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CANADA

MEDICAL & SURGICAL JOURNAL

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Original Communications.

CASE OF ANEURISM OF THE THORACIC AORTA.

By J. A. GRANT, M.D., F.R.C.P., LOND., OTTAWA.

Consulting Physician, General and County of Carleton Hospitals, Ottawa.

(Read before the Canadian Medical Association, Chatham, September, 1885.)

The subject of this history was engaged in sedentary business, of spare habit of body, regular conformation, and more than average intelligence. Good family record, and never had rheumatism or syphilis. He had been under my care for fully ten years, and up to 1880 enjoyed excellent health, and always lived a temperate and regular life. In 1880 he complained of rheumatic pains in his left side, arm and shoulder, which usually subsided for a time with moderate exercise, there being no specially marked indications of constitutional disease. The apparently functional irregularities continuing, and not giving way permanently to treatment, led to the existence of an affection of the great vessels. In April, 1883, apex of heart, beats between 5th and 6th ribs, internal to and below the left nipple, somewhat feeble and diffused. A sense of heaving pulsation is felt over the upper part of the left chest, synchronous with the cardiac impulse, and possessing a moderately expansive lateral motion. On percussion, about the level of the nipple there was an undoubted increase of cardiac dulness. As time passed on, the dull thoracic space gradually increased and became more defined in character, extending from the upper boundary of the heart, in a direction towards the right sterno-clavicular articulation, and on auscultation at the heart's apex, a double blowing

murmur audible, extending from the base of the heart to the aorta, through a considerable portion of which it was traced. Posteriorly, no particular dulness could be defined, although, on auscultation, a double murmur was traced and audible over the left back, and most distinct between the vertebræ and edge of the left scapula. On auscultation over the lungs, occasional sonorous râles were observable, with a moderate degree of prolonged expiration. At times a slight cough and limited expectoration of mucus, but never tinged with blood. No appreciable difference in either pulse. Occasional slight inequality of the pupils, not, however, continuous or determined in character, but sufficiently so to suggest the existence of aortic disease from the apparently moderate implication of the sympathetic and recurrent laryngeal nerves, resulting in local irritation and iritic irregularity. Digestive, urinary and other functions tolerably good. He was recommended to take moderate exercise, to occupy his office only a few hours each day, to take light nourishing diet, and to avoid excitement and over-exertion, but to continue the free use of the iodides. By strict adherence to this plan of treatment, his general health improved for a time. The disease, however, made slow, but gradual progress, the period occupied from first to last of his illness being about four and a-half years, the symptoms varying in intensity and in proportion to the existing abnormality, and yet with a remarkable degree of accommodation to the surrounding diseased condition. Never had any dropsical state whatever. For eighteen months prior to death was subject to paroxysmal cough, associated with shortness of breath and, at times, a feeling of suffocation. Sleep usually composed. Mental excitement tended to increase the pulmonary difficulty, causing pain in the chest almost like angina pectoris. No difficulty in swallowing, and loss of flesh was not marked. Within a short period of his death, would have passed for a person in ordinary health but for the swelling on right chest, which could readily be observed through the clothing. The tumor externally was hemispherical in shape, extending from near the right clavicle to about the 6th rib, and laterally occupying the space from the right nipple to within two and a-half inches

of the left nipple. The central and deepest portion of the tumor externally would be indicated by a line drawn vertically downwards from the right sterno-clavicular articulation. Pulsation was felt distinctly over the whole tumor equally. There was no particular pain in the tumor, and the patient moved about as usual and presented no physiognomical indications of distress. The voice was natural, and, in general, the thoracic functions were performed with surprising regularity.

July 15th, '85.—Retired to rest as well as usual under the circumstances, and in a few moments afterwards suddenly arose from his bed with a sense of impending suffocation and almost immediately became unconscious, breathing heavily and with great difficulty, and, continuing in that condition until 10 a.m. the following day, expired.

Sectio cadaveris, twenty-four hours after death.—*Thorax*: After death the tumor became somewhat flaccid. In reflecting back the skin, the covering of the tumor was found to be formed by the pectoralis muscle and thickened cellular tissue, and fully several inches of the 3rd, 4th and 5th ribs, and of the right side of the sternum, were eroded, this space leading to the cavity of an aneurism, involving a considerable portion of the ascending and transverse aorta. The sac contained laminated coagula, which formed a layer more than an inch in thickness, and externally were observed loose clots of the consistence and color of ordinary currant jelly. The aorta was decidedly atheromatous, and the semilunar valves were thickened, incompetent, and semi-cartilaginous, thus accounting for the murmurs. The heart large and hypertrophied. Right chambers distended with blood. Left ventricle large; walls thicker than normal. On the right side of chest there were extensive pleuritic adhesions.

Within the past few years much attention has been directed to the occurrence of laryngeal symptoms,—such as laryngeal paralysis,—and also to inequality of the pupils, as important indications of the presence of aneurismal thoracic tumors. In the present instance, the physical signs were well defined and the tumor unusually large, and yet a very limited degree of either laryngeal complications or inequality of the pupils. In

such cases the presence of hemorrhage is considered of diagnostic importance, Dr. Gairdner of Glasgow holding that he would not consider the hemorrhagic discharges of a person affected with aneurism as indicating the communication of the sac with the mucous membrane, although it generally did so, when hæmoptysis occurred, if the aneurism pressed on the trachea, and if it were accompanied with indications of pulmonary change of structure. Dr. Gibson of London states that in one-fourth of the cases he has collected of aneurism of the descending aorta, there were present both hæmoptysis and stridulous breathing. In the present case no hæmoptysis had taken place, and the immediate cause of death pointed to cerebral embolism and paralysis. The absence of many of the important indications of thoracic pressure may be accounted for by the increased thoracic capacity, the result of costal and sternal erosion, thus affording considerable additional space for pulmonary expansion, and at the same time, not in any remarkable manner, retarding cardiac or pulmonary circulation. Throughout, the temperature was normal, thus illustrating that systemic absorption, as well as blood-making power, were not apparently defective. The cerebral functions were not in any way interrupted prior to the occurrence of the last act of vitality. The retina exhibited no indications of disturbed circulation. The jugulars were not unduly dilated, nor even excessive fulness in the supra sternal notch. Of the remarkable accommodating powers of the system, even during the existence of organic disease, we have frequent evidence in the great cavities of the body, hence the necessity of rigid examination under all circumstances.

FIELD HOSPITALS AND CLIMATE IN THE NORTH-WEST TERRITORY.

By WILLIAM NATTRESS, M.D., TORONTO.

(Read before the Canadian Medical Association, Chatham, September, 1885.)

I am aware that the advantage of field hospitals has long been recognized, and in bringing the subject before you in connection with the climate of the North-West, I do so feeling we owe so much to those two factors for the more than ordinary success attending the wounded during the recent campaign.

In establishing a field hospital in Battleford, we found it very easy indeed, in a country so well adapted to camp life, to select a site. We pitched our *marquee* on the south bank of the Northern Saskatchewan, as well removed from the fort and little town as safety would allow,—a beautiful slope down to the swiftly-flowing river in front, a vast extent of prairie behind, with a turf dry, smooth and clean, a more perfect spot could not be desired. The season also favored us—May and June,—when spring, with all its freshness, was passing into early summer, when the cold was not felt, and the heat was not oppressive. The condition of the ground, the locality, the season, everything nature could supply was there to make our hospital a model one and enhance the comfort of the patients, who, being well supplied with cots, mattresses and blankets, and with plenty of good dressers, hospital orderlies and cooks, had their wants regularly attended to, and their wounds kept clean and in good condition.

Before referring to any practical illustrations of the advantages of a field hospital, I wish to make a remark or two about the *climate*, and in this connection I cannot do better than give a few notes taken from observations made by B. F. Brown, Esq., B.A., of the "Red Cross Ambulance Corps," during the month of May and part of June. He gives the following

Temperature.

Average temperature at 9 a.m. during month of May,	55° F.
“ “ “ 2 p.m. “ “ “	66°.
“ “ “ 9 p.m. “ “ “	48½°.

During the first week in May, we had nightly from 6° to 7° of

frost. The highest temperature in May was 72°F. Towards the end of June, at 2 p.m., the thermometer rose to 80° and over, and for two or three days it reached 97°F.

Rain-fall.—We had only one regular rain-fall during May, = $\frac{1}{3}$ inch, and two thunder-storms, each only = .02 inch.

Prevailing Winds.—The prevailing winds were from the south-east—occasionally from the east; these usually veered towards the west in the evening. These winds are almost constant, and always moderately brisk—from 8 to 10 miles an hour. Storms, too, usually come from the south-east.

Clouds.—Clouds were never plentiful, an average of not more than one-third of the sky being covered during the day, and these were usually of the lighter kinds—cumulus and cumulo-stratus. At night the sky was almost invariably clear, and the auroral display during the second and third weeks of May was magnificently grand. For ten consecutive nights the whole atmosphere seemed charged with electricity, showing itself in brilliant auroral streamers shooting off from the zenith towards the horizon in almost every direction, while towards the north and west numerous bright flashes played across these with lightning rapidity.

I need only, briefly, here draw your attention to a few facts relating to the climate, as shown by the foregoing observations.

Weather almost unchangeable—three storms in a month.

Air pure, clear, dry, and always in motion.

Temperature: nights cool; days bright and warm.

The presence of so much electricity in the air developing, as no doubt it does, quantities of *ozone*, rendering it stronger and more exhilarating.

Let me say here, as one of the surgeons in charge of that hospital, I feel pleased with our results, which you will see was most satisfactory; but I am assured the pure, out-door air and the unchangeable weather of that northern country contributed much towards the recovery of our patients: -

The rebellion in the North-West was so quickly and effectually quelled, that many surgeons who went out there had comparatively little work. Though more fortunate than a number of

regimental surgeons, who, with their regiments, never got far beyond the line of railway, I was less so than some others in being later on the field, and in not reaching what afterwards proved to be the most central point of the enemy's attack. I reached Battleford in charge of the "Red Cross Ambulance Corps" on the 3rd of May, and found that the wounded from Cut Knife Creek had been brought in but a few hours before. In that engagement our casualties were 23 men wounded, seven of whom died on the battlefield and one early next morning after arriving home. The remaining fifteen men, together with two or three who were accidentally shot, constituted our chief care in that hospital. It is from these I propose giving a few notes to illustrate what I have already said regarding the field hospital and climate as conducing towards the recovery of our patients.

I cannot, in a short paper, attempt to give a full classification of all the wounds, and will therefore only refer to the more serious ones, taking advantage of regimental divisions as a species of classification:—

From the Queen's Own Rifles there were six wounded—three seriously and three slightly. Those seriously wounded were:

Private L. Bullet entered left of spine, inclining upwards and outwards towards the right side, it passed between the spinous processes of the 8th and 9th dorsal vertebræ, and was extracted just below the spine of the right scapula. This operation was performed on the battlefield; wound between 8 and 9 inches long.

Private N. Almost the same wound as the preceding, but made by bullet travelling in the opposite direction. Entering a little higher on the right shoulder, the bullet was discovered on the 20th May lying close to the right side of the spine and removed; wound 9 inches long.

Color-Sergeant C. Ball entered near hip-joint, about an inch below the crest of the ilium, and passing downwards and inwards, made its exit two inches from the anus. Wound 8 inches long.

From "B" Battery there were four wounded—one seriously, three slightly:

Gunner R. Ball entered upper third of right arm, fracturing

neck of the humerus, and, continuing its course under the infra-scapular muscles, was, on the 9th May, discovered below the angle of the scapula, and extracted, together with a piece of the fractured humerus. This proved to be the most troublesome wound in the hospital. It gave considerable trouble until about the middle of June, when a further search revealed a piece of his tunic deeply imbedded in the wound. After the removal of this, it healed rapidly.

From the Governor-General's Foot-Guards, two wounded, both somewhat seriously. In one (Private M.), the bullet passed across the nape of the neck, close to the occipital protuberance. In the other (Color-Sergeant W.), across the face, entering at the root of the left alæ of the nose, and passing diagonally, finally emerged beneath the zygomatic process of the right malar bone. On the 14th May, a small spicula of bone was extracted from the cheek, and on the 20th May he resumed duty with his corps. On the 25th June, while halting at Birch Lake, on the Big Bear expedition, the wound was noticed to have become much inflamed and swollen, and on cutting down, I found not only a piece of dead bone, but a portion of the bullet, a little larger than a buck-shot. After removal of these, the wound healed kindly. This young and brave volunteer had come through the battles of Kassasin and Tel-el-Keber without a scratch.

From the Battleford Rifles, one wounded, not seriously.

From "C" Company, one wounded, not seriously.

From Mounted Police, one wounded, seriously.

Sergeant W. Ball entered at upper inner angle of left inguinal region. The abdominal walls being tense at the time, the bullet did not penetrate, but evidently split, as two sinuses were discovered, one leading downwards and outwards towards the crest of the ileum, the other downwards towards the pubic crest. Neither portions of the bullet were located, and hence remain in; the wound having healed perfectly. There was considerable stomachic disturbance in this patient at first, but this subsiding, the case went on satisfactorily.

Surgically, I may say, in examining those in whom the bullets

still remained, where it could be definitely located without serious interference and removal practicable, the bullet was extracted at once and a drainage-tube introduced when advisable. All wounds were dressed antiseptically. The diet could not be regulated by any fixed rules. Our patients, for some time at least, were obliged to do with but little variety.

Briefly I have given the list of the fifteen wounded from Cut Knife Creek, the nature of their wounds, and how they were treated. I am pleased to be able to say they all recovered without even an amputation. It was somewhat remarkable that all who could be brought back and placed in the hospital should recover so perfectly. Their wounds varied considerably, as a matter of course; some were more or less serious, while others were comparatively trifling. Still, that the record should be so complete is noteworthy, and suggests the idea that something more than the skill and care displayed by the surgeons and the regular and efficient attendance of qualified-dressers contributed to so happy a result. I am disposed to accredit camp-life and the climate with a large measure of the success obtained.

The tendency for wounds to heal and patients to recover in that climate, and under canvass, is, perhaps, better illustrated in the case of a settler who was accidentally shot in the elbow by one of his comrades while in the act of unloading the magazine of his Winchester rifle after returning from guard duty. This man had always lived in that country, having been born there of Scotch parents. He is 63 years of age, and had been most of his life in the employ of the Hudson Bay Company. His family history was good, and he had never abused himself in any way. True, he had on several occasions to suffer some of the privations of a northern winter, and had more than once felt the keen pangs of hunger, but at the time of the accident he was strong, healthy, and well nourished. He was wounded nearly a month before any surgeon arrived in Battleford, and perhaps did not receive proper attention at the beginning. However, the brachial artery must have been wounded at the time of the injury, for on two different occasions the patient had profuse hemorrhage, and, following closely on these, gangrene of

the forearm and hand. The only possible chance to save the man's life was in amputation. A consultation was held on the 5th May, and although he was extremely weak, it was decided to operate the following morning. Dr. Widmer Rolph, to whose charge the patient had fallen, had directed that everything be removed from the little tent which he occupied. Nothing was left but the cot and a little table, and here, on the 6th May, he amputated the arm at the junction of the upper with the middle third, and well removed from unhealthy tissue. The patient rallied quickly, and for a day or two seemed to be doing well, but soon it was observed the flaps would slough. The wound was immediately laid open, and charcoal-linseed poultices were used to facilitate removal of the slough, and afterwards carbolic-water on the syphon principle was allowed to drip constantly on the raw surfaces. The sloughing of the flaps necessitated another operation. Between one and two inches of the humerus was resected, and the flaps brought as closely in apposition as possible. Large and frequently-repeated doses of ammonia and bark were administered, and everything went on satisfactorily.

This case is particularly interesting when we remember the patient was an old man; that the accident happened about the beginning of April, and had not received much attention until the beginning of May; that the state of the country at the time gave him much concern regarding the safety of himself and family; and that the presence of gangrene and the sloughing of the flaps necessitated two operations within a month. Notwithstanding all this, the patient made a good recovery, and on the 1st July—the day I last saw him—he was moving around, feeling well, the stump all but healed. Such a result we would seldom expect, under similar circumstances, to obtain in our own climate and in a well-appointed hospital. It undoubtedly says much for the healthiness of the climate in the North-West, and is a strong indication in favor of hospital tents.

The value of a hospital-tent was probably brought more evidently to our notice by a little incident that occurred there. A sudden and violent wind-storm blew down our hospital marquee, tearing it in many places, and exposing the patients for a time

to the storm. They were removed as quickly as possible to the Mounted Police Hospital, a low wooden building, tolerably clean, but small, being barely large enough for the fifteen cots in use to allow sufficient space between. They remained there a few days until the tent could be repaired and set up again, and during this time a very marked depression was noticeable in all who were in any way severely wounded. The change to so small a building was certainly a most decided one, but the depression was just as decidedly marked. Some of them said they felt they would die if kept long in-doors. They preferred the tent, because they felt so much better, their wounds were less irritable, and the air seemed much purer and more refreshing. Immediately on returning them to the tent, a revival of spirits and a cheerfulness which is always encouraging to the surgeon showed in all—their wounds pained them less, they were more comfortable, and felt stronger.

There yet remains much to be said regarding the climate and camp-life as they affected the general health of the hundreds who were taken from the warehouse, the shop, the office, and the comforts of a luxurious home, to endure the keen blasts of winter and the boiling heat of summer, to perform long and wearisome marches, fatigues, guards and pickets, to fight for and defend the homes and privileges of their fellow-men, and to subsist on rough, coarse food for four long months. Unaccustomed as they were to such hardships and to the dull routine of a soldier's life, still the majority of these returned home more healthy and robust than when they left. We cannot but observe that not alone was there a tendency for the sick to get well, for the wounded to recover, but also a general improvement in the health, strength and endurance of the men. What more can be said of the climate of any country, or what better evidences are required to prove the efficiency of tent life?

In conclusion, I would just like to make one or two suggestions. From what I know of that country, from my own experience of it during some of the spring and summer months, and from the evidence of two or three who have gone there for their health, I am convinced it is a grand place for those who are suffering

from lung trouble, or catarrh of the nose, throat or bronchial tubes. I cannot exactly explain why, unless it be in the fact that the air is so dry and evaporation so rapid, the catarrhal mucus becomes less profuse and the desire to cough less persistent, and, in addition, the purer air relieves respiration and gives a fresher impulse to the heart. With a tent, a good bed, and a few camping utensils, I would say to those to whom life is now a burden, a summer in that country under canvass would be of material benefit to them. The winters are said to be quite as healthy, though, of course, camping would be quite out of the question then. Further, I am so convinced of the benefits of camp-life, that I would like to see it more encouraged than at present in connection with our general hospitals. Wherever practicable, I think the grounds around our hospitals during the summer months should be utilized to their fullest extent. Society ladies, office-worn men, students, professors and others flock to some favorite lake-side camping-ground or to the fresher sea breeze during the hot season to recuperate. Why should not our hospital patients be indulged in like luxuries as far as practicable?

SUPRAPUBIC URINATION.

By J. P. RUTHERFORD, M.D., CHATHAM, ONT.

(Read before the Canadian Medical Association, Chatham, September 2, 1885.)

Suprapubic urination, the subject which I propose summarily to deal with in the present paper, may arise from three distinct causes. 1st, Congenital deficiency of the anterior wall of the bladder, exstrophy. 2nd, From an opening caused from malignant disease, or traumatic injury. 3rd, Superinduced by the hand of the surgeon in the operation of tapping. To the last of these my thoughts will be mainly directed, not so much to show any original plan, as to compare different methods, for the purpose of bringing out a full discussion of the question.

The necessity for any such operation—I mean “bladder tapping”—in any region, simply hinges on two fundamental conditions. 1st, Complete retention. 2nd, The exhaustion of all simpler expedients for the relief of this condition. And here

is where the wedge of controversy enters. Although its necessity is admitted by all surgeons in some extreme cases, eminent men differ as to place of tapping, and just when it shall replace other methods of relieving an over-distended bladder.

Dr. Coulson extends the above rule for guidance by advising the operation of anterior tapping in all cases of "engorgement" produced by enlargement of the prostate gland, necessitating the frequent and difficult introduction of the catheter to remove residual urine, thus giving the irritable bladder and prostate perfect quietude.

In passing, briefly, allow me to notice some of the main causes of complete retention, namely, spasmodic and organic stricture of the urethra and occlusion of the same by impacted calculus, traumatic injury, enlarged prostate gland, or malignant disease. The two latter supply nearly all the cases demanding the operation in question. To relieve a patient in such distress, after thoroughly manipulating with catheters of different sizes and kinds, combined with their powerful adjuncts, opium, chloroform, hot baths, etc., the honest and anxious surgeon, in the face of failure, will ask the question, "What next?" In answer, if we can introduce a filiform bougie, perform Prof. Symes' operation called "external division"; if not, we have "external urethrotomy" at our command, called perineal section by some. External urethrotomy is cutting through the strictured portion without a guide, and said to be (by leading authorities upon this subject) a very difficult, hazardous, and sometimes unsuccessful operation. Again, we have forcing the stricture with a silver catheter, now obsolete; and many other methods only deserving a passing notice, such as cutting out the stricture, Dupuytren's vital dilatation, Wakley's sliding tubes, Arnold's fluid pressure, internal use of caustics, electrolysis, etc. Then, again, we can tap the urethra directly behind the stricture, if sacculated or distended with urine—this method was strongly advocated by Profs. Liston and Guthrie—a difficult operation, save in the condition of urethra as above, and one at present very seldom resorted to. Any successful operation on the urethral tract, when at all practicable, is the best, as the result is more likely to be

permanent ; and to save time, it is sometimes advisable to give temporary relief to the patient by immediate aspiration.

To come more closely to my text. All the foregoing methods of relief having failed or proved to be unsuitable to the case, and when we wish to establish a new outlet for some days—nay, it may be some months, or even years—what shall and must be done ? This paper answers, Tap the bladder, and do it anteriorly or supra-pubically. I advocate this outlet as being on the list next to the natural way. *Four* different methods have been advocated, differing, not so much from their methods of performance as their points of entrance. Two of these have fallen into disuse—the one called “subpubic,” first and last performed by Voillemier ; the other, called “pubic,” first performed by Dr. Brander of Jersey in 1825. These methods I will not attempt to describe. The most favored positions to-day, through the rectum, hereafter called the “posterior method,” and supra-pubic, called “anterior method.” The posterior is also called the English method, and was very forcibly advocated and practised by Mr. Cock of Guy’s Hospital. The anterior or Irish method, strongly upheld by Fleming, was first performed by Dr. Wierzy in 1701, and pronounced the best by Sir H. Thompson, Keys, and many other eminent surgeons, in all cases where a permanent opening is required for any length of time.

Operation.—An assistant, long-curved trocar and canula, soft catheter, some tape, adhesive plaster, and chloroform are required. The catheter should be No. 6, and exactly fit the canula in order to allow of the escape of any mucus, muco-pus, blood or epithelial debris present. After administering chloroform or ether (if thought desirable), remove the hair from Mons Veneris, place the patient in a semi-reclining position, enter the trocar and canula through the integument one inch above the pubis, in the median line, directing its course slightly downwards. During the operation, the bladder is supported antero-laterally by the assistant. The tissues down to the bladder should be pierced by the trocar and not incised. This method was first adopted by Mercier, and is, I think, a most excellent modification of the former plan, as it fortifies very much against

extravasation of urine, the canula being better, more firmly and securely held *in situ* by the muscular contraction of the bladder wall at the one end and of the skin at the other. The trocar must be very sharp-pointed; if not, the bladder may be separated from its areolar bed before piercing. This accident would invite trouble by way of abscess from extravasation of urine. It must be replaced by the soft catheter before the bladder is emptied. The objects of the soft catheter are four-fold :

1st, To save coats of the bladder from rough edge of canula.

2nd, To allow more fully of washing out of the same.

3rd, By attaching a rubber tube, to conduct the urine to a suitable receiver.

4th, By keeping it introduced well into the cavity, it prevents the urine from escaping around the canula, and holds the latter better in position.

If faintness supervene, discontinue flow of urine and administer a stimulant. Ether hypodermically answers admirably.

CASE I.—J. S.—One of malignant disease, involving prostate and neck of bladder, necessitating for some time the use of the catheter, finally ending in complete occlusion of the urethra, and baffling relief from the latter. Retention, extravasation and certain death, on the one hand, or tapping the bladder, on the other, stared the patient and friends in the face. After consulting with patient and friends, an operation (the only hope of prolonging life) was decided on, and finding no possibility of entering per rectum from the extension of the disease in that direction, the anterior method was chosen. The operation was performed as herein detailed, with his lease of life extended fully two weeks. His financial matters and domestic relations were very-much improved. During this period, his hopes of a brighter future (whether mythical or not) seemed much stronger. If he was not any better off hereafter, his sons often thanked the operation for a settlement of the estate and their consequent improved standing and position to each other. At his death, urine passed freely through his novel urethral outlet, and although it is customary, after consolidation of the tissues about the canula (say four or five days), to remove both canula and catheter, in

this case, from extreme debility of the patient and atony of the bladder, the catheter was left in.

CASE II.—W. C.—Was one operated on for false passage made by patient himself in attempting to procure relief and save a fee. The catheter, when in this passage, could be felt some two inches up between bladder and rectum, and could not be directed in any more favorable locality for getting urine and relieving patient. Different sizes were tried, but profuse hæmorrhage opposed a prolonged persistence in these manipulations. The only choice here lay between repeated aspirations, perineal section, and tapping. This was given in favor of tapping and the anterior operation. My reasons for such a course were—1st, I feared the urine would trickle around the canula and enter the torn region between bladder and rectum, and there set up abscess and possibly worse symptoms. 2nd, Aspiration must have been performed if I had chosen “perineal section,” as it occurred just after dark, and the chances otherwise were good for a ruptured bladder before another sun brought sufficient light to properly deal with such a case. 3rd, Having thus to enter the bladder with a needle, and not being over-sanguine of getting the urethral opening from the perineum, it was considered better to use a large trocar and canula at once.

To illustrate the impunity with which the bladder may be tapped, even with a large instrument, I might cite the case of Dr. Dox, in which the bladder was punctured anteriorly some eight times in succession in as many days, to relieve a case of retention, after which the patient reacquired the power of making water per *vias naturales*. The above case you will find recorded in the *New York Medical Record* for June, 1872, by Dr. Clark of Geneva.

The operation was performed and a perfect fistula established without any bad symptoms intervening. On the fifteenth day after the operation, a catheter was with difficulty passed into the bladder and tied in, which was taken out and reintroduced twice in four days. The artificial opening completely closed up, and nothing remains to-day but a cicatrix in the hypogastric region.

the only remaining landmark of the operation. The patient is quite well, and has been making water by the good old way ever since.

CASE III.—J. R.—This case was one of enlarged prostate gland, coupled with vesical catarrh. The occlusion of the prostatic urethra was complete, as can be testified to by my able medical *confrère* Dr. Bray, who very kindly assisted me in trying to overcome our patient's wants by catheterization, etc. Thus failing in our efforts to relieve, we operated April 3rd, 1879, and he lived over four and a-half years, until the fall of 1883, making water during this time more naturally by the new channel than he had for years by the old, as he could retain his water better, and for three or four hours at a time, and even went about and attended to his ordinary duties. The only difficulties experienced by him were excoriation of the integument around the new orifice from contact of urine and branch fistulous tracts running from main channel,—the former always readily relieved by a closer attention to cleanliness, combined with the use of oakum and carbolized sponges over the excoriated parts; the latter by introducing and keeping in a catheter for a short time, which could be done the very day he died, showing that the urethra was almost perfect, and that he passed over to the majority in the end, from general decay and old age (having turned 78 years), and not from any difficulty in urinating. Not one drop of urine, mucus, pus or blood ever escaped from the passage which he outlived, and all attempts to catheterize the same proved futile. This only goes to prove the perfect occlusion of the urethra.

I give a summary of reasons why the anterior operation seems to me preferable to the posterior :

1st, According to some of the very best authorities—Sir H. Thompson, Keys, Coulson, etc.—the posterior method should only be used when wanted for a short time. Hence I claim aspiration should be performed instead; and when an opening for any length of time is required, tap, and do it anteriorly.

2nd, As we do not always know how long we may want this

substitutionary process, and the dangers are about equal (or if anything in favor of the anterior method), perform that which you can use long or short, and close at will.

3rd, More easily performed ; region more accessible to the surgeon.

4th, The most common cause, enlarged prostate, excludes the posterior.

5th, Dangers greater in posterior : if seminal vesicæ should be wounded, epididymitis and abscess may be the result ; as to wounding peritoneum, about equally divided ; *nil*, with ordinary precautions, in either case ; extravasation of urine, abscess and blood-poisoning less in anterior if the soft catheter be used and no incision made.

6th, The function of the rectum—defœcation—not interfered with.

7th, The function of the bladder—its retaining power is present in the one case and not in the other, as was forcibly illustrated in Case III, who could hold his water for three or four hours, much longer than before the operation, and by getting up, completely empty the bladder by making the opening the most depending point. Now, in order to do this by the posterior method, the patient must occupy a position on his face and only be on his back to urinate, which is a gross violation of man's natural attitude when reclining, and of the laws of his nature.

In conclusion, an apology is due you and only justice to myself for this incoherent paper. Hoping that by tapping early the bladder in well selected cases which have baffled all other simpler methods (and such cases will occasionally occur in every man's practice), we will save our patient, in some cases, from diseased and disorganized kidneys, and in others, from certain death, I here conclude, and leave the subject open for discussion.

TREPHING OF THE MASTOID—HISTORY OF A CASE.

BY J. CAMPBELL, M.D.C.M. (McGILL UNIV.), L.R.C.P. (EDIN.),
SEAFORTH, ONT.

(Read before the Canada Medical Association, at Chatham, Sept'r 3rd, 1885.)

H. J., æt. $6\frac{1}{2}$ years, a native of Canada, when six months old, had an abscess in the middle ear, which burst and discharged internally. This was repeated every three or four months for three years. In January, 1882, the mother noticed a swelling behind the ear; this was accompanied by pain, fever, twitching, and some delirium. At this time I was absent in Europe, and the boy was attended to by the medical man in charge of my practice, who ordered a poultice and put drops in the ear to relieve the pain. From this time there was not much trouble, only a constant discharge from the ear until the summer of 1883, when swelling behind the ear came on, accompanied with tenderness, heat, fever, delirium and twitching. We made a free incision, when a copious discharge of thin sanious pus took place. The discharge continued for six months. He now felt a good deal better. We put him upon syr. fer. iodid., soft boiled and raw eggs, and sweet cream, with exercise in the fresh air. His mother thought she could not get him to take cod liver oil. At this stage we advised an operation to prevent a return of the dangerous attacks, and the 4th of October, 1883, was appointed as the day on which the operation should be performed, and Dr. Gunn of Brucefield and myself called at the house for that purpose, but the boy had improved so much in health that the parents requested us to postpone the trephining for the present, which we consented to do. He was free from any serious attacks for four or five months. From this time we treated the ear with powdered boracic acid, blowing it freely into the meatus, as recommended in such cases. He had several mild attacks from this time until the end of 1884, when he had the severest attack of all. This time the temperature ran up to 104° , and the pulse to 140, with twitching, jumping, sleeplessness, and well-marked delirium. This continued for five days, when it burst and ran freely again. The treatment was the same as before. We now

insisted upon the operation as the only means of saving his life, but as the ear was discharging freely, and the mother was near her confinement, at her urgent request we again consented to a postponement. The discharge continued for nine weeks, the ear being syringed two or three times a day during all that time with carbolized lotion 1 to 40. On the 19th of February, 1885, with the assistance of Dr. Elliot of Brucefield and my student, Mr. Donald (who gave the ether), we trephined the mastoid, using a gouge in the operation. We made the linear incision at the line of attachment of the auricle, dissected back the tissue down to the bone, and opened the mastoid directly beneath the first incision. We guarded the gouge by the carbolized forefinger (which we used as a stop), and worked the instrument with a rotatory motion. We made the opening on a level with the upper wall of the meatus, and extending from above downwards, forming a groove opening freely with the mastoid cells. We broke down a large number of them, which is absolutely necessary, as the communication between them is so slight. We think the gouge will enable us to do this with the greatest ease and precision, and with the least possible danger.

We found that the bone broke down easily, and unhealthy pus was discharged. We dusted the opening in the bone as well as that in the flesh freely with iodoform, put in a lead tube, which we kept in place by an antiseptic bandage, and left it undisturbed for three days. We then dressed it, and syringed both through the ear and the tube with a warm 1 to 40 lotion of carbolic acid, the lotion passing freely from the ear through the tube, and *vice versa*. No bad symptoms came on. As it healed from the bottom, we shortened the tube by splitting it up. The tube was in five weeks and a half, when it was forced out by the granulations pressing from below. It was now taken out altogether and the syringing continued through the opening. He has improved in health and strength ever since the operation, and is at present lively and active, and gaining rapidly in weight. Latterly the lotion has been discontinued, and the mother has been blowing fine boracic powder into the ear, and the discharge has entirely dried up. Examined the ear a few days ago with ear speculum and reflector, and found that the drum membrane

had healed entirely, and that he could hear the tick of my watch six inches distant. His health at the same time is excellent.

REMARKS.

The periodic occurrence of the dangerous symptoms in this case was due to the insufficient opening between the middle ear and the mastoid cells.

The condition calling for the operation is pus in the mastoid cells, and the symptoms indicating this condition are meagre and variable, the most marked being tenderness on percussion, pain, increased by the recumbent position, œdema over the mastoid on deep pressure, fever, chills, twitching and delirium, disease of the external plate of bone, and chronic discharge from the meatus. Swelling of the optic disc is also said to be an indication for the operation.

The external plate of bone may be perfectly healthy, and yet there may be pus in the cells. Sclerosis of the mastoid gives rise to symptoms similar to pus in the mastoid, which is also relieved by the operation.

There are two operations recommended: 1st, That from without, which we performed in this case. 2nd, Through the posterior wall of the meatus, known as Sexton's operation. We recommend the former, for reasons already given.

Instruments for operating on the bone.—A drill; a hammer and chisel; a gouge. The drill should be provided with a stop to determine the precise depth of perforation. The hammer and chisel are very unsafe, and should not be used. The gouge, guarded by the finger as a stop, and worked as we have described, is the best and safest instrument that can be used.

Dangers.—The chief danger is that of opening into the lateral sinus, as it curves over the inner surface of the mastoid. The position of the sinus varies as it curves forwards, thus increasing the danger in some cases, shewing the importance of making the opening as far forward as possible. Another danger is in opening into the middle fossa by operating too high. We would again advise the surgeon not to delay too long, as there is death in delay, while no operation is more successful if performed carefully and at the right time.

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

BY WILLIAM GARDNER, M.D.,

Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital.

Removal of Ovarian Tumor, leaving a part of the Ovary.—

At a meeting of the Berlin Obstetrical and Gynæcological Society, held on July 11th, 1885, Prof. Schröder read a paper detailing the notes of six cases of ovarian disease in which he had adopted the plan of removing the tumor and, when practicable, preserving to the patient a part of the ovary. In the first case, the patient, being told that it might be necessary to remove both ovaries, begged so piteously that one of the organs should be allowed to remain, that Schröder consented to do so if at all possible. On opening the belly there was found a tumor with long pedicle, which was ligatured and the tumor removed. The other ovary was three times as large as normal, and contained several small cysts. These were punctured, one giving forth dermoid contents, a tuft of hair being attached to its interior. This cyst was excised by a wedge-shaped incision and the surfaces united by twelve fine sutures, which arrested all bleeding. The patient made a good recovery and menstruated normally afterwards. In the second case, a left side ovarian tumor was removed with the whole organ. A small cyst was removed from the right ovary in the same way as in the first case. Recovery, with subsequent menstruation. The treatment of the other cases was similar. In his concluding remarks, the author alluded to a case of A. Martin's, in which a large ovarian cystoma was removed from one side, and a small cyst of the other ovary punctured, but no sutures inserted. The patient recovered, and conceived twice afterwards. The practice here recorded seems worthy of imitation. Doubtless many of the small cystic second ovaries we see removed at ovariectomies are not necessarily bound, if let alone, to become tumors requiring removal. These small cysts do not destroy the function of the ovary.—(*Zeitschrift f. Geb. and Gyn.*, Bd. XI, Hft. 2.)

The Question of Shock as a cause of Death or alarming symptoms after the removal of Abdominal Tumors.—Hofmeier of Berlin read a paper on this subject before the same Society on the 24th of October last (1884). He contended that the great majority of sudden deaths after such operations, if carefully investigated, will be found to be due to some previously existing disease of heart, blood-vessels or lungs. The dangers which threaten women with large abdominal tumors are varied in their nature, but they especially belong to the vascular and respiratory systems. A form of marasmus is developed, especially in ovarian tumors, leading to the so-called *facies ovariana*. Certain organs undergo degeneration, the heart being most prone to suffer. In myoma, the large veins are subject to the formation of thrombi, which easily become detached, and may cause sudden death by pulmonary embolism. Two such cases of sudden death have been reported by Schwarz from Olshausen's clinic. In one of them the patient died 24 hours after an exploratory incision. In the other—removal of the appendages for large myoma—sudden death occurred on the tenth day after a change of the dressings. In both of these cases, numerous emboli were found in both lungs and many thrombosed vessels in the pelvis and tumor. Hofmeier, in the same paper, reports nine sudden deaths of tumor cases occurring in the practice of Schröder and others, in which the heart-muscle was found in a condition of fatty or brown atrophy. But such degeneration of the heart-muscle is not confined to pathological conditions such those engendered by tumors. In the physiological condition of pregnancy they have also been developed, and the author reports a number of similar sudden deaths in women recently delivered. In these the deaths were so sudden that no thought of septic processes as a cause could be entertained, but at the autopsy the heart-muscle was found in a condition of fatty or brown atrophy.—(*Zeitsch. f. Geb. and Gyn.*, Bd. XI, Hft. 2.)

The Question of Conception after Curetting of the Endometrium.—It has been asserted by B. Schultze that, after curetting of the uterus, women, although still of an age at which child-bearing may reasonably be considered possible, are, as a

rule, rendered sterile. Duvelius has reported to the Berlin Obstetrical and Gynæcological Society a series of sixty cases from Martin's clinic, in which, after this operation, pregnancy had followed, thus disproving Schultze's assertion. Benicke, in a paper read before the same Society on the 23rd January of the present year, reported nine cases of pregnancy, some ending in abortion, but the majority proceeding to full term, which had followed the use of the curette. These cases finally dispose of this question. The truth of the matter is this, that when a woman remains sterile after such an operation, it is because her disease renders her so, and the sterility persists in spite of the treatment which in many others is the very means of rendering subsequent conceptions possible.—(*Zeitsch. f. Geb. and Gyn.*, Bd. XI, Hft. 2.)

On the Local and Constitutional Treatment of Uterine Disease.—Our readers will remember that a year ago, in these reports, I gave a resumé of one of Dr. Clifford Allbutt's Gulstonian Lectures. It will not be forgotten that Dr. Allbutt, in these lectures, while advocating the principle of the constitutional origin of many local disorders, and as a necessary corollary the constitutional treatment of such affections, took occasion to display his unrivalled mastery of English in a severely caustic attack on gynæcologists, accusing certain of them of continuing local treatment for so long a time as to injure the patient by directing her attention too much to the pelvic system when judicious constitutional tonic regimen would much more speedily and certainly cure. Dr. Routh of London read a paper before the Medical Society in defence of his obstetrical brethren.

At the last meeting of the British Medical Association, held at Cardiff in August last, Prof. Playfair read a paper "On the Proper Sphere of Constitutional and Topical Treatment in certain forms of Uterine Disease," in which, while he defends his brethren and denies the justice of the attack, so far as concerns the great majority, admits, nevertheless, that a certain number have been guilty of unduly magnifying the importance of local treatment. Such a defence came with very good grace from Dr. Playfair, who is well known to have paid much attention

to the treatment of the neurasthenic and neurotic complaints of the sufferers from uterine disease. Dr. Clifford Allbutt also read a paper "On Local and Constitutional Treatment in Uterine Diseases," in which he reiterates what he said in his lectures, but says, in plain words, that he meant the strictures to apply to only a few of those who practise gynæcology—in fact, makes the *amende honorable*. Some of his remarks are so telling and apposite that I must quote them in full. "But between these extremes of scrupulous and lax treatment there lie many and interesting problems which, had I the time to discuss, I am unable to decide. Among the chief of these is the strange influence of the mind upon the pelvic organs and the reverse. Let me tell the following story in place of an argument: A lady was under the care of a Yorkshire medical man for pelvic pain, utter inability to walk or to bear the jolting of a carriage, for some general nervous symptoms also, and, in particular, for a strangely intermittent melancholy. Her medical attendant found a large congested retroverted uterus. With much patience and mechanical skill he restored the organ from time to time, and from time to time it relapsed. She would exclaim, the moment the uterus was replaced and supported, how instant was the relief to her pains, to her gait, and, above all, to her nervous and mental discomforts. I saw her with my friend, and I, at least, shall not be accused of error in that direction when I verified the diagnosis and helped to perfect the same line of treatment. At last the husband, being weary of the relapses, took his wife to an eminent gynæcologist, to whose house she was unable to walk. The latter gentleman removed all pessaries, declared to her that she ailed nothing but the vapours, and, in fine, gained so strong an ascendancy over her, that she walked from his house, travelled home, and set about the duties and pleasures of an active life. This is now quite two years ago, and she has enjoyed perfect health ever since, though still childless. What her womb is now like, I know not, for we barely escaped much reviling in the matter. I would ask Dr. Playfair and Dr. Routh carefully to consider this complex problem of mind and pelvis, and to weigh well how much of the sudden

relief given by uterine medication is due to imposition upon the mind of the patient."

In the same section of the British Medical Association, at the same meeting, Dr. T. More Madden of Dublin read a paper "On the Correlation of Constitutional and Local Treatment in Gynæcological Practice." Dr. More Madden's paper was a very long one. He did not content himself with laying down principles, but entered into the details of treatment. While admitting the value of operative procedures, such as trachelorrhaphy and oöphorectomy, he asserted his belief that they were performed much too frequently. He dwelt upon the great influence which, he believed, syphilis, struma, gout, and rheumatism exerted in the production or perpetuation of chronic uterine affections, and the indications they presented for constitutional treatment. The great frequency and variety of distant reflex or other neurotic disturbances, pains, aches and discomforts of uterine disease were fully dwelt upon. In chronic congestive hypertrophy of the uterus, when not of scrofulous nature, Dr. More Madden has great faith in 1-24 grain doses of perchloride of mercury in tincture or infusion of bark. Tonics, as iodine, iron, arsenic, quinine, are constantly necessary. He expressed very great confidence in the value of iodated and bromated mineral waters and of chalybeate waters taken at their sources, accompanied as they are with the many advantages of healthful stimulation of mind that result from the conditions attendant on a stay at a German or French watering-place. The iodated waters recommended by Dr. Madden are those of Wildegg, Kreuznach and Salzhausen; the chalybeate waters are Spa, Ems and Schwalbach; the saline chalybeate are the Stahlbrunnen of Homburg, Franzensbad, and (in England) Tunbridge Wells and Cheltenham. The sulphurous waters he has found useful are the warm springs of Schinznach, Aix le Bains, Eaux-Bonnes and Amelieles-Bains. In the treatment of uterine fibro-myomata, while appreciating fully the value of operative procedures, he expressed great confidence in the value of certain drugs in the treatment of these tumors. For hæmorrhage, rest, sulphuric acid, hazeline, liquor ergotæ, gallic acid, and opium. He expressed special con-

fidence in ergotine given hypodermically, and believes that by it he can control any hæmorrhage from these tumors. As stimulants to absorption or diminution of these tumors, he advocates iodine, potassium iodide, and chloride of calcium, and believes he has had ample proof of their value in attaining this object.

This discussion thus undertaken by the British Medical Association, and which I have attempted to outline, was certainly well-timed, and cannot fail to direct attention to the medical and constitutional treatment generally of the diseases of women. We are apt to forget how much good can be done in such affections by a treatment other than surgical, indispensable as is this latter in many cases.—(*Brit. Med. Journal*, Sept. 26, '85.)

A Series of One Hundred and Twelve consecutive operations for Ovarian and Parovarian Cystoma without a Death.—This is the title of a paper by Mr. Lawson Tait in the *Philadelphia Medical News* for September 12, 1885. Mr. Tait's main object in bringing forward this series of cases is, he says, to dispose, "finally and forever," so far as he is concerned, of Listerism in abdominal surgery. Mr. Tait has thoroughly tried the so-called antiseptic system and given it up, because he found his patients were being poisoned by carbolic acid, thymol, and other chemicals. With just pride Mr. Tait says: "So far as I know the present series has never been approached in success, and as I have steadily reduced my mortality since I gave up the clamp, from 8 per cent. to 6, 5 and 3 per cent., till I have, as I may almost say, brought it to a vanishing point, I think my conclusions in previous papers are completely established. These conclusions were, in the main, that the great elements of my growing success were increased personal experience, increased attention to all the minute details which go to create success, and inattention to any one of which may defeat the best laid plans. In addition to these, I may add unscrupulous cleanliness and an undeviating enforcement of discipline both on the part of the patients and my staff of assistants." The series is as follows:—Dermoid cyst, 1; cystic sarcoma, 1; abscess of ovary, 2; Cystoma of one ovary, 49; cystoma of both ovaries, 38; Parovarian cysts, 21. As all these cases recovered, it appears that, con-

trary to Sir Spencer Wells' experience of removal of both ovaries, in Mr. Tait's experience, the danger is not greater than when one only is removed. When there is a tendency to ooze, and when the patient is aged, he always uses a drainage-tube. He attributes his success largely to this and the Staffordshire knot which he used in all but two cases. In these two cases he used a number of pressure forceps to secure the pedicle, their handles protruding through the wound for some forty hours, when they were removed cautiously one by one. To arrest bleeding from adhesions, he packs with sponges for a time, and uses the cautery. In ten cases the tumors were rotated and gangrenous, requiring immediate operation to save life.

The Cure of Extra-Uterine Foetation by Electricity, by H. G. Landis, A.M., M.D., Professor of Obstetrics and Diseases of Women in Starling Medical College. On this side of the Atlantic, at least, the efficacy of electricity in early extra-uterine foetation is established beyond a doubt. That this is not generally admitted in Britain may be inferred from the fact that in the *System of Obstetric Medicine and Surgery* by Drs. Robert and Fancourt Barnes the subject is dismissed with a mere mention, and no word whatever of commendation. Other methods much more dangerous to the mother are discussed and recommended. The simple, easily manageable faradic current is all sufficient. With a view of settling the points as to the strength of the current and length of time of application, Dr. Landis undertook some experiments on beetles, minnows and rabbits, and as a result he thinks himself warranted in deducing the following conclusions:—

1. In using the faradic current in extra-uterine pregnancy, the applications should be protracted for an hour if the patient can bear it.
2. The current should be repeatedly applied, in order that the vitality of the foetus might be finally exhausted.
3. The current should, for at least one sitting, be used in great strength.
4. The current probably acts not only by destroying the foetus, but by its action upon the placental circulation, an additional reason for a long application.

An examination of the records of the published successful cases (I know of none unsuccessful) does not, I think, bear out the first of Dr. Landis' conclusions. I will, in proof, only allude to my own case published in this JOURNAL a few months ago. In this case, none of the half dozen applications was of more than seven minutes' duration.—(*Amer. Jour. Med. Sciences*, October, 1885.)

The American Gynæcological Society held its tenth annual meeting in Washington on September 22nd, 23rd and 24th, '85. Some of the papers are of great interest. One of especial interest is by Dr. Henry J. Garrigues of New York. The subject is "Puerperal Diphtheria." It was based on 26 cases treated by him in the New York Maternity Hospital and one elsewhere during the years 1882-1884. The diphtheritic infiltration appears in small light gray spots, which spread and coalesce to form thick patches intimately connected with the subjacent tissues. The spots of election were the vaginal and cervical orifices, spots most bruised or wounded during labor. The surrounding tissues were swollen, dark red, brown or dirty greenish, the connective tissue of the pelvis infiltrated with turbid serum, and sometimes the seat of hemorrhagic thrombosis. Erysipelas, petechiæ, and erythema were sometimes found on the skin of the trunk and extremities. The uterus enlarged, cervix bruised, torn, and covered with patches of diphtheritic membrane. Sometimes the membrane was found only in the cavity of the body of the uterus. Infiltration of the ovaries and lymphatics and glands of the pelvis; peritonitis, inflammation of liver, spleen, kidneys, lungs and pleura, catarrh of the bladder, and ulceration of intestine—all occasionally present. Dr. G. believes that every form of difficult, tedious and instrumental labor predisposes strongly to this disease, but the real cause is infection from without. The poison seemed to be in the air of the wards, for after disinfection by fumigation the disease was absent for a week, and after the introduction of the new prophylactic treatment it had entirely disappeared. The symptoms were chills, fever, frequent weak pulse, anorexia, vomiting, diarrhœa, coated tongue, hypogastric pain, scanty, dirty-looking, offensive lochia. General

symptoms preceded the local changes several days. The diphtheritic infiltration extended usually for a few days in spite of treatment, and then the parts took a week to heal after separation of the sloughs. The author had found in one case that the same affection appeared simultaneously on the tongue, and he therefore regarded it as the same as diphtheria occurring in non-puerperal wounds and intact mucous membranes, as the throat. Nervous symptoms are headache, stupidity and delirium. Jaundice, sweet breath, profuse perspiration, bedsores and soreness of spleen also occurred. When the diphtheritic process had stopped, recovery was rapid. In the diagnosis, it is important to remember that the diphtheritic infiltration must be distinguished from the yellow color which abraded surfaces take on under the bichloride of mercury bandage. This latter is strictly limited to the surface of the wounds, while the diphtheritic infiltration, where it formed a continuous layer, commenced in discrete spots, formed a thick membrane, and spread into the surrounding tissue. Prognosis is grave. Five out of Dr. G.'s twenty-nine patients died.

Prophylaxis consists in making as few vaginal examinations as possible during labor, avoiding wounds of the genital tract, careful use of instruments, but especially, in the use of antiseptics, by the bichloride of mercury and an occlusion bandage so arranged that no air can enter the genitals without being filtered through a cotton pad wrung out of a one to two thousand bichloride solution. The curative treatment consisted in thorough cauterization of all affected parts in view, with a solution of equal parts of chloride of zinc and distilled water, washing out the uterus with a 1-4000 bichloride solution, and leaving in the cavity a suppository containing 100 grs. of iodoform. This was repeated once in 24 hours, and a vaginal douche of the same solution was given every three hours. General treatment was by ergot, quinine, morphia, alcohol and digitalis. High temperature was combated by sponge baths, cold pack, cold baths, ice bags, and rubber coil with running ice water. Carbolic acid in one-minim doses was useful in allaying fever and controlling diarrhoea. Peritonitis was treated by opium, ice-bags or warm

poultices, if patient had diarrhœa. Dr. Garrigues concluded by showing his occlusion bandage.

A most interesting discussion followed. Dr. Lusk of New York indorsed Dr. Garrigues' system of treatment by antiseptic vaginal injections and antiseptic pad. These cases had occurred in considerable numbers at the Maternity Hospital previous to this plan of treatment having been introduced, but since then, in three years, he had not seen a single fatal case, not a single case of fever, and milk fever had become a thing of the past. The pad he regarded as useful, not only in preventing entrance of germs, but it enabled them to keep the wards clean.

Dr. W. L. Richardson of Boston said that in the lying-in hospital with which he is connected, nearly the whole time during the years of 1882-83 was spent in fighting puerperal diphtheria; but after adopting Dr. Garrigues antiseptic pad and the corrosive sublimate injections, the institution had been almost absolutely free from the disease. He had, however, occasionally seen salivation follow even very weak sublimate solutions.

Dr. Garrigues, in closing the discussion, said that the total mortality of the Maternity Hospital had been reduced from seven to less than three-quarters of one per cent. The new treatment differed from the old in that all antiseptics were placed outside of the woman in *normal* cases; it was only in *abnormal* cases that resort was had to intra-uterine injections. The pad can be readily used where serrefines are used to keep lacerated surfaces together, and being composed largely of absorbent cotton, it offers no impediment to free discharge of lochia; and by it the usual odor of the lying-in room is entirely removed.—(*Amer. Jour. Obstet.*, Oct., 1885.)

Reviews and Notices of Books.

The Anatomy of the Intestinal Canal and Peritoneum in Man.—By FREDERICK TREVES, F.R.C.S. Hunterian Lectures, 1885. London: H. K. Lewis.

This book is composed of the Hunterian Lectures delivered by Mr. Treves at the Royal College of Surgeons, England, last February. A systematic examination of 100 fresh bodies in the post-mortem room of the London Hospital furnished the material for these lectures. In addition to the investigations made on human bodies, the viscera of over forty different species of mammals were examined by Mr. Treves. The average length of the small intestines was found to be 22 feet 6 inches; extremes, 31 feet 10 inches and 15 feet 6 inches. The average length of the large intestine was 4 feet 6 inches; and extremes, 6 feet 6 inches and 3 feet 3 inches. The length of the intestines seems to be altogether independent (in the adult) of age, height and weight. Now, the length of the bowel in the foetus at full term is remarkably uniform, so Mr. Treves rightly infers that the differences in the length of bowel in different individuals depends upon physiological (as food, activity of nerve centres, etc.) and not on morphological data. The duodenum was found very constant; Mr. Treves agrees with Dr. Bruce Young in describing a fourth portion, ascending vertically by the left side of the spine. He has never found this portion less than one inch in length. The position and connections of the fossa duodeno-jejunalis, which is important surgically as being the seat of origin of retroperitoneal or mesenteric hernia, are fully described, as is also its mode of development. The mesentery and the part it plays in hernia is next considered, and the holes in the mesentery, which have not unfrequently been the cause of fatal strangulation, described. The author then devotes a section to the arrangement of the small intestines; in five instances the coils of intestines were found arranged in a manner exactly the reverse to normal, without any transposition of the other viscera. The cæcum is accurately described, and its different types, variations and relations dwelt on. Mr. Treves establishes beyond

doubt the fact that the posterior surface of the cæcum is never uncovered by the peritoneum, and that the meso-cæcum has no existence. In all works on anatomy the meso-cæcum is described, and it is also stated that the posterior part of the cæcum is frequently destitute of peritoneum, and is attached by areolar tissue to the fascia over the right iliacus muscle. This error, which has been handed down by anatomists from generation to generation, must now be corrected. The relation of the cæcum to the peritoneum is of importance, both surgically and medically, and, as the author remarks, the attempt to reach the posterior part of the gut by an incision from the loin without wounding the peritoneum is anatomically impossible. In the majority of cases, the reflection of peritoneum to the posterior abdominal parietes is four inches from the tip of the cæcum—that is, the bowel for four inches is completely surrounded by peritoneum. The appendix vermiformis was found to have an average length of four inches; extremes, six inches and one inch. The appendix was, in only a few cases, found straight. In nearly all the cases examined, it was curled up, the amount of twist depending on the length of its mesentery. The ileo-cæcal fossæ and their formations are described. In two cases the author found that the cæcum was undescended and was placed under the liver to the right of the gall-bladder; and in two others, there was no peritoneal connection between the cæcum and ascending colon and the posterior wall of the abdomen. Had right lumbar colotomy been attempted in any one of these four cases, the ascending colon would not have been found.

Text-books on anatomy assert that a meso-colon is more often found on the right than the left side, but Mr. Treves found that in 52 bodies there was neither an ascending or descending meso-colon; in 22 there was a descending meso-colon, but no trace of a corresponding fold on opposite side. In 14 cases there was a meso-colon in connection with both ascending and descending colon, while in 12 bodies there was an ascending meso-colon, but no descending one. In the cases where a meso-colon existed, it was from one to two inches broad on the right side, and on the left from one to three inches. When the meso-colon was

absent, the colon was found adherent to the parietes on the outer border of kidney on left side, and in front of and along its inner border on the right.

The author found the book descriptions of the sigmoid flexure and first part of the rectum, as far as his investigations on 100 bodies went, incorrect. The sigmoid flexure he found not to have the S shape, but to consist of a single loop, which begins where the descending colon ends and ends where the second portion of rectum begins—that is, opposite the third piece of the sacrum. He suggests the name *omega loop*, in place of sigmoid flexure, and thinks the term rectum ought to be limited to the parts now known as the second and third portions. This we consider a good suggestion, and one which will make the anatomy of that part more exact and simpler. The flexure, according to the author, is more often within the pelvis than without, and is only found in the iliac fossa when the bladder or uterus are distended or a large cæcum occupies the pelvis. It is a very difficult matter to determine the exact position of these movable portions in the living by observations on the dead. We should imagine that a more certain way of determining the exact position would be by means of frozen sections. In most of the frozen sections of the pelvis we have seen, the bowel within the pelvis, exclusive of the rectum, has been a portion of the ileum and not the sigmoid flexure.

In conclusion, we may say that we have perused this work with both pleasure and profit, and wish to congratulate Mr. Treves on the valuable addition he has made to our knowledge of the anatomy of the intestinal canal. Now that abdominal surgery has become so important a department of general surgery, it is an especially opportune time for drawing attention to the many errors which have been handed down from anatomist to anatomist for generations. We trust that the many corrections made by Mr. Treves will be corroborated, and that the future text-books on anatomy will be purged of their intestinal errors. The book is got up in the latest old-fashioned style, with vellum cover, hand-made paper, with irregular uncut edges. It looks handsome, but seems to us hardly the most useful shape in which

to clothe a scientific treatise. However, we must submit to the inevitable, and bear for a time with this æsthetic invasion of scientific realms. The illustrations, which are grouped together at the end of the volume (as in the old treatises), are coarse, and certainly have an ancient look, which corresponds to the general style of the book, but they are understandable.

The Technology of Bacteria Investigation.—By CHARLES S. DOLLEY, M.D. Boston: S. E. Cassino & Co.

The Use of the Microscope in Clinical and Pathological Examinations.—By DR. CARL FRIEDLANDER. Translated by H. C. COE, M.D., M.R.C.S., Eng., L.R.C.P., Lond. New York: D. Appleton & Co.

Nowadays the microscope is doing so much towards advancing our knowledge of so many of the most important diseases afflicting man, that it becomes actually necessary for every physician who has the slightest pretence to a truly scientific knowledge of disease to be able to use the microscope in connection with it. To such a one, as well as to all advanced medical students, both these books will be very useful, the latter one especially so. It is only within the last very few years that the germ theory of disease occupied the practical attention of more than a very limited number of scientific medical men and others. Much was written by men who were unable to demonstrate them, or, indeed, who had ever seen them. Bacteriology had not yet assumed the importance of being capable of monopolizing the attention of scientists. *Nous avons changé tout cela.* The scientific physician of former years can still be the same of to-day so long as he practises the healing art in a scientific manner, but he is completely debarred from discussing with advantage to himself the pathology of many diseases unless he has practical knowledge of what germs are and how they may be demonstrated microscopically. It was mostly men of mature years who devoted themselves to this kind of work. The subject has now become so enticing, that no young man of any scientific aspirations can consider he knows his profession without having devoted some

time to this special kind of work. The influence of these men, who generally become enthusiasts on their subject, will be so great that the time cannot be far distant when *bacteriology* will constitute a special course in every advanced school of medicine. In the table of contents of Dr. Dolley's work is an instructive list of diseases in which specific bacteria have been discovered, or supposed to be present. This, we think, will surprise many who have not been keeping themselves abreast of the literature of the subject. Although we advise every medical man, especially every young man, to endeavor to become a microscopist, we cannot conscientiously advise them all to become bacteriologists. Were they to endeavor to do so, we fear there would not be much time left for other work of any kind. Those, however, who feel inclined to do so, will find Dr. Dolley's book a very useful synopsis of the various methods of procedure. He will also find references which will prove invaluable in prolonged researches on all the more important diseases in which bacteria are supposed to be present. In this respect, the volume is a very useful addition to our literature. It professes to be simply a work on *technology*. Besides giving special methods for investigation of pathogenic bacteria, a large portion of the book is devoted to general practical work, in which are many useful hints. Every one doing pathological work should have this little book in his possession.

We are very much pleased to see Dr. Friedlander's little book make its appearance in English dress. As we have a practical acquaintance of the German edition since its appearance, we can speak of it in terms of unqualified praise. It will be a much more useful book to the general practitioner than the first-named work. Besides ordinary clinical work, it contains all that is essential concerning bacteria for the busy practitioner to have practical knowledge of. Every medical man should possess and know how to use a microscope. To him, as well as to all advanced medical students, this book will be eminently useful. About one-half of it is taken up with what applies more properly to general *technique*: the remainder being devoted to methods of examination of blood, sputa, pus, urine, secretions, exudations,

contents of stomach and intestine, and micro-organisms; also, the examinations of tumors, etc. Accompanying the plate in the German edition is an "explanation," which certainly makes it more intelligible, and which is absent in the translation. For instance, to the uninitiated, "Fig. VIII, Pneumonia," might be somewhat puzzling until he was informed, as in the "explanation," that it is the capsuled micrococci of pneumonia. This is the more necessary, as it is not every microscopist who can satisfy himself that he can see these micrococci, or "diplococci," as they are sometimes called. The translator has done his work well, and has certainly conferred a great favor on all microscopists by placing within the reach of every one the work of so accomplished a teacher as Dr. Carl Friedlander.

Poisons: their Effects and Detection. A Manual for the use of Analytical Chemists and Experts.—By A. W. BLYTH, M.R.C.S., F.C.S., &c., Public Analyst for the County of Devon, and Medical Officer of Health and Public Analyst for St. Marylebone. With tables and illustrations. Vols. I and II. New York: Wm. Wood & Co.

These volumes form part of "Wood's Series of Standard Authors" for the year 1885. The work altogether is of a very high order, and although primarily intended for public analysts and experts, the general practitioner will find much here that will be of great value to him, the symptoms and treatment of the different forms of poisoning being dealt with in a very complete manner. The description of the mode of action of the mydriatic group of alkaloids—atropine, hyoscyamine, salanine, cystisine—is fully equal to that of the most modern pharmacological works. The veratrum alkaloids—physostigmine, pilocarpine, taxine, curarine, colchicine, muscarine—and the digitalis group, all receive attention, as well as many others. One of the chief recommendations of this work is the fact that it deals fully with the later poisons. Hardly a substance of a poisonous character has missed the author's attention. A very full description is given of the poisons derivable from living as well as from dead animal substances. The cadaveric alkaloids was the subject of

a very interesting and instructive letter from Dr. Ruttan in a recent number of this JOURNAL. In this communication, the latest views on this very interesting group were given. Of equal interest and importance to ptomaine poisoning stands peptone and poisoning by putrid food. Unfortunately, we, as yet, know very little of this subject, but there is, however, good grounds for believing that this obscurity will, before long, be cleared away. Mr. Blyth deals very fully with the inorganic poisons. Their pharmacology is, however, not so fully dealt with as is that of the alkaloids. In an appendix, the more approved methods of examining blood and blood stains are well given, together with a short account of the treatment by antidotes or otherwise of the different poisonous groups.

Kirke's Handbook of Physiology.—By W. M. BAKER, F.R.C.S., Lecturer on Physiology at St. Bartholomew's Hospital; and VINCENT DORMER, HARRIS, M.D., Lond., Demonstrator of Physiology at St. Bartholomew's Hospital. Eleventh edition. With nearly 500 illustrations. New York: Wm. Wood & Co.

The older editions of Kirke's Handbook of Physiology have been popular with students on account of the judicious admixture of matter, the orderly arrangement of statement, and perspicuity of style. Considerable expectation has been excited as to the form and general character of the new edition. Would it be a really modern book, while it retained its old excellencies? In many respects these expectations have been realized, though not in all. There is a rapidly growing feeling that the physiology to be offered to medical students must be of a richer kind and more scientific than that of the past. It is no longer just to the student of medicine to ask him to accept conclusions without evidence—experimental evidence—so that he may form some idea of the value of what he holds as the principles on which the science and art of medicine are to be built. While this has been to some extent recognized in the present text-book, we should like to have seen it more fully endorsed by the treatment of the subject. It is still necessary

to introduce some coarse, and a good deal of fine, anatomy into text-books meant for beginners in medicine; but when almost half a work on physiology is occupied by anatomy, either coarse or microscopic, at the present day (when several excellent text-books on histology are in the market, and this subject is made one of special study, but often under a separate teacher) we consider that a great mistake has been made. We think histology has been much overdone in the last edition of Kirke's Handbook, and that it has taken some of the space that might well have been occupied by physiological discussion proper. However, many new plates and much new and entirely modern matter has been introduced, and the book will serve a good purpose. Many who have preferred Kirke's book hitherto will still hold to their choice. It preserves many of its old points of excellence, has had added many new ones, but does not, we think, maintain its former balance of matter and treatment. It has been published in two volumes, constituting a part of Wood's Library, thus bringing it before practitioners as well as the ordinary student of medicine.

Books and Pamphlets Received.

A PRACTICAL TREATISE ON THE DISEASES OF CHILDREN. By Alfred Vogel, M.D. Translated and edited by H. Raphael, M.D. Third American from the eighth German edition. New York, D. Appleton & Co.

A TREATISE ON NERVOUS DISEASES, THEIR SYMPTOMS AND TREATMENT. By Samuel G. Webber, M.D. New York, D. Appleton & Co.

FOWNE'S MANUAL OF CHEMISTRY, THEORETICAL AND PRACTICAL. New American from twelfth English edition. Philadelphia, Lea Brothers & Co.

MILK ANALYSIS AND INFANT FEEDING, AND DIRECTIONS AS TO THE DIET OF YOUNG INFANTS. By Arthur V. Meigs, M.D. Philadelphia, P. Blakiston, Son & Co.

THE INSANE IN THE UNITED STATES AND CANADA. By D. Hack Tuke, M.D., LL.D. London, H. K. Lewis.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Annual Meeting, October 9th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

The annual meeting of this Society was held on Friday evening, October 9th, a large attendance of members being present.

The following were proposed for membership: Drs. R. F. Ruttan, W. McClure, F. G. Findley, S. Gustin and D. W. Eberts.

PATHOLOGICAL SPECIMENS.

DR. TRENHOLME exhibited an *Ovarian Cyst* and *Two Extirpated Uteri*, and gave the following particulars:—

The ovarian cyst was removed from Mrs. I., of Shawville, aged 42, of spare habit and nervous temperament. Nine years married; no children. Her illness began 16 years ago, when her bladder troubled her. Feeling of pressure, pain in the back, inability to sit; bowels constipated; insomnia; menses always irregular, but for the last six months has had no flow. At present time, pains are not so severe as formerly, and chiefly felt in the back and over the womb. Upon examination, the uterus is found high up and pressed above the pubis, but in the median line. A large, dense tumor is felt to the back of the womb, filling up the brim of the pelvis. This tumor is firm to the touch, smooth and uniform. On the left antero-lateral aspect of the tumor, a small body is found connected with it. This was thought to be (as you now see it is) the left ovary. The tumor itself reached almost to the umbilicus. The depth of the uterine cavity was three inches. The tumor reached nearly as high as the umbilicus in the centre of the body, and well back toward the spinal column. The diagnosis was doubtful: at first inclined to ovarian cyst, originating with displaced ovary, but subsequently, from consideration of the history and the doubtful mobility of the uterus, etc., this was changed to uterine fibroid. As nothing special depended upon a more accurate diagnosis, the removal of the tumor was clearly indicated. The operation for this purpose was performed 12th Aug., 1885, assisted by Drs.

Kennedy, Cameron, Perrigo and Reddy. There were also present Drs. Lyon, Morrison and Saunders. The usual median incision, three inches long, was made, and when the tumor was reached its real character was apparent. There were many adhesions both to the peritoneum and the uterus, those to the latter quite strong. About 0 iv of clear fluid were removed by Fitch's trocar, which, by the way, disappointed me in its working. A few bleeding points were secured by hemp ligatures and the sac of the cyst removed. The abdominal incision was closed and dressed in my usual way. The patient did well, the chief after trouble being due to her nervous condition and some irritation of the bladder. Though rather prematurely, she left for her father's home in Iroquois on the 3rd September, just three weeks and one day after the operation.

Extirpation of a Cancerous Uterus.—This specimen was removed from a lady 42 years of age. The general appearance of the patient was that of good health. For some months past she had been suffering from pains in the pelvis and left groin, which had become so severe that she consulted me about her case early in August of this year. Upon examination, the os was found to be cancerous, and the disease had invaded the upper part of the vagina on the left side to a slight extent. The depth of the uterus was about three inches, the organ movable, and in normal position. Believing the diseased tissues could be removed with some chance of success, and of possible temporary relief—at the patient's repeated and earnest request,—the extirpation of the uterus per vaginam was performed on 20th Aug., 1885—seven weeks yesterday. In this, the first and only operation of the kind in Canada that I know of, I was assisted by Drs. Kennedy, Cameron and Perrigo—a number of medical men and medical students being also present. *Operation*—After reaching Douglas' pouch, the fundus was brought down by means of a strong vulsellum; the right broad ligament was then ligated in small segments and divided. In this there was no very great difficulty, but when I attempted a similar procedure with the left ligament, to my dismay I found it so densely infiltrated with the disease that I had to content myself with dividing the re-

maining structures, guided by the sense of touch alone. There was but slight hemorrhage, and after the removal of the uterus I scooped out a quantity of cancerous tissue with Thomas' serrated spoon. There was some slight hemorrhage a few hours after the operation, which was easily controlled; and but for the escape of the peritoneal fluid, which has given the patient a great deal of trouble, and also kept her weak, she has done well, and is now able to work around her room. I trust, in a few days, she will return to her home. One remarkable feature in this case was the almost entire absence of suffering from the operation itself. The opening of the cavity of the peritoneum, as in this operation, becomes a serious contra-indication to its performance, inasmuch as it cannot be closed by sutures on account of the infiltrated state of the tissues rendering impossible an approximation of the edges of the wound.

DR. GARDNER congratulated Dr. Trenholme on the success of the operation, but thought the case not a good one to select for this operation, as there was ample evidence of infiltration of the broad ligament. In such cases, gouging or scraping is all that should be attempted.

DRS. KENNEDY and HINGSTON also spoke against operating in these cases.

DR. ALLOWAY gave a short description of a similar case under his care. He thought operating unjustifiable.

DR. SHEPHERD asked Dr. Trenholme if his patient was in a better condition now than before operating, or if she was going to live longer. Dr. T. said she would not probably live longer; but she was free from suffering, and therefore better than before the operation.

Fibroid Tumor of Uterus (2 lbs).—The second specimen of extirpated uterus is of more than ordinary interest to me, as well as to the profession, because it is the uterus of the first woman who, in January 1876, was spayed for the control of uterine hemorrhage. The first operation gave the patient nearly ten years' lease of a life that was rapidly drawing to a close when the ovaries were removed. In fact, last March she was robust and fleshy, but foolishly undertaking excessive laborious

work, congestion of the uterus was developed, with a distressing train of nerve symptoms that of late threatened a termination of her life. Her attacks of nervous distress occurred every nine days and lasted for nine days, and were followed by loss of flesh and strength. During the attacks the uterus greatly increased in size, and her symptoms were all referable to that organ. As all conceivable treatment, including incision of the tumor, etc., was of no avail, she determined to have the uterus and tumor removed. *Operation*, 24th Sept., assisted by Drs. Kennedy, Perrigo, Cameron and Armstrong, and a number of medical visitors and students being present.—The usual abdominal incision had to be somewhat modified so as to remove the cicatricial tissue of the former wound; this, of course, necessitated the division of a few muscular fibres of the recti muscles. The tumor was firmly packed in the pelvis, and strongly adherent almost all over its surface. The attachments to the bladder were markedly so, and led to the mishap of incising that viscus to the extent of about half an inch. After separating the uterus from its supports, etc., as far as the neck, a wire *écraseur* was passed around the latter, and tightened just sufficiently to control any hemorrhage. The tumor and uterus were removed by the V incision (as performed by myself many years ago), in the same way as in the last case operated upon in London, Ont., in May 1883. The flaps were adjusted—after carefully securing all the arteries—by the double-running suture, the material used upon this occasion being the prepared iron silk. The bladder was sewed up in a similar manner. The cavity was cleansed and the wound brought together in my usual way by deep silver and superficial horse-hair sutures. A carbolized gauze pad over the wound, held *in situ* by three short straps of adhesive plaster, completed the toilet. It is now two weeks and two days since the operation, and, as the chart of temperature, etc., shews, her convalescence has been a remarkable one. The bladder has given no trouble, and, from present appearances, it will not be long ere this lady, for the second time, will be restored to the active duties of life.

Nephrectomy (first recorded case in Canada).—DR. HINGSTON exhibited a kidney removed by him for hydronephrosis.

The kidney was made up of a lot of cysts, containing, when pressed, a fluid similar in appearance to ovarian fluid, which became of caseous appearance on evaporation. The parenchymatous structure was all gone. No calculus or obstruction was found. The ureter, at the pelvis, was not discernible—nor exteriorly. The lateral operation was employed; there was no difficulty, and but very little general disturbance followed. The patient had suffered from hæmaturia and great pain in the right side.

Dr. Hingston, on being requested, promised to give a paper on this case at the next meeting. Dr. Shepherd, who had also removed a kidney lately, said he would read a paper on his case at the same meeting.

ELECTION OF OFFICERS.

Balloting for the election of officers for the ensuing year then took place, with the following results:—

President—Dr. T. G. Roddick (re-elected).

First Vice-President—Dr. J. C. Cameron.

Second Vice-President—Dr. Geo. Wilkins.

Treasurer—Dr. James Perrigo.

Secretary—Dr. D. F. Gurd (re-elected).

Librarian—Dr. T. D. Reed (re-elected).

Council—Drs. Geo. Ross, Kennedy and Rodger (re-elected.)

Publication Committee—Drs. Kennedy, Geo. Ross, J. C. Cameron, and Bell.

DR. RODDICK thanked the Society for the honor done him, and said that at some future time he would give an address on the history of the Society.

A vote of thanks was tendered Dr. Molson for his past services as treasurer.

DR. HINGSTON said that nine years ago, during an epidemic of smallpox, the Society passed several resolutions upholding vaccination, etc. He thought it might do good to endorse these now, and proposed the following resolutions:—

Be it resolved,—That this Society reiterates the opinion expressed nine years ago in favor of vaccination, and considers it to be the duty of every physician to diligently encourage, at the present time, the practice of vaccination and re-vaccination.

Resolved,—That the Secretary be authorized to publish the above resolutions in the city press.

Special Meeting, October 12th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

A special general meeting of the Society was held to consider what action it should take with reference to the proposed appointments by the Board of Health of a committee of physicians to visit at times and report upon the Civic Smallpox Hospital.

It was unanimously resolved :—

First,—That the Society has learned with much satisfaction of the completion of ample hospitals for the reception and satisfactory treatment of several hundreds of smallpox patients ; that, judging from the reports of many medical gentlemen who have inspected the buildings, this Society is satisfied that the hospitals are eminently suited for the purpose intended, and will materially aid in giving the health authorities control over the present epidemic.

Secondly,—Whereas the members of the Society have learned of many incidents forcing upon them the conviction that the management of the Civic Hospital has been very far removed from what it should be to merit the confidence of the public, and they are aware that this feeling has prevented many physicians from advocating isolation of their patients by removal to the hospital, as well as caused many patients to refuse to leave their homes. Be it now resolved that, as it is of the utmost importance to secure public confidence in the entire management of the Mount Royal Hospitals, the Medico-Chirurgical Society respectfully urge upon the Board of Health the necessity for the appointment of a committee of well known physicians whose duty it shall be to visit the hospitals at stated periods, examine into the management of all the departments, and report to the Board. Resolved, further, that it be a recommendation to the Board of Health that this committee consist of five members, to be composed of one from each of the medical schools and one from the profession generally.

Thirdly,—Resolved, that the members of this Society, having learned that it is the intention of the Board of Health to appoint two resident physicians, one for each section of the Mount Royal hospitals, they hereby express their approval of such action, believing that it will be conducive to the best interests of the patients.

The Secretary was instructed to forward these resolutions to the Board of Health.

The meeting then adjourned.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

Stated Meeting, Oct. 15th, 1885.

Two cases of saturnine poisoning with an uncommon symptom.—DR. McKEOUGH related the history of two cases of lead poisoning, with a relaxed condition of the bowels. The subjects were man and wife. The husband had been engaged in painting for a year; the material he used was wholly a cheap green paint; his wife washed his clothes, which were often saturated with paint. The wife had been suffering for two months previous to coming under observation with progressive anæmia, cachexia, anorexia, nausea, vomiting, colicky pains in the abdomen, and a relaxed condition of the bowels, with loose, slimy, offensive stools. When seen she had the usual phenomena of plumbism, earthy hue of skin, foetid breath, metallic taste, blue dental margin, depressed, anxious countenance, and slow pulse. Under the use of iodide of potassium and hygienic influences she slowly recovered. The husband was taken ill six weeks subsequently, and suffered from the same symptoms, his recovery being more rapid under a similar form of treatment.

In the discussion which followed, most of the members present considered that the arsenite of copper, which is present in green paints, may have been the cause of the unusual symptoms in these cases.

Sprained Ankle.—DR. BRAY introduced for discussion the subject of "sprained ankle." After referring briefly to the pathology of this injury, he took up in detail the best form of treatment to be adopted in accidents of this nature. The principles of treatment he recommended were: To restore the parts to their normal position, to check effusions, and promote absorption of blood and lymph already poured out. To accomplish this, when patient is seen immediately after the accident, the injured parts are showered with ice-water, after which flexion and extension is made to replace injured parts; the joint is then covered with cotton wool, and a rubber bandage applied, or, preferably, a plaster-of-paris dressing. Dr. Bray recently had two

severe cases under his care treated by the latter plan with happy results. After one or two week's rest obtained in this manner, the dressings were removed and passive motion used for a few days. In cases that have not been treated promptly or properly, and which come under one's observation later, when the movements of the joint have been fettered by adhesions, then he resorts to active movements, friction, electricity, and the actual cautery, in the hope of restoring the joint to its original condition.

Discussion.—DR. BACKUS took exception to some points in the pathology of the paper. The swelling in the acute stage of sprains was not entirely due to hemorrhage, but chiefly to the effusion of serum and lymph. He considered that rest was the chief indication for treatment in early stages.

DR. MCKEOUGH thought the subject an important one, as injuries, which are apparently trivial at first, often result, if neglected or improperly treated, in serious disease of the ankle joint. He prefers hot water to cold in recent cases; the foot is placed in water as hot as can be borne, maintaining the temperature at that heat, and continuing its application for ten or twelve hours, a roller bandage is then applied from the toes upward, being careful to make equable pressure on all parts. In chronic cases, he makes use of massage, passive motion, and the actual cautery.

DR. FLEMMING considered that sprains of the ankle joint varied much in degree and character, and each accident should be treated upon its merits. He would not make flexion or extension in acute cases unless tendons were displaced, which was the exception in sprains of the ankle joint. In ordinary cases, he applied a roller bandage at once, which often gave immediate relief. If very painful, and pressure unbearable, used hot water, gradually increasing the temperature of the water to 120°F.

DR. TYE said that chronic trouble in these cases was due to the non-absorption of effused lymph, and treatment should be directed towards producing the speedy absorption of the lymph thrown out. Preferred hot water, rest, and pressure by means of absorbent cotton applied about the joint, and an elastic bandage. Had not much faith in plaster-of-paris dressings. In

chronic stages rest is not indicated ; the object is now to break up the adhesions by manipulation and friction ; if the joint is painful and tender, the actual cautery is most useful.

DR. HOLMES thought that the natural history of neglected cases of these injuries furnished indications for treatment. The lymph which is thrown out soon organizes and contracts, compressing nerves and impeding the circulation. The first object of treatment is to prevent, as much as possible, effusion by means of rest and pressure. Had used with good results thin slices of sponge placed about joint and then a bandage, keeping the whole wet with hot water. In chronic cases, manipulations and passive motion suffice when there are no strong adhesive bands ; if these exist, forcible rupture of these is necessary under an anæsthetic. He has also found the actual cautery most beneficial in promoting absorption, relieving pain, and improving the circulation. In children, the epiphyses are frequently injured at the time or become diseased secondarily ; when this occurs, manipulations even in the later stages are dangerous.

DR. RUTHERFORD did not approve of cold water ; favored bandaging as quickly as possible. Had used the faradic current with benefit in some cases.

DR. BRAY, in reply, stated that he thought he was misunderstood in reference to cause of swelling. Had always been satisfied with ice water showered upon the joint for an hour or more, which numbs the parts and gives great relief. If case seen early, before much swelling, might apply bandage at once. Was much pleased with discussion elicited, as he thought the subject interesting and practical.

CANADA

Medical and Surgical Journal.

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NEW BUILDING, MCGILL MEDICAL FACULTY.

Two months ago we gave a detailed description of the building then in course of erection for the Medical Faculty of McGill University. The work was pushed rapidly forward, and the lecture-rooms were quite complete by the 1st of October, when the session was begun. It required, however, a short time to complete the fittings, &c., of the various laboratories, and the formal opening of the building was postponed until the 22nd. At 3 p.m. a large assemblage was gathered together in the main lecture hall to listen to addresses from distinguished friends of the University and the Faculty. The Dean of the Faculty, Prof. Howard, occupied the chair, and there were present, amongst others: Provost Pepper and Prof. Osler, of the University of Pennsylvania; Sir Wm. Dawson, Principal of McGill University; Hon. Senator Ferrier, Chancellor; Hon. Justice Torrance, Hon. Justice Mackay, Hon. Donald A. Smith, Mr. John H. R. Molson, Mr. John Molson, Mr. R. A. Ramsay, Mr. Hugh McLennan, Mr. W. C. McDonald, and Mr. Geo. Hague, Governors of the University; Dr. H. Aspinwall Howe, Prof. Alex. Johnson, Rev. Dr. Cornish, Rev. Dr. Wilkes, Rev. Principal McVicar, of the Presbyterian College; Rev. Dr. Stevenson, Principal of the Congregational College; Rev. Prof. Murray, Prof. Henry T. Bovey, Dr. B. J. Harrington, Rev. Canon Henderson (Principal of the Montreal Diocesan Theological College), Dr. Grant of Ottawa, Mr. R. W. Shepherd, Dr. J. L. Leprohon, Dr. McEachran, V.S., Prof. Moyses, Dr. F. W. Campbell, Surgeon-General Bergin, M.P., Rev. Prof. Coussirat, Rev. J. Edgar

Hill, Mr. Alexander Murray, Mr. Richard White, Mr. Andrew Robertson, Dr. Rottot, &c., besides all the members of the Faculty and a body of about three hundred students.

The DEAN called upon Prof. Osler of the University of Pennsylvania to deliver the opening address. So warm is the affection entertained for Prof. Osler at McGill University that he is always sure of a hearty reception. The students greeted his appearance with prolonged cheering.

DR. OSLER said—To realize the hopes and longings of ten years, to witness the fulfilment beyond expectation of schemes which have occupied my thoughts sleeping and waking, and, finally, to participate in their consummation, is a measure of happiness not often meted out to a child of man. But such I may claim to be mine to-day as I stand here among you. It is a joy to me to stand here as an *alumnus* of McGill and witness the success which has attended the efforts of the medical faculty to extend the working powers of the school, and to express the gratitude which every member of the profession in this country must feel towards those generous men who have enabled those changes and improvements to be effected. Let us remember that the esteem in which this school is regarded by the profession and by the public is not the growth of a year or of ten years, nor is it all to be attributed to the generous men now in charge. A large part of it is the result of that undying influence which each faithful worker has exercised. It is due in part to the spirit of those who have passed away—Stephenson, Holmes, Sutherland and Campbell. (Applause.) I wish particularly to refer to the laboratory work in McGill College in future. As the most important function of a medical school is to teach existing medical knowledge, so it is known to you all that a great change has come over the mode of teaching. When I entered the halls of McGill some fifteen years ago, with the exception of practical anatomy, practical chemistry, practical medicine and practical surgery, the teaching was entirely theoretical. The object of this beautiful new building is still further to improve the practical work of the school and its practical teaching. In this new building the students will be able to see laboratories devoted to practical physiology, pharmacology, pathology and histology. These have been rendered necessary by the demands of modern medical education. To be effective, laboratory work must, in the first place, have plenty of time on the part of the student, and for this the time has been so arranged that the first two sessions are almost exclusively devoted to the practical department work. And in addition to the time which is necessary for careful instruction, industrious and laborious men are required, and the professors should be men well up in the scientific department over which they have control, men who are enabled to devote a large part of their time to the work, and who have been thoroughly trained in the modern methods of work. There must also be well equipped laboratories, and by a well equipped laboratory we mean not only plenty of accommodation, but an abundant supply of modern appurtenances, careful and well trained assistants. To extend scientific work so as to gain a reputation for any school, there must be in connection with the laboratories young men who, under the supervision and control of the professor, are enabled to do original work. This work should not be entrusted to students, for they have as much as

they can do in the four sessions to thoroughly master the subjects necessary for the degree. This work should be bestowed on men who have already passed through their medical course, and who can spare the time and expense to devote a few of the earlier years of their life to original work and research. To this object I most earnestly hope that my *alma mater* in all her departments will quickly turn her attention, as she has already done in other matters. Of the future of this University school this gathering to-day augurs well. In the sixty odd years which have passed since the founding of McGill, the labors of those in charge of it have been numerous, and the work which has been accomplished has been grand. So in the next half century the progress will be equally grand, if not grander. (Applause.) I need scarcely say in conclusion, gentlemen, how delighted I am to be with my old students again. It is a joy to me to be here amongst well known faces on an occasion which marks the progress of your school. I am always glad to be amongst the students wherever I am, because they are good fellows, and I can always get on with them. (Loud applause.)

The DEAN then called on Provost Pepper of Philadelphia to address the meeting.

The PROVOST, who was received with great applause, said :

Sir William Dawson, Members of the Faculty of McGill University, and Gentlemen.—When I received the very kind invitation of the Faculty of your medical department to be present on the occasion of the opening of the new laboratory building of McGill University, I felt constrained to accept (though at serious personal inconvenience) by a variety of motives. The great pleasure of revisiting your beautiful city was a strong inducement of itself; and even stronger was the hope that I should meet those whose friendship it has been my privilege to enjoy, as well as others whose names have been long familiar for their learning, their achievements, or their philanthropy. (Applause.) I knew that I should find McGill University all alive with that fine activity in her various departments which has enabled the struggling college of less than half a century ago to become the vigorous and full proportioned university whose influence is felt throughout the continent, and felt invariably, I may truly say, on the side of sound learning and healthy progress. I knew that I should find in the recent additions to her academic buildings and facilities models to admire for their fitness to the purpose in view, and that they would inspire me as fresh evidences of a widespread determination on the part of the people of this vast country that nothing shall be withheld which is needed for the diffusion—east, west, north and south—of the priceless blessings of sound, pure, high education. (Loud applause.) Need I say that I have enjoyed this pleasure: that I have been permitted to realize this hope; that I shall carry away with me this fresh assurance and inspiration, and in larger measure than I had ventured to anticipate from so brief a visit? But I have not yet alluded to the feeling which, above all, constrained me to attend these interesting ceremonies. This was my conviction, that the building to be formally opened to-day was, if I may venture to use the expression, the final proof that McGill University has chosen the path of true progress rather than that of selfish profit in regard to medical education, and has determined that in the future, as in the past, the interests of the community and of scientific truth shall be held infinitely above the personal gains of the teachers who labor in these halls. (Applause.) There has been a hard struggle during the past twenty-five years to

elevate the standard of medical education in America and to bring its methods into harmony with the swiftly changing condition of natural science. Happily this struggle is over, and the educated sense of the community, lay as well as professional, has learned to recognize in the graduates of such schools as those of the University of Pennsylvania, of Harvard, and of McGill University the best representatives of the healing art. If I needed an illustration of this, I should find it close at hand in one of your own graduates, whose brilliant scientific attainments have won for him unusual distinction and honors in his native land no less than abroad, and who has recently been called to fill one of the leading chairs in the oldest and most distinguished medical school of the continent. May I not add that in this new position he is sustaining the high reputation and winning the same strong personal attachments which he enjoyed here? It would be difficult to convey to anyone not familiar with the subject an adequate conception of the changes recently effected in medical education and in medical practice. I left Philadelphia yesterday afternoon, dined satisfactorily on the train, passed a comfortable night, and found myself in Montreal early this morning. Unhappily, I am forced to leave by the afternoon train, and I expect to travel safely, and with equal precision, comfort and speed, back to Philadelphia by to-morrow morning. Steam, electricity, the highest attainments of physical science and the most perfect mechanical appliances, with thorough training and discipline, render this seeming miracle an everyday occurrence. Fifty years ago I should have reluctantly entrusted myself to the rude mercies of a mail waggon, and a month would have been spent in the journey to and fro, even if the perils of flood and mud, of breaking down and upsetting did not give additional and unwelcome variety and duration. It might be extravagant to assert that the change between the medical man of the last century and of to-day—between the old medical method and the new—is as great as between, let me say, the general manager of the Grand Trunk railroad and the most skillful jehu who then drove His Majesty's mail coach. (Applause.) But in fact the change is no less real and important, and has been brought about through the operation of the same influences. With the introduction of exact methods of scientific research, the development of organic chemistry and the invention of the microscope and other instruments of precision, the entire field of medical science underwent rapidly a marvellous change. The ancient burden of tradition and of blind allegiance to eminent authority fell from men's minds, and their eyes lifted to behold the truth as it is in nature and in nature alone. No need now to dwell upon the swift development of rational medicine which has followed. But this much at least may be asserted, that at this day it were no more reasonable to cling tenaciously to the school doctrines of Galen, of Brown, of Broussais, or of Hahnemann than to cross the continent on a buck-board instead of in Pullman coach. In all medical schools of the first rank—high in which honorable line stands McGill—this new scientific method of medical education is firmly established. The struggle to secure it has been a hard one. In the United States, and to a much less degree in Canada, powerful prejudice, the vested interests of an excessive number of competing schools, and the great cost of the buildings and outfit requisite for the successful establishment of a full graded course of medical education with the attendant technical training, has hindered and deferred its development. A few years ago I took occasion to indicate as plainly as I could the grave defects of medical education as it then existed in the United States—and unhappily still does exist save in a few schools—and the reforms which were obviously needed. The latter were:—

1st, the establishment of a preparatory examination; 2nd, the exaction of a period of collegiate studies of at least three years of eight or nine months each; 3rd, the careful grading of the courses; 4th, the introduction of ample practical instruction of each student, both at the bedside and in laboratories; 5th, the establishment of effective examinations, both written and practical, at the close of the course of study of each subject, in lieu of the unsatisfactory oral examinations in common use; 6th, the endowment of medical schools so as to secure fixed salaries for the professors, who would then cease to have any pecuniary interest in the size of their classes. If you can appreciate the devoted and self-sacrificing toil needed to keep the standard as high as the claims of science and the interests of the community demand, while a faculty is constantly subjected to the temptation of entering on a more profitable and facile course, you must cheerfully award the highest praise to the earnest and gifted men whose labors have for forty years maintained the medical department of McGill University in the true path. In 1846, the University of Pennsylvania, whose medical department is the oldest medical school in America, made an unsuccessful attempt to elevate the standard of medical education; but it has not been till within the past fifteen years that the necessary reforms have been securely adopted by a few of the leading colleges there. In McGill University, on the other hand, ever since 1848 a preliminary examination has been required; the course of study has extended over four years, and has been carefully graded, while from time to time such important subjects as medical jurisprudence and botany have been added to the compulsory list; an admirable system of bedside instruction has been developed, and the final examinations before graduation have been rendered practical, searching and impartial. In dwelling with justifiable pride on such a record it might seem pardonable to overlook the shortcomings and defects which have remained. But the interesting ceremonies of to-day prove that the same spirit which animated the men of the past—your Stephenson, Holmes, Caldwell, Robertson and Campbell—still inspires their worthy successors. (Loud and long continued applause.) You see to-day that their efforts, seconded by the powerful influence of one under whose skillful guidance all departments of McGill University have made rapid strides during the past thirty years, have supplied one of the remaining great needs of the medical school. In this splendid building the students of medicine will hereafter be taught in the only way which can possibly bring out their best powers. The most eloquent discourses by the most learned professors can but impart facts, teach the methods of correct reasoning, expound the laws of pathology which have been established, and furnish illustrations from the rich stores of experience. This is valuable and essential instruction, but no amount of it will train the student to use his own eyes and hands in the practical investigation and recognition of disease. The laboratories of anatomy, of chemistry, of physiology and of pathology, and later the wards of the hospital are the real educators in this, the most important portion of the training of a medical man. It is in them alone that can be produced physicians, who shall be neither theorists nor routinists, but clear-sighted, practical students of nature as revealed in the myriad forms of morbid action, and in the no less numerous agencies for the prevention or cure of disease. From the labors of these well-trained physicians of the future shall spring the highest physical welfare of the individual and of the state. (Applause.) Results await them far transcending all that have yet been attained; the detection of the subtle causes of deadly maladies; the discovery of remedies whose

specific power shall rival that of quinine in malarial fever; the establishment of means of prevention no less sure than Jenner's precious gift of vaccination, the culpable neglect of which in a small area is even now showing a startled people horrors from which they are secured. Such is the lofty task imposed upon medical science. Real progress will be slow, errors numerous, excess in one direction often ill corrected by excess in another. But through the weary struggle, no doubt of ultimate success can be harbored so long as our methods are rational, our zeal unselfish, and our aim stamped with the fine old motto of Boerhaave—"Simplex Sigillum Veri." It is easy to see the widening range of medical influence in modern life and legislation. The advancing intelligence of the community recognizes more and more clearly in the medical profession, a body of men who, while possessed of their full share of human weaknesses and class prejudices, still do labor faithfully for the most vital material interests of the race. As positive knowledge has increased, the assumption of mysterious powers become almost obsolete, and relations of far more real confidence and respect have been established between the medical profession and the community. And with this growth of public interest in general medical questions and of public confidence in the medical profession there must necessarily develop in the community a sense of responsibility and obligation towards those institutions which are honestly doing their share towards supplying it with well educated, practical physicians. Hitherto it has been the custom to regard medical colleges as in a peculiar sense the property and charge of medical men. In no other way can we understand the remarkable apathy of the public towards the abuses which might exist in their management and teaching, and towards their claims for endowment upon the generous patrons of learning. All must have been struck with the fact that, while tens of millions have been given during the past half century for the support of classical and scientific education, the general movement for the endowment of medical schools is of very recent origin. Within the last decade, however, a number of munificent gifts and bequests have been received, which show that at least the interest and approval of the community have been awakened by the earnest efforts made in various colleges to place medical education on its proper basis. The splendid gifts of Johns Hopkins, of Mrs John Rhæe Barton, of Vanderbilt, of Carnegie, and of your own liberal benefactor, the Hon. Donald A. Smith (loud applause which lasted for several minutes,) the countless smaller ones which have erected such stately buildings as the medical halls and laboratories of Harvard and the University of Pennsylvania, and finally this noble structure of your own, attest this truth. The movement has but begun however; but since it has become apparent that no gifts promote more directly the best interests of the community than do these in support of the new and higher medical education, we may confidently expect to see it advance until all deserving medical schools are fully endowed. The amounts needed are large. There are several chairs in each faculty, the incumbents of which should receive an ample fixed salary, since their time must be devoted to scientific work, which brings no other remuneration. These professorships should all be fully endowed. The increased time required for a medical education, and the higher preliminary preparation exacted from those entering on it, involves so heavy a drain on the student's resources that some of the worthiest are reluctantly forced to seek their diplomas at schools of lower grade. This should be obviated by the establishment of an ample number of scholarships to be awarded on the results of competitive examination. Further it is essential that the great medical

schools shall be centres not only of teaching, but of elaborate original investigation upon such subjects as the causes of disease and the action of remedies. Who is not familiar with the profound researches of recent years upon the nature and causation of consumption, of diphtheria, of cholera? Such investigations must be carried on in laboratories, such as you have constructed here, and there should be in connection with every such institution a number of well endowed fellowships tenable for one year or longer, so that encouragement and support may be given to those scientific men who are able and willing to devote themselves to these researches. Does anyone question the practical value of these elaborate and costly studies, and the wisdom of expending large sums for the equipment and endowment of such original research? Happily the day has come when even in this practical country, there is a growing recognition of the importance of pure science, and of the influence of abstract scientific investigations upon our material welfare and progress. It might seem extravagant to provide spacious rooms, expensive outfit, and large endowment merely for the study of a few of the lowest and most minute forms of organic life. But it is not extravagant to assert that if such study led to the discovery of the true cause of any one of those great diseases it would be of more practical value to the world than all the gold fields of another California. Lastly, although we look with proud satisfaction on such buildings and laboratories and equipment as these, we must not remain contented. The progress of medical science is rapid and unceasing. New fields of investigation are continually being opened in this as in other branches of natural science; new methods of research are being introduced; enlarged facilities will continue to be required from time to time; and ere long other spacious buildings must be erected. But the achievements of the past and of the present are the sure guarantees of the future. We advance with increasing confidence because assured of the co-operation and support of an enlightened public sentiment. Here in Montreal, at least, such confidence may be most reasonably entertained; for no one can doubt that whatever are the just demands of education and of science in the future, they will be generously supplied by the fellow-citizens of McGill, of Redpath, of Mackay, of the Molsons, and of Donald A. Smith. (Loud applause.)

Hon. Chancellor FERRIER reviewed briefly the rapid progress made in medical education at McGill University, and contrasted the dingy rooms they were condemned to occupy only a few years ago with the palatial establishment now under their control. He congratulated the Faculty very heartily upon their new acquisition, and predicted that the next move would be towards the admission of female students.

The DEAN then called upon the Vice-Chancellor, Sir William Dawson. The distinguished Principal was received with tremendous cheering.

SIR WILLIAM DAWSON said—I have very much pleasure in congratulating the Faculty of Medicine on my own behalf and that of the University upon the progress which it has made, and especially upon the evidence of that progress in this building which we are met to take

possession of to-day. It is an especial reason for gratification to me that one so well qualified as Provost Pepper, and so extensively known for his own successful efforts on behalf of higher education, should have borne so cordial testimony to the higher qualities of our medical education, in which the ceremony of to-day marks a new and important stage of progress. The Medical Faculty of McGill, whose efforts I have known and appreciated for thirty years, has always aimed not at the cramming of young men for examinations, or at giving them in the easiest way a minimum of qualification to enter on medical practice, but rather at the cultivation of a thorough professional training, scientific as well as practical, and to elevate that profession, to raise it to a higher position than it has hitherto enjoyed in this country or elsewhere. (Applause.) Its efforts in this way have been appreciated by the citizens of Montreal, to whose liberality, by voluntary contributions, it is due that the present extension of the building of the faculty has been provided. (Applause.) That is not only something to congratulate the faculty upon, but also Montreal itself; it is something to be able to say that there is no other city in Canada the citizens of which have put their hands in their pockets, in the manner in which the citizens of Montreal have done, in order to advance the interests of education in this great profession. (Applause.) I would like also to congratulate you, students, upon the new and better provision which has been made for you. You cannot be expected fully to appreciate the differences between the medical training of fifty years ago and that now provided for you. Dr. Pepper has referred to the great advances which have been made in science and art, and no science or art has advanced more than that noble one represented by this faculty. I have no doubt that many of the most eminent members of the profession around me would gladly, if they could, put off their burden of years and change places with you. Bear in mind, however, that added privileges imply added responsibilities. You are expected to avail yourselves to the utmost of the advantages provided for you, and we may hope that some of you may be able to advance the science of medicine in some of those directions in which it is evident that advance may be made, so as to leave it better than when you found it. (Applause.) Dr. Pepper has referred to some of the most terrible diseases which affect humanity, and of which the causes and methods of prevention are yet involved in obscurity. May we not hope that in reference to these, discoveries may be made by some of the rising generation of medical men which may associate their names with that of the discoverer of vaccination. The presence here to-day of representatives of all the faculties and associated colleges, and of so many leading citizens, should be taken as an evidence of the interest which is felt in this faculty, and you, students, should learn from this and from the liberal aid given by the citizens that in Montreal you are among the friends of education and professional training, and that we are all anxious to advance those interests and through them the welfare of the world at large. The presence here to-day, on his eighty-fifth birthday, of your venerable chancellor—(loud and prolonged applause)—who has witnessed the whole history of the medical faculty since its first small beginnings, and the testimony he has borne to its vital importance to the interests of the University, should also be a source of encouragement for the future. (Loud applause.)

The DEAN then briefly addressed the meeting, speaking feelingly of the generosity of the citizens which enabled them to celebrate the important event of the day, alluding to the changes

which the possession of new laboratories enabled the Faculty to make to advance the practical teaching of the several branches, and thanking the various gentlemen, and especially Provost Pepper, who had been kind enough to assist upon the occasion.

Surgeon-General BERGIN, M.P.; also offered his congratulations as an old student of McGill upwards of 50 years ago.

The proceedings then terminated, and the visitors inspected the buildings, all expressing themselves much pleased with the spacious lecture-rooms and well-equipped laboratories.

In the evening a dinner was given by the members of the Faculty to commemorate the event. A large and distinguished company were present, composed of representatives of the various faculties, from sister Universities, benefactors of the College, eminent citizens and journalists. The Dean presided.

After the loyal toasts, that of "The President of the United States" was responded to by Dr. Anderson, the newly-installed Consul-General of the United States.

THE CHAIRMAN then gave "Medical Education in the United States and Canada." He regretted that they were disappointed in not having present any of their confrères of the United States. Speaking for medical education in the States, he was glad to say that the tendency had been on the side of progress. It was no longer possible for a man to be admitted to the study of medicine and get his license after two years. The higher medical educational establishments insisted on a good general education and a three or four years' course. In Canada they, many years ago, attained this high position in the profession. Regarding the matriculation examinations for medicine, he was of opinion that, while classical education should not be forgotten, mathematical and physical science should have a prominent place. In the Dominion of Canada they had long since had a four years' academic course, and as they had seen at the opening of the new building that day there was a strong effort being made to unite practical with didactic teaching. He felt that Canada had reason to be complimented on the high position she had attained in medical education. (Applause.)

PROFESSOR OSLER, in responding, said that when he that day visited the school with which he was connected for ten of the happiest years of his life, it seemed that in the short year that elapsed since he left McGill they had made more progress than for the ten years he was connected with the college. So recently had he been with his brethren south of the line, he might feel excused if he did not refer to the many anomalies that existed in the profession in that country. How it was that such a shrewd, practical people as those in the States should have drifted into such a loose, slipshod way of conducting medical schools was unintelligible. To think that in one or two sessions in some schools and three sessions in only a few, a man should be considered qualified to take charge of the most important

lives in the country, was indeed an anomaly. This arose from the abuse that anyone with sufficient influence could get his charter as a medical practitioner from the state legislature. In Canada there was a brilliant contrast. A man needed to be educated before he commenced the study of medicine, he had to pass through four sessions in college, and he had to pass an intricate examination before he obtained his license. The people of Canada ought to appreciate this, because they were in the care of experienced, educated men, and not in the hands of quacks and charlatans. In Ontario and Quebec, medical men were in advance of any of the States, and even ahead of the older countries, because in Ontario they had an examining board which every practitioner from another country had to pass before obtaining leave to practice. What was now to be considered in Canada was the advancement of practical and scientific teaching in medicine—such an education as was that day inaugurated in McGill. (Applause.) That Montreal had taken the first step in practical medical science was a real source of pride, and that Montreal should be the same pride to Canada that Edinburgh is to Scotland should be the prayer of every Canadian.

DR. ROTTOR, Dean of the Faculty of Medicine in Laval, speaking in French, said that he endorsed the remarks of Professor Osler with regard to the importance of practical and scientific training in medicine. He congratulated the faculty of McGill on the addition which they had received to the buildings. Referring to the medical profession in Canada, he said that it deservedly occupied a high place in the reputation of the world, and he believed that with the progress which every day was being made it would occupy a still higher position. (Applause.) He felt sure that in this march of progress the School of Medicine of Laval would be ready to take its place. (Applause.)

REV. DR. STEVENSON proposed the toast of "The profession of medicine, its relation to, and claims on society." In the course of a speech replete with characteristic eloquence the reverend gentleman said that the medical profession did not look upon man as a purely physical being, nor as a purely intellectual being. It looked upon him as the highest type of a vital being, and the prime state of man was his vitality. They could expect nothing social, nothing moral, nothing religious, until they had vitality, and the medical profession must be very near the noblest of all professions when it took charge of vitality in man. It appeared to him that there were very close connections between the medical profession and the life of society. One very close connection was that a great many human beings would not have been able to struggle into life at all were it not for the presence of the medical man at his birth. (Laughter.) The importance of the profession would appear when it was known that the slightest inattention or want of skill at this important period of life might make a future Shakespeare a Milton, or a Newton an imbecile. If the connection was such at the beginning of life, there must, indeed, be a very close and intimate connection all through life between this noble profession and the interests of humanity. Education was intended to bring into close and harmonious development all those varied powers which, taken together, constitute the highest and noblest humanity. How could they expect to do this without the assistance of their medical friends? It was all very well for the Arts graduates on one side of McGill University to think they could work by themselves. It was all very well to imagine that they in the pulpit could do the work by themselves, but they could neither have active morality nor education

without good health and the knowledge of the laws that govern mortality. He spoke of the trusted position which the medical attendant occupied in the family, a position which required ability, integrity and high moral character, and he was glad to be able to say that all those attainments were possessed by the medical practitioners of Canada. He did not know much about drugs, but he could say that one cheering word from the doctor was better than any drug he had ever taken. He congratulated the medical profession in Canada on the progress of medical education in Montreal; he congratulated the city of Montreal on what she had already done and upon what she would do. In conclusion he said that in his ideal a perfect physician was a perfect man, and of the physician it might be said, as was said of the perfect ideal of humanity, "He went about doing good. (Loud applause.)"

DR. HINGSTON, in responding, said that the duties of the profession to society were clear in principle, but difficult in practice. The principles of society were changing, but medical men must do their duty to themselves. There was a time when culture and education and knowledge were the passports to the highest society, but this was changed. Johnson, in his time, spoke of medical men as the first gentlemen in every society. All the joys of life, the poet Pope wrote, were included in health, peace and competence. He gave prominence to "health," for without it competence had no joy and peace could not exist without health. (Applause.) He concluded an able address in congratulating the city of Montreal on the progress of medical education.

SIR WILLIAM DAWSON proposed "Our Benefactors." He said that the present position of McGill was due to the men of princely and liberal minds, residents in the city who increased the endowment and made its educational mission what it was to-day. Shortly after he came first to Montreal the income was \$500 a year. Now the capital of the institution was over \$1,000,000, and the greatest part of this was due to "Our Benefactors." (Applause.)

MR. DONALD A. SMITH on being called upon to respond, was cordially applauded. In reply he said that he felt that all the contributors to the funds of the McGill University must feel it an honor to be associated with that institution. They must look upon it as an honor to be connected with the honorable gentlemen of the medical faculty. That night they had heard from eminent professional men from the United States and Canada, notwithstanding the high position of the medical profession in Canada, how necessary it was to still improve the facilities for medical education. On the part of the contributors to the medical faculty, he should say that their desire was to see this progress, and their efforts would be directed to give further and to induce others to give liberally for the cause of education.

PROF. CRAIK proposed "The Medical Associations," coupled with the name of Dr. Grant, who responded in an eloquent speech.

DR. GEORGE ROSS proposed "The Medical Councils." He said that these important bodies had in their care the management of all on which depended the best interests of the profession. Although in existence but a few years, the opinion was unanimous that to them was largely due the fact that the standing of the profession in Canada was deservedly so high. They had ensured that every man admitted to the practice of medicine had received a fair general education and was also in possession of good medical knowledge. They had done much to raise the standard of education in the Dominion, to prevent imposition, and to protect from quacks and charlatans. The

public admitted this, and accepted their licenses as a fair passport to their confidence. McGill University, he was proud to say, had always been loyal to the councils, and urged students to comply faithfully with all their requirements. The assessors or visitors from the governing body in this Province are always welcomed to her examinations; the freest scrutiny is always courted, as she is convinced her teaching will be found even in excess of that demanded.

DR. BERGIN, M.P., President of the Ontario Medical Council, responded. He alluded in a forcible speech to the good that had been accomplished since the establishment of the Council, the care taken in the selection of examiners, the strictness of its tests, and the satisfaction generally expressed with the results obtained.

The toasts of "The Ladies" and "The Press" were duly honored, and

DR. F. W. CAMPBELL, Dean of the Medical Faculty of Bishop's College, proposed the health of Prof. Howard, the Chairman, to whose exertions so much of the success recently accomplished by the Faculty was due. The toast was received with great enthusiasm.

THE PROVINCIAL MEDICAL BOARD.

The Provincial Medical Board held its semi-annual meeting at the Laval University, Quebec, on Wednesday, Sept. 30, 1885. There were present—Dr. Lemieux (President), Drs. Belleau and Campbell (Secretaries), Dr. Léonidas Larue (Registrar), Dr. E. P. Lachapelle (Treasurer), Dr. Marsden, Dr. St. George, M.P., Dr. Parke, Dr. Russell, Dr. Marmette, St. Thomas; Dr. Gingras, St. Sauveur; Dr. M. Guay, M.P., St. Romuald; Dr. Rousseau, St. Casimir; Dr. Rinfret, M.P., St. Croix; Dr. Lafontaine, St. Edouard de Napierville; Dr. Desaulniers, Nicolet; Dr. Thos. Larue, Compton; Dr. Hart, Bedford; Dr. Jules Prévost, St. Jerome; Dr. H. A. Mignault, St. Denis; Dr. Ladouceur, Sorel; and Drs. Kennedy, Howard, Leprohon, Durocher, Ross and Rodger, Montreal.

A resolution of condolence was adopted upon the death of Dr. Jackson, who has been replaced upon the Board by Dr. Simard, Professor of Laval University.

The reports of the assessors, of the examiners for admission to the study of medicine, of the treasurer, and of the agent of the Board were read and adopted.

It was proposed by Dr. Lachapelle, seconded by Dr. Campbell, and resolved—That a committee composed of Drs. Lemieux, Ross, Hingston, Lachapelle, Austin, P. G. Migneault, Marcil, Marsden, Desaulniers, Rodger, Guay and N. Larue be appointed,

with instructions to prepare all amendments to the Medical Act necessary to carry into effect the various clauses of the report of committee on finance, which has been adopted ; also to meet the suggestions made at the last triennial meeting concerning the election of members of the governing board, to make the preliminary examinations as equitable as possible both for the candidates and for the profession, to make the laws against those infringing them as severe as possible,—in a word, to suggest any amendments which may be considered in the interests of the profession ; that this committee proceed without delay, in order that the amendments may be submitted to a special meeting of the Board prior to the next session of the Legislature ; that the travelling expenses of this committee be paid by the College, and that the committee meet at Montreal.

Moved by Dr. Belleau, seconded by Dr. Marmette, and resolved—That the notice of motion given at last meeting by Dr. N. Larue, with reference to a central examining board, be referred to the committee having charge of the proposed amendments to the Medical Act.

Moved by Drs. Ladouceur, Russell, Prévost, Mignault, Leprohon, Rinfret, Rodger, Gingras and Marmette ; seconded by Drs. Hart, Desaulniers, Parke, Geo. Ross, Durocher, Kennedy, Simard, St. George, and Rousseau :

Resolved unanimously,—That this College feels itself bound to express its opinion on the present state of the public health in this Province, in reference to the smallpox epidemic which exists in the city of Montreal and is now spreading to other parts of the Dominion ;

That it is the unanimous opinion of this College that science and experience have established incontestably that vaccination and re-vaccination is the only preventitive of such calamitous periodical visitations as at present ;

That when the disease or epidemic is fully and extensively developed, as is unhappily the case at present, concerted, unanimous and united action is absolutely necessary, and *perfect* isolation, *scientific* disinfection, with vaccination and re-vaccination, will alone stamp out the epidemic ;

That the immediate establishment of Local Boards of Health throughout the Province, organized under Chapter 38th of the Consolidated Statutes of Canada, is the proper course to prevent the spreading of the epidemic in the country parts, as well as in the cities and towns.

Moved by Dr. Durocher, seconded by Dr. N. Larue—That a copy of the report of the committee upon the proposed amend-

ments to the Medical Act be sent to each governor fifteen days before the special meeting of the Board, and that the names of Drs. Ladouceur and Lanctot be added to the committee.

In the absence of the two Vice-Presidents—Hon. Dr. Ross in Europe, and Dr. Hingston, who was detained in Montreal owing to the recent troubles in that city on the vaccination question,—Dr. Marsden of Quebec was named Vice-President *pro tem.* for the purpose of signing the licenses. The following graduates of Universities having been sworn, received their diplomas:—W. A. DeWolf Smith, Montreal; Hilaire Goudreau, Lacolle; Charles F. X. Prévost, St. Pierre de la Patrie, County of Compton; Hector Palardy, Marieville; Chas. N. Gauvreau, St. Frédéric de la Beauce; Louis A. Gagné, Kamouraska; Alfred Laurendeau, St. Didace; Alfred Morin, Baie St. Paul; Gaston G. Smith, Papineauville; Louis F. Lepage, Rimouski; Léon Octave Noël, Scottstown, Co. Compton; Louis P. Picard, Quebec; Joseph Houle, St. David d'Yamaska; Joseph N. Legault, St. Jean Baptiste, Montreal; Ferdinand Simard, Daniel Caisse, Lucien Proulx, Arcadius Toupin, Henry Dazé, Jabez B. Saunders, Joseph Jetté, Frank R. England, Wyatt Galt Johnston, and Hormisdas Brodeur, Montreal.

The Secretary (Dr. Belleau) drew the attention of the Board to the applications for license of Dr. Burrows of St. John, N.B., and Dr. A. M. Robertson, of the Beaver Line of steamships. Both these gentlemen are graduates of McGill University, and were admitted to the study of medicine by the Medical Council of Ontario. As it was shown that their matriculation was accepted by this Board, it was decided that the license be granted them.

Moved by Dr. Lachapelle, seconded by Dr. Rodger, that the secretary be instructed to write to the Registrar of Ontario and enquire upon what qualifications Dr. A. M. Ross was admitted to registration in that province.

Dr. Campbell suggested that a sheet containing the names of new licentiates be sent to members after each semi-annual meeting.

After a vote of thanks to the Laval University for the use of their rooms, the meeting adjourned at 4.30 p.m.

BRONZING OF THE SKIN FROM ARSENIC.—It is not generally recognized that when arsenic is given for a lengthened period, it produces, occasionally, bronzing of the skin. This is not due to the deposition of the metal in the cellular structures of the skin,

as is the case with the bronzing brought about by the internal administration of the nitrate of silver. During the past year we have had under treatment a case of epilepsy in a young man. Bromide of potassium in divided doses of three drachms daily causes an intense and disfiguring acne, but when combined with five minim doses of Fowler's solution, the eruption quickly disappears, to be succeeded by a marked bronzing of the skin, especially of the face, neck and hands, which in turn disappears on the discontinuance of the arsenic. Von Guaita says that arsenical bronzing is more likely to occur in children who have been taking Fowler's solution than adults. It is well known that children, especially girls, withstand the untoward influence of this drug much better in proportion to their age than do adults. From a very considerable experience of the use of arsenic in the treatment of infantile chorea, we are unable to confirm Von Guaita's assertion. Arsenical bronzing entirely disappears a few weeks after the discontinuance of the drug, and is of no significance, except the temporary disfigurement that it gives rise to.

—We have at last been told the real reason for our smallpox epidemic. The original recently appeared in a New York newspaper :—

“Mr. —, a well known French Canadian lawyer, claims to have been studying up the smallpox question with some eminent scientists, and the conclusion they have come to is that the disease originated in Canada and has always been prevalent here, and more especially in the immediate vicinity of Montreal. When Jacques Cartier first sailed up the St. Lawrence he found Indians dying off by hundreds from the disease, and it broke out among the crews of his vessels. While they were lying at Hochelaga the mortality was so great that one of the ships had to be left behind for want of sailors to man it. Several of the sailors died on the voyage back to Europe and the disease was then spread broadcast. Smallpox, they claim, seldom attacks new-comers, and is most deadly in its effects among the families who have been settled here for the longest time. Thus the Hurons and the Iroquois Indians have been almost exterminated by the disease, and now it is the turn of the French Canadians, the next oldest settlers. The English people having only settled here at a comparatively late date will not suffer so much by it for several generations yet. Mr. — claims that the reason for the great mortality among children is that they breathe the air nearer the ground than grown people and thus takes the exhalations from the earth into their system, and adduces as a proof the fact that scarcely a single tall man has died of the disease. A similar peculiarity, he says, noticed in the Grotto des Chiens, at Rome, where a man feels no inconvenience

from the exhalations, while a dog dies at once. Smallpox, he says in conclusion, is as much indigenous to Montreal as yellow fever to New-Orleans or ague in New Jersey."

We trust no further questions will be asked as to why smallpox rages here. This body of "eminent scientists" has put the matter beyond a peradventure.

THE "MEDICAL PRESS OF WESTERN NEW YORK."—We have received the first number of this latest addition to American medical journalism. It is under the editorial management of Dr. Roswell Park of Buffalo, well known as one of the most enterprising surgeons of that city, and one whose contributions on surgical subjects have already made for him an extensive reputation. He is assisted by able colleagues from Buffalo, Syracuse and Rochester. *The Press* is a handsome journal, containing, in its first issue, an excellent collection of original papers, besides other matter of much interest. There is always ample scope for a high-class monthly such as this promises surely to be, and we wish it all success.

Medical Items.

HOW TO TAKE A PILL.—Dr. Ashwallis (*Med & Surg. Rep.*) says: Dr. Hanna's method, which I have tried with success on many patients who thought it impossible for them to swallow a pill in the ordinary way, is to place one or more pills under the tongue. I repeat, place one or more pills under the tongue, then take a mouthful of water or other liquid, and swallow (just as in the act of drinking). Invariably the "I-can't-take-a-pill" patient is astonished, and will investigate his mouth with his fingers to reassure himself that he has really swallowed the pill. The success—secret—as you wish—lies in the fact that in the act of drinking the tongue curves back upon itself; the pill, taken by the force of the current, is imperceptibly washed down the œsophagus.

MALTOPEPSYN.—Since the introduction of Maltopepsyn into the Dominion of Canada, its rapid and increasing demand, arising entirely through the support of the medical profession, until it now stands at the head of all remedies of its kind, proves conclusively its intrinsic merit and superiority of formula over all other digestive remedies. This is still further attested to by the signatures of nearly all the leading physicians of Canada, and the fact that it has met with the support of the profession in England, and is gaining a large sale throughout Great Britain. Maltopepsyn is invaluable as a specific for infants' troubles during the summer months, such as cholera infantum, etc.