; he considers the presence of 0.6 per 1000 of carbonic acid to have a gradual undermining influence upon the health. The Provincial Act does not fix any minimum of air space to each worker. The air in steam laundries was found to be particularly full of the products of imperfect combustion of coal gas. Dust was found to be most troublesome in foundries, wood-working establishments, and cotton, woollen and spinning factories. This could be regulated by means of powerful exhaust fans, but these had only been employed in the case of the foundries. The fumes arising in plating works were found very difficult to regulate by means of natural ventilation. The offensive odours of glue factories were found to be best checked by sprinkling the bespattered floors plentifully with strong solutions of common salt. As a rule it was found very difficult to secure the intelligent co-operation of the workmen in such sanitary measures as wearing respirators in dusty atmosphere, etc.

(11.) *Water Supply of Farms.*—Mr. Shutt (chemist to the Experimental Farm, Ottawa) has found as the result of a large number of water samples sent him from wells and springs on various farms throughout the country, that less than 10 per cent could be called first class in quality, and 70 per cent. had to be condemned as entirely unfit for drinking purposes. The reason for this found to be, in almost all cases, the proximity of the water supply to barn-yards and privies. Mr. Shutt thinks it likely, however, that the waters examined were worse than the average farm supply, as some illness must usually have given rise to suspicion as to their purity. At the same time it is evident that pollution of the drinking water on farms is much commoner than has been supposed.

(12.) *Toronto Water Supply.*—Dr. CASSIDY, chairman of the Provincial Board of Health for Ontario, strongly urges the advisability of utilizing the under-ground water from the gravel beds north of Toronto for the city supply. The York Waterworks Company claim to be able to supply their water at 3½ cents per 1,000 gals. An analysis of the water made by Prof. Ellis gave in parts per million :—Chlorine, 2 ; free ammonia, 0.04 ; albuminoid ammonia, 0.03 ; oxygen absorbed in 15 minutes, 0.16 ; oxygen absorbed in 4 hours 0.32. Total solids 28.35 grains per gallon. Hardness 18.55 Clarke's scale.

It is claimed that an underground river, 300 to 500 feet wide, and 10 to 25 feet deep, is flowing down the valley to the north of Toronto, and that a supply of 14 million gallons daily can be obtained in 18 months, and one of 24 million gallons daily within 30 months, by sinking wells and tunnels of open brick work. The water lies between 50 and 60 feet below the surface at a height of 400 feet above Toronto bay. Its temperature is 45°F., and it is supposed to be derived from the vicinity of Lake Simcoe.

The utilization of this water supply is recommended by Dr. Cassidy in preference to the construction of a water tunnel for Toronto, the construction of filter beds and the obtaining of a supply by gravitation from the northern lakes.

(13.) *Epidemic Diarrhœa from Contamination of Drinking Water.*—Dr. WALKER (Toronto) describes an outbreak of choleraic diarrhœa during the winter of 1892-93, which probably affected 5,000 persons, the Board of Health having knowledge of 1293 cases. The average duration of illness was about 5 days, though the cases might last from a few hours to several weeks. The other symptoms noted were vomiting, headache and fever with great prostration, and in some cases bronchial disturbance. The cases nearly all occurred in the 10 weeks following an accident to the intake pipe of the water which caused the city water supply to be pumped from the sewage polluted Toronto Bay during this period. A few cases, however, occurred previous to the accident. In many houses the cases ceased where all water was boiled before use, or filtered through a Chamberland filter. The weather during this period was steadily cold. (The accident referred to happened on December 25th, 1892. The cases of typhoid fever

reported at Toronto in the following months were 111 in February, 108 in March, 138 in April and 15 in May).

(14.) *System of Sewerage for Small Towns and Villages.*—Dr. McDougall recommends the introduction of small (6 inch) sewage pipes running at the backs of the houses and connecting with the main drains at each block. These can be placed, if necessary, quite near the surface of the ground, as sewage does not tend to freeze readily, and may be covered with some material protecting against frost.

(15.) *Danger of Small-pox in Ontario.*—Dr. Bryce called attention to the fact that there were probably about 400,000 children in Ontario who were unvaccinated. This, in face of the existence of small-pox in various parts of Europe and America, constituted a serious menace to health.

Society Proceedings.

THE MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, Feb. 23rd, 1894.

JAMES BELL, M.D., PRESIDENT IN THE CHAIR.

Cholesterin Cyst of the Testis.—DR. ADAMI exhibited a cyst of the tunica vaginalis testis, removed post-mortem, which contained two ounces of a clear fluid, full of pure cholesterin crystals. The history of the case was that the patient, a man advanced in years, was brought into the hospital with paralysis of the left side, and with deviation of the eyes to the right. He rapidly lost consciousness, and after lingering a few days, died. At the autopsy a large hæmorrhage was found in the corpus striatum. There was a condition of general arterio-sclerosis, granular kidneys, emphysematous lungs and hypertrophied heart. On the right testicle there was a large cyst, apparently in front of the organ and full of fluid. The walls were thickened and atheromatous and contained calcareous plates.

The question as to the origin of the cholesterin was difficult to answer. Cholesterin in large quantities may be found in connection with dermoids and with atheromatous degeneration, but in both cases the crystals are almost always found associated with fatty debris. Old chronic hydroceles are recorded also as showing atheromatous conditions of their walls, and occasionally containing large quantities of cholesterin. Such is probably the nature of the cyst in question, but how and why the crystals are deposited in large quantities requires further explanation.

DR. JOHNSTON had seen cysts in various parts of the body which were lined with squamous epithelium and contained cholesterin. He had seen one such cyst situated deep in the cervix uteri.

DR. ADAMI said that atheromatous cysts are found in connection with the scalp, but in such cases fat and broken down tissue are among the contents, while in this case there was no fat or debris.

Dr. SHEPHERD exhibited the following specimens:—

(1.) *Supernumerary Digits in the Pig's Manus.*—Two pig's

fore-feet were shown, each with a supernumerary digit. In each case the digit was the lost pollex, and with it was reproduced to its full size, the os trapezium which, in the normal manus of the pig is a small rudimentary ossicle. Dr. Shepherd remarked that the re-appearance of the lost digit in the pig's manus was not very uncommon, and said that the normal manus consisted of two hanging toes, the second and fifth, and the toes which reached the ground, the third and fourth, so that when a supernumerary digit was seen it was always the lost pollex, and with it was reproduced the os trapezium of the carpus. A couple of years ago he presented to this society a specimen of a pig's manus having a pollex and pre-pollex, six digits in all, a variation which was of greater rarity than the one above described.

(2.) *Boat Shaped Negro Skull.*—The skull was that of a full-blooded negro, and with a very small cranial capacity, in fact micro-cephalic, and very prognathous. The skull was long and very narrow, and of the form usually described as scaphoid. This was due to the absence or early obliteration of the sagittal suture, hence the transverse growth being prevented, a great increase takes place in the vertical and longitudinal direction, thus giving the vault of the skull a boat-shaped shape. This was well shown in the specimen exhibited. At the site of the anterior fontanelle the bone was raised into a prominent boss, due no doubt to the later ossification at this point. This form of skull is said to be common amongst the Scotch, hence the term "long headed Scotchmen."

(3.) *Skeleton of Hawk with Multiple Fractures.*—This specimen exhibited healed fractures of the femur, breast bone and the radius and ulna of each wing. The fractures had been no doubt due to shot, as one pellet was found in the breast bone and another in the right bronchus. The amount of callus thrown out was enormous, being necessary to unite the fractured ends of the bones which were a considerable distance apart.

Necrosed Polypus of the Uterus.—DR. LAPHORN SMITH exhibited the specimen which he had removed from a woman fifty-five years of age, the menopause having occurred several

years before. For two weeks the patient had suffered from a profuse foetid discharge. Her physician found a large mass in the vagina, which was easily broken and bled profusely, so he thought that the disease was cancer. Dr. Smith found that the mass was movable, and under an anæsthetic, when he had removed a large quantity of necrosed tissue, discovered a pedicle springing from the fundus, and which was easily removed. After thorough disinfection, the uterus was stuffed with iodoform gauze; the patient made a complete recovery. Dr. Smith pointed out that the foetid discharge, accompanied by hæmorrhage, rendered the suspicion of cancer very strong, especially in a woman so long past the menopause.

Cancer of the Body of the Uterus.—DR. LAPHORN SMITH exhibited a specimen of extensive cancer of uterus, in which the disease was confined to the body, the cervix showing no appearance of being affected. The patient had suffered from hæmorrhage, coming on several years after the menopause. Portions of tissue removed by the curette proved the disease to be cancer.

Osteo-Sarcoma of the Tibia and Fibula.—DR. HINGSTON exhibited a tibia and fibula, in which large excavations were situated deep in the substance of the bones near their heads. The patient had come to him five months before, with a large, hard swelling at the back of the knee. Recognizing the malignant character of the growth, operation was advised, but the man would not submit until three days ago, when the leg was removed by the circular operation a little above the condyles of the femur. There were large cavities on the posterior surface of the bones just below their articulating surfaces, where the tumour had been removed, and the periosteum was detached for some distance on both bones. The appearance of the bones would lead one to suspect strumous disease had not the history of the case and the presence of the tumour pointed unmistakably to osteo-sarcoma.

Poisoning, Possibly from Lead, after Eating Canned Tomatoes.—DR. JOHNSTON and MR. WOLFF reported a case of a girl, aged seven, who was taken violently ill with vomiting

and collapse within two hours after eating a large quantity of tomato soup. Of the other members of the family, who had eaten the soup, the mother suffered from headache and nausea, while the rest were unaffected. The child died within sixteen hours. At the autopsy, no natural cause of death was found, but chemical analysis made independently by Dr. Ruttan and Mr. C. F. Wolff, showed the presence of a large quantity of lead within the liver. The case was of interest owing to the frequency of poisoning from canned goods, and the rarity with which any evidence pointing to the absorption of mineral substances had been established by analysis of the viscera.

DR. T. D. REED considered the evidence of lead from the tomato can being the cause of death in this case quite inconclusive. Canned goods are used in enormous quantities, and death from the lead in them is unheard of. Fatal acute poisoning from any lead salt is extremely rare, several drachms per day of lead acetate are given therapeutically, and quantities of one ounce have failed to cause death. The entire amount of solder in a tin would only represent a very few grains of lead. The few cases of death from canned goods heretofore reported have been attributed to decomposition of the contents of the can, but in this case, as the material was boiled into soup, it is difficult to accept the eating of the tomatoes as the cause of death. Most persons carry about with them in their bodies a small quantity of lead.

DR. JOHNSTON replied that the remaining contents of the can could not be obtained. He pointed out that though large quantities of the acetate may be taken with impunity, some other salts, notably the chromate, were highly poisonous. Some such poisonous salt may have been present in this case.

DR. HINGSTON remarked that the carbonate, which is a poisonous salt, may be formed from the decomposition of the acetate.

DR. F. W. CAMPBELL suggested that the fatal result might have been due to decomposition of the tomatoes, and referred to two cases, that had recently come under his care, of severe poisoning from eating canned salmon. He pointed out that

many years ago Dr. Joseph Workman recommended drachm doses of the acetate of lead for post partum hæmorrhage, and he recalled a case which appeared to be acute lead poisoning following this treatment.

Intestinal Anastomosis with the Murphy Button.—DR. LAPHORN SMITH demonstrated the method of using this instrument for rapidly and effectually securing union between two portions of the intestinal canal, while leaving a lumen for the passage of the contents. The instrument consists of two metal discs, each having a central orifice about 1.50 c.m. in diameter. Each disc is attached to a portion of the bowel by having the free edges of the bowel drawn inward over it by a purse-string suture. The discs are then approximated and held in position by means of a spring which keeps up a continuous pressure upon the serous surfaces until union takes place, after which the compressed tissues slough away and the button is passed with the feces. The advantages of this device are the rapidity and ease with which the operation is performed, the certainty of union, a large opening for the passage of the bowel contents while the union is taking place and the little or no tendency to subsequent constriction.

Amœbic Abscess of the Liver.—DRS. FINLEY and ADAMI exhibited the specimens and gave the history of the case. (See page 728.)

DR. LAFLEUR stated that this was the first case of the kind reported in Canada. The presence of abscess without dysentery is not at all unusual. He had seen three cases in Baltimore, which began as abscess of the liver, and in which it was only secondarily discovered that the patient suffered from dysentery, and in fact, this was so slight that it did not form an important part of the disease, the lesions in the bowel being very secondary and unimportant compared with those in the liver. The anatomical picture in this case was exactly like that he had observed in a good many fatal cases of liver abscess, in which the amœbæ seemed to be the cause of the disease, and he had no doubt that the microscopical examination would be found to correspond. The pus of the abscess really consists of masses

of softened necrosed material, and, as a rule, unless there has been a coincident infection by pyogenic organisms, the leucocytes are very few in number. He added that since he had written his share to the contribution on "Amœba in Dysentery," there have appeared in Germany and Austria a number of works upon the subject, which seem to favour the existence of a distinct form of dysentery caused by the amœba coli and which confirm the work done in Baltimore.

Stated Meeting, March 9th, 1894.

A. D. BLACKADER, FIRST VICE-PRESIDENT, IN THE CHAIR.

Dr. O. F. Mercier was elected a member of this Society.

Xanthoma Tuberosum.—DR. SHEPHERD showed a case and gave the history as follows:—The patient was a woman, aged fifty, who had suffered severely from jaundice, and was at present jaundiced. Three weeks before she had noticed some yellowish looking tubercles under the skin, which were of the size varying from that of millet seeds to that of peas. These grew larger and others appeared in the normal lines and folds of hand, and often on the surfaces of phalangeal joints; here the tubercles were fused together into a raised yellowish band, which were subepithelial. These growths looked as if they contained fluid, but on pricking them it was seen that they were dense and fibroid in character. Latterly tubercles of same character had appeared on the elbows and knees and also on the lips and side of nose. They were excessively painful when touched and pressed, and itched a great deal. The hands were continually perspiring. Dr. Shepherd said this was a somewhat rare disease, and was more common in women than men being often but not constantly associated with jaundice. The tubercles are not connected with the sebaceous glands as seen by their appearing so abundantly in the palms of the hands. They are no doubt growths of connective tissue with fatty degeneration, this giving the yellow appearance. They sometimes occur in the throat and fauces, trachea, heart, &c. Treatment is of little avail. The patches often disappear spontaneously.

DR. ADAMI had made only a cursory examination of portions

of the growths that had been sent to him, but would give a full report to the Society at a later date.

DR. BULLER had seen a great many cases of xanthelasma of the eyelids, and he thought that there must be some marked underlying difference between the pathological processes of this disease as found in the eyelids and in the other parts of the body. In these cases he had never found any tenderness of the diseased portion, nor could he ever elicit any history of sick headache or hepatic affection, though he always made careful enquiries.

DR. FOLEY enquired whether the growth was strictly confined to the corium or whether it penetrated into the deeper structure; he also asked if cholesterin crystals were present.

DR. ADAMI replied that as the corium and the fibrous tissue below was very indefinite, Dr. Foley's question was difficult to answer; no cholesterin was found.

Arthrectomy.—DR. ARMSTRONG brought before the Society a man in whom a particularly favourable result had been obtained of an arthrectomy of the knee-joint, a partial incision having been performed last September. As could be seen, the man walked well and had a considerable amount of motion in the joint; the patella was also quite movable. The operation was performed by the transpatellar incision, the sections being reflected up and down, the tubercular disease was shaved off the patella and condyles, the patella was then sutured and the wound closed without drainage. The portions removed were submitted to Dr. Adami, who reported them to be tubercular. They seemed to resemble the dry atrophic form of tuberculosis which sometimes occurs in arthritic joints, the *caries sicca* of Volkmann.

The history of the case, which presented many points of interest, was as follows:—The man came to the hospital early last spring complaining of severe pain and practical immobility of the knee-joint. This pain was so severe that hypodermics of morphia were required to relieve him. There was very marked atrophy of the joint, which was then even more plainly seen than at present, the measurements being one to one and a half inches less than on the sound side. At the same time when the knees were placed together one could hardly tell which was the diseased joint, the outlines of the affected one

being perfectly normal, there was no œdema, no puffiness, no redness to indicate disease.

In the absence of physical evidence, Dr. Armstrong hesitated to operate and sent the man home after the pain had become somewhat relieved. He, however, shortly afterwards began again to annoy his family physician, who sent him back to the hospital with an urgent request that something should be done. The operation was then performed with the result already mentioned.

The case is of interest as showing a relationship between joint disease and arthritic atrophy, the pain and atrophy being here more marked.

Dr. Armstrong then cited the history of a case of hip joint disease, presenting very similar features, which he had met during last summer. Here also pain and atrophy were the only symptoms. With Dr. Shepherd he had examined the patient under ether several times without being able to decide on operation, but as the great pain was wearing the man down to a shadow, he at last opened the joint and found distinct tubercular disease in the floor of the acetabulum, and the head of the femur was in a condition of caries.

The result had been very favourable, and Dr. Armstrong regretted that he could not find the man to bring him before the Society.

DR. SHEPHERD had seen the case with Dr. Armstrong, and from the external appearances no one would have thought that there was a tubercular condition present in the joint. From the experience gained from this case he would be more ready to open such joints in future.

DR. JAMES STEWART on being asked to express his views on arthritic atrophy, thought that there was but little to be said on the subject; there are explanations for all forms of atrophy except this one. Some hold that its nature is that of a reflex process, but this is a convenient term to use, when we know nothing about a subject, and such is probably the case here.

Frogs with the Cerebrum Removed. — DR. MILLS and MORROW exhibited two frogs deprived of the cerebrum, and demonstrated that they were capable of co-ordinated movements of the most complicated kind, including Goltz's "balancing experiment," i.e., the frogs would, when a surface on which they

were resting was gradually tilted, move in order to maintain their position. They would also turn over when placed on their back. The frogs had been operated on about a month previously, and during all this time had never made one spontaneous (voluntary) movement; they had not, *e. g.*, attempted to leap out of the dish in which they had been sitting under a water tap. This showed that the removal of the cerebrum abolished voluntary movement, but that all the mechanism necessary for co-ordinated movements remained. These frogs were shown especially, because it would appear that certain changes in the nutrition of the animals had taken place leading to necrosis of the skin, etc., and ulceration. On one occasion, when the surroundings had been changed, one of the frogs had shown tonic spasm of the limbs. This reminded Dr. Mills of what Prof. Goltz had told him, when a worker in his laboratory in 1884, that many of the dogs whose cerebrum had been operated on died in convulsions weeks or months afterwards. The frogs in question had been in only fairly favorable surroundings and had been given a little food a few times, but food was of minor consequence to frogs in winter. A frog that had not been operated on, and kept under somewhat similar circumstances, was shown and seen to be in a very different state of health. Dr. Mills thought the operation had greatly lowered the vitality of the frogs and this was one of the chief lessons conveyed.

DR. WILKINS was of the opinion that a portion of the cerebrum remained intact in these frogs, as they had made an attempt to get away, which action involved a series of movements, implying volitional power, and volitional power cannot exist with no portion of the cerebrum intact. In a frog with the entire cerebrum removed, on stroking the flanks a single croak is elicited, but the debilitated condition of these frogs may explain the absence of the sound. Dr. Mills had expressed a doubt about frogs swallowing each other, but the speaker thought that he was mistaken. He had more than once, in his own laboratory, upon opening frogs found bones in their stomachs, and on one occasion he had positive evidence that frogs do eat each other, for on hearing a splash and a croak he hurried to where the frogs were kept, and found one frog with the hind legs of another sticking out of

his mouth, and which he immediately removed. He thanked Dr. Mills for his demonstration, and hoped that he would bring similar cases before the Society in future.

DR. ADAMI referring to the length of time that the frogs had lived, quoted a Russian observer who kept a pigeon alive a whole winter after the removal of the cerebrum. He further suggested that as an explanation of the double movements spoken of by Dr. Wilkins that the severity of the stimulus was sufficient to account for it.

DR. MILLS in reply, thought that Dr. Wilkins was confounding the actions of frogs with the cord only remaining with those, as in the present case, with cord and medulla. Whether it would turn out that these frogs had the whole cerebrum removed or not, he had certainly seen cases, in which the whole cerebrum had been removed, act in a manner similar to these.

Complete Double Ureter.—DR. ADAMI read the report of the case and showed the specimen. (See page 736.)

DR. SHEPHERD had met with a great many cases of abnormal blood supply of the kidney, and partial double ureter, but the only other case that he had seen of complete reduplication was the one taken by Dr. Adami from the museum to compare with the case reported.

Mitral and Tricuspid Stenosis.—DR. FINLEY exhibited a heart in which both mitral and tricuspid stenosis was well marked. The orifice of the mitral valve admitted the tip of the little finger, that of the tricuspid the first finger. The changes in the left ventricle were not marked; if anything, its cavity was somewhat smaller and its walls thin; the right ventricle, while its walls were slightly thickened and its cavity dilated, did not present that extreme degree of enlargement commonly found in mitral stenosis; the right auricle was the largest of all the cardiac cavities. The lungs presented numerous reddish patches, which on microscopical examination proved to be hæmorrhagic infarcts.

The following is the history of the case:—The patient, a female, æt. 33 was admitted to the Montreal General Hospital in November, 1893, for pain in the side and cough. She had suffered from repeated attacks of sore throat, sometimes going on to suppuration, but had never had rheumatism or chorea.

Dyspnœa on exertion had been present for three months before her admission. She had never had hæmoptysis. The family history presented no feature of importance, and there were no rheumatic tendencies. The present illness began four days previous to admission with a slight chill, cough and pain in the right side.

Physical Examination.—Moderate emaciation, slight cyanosis of lips and cheeks, with stellate venules on face. Temperature sub-normal. Cardiac impulse forcible and somewhat heaving over lower sternal region. Apex in fifth space $\frac{1}{2}$ inch inside nipple. Marked presystolic thrill at the apex. Cardiac dulness normal. A harsh rumbling presystolic murmur is heard, but to inner side of the apex, and localized over a space two inches in diameter. The first sound is abrupt, greatly accentuated and snapping in character. A soft systolic murmur is heard between the lower sternal area and the nipple. The pulmonary second sound is enormously accentuated and reduplicated. Below the angle of the scapula on the right side dulness, feeble breathing, with diminished vocal resonance and fremitus. A small quantity of clear serum was drawn off a few days later with a hypodermic syringe. The first sound at the tricuspid area is feeble. The pulse 102, small, regular and of low tension. The other organs are normal, and the urine reddish yellow in colour, s.g. 1025, no albumen or casts. Ordered digitalis m. x ter in die .

Nov. 14.—Fluid in pleura reaches fourth rib in front. Temperature 99 to 100 in the morning and about 100 at night, became normal at this date. Digitalis dropped on account of vomiting.

Feby. 15.—The presystolic murmur and thrill disappeared and ten days later pulse became extremely weak, paroxysmal attacks of intense dyspnœa and cyanosis came on, death resulting apparently from cardiac failure. The urine averaged 20 to 30 ozs. daily whilst under observation. There was at no time any œdema of the extremities or serous sacs.

The physical signs left no doubt that the mitral valve was narrowed, but there was, during life, no evidence made out indicating disease of the tricuspid. On looking back, however, on the case, he was inclined to think that the systolic murmur heard in the lower sternal area was possibly a tricuspid sound.

It was impossible to find the onset of the disease—there was no history of rheumatism—but judging from the condition of the cardiac orifices it must have been of a good many years standing, and the case furnishes another instance of the extreme degree to which cardiac disease may advance and yet compensation be maintained. A point of interest in connection with the first sound of the heart in mitral stenosis is the cause of its peculiar snapping character. It is, perhaps, difficult to give any satisfactory explanation. The point has been much debated, and many authors think that the thickened condition of the valve, in itself, would preclude the possibility of its emitting such a sound. Recently a paper has been published by Fenwick and Overend in *Am. Jour. Med. Sc.*, 1893, stating that the peculiarity of the first sound of the heart occurring in mitral stenosis is really due to the closure of the tricuspid valve in the hypertrophoid right ventricle. The present case, however, certainly negatives such a view as the tricuspid valves were rigid, and yet the first sound was as sharp, snapping and loud as in cases of uncomplicated mitral stenosis.

DR. MARTIN had examined the lungs and found a rather curious condition resembling somewhat broncho-pneumonia, but sections proved the condition to be only hæmorrhagic infarction, with slight desquamation of the epithelium.

DR. LAFLEUR remarked that the specimen was of interest, as all records show tricuspid stenosis to be a rare lesion. With reference to Dr. Finley's suggestion as to the possibility of there being regurgitation through the tricuspid valve—if such had been the case there must have been pulsation of the veins; he asked if such a condition had been noticed. With regard to the situation of a systolic murmur as indicating tricuspid disease it is not of diagnostic value.

DR. FINLEY replied that there was very slight pulsation of the veins which seemed to come from below, but certainly was not a very marked condition—but as there are so many forms of pulsation of the vessels of neck, he did not lay much stress upon this condition.

Wound of the Heart.—DR. SHEPHERD reported the case as follows:—In the summer of 1892 he was summoned to a case where it was said the patient, who had alcoholic mania, had

pushed two needles into his heart. The patient when seen was lying on the floor and seemed in great distress, but calmly told the doctor that he had tried to kill himself by pushing needles into his heart. On examining the region of the heart with every beat the skin over the apex seemed to be pushed up by something beneath; this felt like a needle. An inch out from this another needle could be felt deep down in the intercostal space. The patient said that he had pushed both needles out of sight beneath the skin with a sharp end of a file. Dr. Shepherd made an incision over the needle in the apex of heart, and by pressing in a needle holder caught the end of the needle and pulled it out. The second needle was extracted with greater difficulty on account of its depth, both layers of intercostal muscle having to be cut before the needle was reached. The patient during the operation gave no evidence of pain. The needles were small darning needles, measuring a little over two inches in length. The patient never suffered any trouble from the injury, and was as well next day as ever. The wounds both healed by first intention.

DR. MILLS spoke of the condition known as delirium cordis set up by wounding certain points in the heart and referred to the suggestion made by a writer in the *Medical News* some years ago, to make use of this procedure to restore the heart's action after chloroform syncope, but he thought that this step would be of doubtful value as the heart may or may not recover from this condition of delirium.

DR. LAFLEUR recalled the specimen of a bullock's heart, exhibited by him four years ago, in which a large wire had forced its way from the stomach into the heart, penetrating the ventricle and auricle. There was evidence that this process had existed for some time, as the wire had worn a regular groove for itself in the ventricular muscle. Septic infection has been set up from the communication with the stomach.

DR. SHEPHERD referred to a paper read by Dr. Praeger, before the Canada Medical Association, in which he mentions a case of chloroform syncope which was restored by sticking a needle into the heart.

Congenital Defects of the Anterior Pillars of Fauces.—DR. H. D. HAMILTON read the report as follows:—I have been fur-

nished, through the courtesy of Dr. George W. Major, with this report of a somewhat rare malformation, which it is proposed should here be put on record. It is interesting as a curiosity and also because of the practical importance of diagnosing it from other affections.

J. C., member of the civic police, 25 years of age, a subject of laryngeal phthisis, was referred by Dr. Molson for local treatment on 8th Dec., 1890, to the Department for Diseases of Nose and Throat, Montreal General Hospital.

On examination, the anterior pillars of the fauces presented two longitudinal slits or fissures, the left being slightly the larger, and measuring half an inch in length, by about $\frac{3}{16}$ of an inch in width at the widest part. These openings were of a somewhat oval form extending down to the base of the tongue, and as the tonsils were deficient, the condition was very easy of observation. There was no evidence of cicatricial tissue anywhere, the edges of the opening being smooth, and presenting the natural appearance of the surrounding parts.

In the *Archives of Otology* for January, 1892, Max Tœplitz, of New York, reports a case and states that the literature on the subject contains but six similar observations up to that date.

The cases so far recorded have been (1) by Walters in 1859.

(2.) J. Solis Cohen, in the *Medical Record* of 1878, and also in the 2nd edition of his work on Diseases of the Throat, where the condition is explained as a separate investment of the fibres of the palato-glossus muscle.

(3.) Lefferts reports a case in the *Philadelphia Medical News* for 1882, besides communicating privately with Tœplitz regarding two unpublished cases in 1890.

(3.) Chiari reports a case in August, 1884. (*Monatschrift für Ohrenheilkund*); (5.) Schapringer another in 1884; (6.) Clarborne another in the *American Journal of Medical Sciences* of 1888, one-sided. One-sided defects have also been noted by Schapringer and Tœplitz.

DR. BIRKETT had seen a case referred to him by Dr. Buller where the congenital defects existed on one side only. There are a number of such cases on record, but as yet no explanation as to how they occur has been satisfactory.

New Inventions.

THE OBTURATOR SYRINGE.

The Obturator Syringe is a vaginal syringe, embodying retention and distention—an instrument intended to take from the physician the practically impossible and certainly indelicate task of cleansing the genitals, doing it more quickly, more conveniently and more thoroughly than the most skilled hand with the best of instruments. It consists of: an injector or supply-tube and bulb, exhaust-tube and the expanding vaginal obturator, all attached to and forming part, so to speak, of a hard rubber nozzle, a trifle over 3 inches long by $\frac{3}{4}$ inch diameter, intended for insertion within the mouth of the vagina, just beyond the sphincter, the soft rubber obturator which fits round the neck of the nozzle being inflated by means of an air bulb until the orifice is tightly, albeit painlessly, closed; after which injection is made, or water turned on from a fountain syringe, the flow being limited or continuous, at the user's will, as the exhaust tube is provided with a shut-off. The inflated obturator holds the instrument securely in position, in other words, makes it entirely self-holding and water-tight, allowing no drop of the douche to escape on dress or bedding, and causes the injected fluid to smooth out the crypts and folds of the vagina more effectively than can be done by the most careful manipulator with the speculum. Altogether it seems to us a most unique and very valuable invention. It is manufactured by the Obturator Syringe Co., 122 West 23rd Street, New York.

THE
Montreal Medical Journal.

VOL. XXII.

APRIL, 1894.

No. 10.

SIXTY-FIRST CONVOCATION OF THE MEDICAL
FACULTY OF MCGILL UNIVERSITY.

The annual convocation for conferring degrees in medicine at McGill University was held in the William Molson Hall on Thursday afternoon, April 5th. The Chancellor, Sir Donald Smith presided, supported by the members of the University. The graduating class occupied seats directly in front of the platform, and the hall was filled with friends and relatives, come to offer good wishes and congratulations.

Rev. Dr. Clark Murray opened the proceedings with prayer, after which Dean Craik read the report on the examinations, showing that the total number of students enregistered in the faculty during the past session had been 350, and that of these 55 had fulfilled all the requirements entitling them to the degree of M.D., C.M.

The winners of the medals and prizes were presented with the honours won by them, receiving them from the hands of Sir Donald Smith, and afterwards the graduating class came forward for the conferring of their degrees, the oath being administered by Dr. Ruttan, the "capping" performed by Dr. Johnson, and the diplomas handed to the graduates by Mr. Brakenridge.

Dr. A. Davidson delivered the valedictory, in the course of which he paid eloquent tributes to the memories of the late Dr. McDonnell and Dr. Geo. Ross, professor of clinical medicine and professor of medicine respectively, and said that the only feeling the class of '94 entertained towards the professors was one of admiration, confidence, respect and gratitude.

Prof. James Bell, on behalf of the faculty, addressed the graduating class. (See page 721.)

Before proceeding to sum up the work of the session, Dr. Craik read an extract from a letter from Sir William Dawson, who had expected to be present at the convocation, but found himself unable to be there. Sir William said it was always a great pleasure to him to see the young men come up for their degrees, and to think that they were going out to reduce the sum of human misery.

Dr. Craik then spoke as follows: "The sixty-first session of the faculty of medicine of this university, which closes to-day, though not differing greatly from those which have immediately preceded it, has, nevertheless, been marked by some important incidents and occurrences which call for more than a passing notice.

"The steady increase in the number of our students, which has been going on without interruption for several years, has this year been greater than ever. In 1891-'92 the number was 291; in 1892-'93 it rose to 312, and this year it has reached the gratifying figure of 350. Of this number 135, or rather more than one-third, were from this province; 108, or a little less than one-third were from the province of Ontario, and the remainder 107, also a little less than one-third were from the other provinces, the United States, the Northwest territories and the West Indies. It seems to me that it is a matter for sincere congratulation that this province, and McGill University in particular, should be able to attract students in such numbers from so wide an area. And not merely are they attracted to the university as a moth might be attracted to a flaring light, to scorch its wings and, if possible, to flit away again, but they remain with us, as a rule, through their entire course of medical study, culminating year by year, as you see to-day, in a bright class of graduates, eager and enthusiastic, well equipped, as we believe, for the battle of life, and carrying with them to their homes the respect and the good wishes of their teachers and the community. Of the 55 graduates who take their leave of us to-day, 17, or nearly one-third, are from the province of Quebec; 19, or a little more than one-third, are from the province of Ontario, and 19, also a little

more than one-third, from the other provinces, the Northwest territories and the United States.

"It will thus be seen that the work of this faculty has become continental rather than provincial, and that, not on account of its cheapness, for our fees are greater than those of most other medical schools, but rather, we are fain to believe, because our aims are higher, and our means of realizing them have been, and now are, exceptionally good.

"Our faculty has long recognized the importance of clinical and practical work, and has endeavored to give them due weight in its curriculum. The clinical instruction in the wards of the Montreal General Hospital has in the past, perhaps more than anything else, attracted earnest students to our school; and supplemented as it has been by practical courses in anatomy, chemistry, histology, physiology, and latterly of pathology, with hygiene in process of active organization, we may reasonably claim to take rank as a working faculty second to none on the continent. But great as have been our advantages for clinical work in the past, they have now been practically doubled by the opening of the Royal Victoria Hospital. That magnificent charity, the gift of our Chancellor and Lord Mount-Stephen, has now entered upon its work, and in the completeness of all its appliances for the relief of suffering, as well as for medical teaching, it is proving a great boon to suffering humanity as well as to the cause of advanced medical education. But with all this wealth of clinical material, and with a firm determination to utilize it to the very utmost, we must be careful not to let it destroy the proper equilibrium of our curriculum. Too great a preponderance of didactic and descriptive work was a serious evil in the past; let us be careful that the educational balance does not oscillate too far in the opposite direction. In a properly adjusted system, theory and practice should go hand in hand, and the principles which are to guide us in practice are quite as important as the practice which is to be founded upon them. Without a through knowledge of the principles, a man becomes a mere empiric or handicraftsman, just as without adequate instruction in practical work he is likely to become a mere theorist and a visionary; but with careful, practical training,

built upon sound principles intelligently applied, we may reasonably look for such a degree of harmonious completeness in a man's medical education as shall fit him safely to undertake the onerous and responsible work which is before him. Such an education, according to our opportunities, it has always been our aim to give, and with our greatly enlarged facilities it must be our aim to maintain the normal equilibrium, that our graduates may not tend to become mere theorists on the one hand, nor mere empirics on the other, but thoughtful, intelligent and skilful men, to whom human life and health may safely be entrusted.

“Of the changes in the *personnel* of the faculty since last convocation it is only necessary to say that they are such as were rendered necessary by the lamented death of our late vice-dean and professor of medicine, Dr. Ross, and by the increased clinical ground to be covered by the opening of the Royal Victoria Hospital. Our well tried friend, Professor Stewart, was promoted to the chair of systematic medicine, but was allowed to retain also the chair of clinical medicine. A new chair of laryngology was also created, and Dr. George W. Major, one of our own graduates both in arts and medicine, who has acquired considerable distinction in that specialty, was appointed to it. The following gentlemen were appointed lecturers in the faculty:—Dr. Alloway in gynecology, Dr. Finley in clinical medicine, Dr. Birkett in laryngology, Dr. Lafleur in clinical medicine, Dr. Armstrong in surgery and clinical surgery, and Dr. Burgess on mental diseases. The following gentlemen also were appointed demonstrators and assistant demonstrators:—Dr. Sutherland, demonstrator in surgery; Dr. Johnson, demonstrator in bacteriology; Dr. Elder, assistant demonstrator in anatomy; Dr. McCarthy, assistant demonstrator in anatomy; Dr. Evans, assistant demonstrator in obstetrics; Dr. Gunn, assistant demonstrator in histology; Dr. Morrow, assistant demonstrator in physiology; Dr. Kirkpatrick, assistant demonstrator in surgery; and Dr. Martin, assistant demonstrator in bacteriology. Of all these gentlemen I may say that they have shown ability and interest in their work and have added very considerably to the efficiency of the faculty.

“The princely gifts of our chancellor, Sir Donald A. Smith, and our senior governor, Mr. John H. R. Molson, which it was my happiness to announce at last convocation, have already borne good fruit in the housing and equipment of our department of practical pathology in a manner which leaves little to be desired. The substantial stone building on the property acquired for us by Mr. Molson has been converted into a convenient and efficient pathological laboratory and under the able management of Prof. Adami, with competent assistants, that department may be considered firmly established on a satisfactory basis. The proposed extension of our other buildings rendered necessary by the increasing number of our students, has also been provided for, and we hope that before the beginning of another session the new buildings will be ready for occupation.

“With reference to hygiene and public health, which heretofore may be said to have been absolutely without equipment of any kind, comparatively little has yet been accomplished; but, thanks to the generous endowment of the chair last year by our Chancellor, a beginning has been made, and in the meantime the whole of the revenue from the endowment is being set aside for the thorough equipment of the department in the new building on the most modern and scientific principles.

“It has been our good fortune this year, as on some former occasions, to have received substantial proofs of the goodwill and active interest in the welfare of the faculty at the hands of persons not directly connected with the university. The late Miss Jane Learmont, of 793 Sherbrooke street, whose death took place in May last, bequeathed the faculty the sum of three thousand dollars, to be added to its permanent fund and to be free of legacy duty. To myself personally, this bequest is specially gratifying, for it has rarely been my good fortune to enjoy the personal friendship of one so patient and cheerful under great and protracted suffering, or one so unselfish in seeking in every way to secure the happiness and welfare of others rather than her own. Another gift which we value most highly, but which is of a more esthetic and sentimental kind, has come to us from a source and in a way

which are peculiarly gratifying. It is no less than a portrait in oil of the founder of our medical school, the late Dr. William Robertson, of this city, presented to the faculty in loving remembrance by his family and descendants. He was the chief of the four "good men and true," Drs. Robertson, Holmes, Stephenson and Caldwell, who founded the nucleus of our medical faculty in what was then called the Medical Institution, in 1824, exactly three score and ten years ago. Dr. Robertson was born on his father's estate of Kindrocket, in Perthshire, Scotland, in 1774, and came to this country as an army surgeon in 1806. He married the daughter of Chief Justice Sir William Campbell, and after retiring from the service, established himself in practice in Montreal, and continued at the head of the medical profession in this city until his death in 1844. Three of his daughters still reside in Montreal, Mrs. MacCulloch, Mrs. Hooper and Mrs. Pangman, and his eldest daughter, Lady Cunningham, still lives at her late husband's estate in Ayrshire, Scotland. His only son, the late Mr. Duncan Robertson, of this city, died a few years ago, leaving a daughter and three sons to perpetuate the name. The faculty had already begun to establish a portrait gallery of those who have been prominently connected with it. It has excellent portraits of Drs. Holmes, Sutherland, Campbell, Howard and Ross, but this portrait of the founder of our school shall by right have the post of honor.

What associations are called up by the sight of this portrait to-day! Is it possible that Dr. Robertson, when he planted the seeds of our medical school seventy years ago, foresaw what was to be the result of such a small beginning; or is it possible that any one looking now at our prosperous medical faculty could predict, with any degree of probability, what may be in store for it in the seventy years that are to come? Most assuredly not; but, with the example of Dr. Robertson's energy and perseverance ever before us, with the encouragement that comes to us with difficulties successfully overcome, with the hearty good will of the community, and the material help which has been given to us with such unstinting hands, we should be unworthy of the trust that has been placed in us, did we fail to strain every nerve to place

our medical faculty, and the university of which it forms a part, in the very van of progress and prosperity."

Sir Donald Smith then spoke briefly. He paid a tribute to the memory of the late Mr. Peter Redpath, the late Sir Alexander Galt and the late Sir John Abbott, all of whom had died since the last convocation of the medical faculty, and then went on to fittingly refer to the retirement of Sir William Dawson from the principalship of the university. That was the sixty-first convocation, and he thought, looking back over what McGill had done in that period, they might feel that she had gone on progressing in giving year by year a better medical education. For many years McGill had had a reputation, not only in this country, but also in Europe, and they might confidently feel that the graduates who were going out from the university would do credit to their alma mater. In conclusion he cited Sir Andrew Clarke as an example to be followed, and said that if the graduates of the medical faculty followed, as he was sure they would desire to do, in the footsteps of such a man, they would be sure not only to reap the reward of wealth, but they would have what was infinitely better, the good will and approbation of their fellow men.

The proceedings were then closed with the benediction, pronounced by the Rev. Dr. Shaw.

REPORT ON THE MEDICAL FACULTY OF MCGILL FOR THE SESSION 1893-94.

The total number of students enregistered in the Medical Faculty during the past session was 350, of whom there were from :—

Quebec.....	135	Prince Edward Island....	13
Ontario.....	108	North-West Territories..	2
New Brunswick.....	32	Manitoba.....	6
Nova Scotia.....	28	West Indies.....	3
United States.....	19	British Columbia.....	4

The following gentlemen, 55 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University. In addition to the primary subjects mentioned, they have passed a satisfactory examination, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and

Children, Pharmacology and Therapeutics, Medical Jurisprudence, Pathology and Hygiene,—and also Clinical Examinations in Medicine, Surgery, Obstetrics, Gynæcology and Ophthalmology, conducted at the bedside in the hospitals :

Bazin, A. T.	Montreal.
Byers, W. G. M.	Gananoque, Ont.
Colvin, A. R.	Lethbridge, N.W.
Davidson, A.	Barns, Ont.
Davis, R. E.	Fallowfield, Ont.
Drysdale, W. F.	Perth, Ont.
Estey, A. S.	Keswick Ridge, N.B.
Evans, J. W.	Hull, Que.
Ferguson, W.	Pictou, N.S.
Fowler, E. S.	Hudson, Wis.
Fry, F. M., B.A.	Montreal.
Fulton, J. A.	Franklin Centre, Que.
Gorrell, C. W. F.	Brockville.
Hamilton, G.	Bright, Ont.
Hanington, J. P.	Montreal.
Hart, E. C.	Baddeck, N.S.
Henderson, W.	Vars, Ont.
Hepworth, W. G.	Manitoba.
Holohan, P. A., B.A.	Newcastle, N.B.
Jacques, H. M.	Upper Dyke, N.S.
Kearns, J. F.	Metcalfe, Ont.
Kinghorn, H. McL., B.A.	Montreal.
Lumbly, W. O.	Montreal.
Lewis, J. F.	Hillsboro', N.B.
MacCarthy, G. S.	Ottawa.
McCrea, J.	Detroit, Mich.
McLaren, J. T.	Bell Creek, P.E.I.
McLaughlin, J. A.	Avonmore, Ont.
McLean, C. M.	Cambridge, N.B.
McIntosh, L. Y.	Strathmore, Ont.
McKenzie, L. F.	Montreal.
Manchester, G. H.	Ottawa.
Mathewson, G. H., B.A.	Montreal.
Mitchell, W.	Lachute, Que.
Nicholls, A. G., M.A.	Montreal.
O'Connor, E. J.	Ottawa, Ont.
Ogden, C. L., B.A.	Warrensburg, N.Y.
Pritchard, J., B.A.	North Wakefield, Que.
Reeves, J.	Eganville, Ont.
Richardson, A.	South March, Ont.
Richardson, H. J.	Spencerville, Ont.
Rimer, F. E.	Bryson, Que.
Robertson, A. A., B.A.	Montreal.
Ross, D. W.	Peel, N.B.
Ross, H.	Thorburn, N.S.

Ross, J. J.	Derwentville, Que.
Seammell, J. H.	St. John, N.B.
Scott, W. H.	Owen Sound, Ont.
Sharpe, E. M.	Havelock, N. B.
Shaw, H. S.	Montreal.
Shillington, A. T.	Kemptville, Ont.
Stenning, W. A.	Corticook, Que.
Wilson, R. D.	Derby, N.B.
Wolf, C. G. L., B.A.	Winnipeg, Man.
York, H. E.	Metcalfe, Ont.

The following gentlemen, 85 in number, have completed their PRIMARY EXAMINATIONS, which comprise the following subjects : Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Physiology, Practical Physiology, Histology and Botany :

Allen, J. H., B.A.	West Osgoode, Ont.
Archibald, E. W., B.A.	Montreal.
Ault, C. R.	Tilsburg, Ont.
Braithwaite, J. M. Mc.	Barbadoes, W.I.
Brunelle, P.	Lowell, Mass.
Church, H. M.	Montreal.
Churchill, J. L.	Lockport, N.S.
Colquhoun, P., B.A.	Colquhoun, Ont.
Corbett, F. A., B.A.	Parrsboro' N.S.
Craig, R. H.	Montreal.
Deacon, G. R.	Stratford, Ont.
Dewar, J. E.	Glensandfield, Ont.
Ellis, G. H.	Dundela, Ont.
Elliot, F. B.	Mayfair, Ont.
Estey, A. S.	Keswick Ridge, N.B.
Evans, J. W.	Hull, Que.
Ewan, R. B.	Montreal.
Ferguson, J. A.	Easton Corners, Ont.
Findlay, C.	Hamilton, Ont.
Fish, E. C., B.A.	Newcastle, N.B.
Fisk, W. M.	Abbotsford, Que.
Foss, A. F.	Sherbrooke, Que.
Gallant, St. C. G.	Charlottetown, P.E.I.
Goltman, A.	Montreal.
Grant, A. J.	Pembroke, Ont.
Groat, D.	Pictou, N. S.
Hartin, G.	Bells Corners, Ont.
Harwood, R. DeL.	Vaudreuil, Que.
Hepworth, W. G.	Winnipeg, Man.
Hogle, J. H.	Montreal.
Howell, W. B.	Montreal.
Irvine, A. D.	Montreal.
Keith, H. W.	Havelock, N.B.
Kelly, J. K.	Almonte, Ont.
Kendrick, W. N.	Spring Valley, Minn.

Lambly, W. O	Inverness, Que.
Lauder, S. E.	Durham, Que.
Lauterman, M.	Montreal.
Lee, F. J.	Port Hope, Ont.
Lewis, J. T.	Hillsboro', N. B.
Lynch, D. P.	Chapleau, Que.
McArthur, A. W	Williamstown, Ont.
McEwen, D.	St. Elmo, Ont.
McGannon, A. V.	Brockville, Ont.
McNally, G. J.	Kingsclear, N. B.
McTaggart, D. D.	Montreal.
Macartney, F. W.	Montreal.
Martin, R. H.	Chatham, Ont.
Mitchell, R. J. W., B. A.	Montreal.
Moffatt, W. A.	Ormstown, Que.
Moles, E. B.	Arnprior, Ont.
Morse, L. R., B. A.	Lawrencetown, N. S.
Mowatt, W. B.	Montreal.
Neil, R. W.	Aylmer, Que.
Ogden, C. L., B. A.	Warrensburg, N. Y.
Palmer, A. J.	Buckingham, Que.
Quay, D. D.	Port Hope, Ont.
Quirk, E. Mc. G.	Montreal.
Robins, G. D., B. A.	Montreal.
Ross, R. O., B. A.	Margaree, N. S.
Ryan, J. P.	Portage la Prairie, Man.
Scammell, J. H.	St. John, N. B.
Secord, J. H.	Summerside, P. E. I.
Shaw, R. B.	Cove Head, P. E. I.
Shaw, H. M.	Berwick, N. S.
Smillie, W.	Huntingdon, Que.
Smith, R. E. G., B. A.	Woodstock, N. B.
Smyth, W. H., B. A.	Montreal.
Staples, C. A., B. A.	Stillwater, Minn.
Steeves, C. P., B. A.	Lower Coverdale, N. B.
Sutherland, J. A.	River John, N. S.
Sterling, A.	Fredericton, N. B.
Tetreau, T.	Lawrence, Mass.
Thomson, F. L.	Mitchell, Ont.
Tupper, T. S.	Fredericton, N. B.
Vipond, C. W.	Montreal.
Walker, D. F.	Huntingdon, Que.
Warren, J. F.	Harper, Ont.
Watson, J. A., B. A.	Barbadoes, W. I.
Wheeler, F. H., B. A.	Florenceville, N. B.
White, R. B.	Pembroke, Ont.
Williams, J. A.	Carleton Place, Ont.
Wood, D. M.	Kenmore, Ont.
Wood, N. S.	Faribault, Que.
Wright, H. K.	Montreal.

HONOURS, MEDALS AND PRIZES.

THE HOLMES MEDAL is awarded to ANDREW ARMOUR ROBERTSON, B. A., of Montreal, Que.

THE FINAL PRIZE is awarded to ALBERT GEORGE NICHOLLS, M.A., of Montreal, Que.

THE PRIMARY PRIZE is awarded to WILLIAM NASSAU KENDRICK, of Spring Valley, Minn.

THE SUTHERLAND MEDAL is awarded to GEORGE DOUGALL ROBINS, B.A., of Montreal, Que.

THE CLEMESHA PRIZE is awarded to ALLAN DAVIDSON, of Burns, Ont.

PROFESSORS' AND DEMONSTRATORS' PRIZES.

THE BOTANY PRIZE is awarded to J. G. McDUGALL, of New Glasgow, N.S.

THE CLINICAL CHEMISTRY PRIZE is awarded to A. A. ROBERTSON, B.A., of Montreal.

THE OBSTETRICS PRIZE is awarded to L. Y. McINTOSH, of Strathmore, Ont.

THE SENIOR ANATOMY PRIZE is awarded to R. O. ROSS, B.A., of Margaree, Ont.

THE JUNIOR ANATOMY PRIZE is awarded to C. B. KEENAN, of Ottawa, Ont.

FINAL YEAR.

The following gentlemen have obtained First Class Honours in the FINAL SUBJECTS :

- | | |
|---------------------------|---------------------------|
| 1. Nicholls, A. G., M.A. | 8. Pritchard, J. B.A. |
| 2. Robertson, A. A., B.A. | 9. Colvin, A. R. |
| 3. McIntosh, L. Y. | 10. Hart, E. C. |
| 4. Fry, F. M., B.A. | 11. Shaw, H. S. |
| 5. Davidson, A. | 12. Mathewson, G.H., B.A. |
| 6. Byers, W. G. M. | 13. Ross, D. W. |
| 7. Bazin, A. T. | 14. Gorrell, C. W. F. |

The following gentlemen have obtained First Class Honours in MEDICINE AND CLINICAL MEDICINE :

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|---------------------------|---------------------|
| 1. Robertson, A. A., B.A. | 7. Ross, H. |
| 2. Nicholls, A. G., M.A. | 8. Shaw, H. S. |
| 3. Pritchard, J., B.A. | 9. Davidson, A. |
| 4. Byers, W. G. M. | 10. Rimer, F. E. |
| 5. McIntosh, L. Y. | 11. Hart, E. C. |
| 6. Gorrell, C. W. F. | 12. Drysdale, W. F. |

The following gentlemen have obtained First Class Honours in SURGERY and CLINICAL SURGERY :

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|---------------------------|----------------------------|
| 1. Nichols, A. G., M.A. | 9. Shaw, H. S. |
| 2. McIntosh, L. Y. | 10. Ross, D. W. |
| 3. Bazin, A. T. | 11. Mathewson, G. H., B.A. |
| 4. Colvin, A. R. | 12. Hepworth, W. G. |
| 5. Fry, F. M., B.A. | 13. Byers, W. G. M. |
| 6. Robertson, A. A., B.A. | 14. McLaren, J. T. |
| 7. Davidson, A. | 15. McCrea, J. J. |
| 8. Hart, E. C. | 16. Fowler, E. S. |

The following gentlemen have obtained First Class Honours in OBSTETRICS :

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|----------------------------|-----------------------|
| 1. Robertson, A. A., B.A. | 11. Byers, W. G. M. |
| 2. Gorrell, C. W. | 12. Ferguson, W. |
| 3. { McIntosh, L. Y. | { Colvin, A. R. |
| { Nicholls, A. G., M.A. | 13. { Reeves, Jas. |
| 5. Davidson, A. | { Ross, H. |
| 6. Bazin, A. T. | { McCarthy, G. S. |
| 7. Richardson, H. J. | { Hart, E. C. |
| 8. Kinghorn, H. McL., B.A. | 17. { Henderson, W. |
| { Jacques, H. M. | { Pritchard, J., B.A. |
| 9. { Shaw, H. S. | 20. Fry, F. M., B.A. |

The following gentlemen have obtained First Class Honours in GYNÆCOLOGY.

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|-----------------------------|---------------------------|
| 1. Bazin, A. T. | 13. { Hart, E. C. |
| 2. McIntosh, L. Y. | |
| 3. { Nicholls, A. G., M. A. | { Shaw, H. S. |
| { Robertson, A. A., B. A. | 16. { Ross, D. W. |
| 5. { Byers, W. G. M. | { Evans, J. W. |
| { Gorrell, C. W. F. | 18. { Hepworth, W. G. |
| { Jacques, H. M. | { Kinghorn, H. McL., B.A. |
| 7. { Fry, F. M. | 20. Richardson, A. |
| { O'Connor, E. J. | |
| { Davidson, A. | |
| 10. { Henderson, W. | |
| { Ross, H. | |

The following gentlemen have obtained First Class Honours in OPHTHALMOLOGY and OTOTOLOGY.

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|----------------------------|--------------------|
| 1. McIntosh, L. Y. | 6. Hendesson, W. |
| 2. { Nicholls, A. G., M.A. | 7. { Fowler, E. S. |
| { Robertson, A. A., B.A. | { Shaw, H. S. |
| 4. { Bazin, A. T. | |
| { Colvin, A. R. | |

The following gentlemen have obtained First Class Honours in PRACTICAL PATHOLOGY.

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|----------------------------|--------------------------|
| 1. McIntosh, L. Y. | 9. Wolf, C. G., B.A. |
| 2. { Nicholls, A. G., M.A. | 10. { Bazin, A. T. |
| { Pritchard, J., B.A. | { Mathewson, G. H., B.A. |
| { Robertson, A. A., B.A. | 12. Henderson, W. |
| 3. { Fry, F. M., B.A. | 13. Hart, E. C. |
| { Byers, W. G. M. | 14. Evans, J. W. |
| 7. Davidson, A. | 15. Manchester, G. H. |
| 8. Fowler, E. S. | 16. Colvin, A. R. |

THIRD YEAR.

The following gentlemen have obtained First Class Honours in PATHOLOGY:

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|--------------------------|--------------------|
| 1. { Feader, W. A. | 7. { Price, B. S. |
| { Le Rossignol, W., B.A. | { Robertson, A. T. |
| { Oliver, W., B.A. | 9. Cruikshank, H. |
| 4. Reilly, W. G. | 10. Connors, E. |
| 5. { Bouck, C. W. | 11. Wickham, W. W. |
| { Kerry, R. A. | |

The following gentlemen have obtained First Class Honours in PHARMACOLOGY and THERAPEUTICS:

- | | |
|--------------------------------|---------------------|
| 1. Feader, W. A. | 8. { Anthony, X. L. |
| 2. { Le Rossignol, W. J., B.A. | { Day, J. L., B.A. |
| { Wright, H. K. | 10. Rielly, W. G. |
| 4. Wickham, W. W. | 11. Saunders, E. H. |
| 5. Bouck, C. W. | 12. Cruikshank, A. |
| 6. Kerry, R. A. | 13. King, J. H. |
| 7. Blow, T. H. | |

The following gentlemen have obtained First Class Honours in MEDICAL JURISPRUDENCE:

- | | |
|------------------------------|---------------------------|
| 1. Wickham, W. W. | 8. Oliver, W., B.A. |
| 2. Hargrave, J. L., B.A. | 9. Hamilton, R. |
| 3. Anthony, X. L. | 10. Anderson, D. P., B.A. |
| 4. Feader, W. A. | 11. Nell, P. W. |
| 5. Le Rossignol, W. J., B.A. | 12. Hogg, L., B.A. |
| 6. Saunders, E. H. | 13. Rielly, W. G. |
| 7. Johnston, F. E. L. | |

SECOND YEAR.

The following gentlemen have obtained First Class Honours in the PRIMARY SUBJECTS;

- | | |
|---------------------------|-------------------------|
| 1. Kendrick, W. N. | 7. Corbett, F. A., B.A. |
| 2. Robins, G. D., B.A. | 8. Deacon, G. R. |
| 3. Archibald, E. W., B.A. | 9. Ellis, G. H. |
| 4. { Ross, R. O., B.A. | 10. Sicord, J. H. |
| { Smith, R. E. G., B.A. | 11. Morse, L. R., B.A. |
| 6. Steeves, C. P., B.A. | 12. Moffatt, W. A. |

The following gentlemen have obtained First Class Honours in
PHYSIOLOGY :

- | | |
|-----------------------------|-------------------------|
| 1. Smith, R. E. G., B.A. | 6. Ross, R. O., B.A. |
| 2. { Archibald, E. W., B.A. | 7. Kelly, J. K. |
| { Robins, G. D., B.A. | 8. Corbett, F. A., B.A. |
| 3. Kendrick, W. N. | 9. Morse, L. R., B.A. |
| 4. Staples, C. A., B.A. | 10. Secord, J. H. |
| 5. Warren, J. F. | 11. Deacon, G. R. |

The following gentlemen have obtained First Class Honours in
CHEMISTRY :

- | | |
|---------------------------|-----------------------|
| 1. Smith, R. E. G., B.A. | 6. { Deacon, G. R. |
| 2. Kendrick, W. N. | { Morse, L. R., B.A. |
| 3. { Corbett, F. A., B.A. | 8. Ellis, G. H. |
| { Robins, G. D., B.A. | 9. Ross, R. O., B.A. |
| 5. Archibald, E. W., B.A. | 10. Sutherland, J. A. |

The following gentlemen have obtained first class Honours in
ANATOMY.

- | | |
|----------------------------|--------------------------|
| 1. Ross, R. O., B.A. | 12. Moffatt, W. A. |
| 2. Kendrick, W. N. | 13. { Kelly, J. K. |
| 3. Archibald, E. W., B.A. | { Thomson, F. I. |
| 4. Robins, G. D., B.A. | 15. Corbett, F. A., B.A. |
| 5. Howell, W. B. | 16. Deacon, G. R. |
| 6. { Ferguson, J. B. | 17. Ellis, G. H. |
| { Smillie, W. | 18. Argue, J. F. |
| { Wheeler, F. H. | 19. Brathwaite J. M. Mc. |
| { Macartney, F. W. | |
| 9. { Smith, R. E. G., B.A. | |
| { Stevens, C. P., B.A. | |

The following gentlemen have obtained First Class Honours in
HISTOLOGY :

- | | |
|---------------------------|--------------------------|
| 1. Archibald, E. W., B.A. | 10. Staples, C. A., B.A. |
| 2. Kendrick, W. N. | 11. Fisk, W. M. |
| 3. Robins, G. D., B.A. | 12. Fisk, E. C., B.A. |
| 4. Howell, W. B. | 13. Bessey, M. W. |
| 5. McTaggart, D. D. | 14. Churchill, J. L. |
| 6. Ellis, G. H. | 15. Deacon, G. R. |
| 7. Brunnelle, P. | 16. Steeves, C. P., B.A. |
| 8. Braithwaite, J. M. | 17. Shaw, R. B. |
| 9. Ross, R. O., B.A. | |

The following gentlemen have obtained First Class Honours in
PRACTICAL CHEMISTRY :

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|----------------------|------------------------|
| 1. { Ellis, G. H. | 9. Robins, G. D., B.A. |
| { Secord, J. H. | 10. { Ferguson, J. B. |
| 3. Kendrick, W. N. | { Kemp, H. G. |
| 4. Fisk, W. M. | { Tetreau, T. |
| 5. Seale, J. H. | 13. { Deacon, G. R. |
| 6. McTaggart, D. D. | { McArthur, A. W. |
| 7. { McEwen, D. | 15. Shaw, R. B. |
| { Smyth, W. H., B.A. | |

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| | Bessey, M. W. | | Archibald, E. W., B.A. |
| | Braithwaite, J. A. | | MacAuley, J. F. |
| | Healy, D. J. | | Ogilvy, C. |
| 16. | Macartney, F. W. | 28. | Ross, R. O., B.A. |
| | McLeay, K. I. | | Kirby, H. I. |
| | Morris, C. H. | | Church, J. M. |
| | Smillie, W. | | Stanfield, H. M., B.A. |
| | Lee, J. F. | | Flynn, J. W. |
| | Brunelle, P. | 35. | Wood, W. S. |
| 24. | Jack, A. C. | | McPherson, D. |
| | Thomson, F. L. | | Tupper, T. S. |
| 26. | Warren, J. F. | 39. | Morse, L. R., B.A. |
| | | | Mitchell, R. J. W., B.A. |
| | | 40. | Keith, H. W. |
| | | | Lauder, S. E. |
| | | | Dewar, J. E. |
| | | 42. | Prescott, A. H. |
| | | | Trudeau, M. A. |

FIRST YEAR.

The following gentlemen have obtained First Class Honours in
BOTANY :

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|----|----------------------|-----|----------------------|
| 1. | McDougall, J. G. | | Eberts, E. M. |
| 2. | Allan, W. G. | 10. | McKinnon, F. W. |
| 3. | Pennoyer, A. R. | | Wainwright, S. F. A. |
| | { Lennon, H., B.A. | 11. | Rogers, F. E. |
| 4. | Gourley, T. A. | | Doyle, J. J. |
| 5. | Keenan, C. B. | 12. | Hudson, H. P. |
| | { Tozer, F. W. | | Lockary, J. L. |
| 6. | Wyman, D. C. | 13. | Johnston, W. |
| 7. | Gladman, E. A. | | { Foster, G. M. |
| | { McCallum, E. C. D. | 14. | Trainor, J. B. |
| 8. | McRae, J. D. | 15. | Laing, A. A. J. |
| 9. | Laidley, J. H. | 16. | Robertson, D. M. |
| | | 17. | Hurdman, H. H. |

THE FUNCTIONS OF THE CEREBRAL CORTEX.

To a recent number of the *Journal of Physiology*, Dr. Mott contributes a valuable paper upon the functions of the central convolutions of the cerebral cortex,* and prefaces his own observations and conclusions by a brief but lucid epitome of the views of previous workers. Those views are notoriously widely divergent, or have been so in the past. They range from the opinion of Schiff that the so-called motor-areas are purely tactile sensory (movements upon irritation of these areas being of the nature of simple reflexes, and the paralysis following upon their destruction being due to the loss of tactile sensibility), to that of the English school of a few years ago, of Farrier, of Horsley and of Schäfer, that the central region of the cerebral cortex is purely motor. Between these two absolutely opposed views, there are divers intermediary. These may be grouped conveniently into two or three categories..

Goltz, still working on the dog, holds firm to his opinion that the cerebral hemispheres have no active function in initiating muscular activity, and brings forward evidence† showing that in a dog eighteen months after removal of all the cortex, there still is present—or there has been developed anew—muscle sense, the animal resisting alterations in position and not permitting one of its limbs to sink through a trap door. It cannot, however be denied by Goltz that these experiments on the dog do not hold for the monkey, nor again, as clinical experience teaches us, for man.

Hitzig and Bastian may be said to hold that the motor areas are at the same time the seat of motor ideation and muscle sense. Munk goes further and localises not only muscle sense, but also tactile sense in the cortex of the parietal lobe: Tripier, Moelli and Bechterew working independently, arrive at a somewhat similar conclusion. Tripier finds that the sensory area for a definite limb coincides with, but is more extensive than the

* The sensory motor functions of the central convolutions of the cerebral cortex, by F. W. Mott, M.D., F.R.C.P., Lecturer on Physiology in the Charing Cross Hospital Medical School. *Journal of Physiology*, vol. xv., No. 6, p. 464, 1894.

† *Plüger's Archiv.*, xx., 1892.

motor area for the same limb, while Bechterew concludes from his experiments, that there are independent motor and sensory centres lying very near to each other and often overlapping to a certain extent. And now Horsley has reversed his previous declarations, and admits fully that in consideration of clinical and experimental studies, the Rolandic area must be considered sensori-motor, impressions of touch and common sensibility being there registered. Schäfer, too, now admits, with Gowers and Hughlings Jackson, that the region cannot be regarded as purely motor.

Thus it is that the majority of workers are coming round to the opinion that the so-called motor area of the cortex is truly sensori-motor.

It is interesting to review the clinical observations in proof of this contention. As Dr. Mott points out, cases of sensory disturbance accompanying motor paralysis from cortical lesions (and Dana has brought together 142 such cases) while affording strong presumptive evidence, are not conclusive. The reliable evidence must be obtained from surgeons who have removed portions of the brain, their cases being carefully tested before and after operation. Allen Starr as the result of thirty cases of cerebral operation is fully convinced of the existence of centres for the reception of tactile sensation in the motor area of the cortex, especially behind the fissure of Rolando, where also he places the motor centres for the organs of most delicate action—the hands and feet. Horsley has had five cases in which large portions of the brain in the Rolandic area have been removed and operation has been followed by sensory defects. Albertoni and Brigatti report a case of removal of a tumour plus brain tissue, the size of a hen's egg, from the motor area of a young girl thirteen months previously. All the epileptic seizures had ceased, and the paralysis in the lower limb had diminished, but tactile, general, thermal and painful sensations which before the operation were unimpaired, have, since the operation been affected over the whole left half of the body except the face.

There are yet other facts in support of this view. Take for instance the history given in Jacksonian epilepsy, in epilepsy,

that is, due to some irritative lesion in the motor area, where as a result of the irritation a sensory aura precedes the motor spasm. Again Ransom and Dana's independent studies of the results of faradising the human cerebral cortex when the patient was not under an anæsthetic, are fully in harmony with the above clinical observations. Both observers found that the immediate effect was a tingling sensation in the part, which would then contract. They proved clearly that stimulation of the human motor area leads to both motor and sensory disturbances, the sensory, like the motor being contralateral.

Dr. Mott gives in detail the results of removal of relatively large portions of the motor area in seven monkeys. Interesting as are his methods and observations there is not space to say more here than that his very careful and conscientious tests support fully the general conclusions upon which weight has here been laid. He found, that is to say, that removal of one or other part of the motor area led to a corresponding blunting of sensibility of the part whose motion was controlled from that area.

To sum up, it would seem to be fairly well ascertained and to be gaining a general acceptance among neurologists that the Rolandic or "motor" area is in reality sensori-motor; that it is sensory, not merely, as Hitzig would have it, as registering muscle sense, but rather, as Munk holds, as registering also tactile and thermal sense; that to obtain sensory disturbances it would seem necessary that relatively large areas of brain substance in the motor area should be destroyed or removed. This may possibly explain why it is that all operations upon this region do not lead to anæsthesias and other sensory troubles, and why motor paralysis is greatly in excess of sensory disturbance in many clinical cases.

But while believing that an important step forward has been made in the more general acceptance of a belief in the combined functions of the "motor" cortex it must still be kept in mind that we are as far as ever from knowing how the cortex controls or determines motion and sensation. Are there actually different centres governing the two, or does paralysis "occur as the result,

of inability to revive the sensory images incidental to movement"? Does paralysis ensue, because through destruction of the cortical cells which register sensation, no stimulus passes to the cells determining motion (wherever these be situated) and as a consequence these cells remain inactive, or is it that the cortical cells are at one and the same time sensory and motor, receiving sensory stimuli and inducing motion in response? These are questions which cannot as yet be answered and which are more truly psychological than medical. Nevertheless they are questions of very considerable import for all those who study the actions of the brain, alike in disease and in health.

HOSPITALS FOR CONTAGIOUS DISEASES.

The question as to who should take charge of patients suffering from the diseases, diphtheria, scarlatina and measles, has at last been settled by the City Council making the following arrangements.

The civic hospital on Moreau street has been given over to the authorities of Notre Dame Hospital, and they are to receive all Roman Catholic patients suffering from these diseases. The Protestant patients are to be cared for by the Montreal General Hospital, and for that purpose they have fitted up two houses directly opposite to the Hospital. The expense of fitting up the two fever hospitals is borne by the city, and they are to be maintained by a pro rata allowance.

This solution of the difficulty is a most satisfactory one, and it is owing to the efforts of the new chairman of the Health Committee, Ald. Beausoleil, that it has been carried through and that with a rapidity and completeness that would take away the breath of the old committee. A great many obstacles were put in the way of accomplishing the design, but they have all been overcome, and we trust that the arrangement will be permanent. To Ald. Beausoleil the thanks of the whole community are due for the prompt and efficient manner in which he has arranged what had hitherto proved too knotty a point for the Council to grapple with, and we congratulate the city on having such a chairman of its Health Committee.

Obituary.

DEATH OF DR. DORION.—Dr. Dorion, one of the oldest practitioners of L'Assomption, is dead. He graduated in 1833, after studying under the late Dr. Munro. Dr. Dorion's first practice was given up to the Irish victims of cholera at Point St. Charles. The deceased was twice married, and was the father of a numerous family.

Medical Items.

—We are pleased to note that Dr. Montizambert has been appointed superintendent of Dominion Quarantines. Dr. Montizambert has been for many years in charge of the quarantine on the lower St. Lawrence and is consequently well qualified for his present position.

—There may not be so much in therapeutics as some people believe, but there is a great deal in knowing what is the matter. These men that are so devoted to drugs sometimes do not know what is the matter, but they fire a mitrailleuse in a very extraordinary prescription, hoping that there is something in the mixture that will kill something in the body they are attacking. From such medication let us be delivered! Diagnosis, diagnosis, always diagnosis.—*The Post-Graduate*.

—Several sudden deaths have occurred lately in public conveyances in Paris. Investigation showed that these vehicles were heated by *briquettes* which are composed of equal parts of wood, charcoal and dextrin with 2 per cent. nitrate of soda added to the combination. These burn very slowly and disengage considerable quantities of carbon monoxide as well as carbon dioxide, the former of which is an active poison and undoubtedly was the cause of death.

COBRA POISONING IN MOTHER'S MILK.—A Mahomedan beggar woman and her child (aged about one year) recently died in Madras. It would appear, says the *Times* of India,

that the deceased woman was bitten by a cobra, and while in that state she nursed the child, which also died from the effects of the poison. With reference to this statement, Sir J. Fayrer says: "I think it quite probable. I long ago showed that the blood of an animal poisoned by cobra virus is itself poisonous when placed in the stomach. Nothing more probable than that the milk of a woman so poisoned should be poisonous to the infant, but is it quite sure that the infant did not die of some other cause?"—*British Medical Journal*.

THE MEDICAL PROFESSION IN GERMANY.—According to official statistics recently published the total number of medical practitioners in the German Empire is now 21,621, being an increase of 5.46 per cent. as compared with the previous year, and 22.5 per cent. as compared with five years ago. The practitioners are distributed as follows: Prussia, 12,851; Bavaria, 2,431; Saxony, 1,563; Baden, 855; Wurtemberg, 739; Alsace-Lorraine, 632; Hamburg, 429; other provinces less than 200. The proportion of doctors to population in the whole empire is 4.37 per 10,000; the ratio in 1892 was 4.15.

VEGETARIANISM AND CRUEL TEMPERAMENTS.—There has been much written on the mildness of temper possessed by vegetarians. The Hindoo professional assassin or murderer is probably as cold-blooded and as ferocious a being as one may imagine. The Chinese are great vegetarians. Rice, beans in the green state, cabbage and large spinach, water-cresses and fruits enter largely into their diet. They are besides very fond of fish, and yet there is nothing more bloodthirsty and bellicose, more wild or more unmanageable than the Chinaman when aroused. On the other hand, the native Californians, like the native or dweller of the wild pampas of South America, who lived on an exclusive beef diet, were generous, self-composed, and not in the least given to either strife or bloodshed.—*National Popular Review, January*.

—*The Medical Register* for Great Britain and Ireland has just been issued at a rather earlier date than usual. It contains 1,054 more names than last year. The actual number of new

names is 1,579, and of this number 770 were registered in England, 638 in Scotland, and 171 in Ireland. The loss by death was 546, as compared with 558 in the previous year. The growth of the profession as evidenced by the increase in the bulk of the *Register* is portentous. The increase has been nearly 50 per cent. since 1876. In that year there were 22,200 registered practitioners; the *Register* for this year contains 31,644 persons, an increase of 9,444 in eighteen years. A marked and comparatively novel feature in the *Register* is the number of licensing bodies in the Colonies and India which have been recognized by the General Medical Council as granting qualifications entitling to registration in the Colonial List. The bodies thus newly recognised are the Universities of Adelaide, Calcutta, Madras, and the Punjab, and the Ceylon Medical Congress.

—The subject of male nurses has recently been commented upon by Dr. Charles H. Stowell in *Food*. We have for a long time been of the opinion that the male nurse had very small place in the care of the sick. This is certainly true outside of the insane hospitals or prisons, or in a few exceptional cases where mere muscular power is needed. In private homes, certainly, the male nurse is rarely required. In these days of trained nurses there is no comparison between the male and the female nurse as regards usefulness in the sick room.

There are many diseases, for example, typhoid fever, where nursing has a larger place than medicine, and to-day no reputable physician would conduct such a case without obtaining the services of a trustworthy trained nurse to carry out his instructions and to do the thousand and one things so needful to establish convalescence, that only her thoughtful brain and delicate hand are capable of accomplishing. We believe there has been no stronger evidence of progress in medical science in the last fifteen or twenty years than in the training of nurses and in their extensive employment in the sick-room.

A LAW CLINIC.—In a lecture upon the ethics of the medical profession, Dr. S. Weir Mitchell said :—“ Who ever heard of a law hospital ?” This taunt put some lawyers to work

upon the subject, and now the law students of the University of Pennsylvania have established a regular law dispensary, with semi-monthly clinics, where poor clients can have their cases taken charge of and carried through the necessary courts. Of course, the client or his friends must pay the court costs.—*Medical World.*

This is a brand new thought, and one that may be taken up by the legal profession as worthy of their consideration. While it is no doubt true that any meritorious case will easily find a defender in the legal profession, there are many among the poor who should have given them legal advice in regard to legitimate rights which they should enjoy, but in regard to which they have very indefinite ideas and notions, and are always in danger of getting into the hands of conscienceless shysters. It is true that in some instances members of the medical profession are wronged out of some paying patronage through the operations of the hospitals and clinics. We are quite sure that at the same time the profession at large is, through this avenue and means, relieved of a very considerable burden of labour it would be forced to bear under other conditions. In the establishment of a law department of the Cincinnati University, a law clinic may with all propriety be made a most interesting and useful adjunct, and be worth to the students even more than a moot court.—*Cincinnati Lancet-Clinic.*

—Henry W. Cottell, in the *Medical and Surgical Reporter*, gives the following practical post-mortem points:—

Get all the anatomical knowledge you can out of every autopsy you make. It is therefore usually advisable, especially in the case of females, to perform a preliminary laparotomy. Many surgical operations can be practised upon the body without disfigurement, such as Alexander's operation, oöphorectomy, removal of the ear ossicles and vermiform appendix, stretching of the sciatic nerve, symphysiotomy, etc.

Be sure you have a legal right to make the post-mortem before you begin. The nearest relative, or the one who is going to pay the expenses of the funeral, should give the consent in writing.

Tact will get you many autopsies. Curiosity of relatives and friends can often be worked upon to get permission for an autopsy.

In legal cases be sure to protect yourself in every possible way. The jars (which should never have been used) containing the specimens should be sealed in the presence of a witness. In important cases here in Philadelphia the coroner has both of his physicians present at the autopsy, so that the testimony is stronger, and in case of absence of one of the physicians the other can go on the witness stand and the case not be postponed.

If you value your peace of mind, do not put yourself forward as an expert witness in medico-legal matters. Knowledge which you already have should be freely given to the court in criminal cases, but the court can not compel you to obtain expert knowledge without your consent.

In Germany the legal evidence of a post-mortem held by gas-light has been judged by the court, except under certain peculiar circumstances, to be void.

If two persons are lifting the body, the lightest weight is at the feet.

Chloroform, when placed on a towel and the head enveloped in the towel, will quickly dispose of *pediculi capitis*.

Many signs of inflammation, especially of the mucous membrane, disappear after death. Remember that red flannel often colours the skin red.

Wash your hands freely during an autopsy, so as not to allow the blood to dry on the skin.

Urine or aromatic spirits of ammonia will best take off the odour from your hands. The odour is usually got from opening the intestines.

Remember that a post-mortem, with the exception of brain and cord, can be made with a penknife.

SANITATION AS TAUGHT BY THE MOSAIC LAW.—Dr. Adler, in a paper read before the Church of England Sanitary Association, on November 1st, 1893, explained how various Jewish customs, directly derived from the Pentateuch, exercise an important sanitary influence on the community; and pointed

out that prevention was substituted for the old curative system in dealing with disease. He applied the old principles adopted by the Jews in the treatment of leprosy to specific diseases such as variola, scarlet fever, and typhus, and insisted that if they were as rigourously carried out, these diseases would disappear or become very rare. In dealing with house sanitation, the Chief Rabbi recommended the destruction of rotten tenements as one means of preventing the spread of disease, a recommendation which is strongly supported by recent investigations with regard to tuberculous infection from the walls of rooms formerly occupied by phthisical patients. In view of the advances that have been made of late with regard to food sanitation, one of the most important parts of the paper was that which dealt with the dietary laws. It was observed that the animals pronounced unclean among quadrupeds were those particularly liable to parasites, and among birds, the scavengers of garbage and carrion. The whole question of Shechita was dwelt on at considerable length, and the advantage of obtaining the flesh as free from blood as possible was held to be a sanitary basis for the custom. The fact that micro organisms of disease are often present in the blood, while the tissues of the organs through which the infected blood circulates are free from them, was, with reason, made a strong point in favor of the Jewish method of slaughter. We are, however, obliged to take exception to the suggestion that apart from disease possibly some of the qualities of the animal may be communicated to us by means of its blood. Attention was called to the great care with which the carcasses of the animals are searched for signs of disease and the recommendation that the same care should be taken in all slaughterhouses is one which we cannot too strongly support. If, as is probable, the Jewish race owes its immunity from the tuberculous diathesis of phthisis to this measure, this fact alone is an overwhelming argument in favor of the custom. Happily the results of recent researches have left little doubt in the minds of those most competent to judge that many diseases common to the lower animals and man are capable of propagation by means of infected meat, and the importance of

the careful inspection of meat before it is allowed for human consumption is becoming more and more recognized. If Dr. Adler's able and comprehensive paper succeeds in giving further impetus to this point in sanitation alone among the many he has discussed, the community at large will have every reason to be grateful to him.—*British Med. Journal.*

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