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CANADA

MEDICAL JOURNAL

AND

Monthly Record

OF

MEDICAL AND SURGICAL SCIENCE.

EDITED BY

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CANADA

MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Ligature of the External Iliac for Aneurism of the Common Femoral. By G. W. CAMPBELL, M.D., Professor of Surgery, &c., &c., McGill College. Reported by DR. DRAKE, House Surgeon Montreal General Hospital.

Louis Foisy, aged 25, a storeman, was admitted into the Montreal General Hospital, 28 March, 1864, under Dr. G. W. Campbell, complaining of a tumor in the left inguinal region. He is of thin spare habit, sallow complexion, and extremely anxious and irritable. Has always enjoyed good health, with exception of a venereal ulcer which he contracted six or seven years ago, and which was attended with enlargement of the glands of the left groin. He had no internal treatment of any kind, and never had any secondary affection. Six or seven months ago he first noticed a very hard swelling in the left groin—not painful unless after walking a good deal. The tumor felt about as long and as broad as his little finger, the long axis being directed obliquely across the thigh. It was painful on pressure, but he was not conscious of any pulsation. It increased in size very slowly till about three weeks ago when a very sudden change took place in the symptoms. He had been skating one evening for three or four hours, went to bed well, and on awaking next morning found the tumor so painful as to compel him to keep his bed with the thigh constantly flexed on the abdomen.

The pain was of a burning, darting character. From this date it grew rapidly to its present dimensions.

On examination a hard, well-defined, pulsating tumor of an oval form can be seen and felt in the left groin. The tumor measures four inches by two and a half, the long diameter directed obliquely upwards and outwards, and the shorter extending from about three fourths of an

inch above Poupart's ligament downwards and forwards on the thigh. Arterial thrill and pulsation are felt very distinctly over its whole surface, and nearly as far outward as the anterior superior spinous process. On placing the stethoscope over any part of the tumor a loud blowing murmur is heard, and may be traced for some distance in the course of the vessel both above and below. The heart's sounds are normal. All pulsation ceases and the tumor becomes perfectly flaccid on making firm pressure in the course of the external iliac. The pulse on the distal side of the vessel is weakened, and in the popliteal cannot be felt, though it is distinct enough on the healthy side. His general health is as good as usual; and as treatment by continuous pressure is practically impossible, and danger of the sac bursting appears imminent, deligation of the external iliac was resolved upon.

Wednesday, March 30th. The bowels having been previously well evacuated with a dose of castor oil, and the pubes shaved, the man was placed on the operating table on his back, the shoulders raised and legs extended, and put thoroughly under the influence of chloroform. A curved incision, five inches in length, was then carried through the integument from a point an inch to the inner side and a little above the anterior superior spine of the ilium to about the inner third of Poupart's ligament. The superficial fascia and abdominal muscles were cautiously divided, to the same extent, and the transversalis fascia being exposed, a small portion was pinched up by forceps, and an opening made at the upper angle of the wound: a director was then gently insinuated, and the fascia divided the whole length of the wound. The peritoneum was exposed without having sustained the slightest injury, and was gently detached by the fingers to a sufficient extent, and held to the inner side by means of a broad copper spatula. The sac of the aneurism could now be felt pulsating with so much violence that some fears were entertained it might give way. It was also found that the sac extended somewhat higher than had been anticipated from the external examination. The fascia covering the vessels was next scratched through with a scalpel, having its edge and point previously blunted, and the sheath of the vessel being exposed and opened by raising a fold with forceps, and scratching it through with the blunt pointed scalpel, an aneurism needle was passed without any difficulty between the vein and artery from within outwards. A very small opening was made in the sheath, and only enough detached to allow of the needle being passed. Having satisfied himself that the ligature controlled the vessel completely and included nothing else, the operator then tied it firmly. All trace of pulsation in the tumor ceased immediately. The wound was closed with silver sutures and adhesive

straps, and a compress of lint applied with a spica bandage. The patient was removed to bed; the left leg, encased in flannel, was maintained in a semi-flexed posture, and warm water bottles applied to the foot. Not an ounce of blood was lost.

9 p. m.—He appears pretty comfortable though rather excited and anxious. Pulse 94. Temperature in left leg 94° 5, and on the right 99° 5—no pulse in tumor. Ordered to take 20 drops chlorodyne, and to have Tr. Aconit gtt. j. every second hour. Ordered milk diet.

12½ a. m.—Feels easier; has vomited once. Pulse 96. Has not voided urine since the operation.

Thursday, 2nd day, 10 a. m.—Pulse 120. Temperature in left leg 95°.5, in right 100°. Looks much more cheerful. Vomited five times during the night. No pains or tenderness of the abdomen Has made water twice. Tongue moist, slightly furred. Thirst moderate. Ordered small pieces of ice to be kept in mouth.

Friday, 10 a. m., 3rd day—Pulse 120, soft and compressible. Temperature right leg 99°, left leg 98°. Did not rest well. Complains of pain in left side just above middle of crest ilii. No tenderness elsewhere. Ordered chicken broth.

The wound appears healthy, and is to be dressed daily.

Saturday, 10 a. m., 4th day—Feels much better and is quite cheerful. Pulse 94. Temperature left leg 96, right leg 98. Tongue moist and slightly furred. Free discharge of healthy pus from upper angle of wound.

From this date he continued to progress favorably: two of the sutures came away and the wound appeared to be doing well till

Wednesday, 8th day, 5 p. m.—Has had a rigor, and now complains of sharp pain in left side "like a stitch." With the stethoscope a gentle to and fro friction sound can be heard over the heart's apex, synchronous with the heart's action, and continuing while the breath is held. Pulse 120. A few leeches were applied with relief to the pain, but the symptoms now detailed were followed by irregularity in the pulse, extensive dulness over the cardiac region, and other unmistakable indications of pyæmic pericarditis. The left lung subsequently became involved. Dulness and moist crepitation gave evidence of secondary deposit in its texture, and although the patient frequently rallied, and signs of improvement in the amount and extent of the effusion were indicated by percussion and the stethoscope, still the strength gradually gave way, and he died on the 32nd day after the operation. The treatment was supporting throughout, with wine, and as much nourishing food as the stomach would bear. Opium, chlorate of potass, iron and quinine, and

finally nitrate of ammonia, were administered. The ligature had not come away, but the wound was completely closed. The body was removed by the friends immediately after the patient's death against the regulations of the hospital, and the post mortem examination was conducted at his own residence, under circumstances of considerable difficulty: the relatives, being opposed to it, were very violent and noisy. All that could be done was to secure the aneurismal sac, and surrounding parts, which were removed for a careful dissection, and no attempt was made to investigate the condition of the thoracic viscera. However, in dividing the common iliac artery and vein near the aorta, pus was discovered to flow from the vein, and a quantity of sero-pus escaped from the peritoneal cavity.

The aneurismal sac was in form and size like a large hen's egg, it was situated chiefly upon the outer side of the artery, and extended from an inch above Poupart's ligament to the giving off of the profunda. The anterior crural nerve was spread out upon its surface, and its interior was completely occupied by a dense coagulum.

The artery above the point of ligature was filled up by a clot as high as the division of the common iliac, and appeared healthy; the ligature had separated and lay loose in the wound. It may be mentioned, in conclusion, that erysipelas and puerperal fevers were epidemic in Montreal last spring, and that there were other cases of pyæmia in the hospital.

Traumatic Aneurism of the Femoral Artery—Ligature. By WILLIAM H. HINGSTON, M.D., L.R.C.S.E., Physician to the Hospital de St. Famille. Reported by Mr. E. C. WALSH.

R——F——, æt. 26, a native of Canada, and of temperate habits, while passing along one of our streets on the 21st of April, having in his hand a file, the blunt end came in contact with a box, which was lying on the sidewalk. The force was considerable, and the sharp end of the instrument entered the outer side of the thigh, about three inches and a half below Poupart's ligament, its direction being oblique, and beneath the sartorius muscle. It was immediately removed by himself, and the amount of hemorrhage which ensued was considerable. He applied his handkerchief tightly above the wound, and thus controlled the bleeding. Dr. Rottot soon after was in attendance, and dressed the wound. Dr. Hingston was subsequently called in, but did not remove the dressing. The patient suffered a good deal of pain during the night, but was tolerably free from it in the morning. He continued easier until the 25th,

when, on examination, Dr. Hingston discovered a small pulsating tumor, three inches to the inner side of the wound, which he pronounced to be an aneurism. Weights were placed upon the tumor, notwithstanding which it continued gradually to enlarge. On the 29th April a consultation was held, when it was decided to try digital compression. This was kept up for fifty-four hours, the patient being watched by several students belonging to McGill University, and the Montreal School of Medicine, at the end of which time, there being no perceptible diminution in the size of the aneurism, its walls being very thin and it being easily emptied of its contents, it was determined to ligature the injured vessel where it had been wounded. On the 3rd of May, twelve days after the accident, the operation was performed by Dr. Hingston, assisted by Drs. Campbell, Howard, and Fenwick, (the students who assisted at the compression, being also present). The external illiac artery was controlled by means of one of Carte's large compressors. Pressure by means of the hand was made upon the common femoral high up, and the same means to prevent hemorrhage was adopted upon the distal side of the artery. An incision was then made through the skin and fascia, on a line with the artery, and about four inches to the inner side of the original wound, of sufficient size to allow the introduction of the index finger. Through this opening the artery was searched for; and though the amount of bleeding was insignificant, the wound in the artery could not be discovered. The aneurismal tumor had pushed the sartorius muscle inwards, and it was therefore of no use as a guide in subsequent operations. Having thus failed, a somewhat lengthened incision was made, cutting into the sac, and the vessel sought for, but the semi-organised condition of some portions of the sac and the altered state of the surrounding parts from extravasated blood, made the discovery somewhat difficult. It was soon found however, and the wound ascertained to be upon its posterior aspect. Ligatures were passed around the artery, both above and below the seat of injury, and firmly tied. Very little blood was lost during the operation. The wound was brought together by means of several interrupted sutures, and adhesive plaster—the limb placed in a slightly elevated position, and lightly covered. The patient bore the operation well. About twenty minutes after his removal to bed, he became suddenly weak. Mr. Walsh was in attendance at the time, and administered wine, at short intervals, till he had taken about half a pint, when he rallied. The temperature of the injured limb remained as high as that of the sound one. This was doubtless owing in a measure to the more perfectly established collateral circulation caused by the attempts at cure, which had been made by compression.

May 4th. Feels better. Wound looks healthy. Temperature of limb unaffected. Has taken some beef-tea. To have half a drachm of chlorodyne, every four hours, during the night, if restless.

May 5th. He was feverish during the night, and did not sleep. Was very thirsty. His stomach would not retain the chlorodyne. Feels better this morning, and continued so during the day. ℞ Pulv. Doveri gr. x. H.S

May 6th. Not so feverish. Appetite good, and the various secretions normal. He took, during to-day, some broiled chicken, and a little broth at intervals.

May 8th. Had a distinct rigor this morning, which lasted half an hour, and was followed by profuse perspiration. A dry cough annoys him a good deal, especially towards night. To have the following: ℞ Quinine Disulph. ℥ ss. Acid Sulph. Arom. m.xx. Syr. Auranti ℥ j. Aquæ ad. ℥ viii. A tablespoonful to be given every four hours.

May 9th. Cough worse. Has had two more rigors, one of which was about two hours in duration, and was very severe. Towards evening, during a fit of coughing, hemorrhage from the wound to the extent of about six ounces occurred, but was controlled by moderate pressure. A solution of alum was ordered to be applied.

May 10th. Some slight hemorrhage to-day, which seems to be of a venous character. Pulse 110. Tongue coated white. Countenance pale and anxious.

May 11th. Very weak, dull and incoherent. There is some delirium, and no desire whatever for food. Wound full of unhealthy pus, and signs of gangrene are visible.

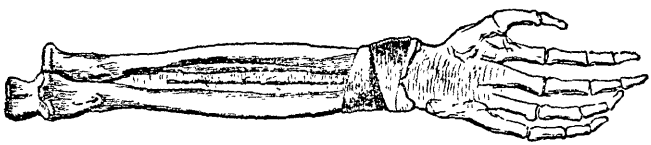
May 12th. Still weaker—pulse towards evening 160. Coagula in wound exceedingly offensive. Complains of a good deal of constriction about the chest.

May 13th. Has been in a stupor most of the night. Is a little brighter this forenoon, but very weak. Pulse 175—small and wiry. Cough and dyspnœa very troublesome. *Expectorated a quantity of sanious pus.* Complains of pain in the hypogastric region. A catheter was introduced, and a quantity of healthy-looking urine drawn off. Towards the afternoon, he gradually got weaker, and his breathing became exceedingly difficult About half past three he died.

No *post mortem* examination was allowed, as the body was at once removed to Western Canada for interment. There can be no doubt, however, that death resulted from pyæmia.

Double Pronator Quadratus Muscle; two cases observed during the session 1863-4. By GEORGE E. FENWICK, M.D., Demonstrator of Anatomy, McGill University.

In the course of the Session just closed, two cases of the above peculiarity were met with, in the anatomical rooms of the University. The first was in the left arm of a female subject, from which the accompanying engraving, taken from a photograph, was procured. On showing it to



a confrère, he remarked that had the person been a violin player, it might be accounted for, from the increased use of the arm, in handling his instrument. Very shortly afterwards a male subject was brought to the college, who for years had eked out an existence, in playing the violin in low taverns; and I certainly felt anxious to see the pronator, when, singular enough, it was found double, occurring again on the left side. In both instances, the muscle consisted of two distinct muscular bundles, triangular in shape, with their broad attachments or base reversed. The upper muscle arose by fleshy fibres from the inner edge of the ulna, the fasiculi converging to a point, presenting a somewhat radiated appearance, terminated tendinous, and was inserted into the anterior surface of the radius. The lower muscle had a broad muscular attachment to the anterior surface of radius, the fibres converging to a point, in fact a distinct tendon, which was inserted, into the anterior portion near its base, of the styloid process of the ulna. The two muscles combined presented a most singular appearance, and occupied the same space as does the quadratus usually. The arrangement would not in any way affect the action of the muscle, but in fracture of the lower end of either bone, I doubt much, whether it would not give more than ordinary trouble, in retaining the fragment in its proper place. I find no mention made of this anomaly by anatomical authors, except by Horner, in his work on Special Anatomy and Histology. In a foot note it is stated, in speaking of the pronator quadratus: "This muscle in some very rare cases does not exist. Sometimes it consists of two layers whose fibres cross each other. In a case noticed in the Pennsylvania Hospital, by Dr. J. R.

Barton, it consisted of two triangular pieces, the bases of which were reversed."

I may mention, that the present professor of anatomy in McGill University, Dr. Scott, who has been connected with the anatomical department of the college, for nearly twenty years, and who, during that time, has had ample opportunity for observation, never met with an instance of the above description.

Montreal, May, 1864.

Poisoning by Strychnia: recovery from a large dose. By FRANCIS WAYLAND CAMPBELL, M.D., L.R.C.P., London; Member of the Royal Medical Society of Edinburgh; Corresponding Member of the Dublin Microscopic Society; Physician to the Montreal Dispensary, and Infirmary for Diseases of Women and Children.

The following case is interesting, not only from the quantity of the poison taken, but from the comparatively long time which elapsed before the patient was seen by me, and the consequent delay in the commencement of treatment:

F—— J——, a gentleman of position in society, owing to reverses in business, had been for some weeks in exceedingly low spirits, and during that time had drank very freely. On the morning of the 17th November last, he left his house about 8 o'clock in a very excited state, not having partaken of any food, and shortly after that hour called at a druggist's store and requested one of the clerks with whom he was acquainted, to give him sufficient strychnia to poison two dogs. About four grains and a half were weighed out to him. He states that he immediately went to a neighboring fashionable saloon, called for a glass of gin, and placing all the strychnia in it, drank it off. To make sure that none remained behind, he immediately filled the glass with water, and drank it also. He then started for home, and on the road one or two very slight spasms seized him. On reaching his house he at once undressed and went to bed, his wife being out at the time. She returned about ten o'clock, and found him in a very strong paroxysm. He at once confessed what he had done, and the family physician who was sent for not being at home, I was called upon to attend him. It was eleven o'clock when I reached his house, fully two hours and a half having elapsed since he took the poison. On my entering the room he was seized with a very violent tetanic paroxysm, which lasted fully a minute and a half. He had not vomited, but had drank freely of milk. I at once administered a drachm of sulphate of zinc, which soon produced copious vomiting.

When it had in a measure subsided I gave a drachm of tannin in a tumbler of water, which was repeated in about half an hour. A little after twelve, another very violent paroxysm came on, which was followed by violent emesis, which continued with a good deal of frequency the entire day. At two p.m. the paroxysms were recurring every twenty minutes, and were very severe. He was given two grains of solid opium, and shortly after drank several cups of green tea. At half-past two, Drs. McCallum and Drake saw the patient, when fifteen drops of the fluid extract of belladonna was injected subcutaneously, near the third dorsal vertebræ. Chloroform was also administered *during* the paroxysm. At three o clock the spasms were recurring every eight minutes, and very strong, their *duration* being apparently lessened by the inhalation of chloroform. Pulse 140—full and strong By half-past three the patient began to show evident signs of weakness; the interval between the spasms had decreased to about three minutes, and they were much stronger. Sherry and water was given at the rate of an ounce every hour. As the patient was evidently sinking, I determined to try the effect of keeping him partially under the influence of chloroform the whole time. Its effect was all that could possibly be desired. The interval between each paroxysm gradually lengthened, and at 7 p.m. it had increased to an hour, though their severity seemed to be but slightly diminished. At this time I had his spine well rubbed with soap liniment and tincture of opium, and gave him a drachm of compound spirits of sulphuric ether, in three drachms of camphor mixture, every two hours, still continuing the inhalation of chloroform, but not to the same extent as previously. At 9 p.m., while drinking some beef tea, a violent paroxysm came on. Its duration was short, and during the previous two hours he had only two very slight spasms. At eleven p.m., when I left him, no more severe ones had occurred, and only one very slight one. I ordered beef tea in large quantities, and the wine to be given every three hours. Pulse 120 and weak. At 8.30 a.m., next day, I visited him, and found he had passed a tolerably comfortable night. No spasms—only occasional involuntary twitchings. His spirits are better. To have the ether and camphor mixtures every four hours only. Wine to be stopped. To have beef tea at intervals, and chicken broth for dinner. 9 p.m., still improving, the twitchings continue, but neither so strong nor so frequent. From this time the patient made a rapid recovery, and, in a week from the time he swallowed the poison, was out attending to his business. The quantity of chloroform consumed between 1 p.m. and 11 p.m. was rather more than a pound, and its beneficial effects were certainly most marked. I am firmly convinced that had it not been so largely inhaled the case would have terminated fatally.

Elephantiasis of the Scrotum, about the size of a man's head. Successful removal. By Professor Ferguson, of London. Reported by Dr. Francis W. Campbell.

Elephantiasis of the scrotum is a disease of great rarity, not only in this country, but in Great Britain. In India, and other tropical countries, it is of comparative frequency, at times reaching an enormous size. Cases are on record where they have been removed weighing 80 lbs. and 120 lbs. The case detailed below occurred under the care of Mr. Ferguson of King's College Hospital, in June, 1861, while I was sojourning in London, and was witnessed by me, and was the first case of the kind which he had met with in his large private, and hospital practice. Mr. Ferguson stated that he only knew of two other cases, having been met with in Great Britain—one in the practice of the late Mr. Liston, which terminated fatally, the other in that of the late Mr. Skey. Mr. Ferguson said that death occurred in Mr. Liston's case, from the amount of blood lost while attempting to save the penis and testicles, which were eventually removed. In the present case, if it was possible, the testicles would be saved, but he would not waste time looking for them. If not found easily he would not hesitate for a moment to sacrifice them. He suggested the idea that uncleanliness has considerable to do with the growth of the disease in tropical countries. The following are the notes of the case:

A strong robust Englishman, aged 41, from Devonshire, was admitted into King's College Hospital, London, England, on the 11th of June, 1861. States that when young he had several attacks of gonorrhœa, almost every attack being accompanied by slight orchitis. About fourteen years ago, he had a severe attack of orchitis, but in time the testicles regained their ordinary size. Some eight years ago he received a blow on the scrotum, which gave rise to another attack of orchitis, this time leaving the scrotum considerably enlarged. From that time till now, he has had periodical attacks of scrotal inflammation, each succeeding one leaving it larger than it found it, till it has reached its present formidable size. Was never out of England. Was married for twelve years, but is now a widower, and has not had any children. For a number of years has been very temperate in his habits.

When admitted to hospital the scrotum presented the appearance of a tumor about the size of a man's head, suspended by a very narrow neck and of a light rose color. At its largest circumference it measured twenty-six inches, seventeen inches from the under surface of the penis to the perineum along the raphé, and twelve inches around the

neck. Manipulation conveys the sensation, as if the tumor was lined with thick cartilage. Cold weather causes it to contract somewhat. The testicles can be discovered with great difficulty at the back and upper part of the scrotum, apparently not enlarged, but rather painful when touched. The penis was all but undiscoverable, being entirely hidden in the foreskin, which is enormously hypertrophied. Since his admission into hospital the tumor has been punctured twice with a trocar, but nothing came away but a few drops of blood and serous fluid.

On the 6th of July, 1861, Mr. Ferguson having determined to remove the scrotum, ice was applied for four hours previous to the operation. The operating theatre was crowded with students and medical men drawn thither by the rarity of the case. Chloroform being administered, Mr. Ferguson, who was aided by several qualified assistants, commenced the operation by making an incision through the hypertrophied foreskin, and performed as it were circumcision. He then severed the penis from its connection with the scrotum beneath, and gave it, denuded of its integument, to an assistant to hold out of the way. Next making a horizontal cut round the base of the scrotum, by a little dissection, he came upon the testicles, which were enclosed in small hydroceles, fluid gushing out as they were opened. These he separated from their connection, nearly up to the external abdominal ring, and finding them healthy, they were given to an assistant to hold out of the way. After this, two or three sweeps of the knife sufficed to remove the entire mass. The bleeding was considerable—yet not so great as might have been expected from the formidable nature of the operation—as competent assistants secured the vessels, as soon as cut, by the firm application of sponges. A number of ligatures were applied, and the scrotum sewn up from the bottom, some little difficulty being experienced in replacing and retaining the testicles. The patient was removed to the ward under the influence of chloroform.

Late in the evening of the same day profuse hemorrhage set in. Cold was applied, but without any success in controlling it; and as the patient seemed on the verge of syncope—the bandages were undone, the wound re-opened, clots turned out, and four ligatures were applied to bleeding vessels. Ice was again applied, and the bleeding ceased.

July 9. Is progressing favorably. The right testicle was found today to be protruding slightly in the middle line. It was pushed back, and two sutures put in, to keep it in its place. Has no difficulty in passing urine.

July 10th. Is very weak, and has very little appetite. Bowels moved this morning by a dose of oil—the first time since the operation.

Pulse 104. Wound commencing to discharge. Water dressing to be applied.

July 13th. Has improved greatly since last report; appetite good; wound beginning to granulate; discharge abundant and healthy, a large poultice to wound.

July 17th. Discontinue poultice, and re-apply water dressing. Most of the ligatures are away.

July 18th. Red wash ordered to-day.

Aug. 4th. Still progressing very favorably. The denuded penis is granulating healthily. The left testicle forms a prominence above and to the left of the penis, the right is situated below, about the centre, and is not readily felt.

Aug. 10th. A redundance of skin above the root of the penis which was very unsightly, was removed by Mr. Ferguson to-day.

Aug. 24th. Was discharged to-day to return home, the wound being all but closed, and the patient strong and hearty.

The tumor weighed 6 lbs., and consisted of a simple hypertrophied condition of the tissues of the part infiltrated throughout with semi-gelatinous material.

HOSPITAL REPORTS.

Delirium Tremens treated with large doses of Tincture of Digitalis under the care of DR. FRASER.—Peter Dupuis, a young man of intemperate habits, was admitted into the Montreal General Hospital, on the 16th May, 1862, suffering from delirium tremens. This is the third attack within three months.—May 17. Is exceedingly nervous. Has not slept since admission. To have the following at bed time: ℞ Chloric Ether ʒj; Chlorodyne gtt. xl fiat. Haust. Ordered nourishing diet, and to have soda water, with ginger syrup, for a drink.

May 18th. Still no sleep. Nervousness increasing—also the delirium. Complains of some pain in chest, for which a sinapism was ordered. ℞ Cal. gr. iv. Ol. Tig. gtt. vi. Pulv. opii gr. j. SS. ℞ Chlorodyne, gtt. xii H.S.

May 19th. Has not slept. Pain in chest still present. Sinapism to be repeated. Ordered 2 oz. of brandy.

May 20th. No sleep. Quite delirious—almost impossible to keep him in bed. There is very great tremor, and he is constantly picking at the bed clothes. To have ʒ ss. of the tincture of digitalis immediately. This was placed in the hands of one of the dressers, with

instructions to administer it, and remain beside the patient to watch its effect. Before the digitalis was given, the pulse was 100—of moderately full volume, and it did not vary more than a few beats after its administration. An hour after, he became more composed and somewhat drowsy; and two hours from the time it was taken, the patient was in a profound sleep, in which he remained, with the exception of brief intervals, till the following morning, when the delirium was quite gone. He rapidly improved, and was discharged from hospital on the 23rd of May.

Delirium Tremens treated by large doses of Digitalis, by DR. FRANCIS W. CAMPBELL.—The following case occurred in my private practice. On the 25th of April, 1862, I was called upon to attend a strong and robust young man, who was laboring under an incipient attack of delirium tremens. He had for some weeks being drinking whiskey to very great excess, but for four days previous to my seeing him had not tasted liquor of any kind. Has not slept for two nights. Will not remain in his room, stating that people bother him while there. Sits in the dining-room reading—delirium not always present. States that he is aware that his ideas are at times absurd, but that he cannot resist them. Tongue thickly coated—great pain in the head. Bowels constipated. Pulse 89. Ordered to go to bed, and to have a pill containing half a grain of opium, and a drop of croton oil, immediately; another to be given in three hours, if the bowels did not move freely. Put him upon Graves' mixture, which was to be commenced after the bowels operated, and repeated every three hours. I saw him in the evening. His bowels had operated several times, yet he was rather more excited. Complains that Graves' mixture gives him an electric shock every time he takes it, and refuses to continue it, but on persuasion promises to do so.

April 26th. No sleep. It is impossible to keep him in bed. Still more excited—especially, his friends say, after taking the mixture (Graves'). Positively refuses to take any more. To have 3 ss. of the solution muriate of morphia every hour, till sleep is produced. 10 p. m. No sleep. Quite delirious, and very violent. His friends getting greatly alarmed, I met Dr. Reddy in consultation, when it was decided to give half an ounce of tincture of digitalis in a tumbler of porter, and to repeat the same in two hours, if the first did not quiet him, and to again commence Graves' mixture, giving a tablespoonful every two hours—the first dose to be given two hours after the last dose of digitalis. The first dose of digitalis produced no noticeable effect whatever. The pulse, which was very frequent, and small, was not diminished a single beat, but

within an hour after the second dose he became much quieter, and in an hour and a half was in a tranquil sleep, which lasted several hours.

April 27th. Was sleeping when I made my visit this morning: Perspiration most profuse. Pulse 82, quite soft and compressible. He awoke about 8 a. m., and took his first dose of Graves' mixture, and almost immediately went to sleep. 4 p. m. Is awake, but still slightly delirious—inclined for more sleep. 10 p. m. In a profound sleep.

April 28th. Is quite rational. Slept till 7 a. m. Feels very weak. Graves' mixture stopped—with the exception that he is to get a tablespoonful at bed time.

April 29th. Improving. Quinine and iron prescribed. He was soon able to be about attending to business.

REVIEWS AND NOTICES OF BOOKS.

On Diseases of the Throat and Windpipe, as reflected by the Laryngoscope, a complete Manual upon their Diagnosis and Treatment, embellished by 116 *Engravings.* By GEORGE DUNCAN GIBB, M.D., M.A., Assistant Physician, and Lecturer on Forensic Medicine, Westminster Hospital. Second Edition. London: John Churchill & Sons, 1864. Royal 12mo., pp. 480.

Scarcely four years have elapsed since the author gave to the world the results of his labour and experience in the above class of diseases. He has continued his researches with diligence and with increased facilities, as has had brought to his aid, the reflecting mirror of Professor Garcia, through which means truly astonishing revelations are made, our diagnosis greatly aided, and topical applications facilitated, to parts which the surgeon had hitherto failed to bring within the scope of his vision.

There need be no doubt now of the local application of "the caustic" to the interior of the larynx, many sceptics believing that it is impossible to do so. With the aid of the means now at hand, the sponge or brush can be seen to pass the rima, and in some instances, without even giving rise to spasm.

Diseases of the throat and windpipe as a class are of the very deepest interest and until of late years were comparatively neglected. Daily experience proves the frequency of their occurrence, and to what serious consequences they lead when they are neglected or improperly treated. With a view of calling more markedly the attention of the profession, to the vast importance of the subject, and to supply a desideratum in medical

literature, the author devoted himself to the task, and has reaped the reward of his industry in becoming in the great city of the world, the authority "*par excellence*" on diseases of the throat.

In the former edition, the subject was treated of in thirty-two chapters; in this, the second issue of the work, there are thirteen chapters; twelve devoted to the subject under consideration, the thirteenth, containing a History of the Laryngoscope and Rhynoscope, the mode of use of these instruments, together with concluding hints and remarks of a truly practical nature. It is, as the author observes, "In every sense a perfectly new work; for the introduction of the Laryngoscope has added so much to our knowledge of the throat and larynx, as to render it necessary that the greater part of the subject should be re-written."

The first chapter is devoted to the consideration of the follicular disease of the throat, or granular pharyngitis and its consequences, resulting in some cases, when treatment is neglected, and in unhealthy constitutions, in implication of the deeper structures, even to destruction of the cartilages, and ultimate release by death. The author takes up in an eminently practical manner, the consideration of treatment, both constitutional and topical, referring in the course of his remarks to the inhalation of medicated powders, which, according to Dr. Fournié of Paris, are conveyed with great ease and precision to any portion of the air passages. The author also refers to the pulveriser of fluids, an instrument recently introduced by Dr. Sales-Gerous.

"It consists of a glass vessel containing the liquid, to the neck of which a syringe is attached. By pressing the piston, the air in the interior is compressed, and on turning the stop-cock it drives the fluid with such force against a metal plate contained in a barrel-shaped tube, that it is instantly converted into a fine mist, which the patient can easily inhale. The large tube conveys away such portions as are at once condensed. The apparatus is figured in the 'Medical Times' of June 28th, 1862, and is extensively used in France, but especially at the thermal establishment at Pierrefonds. I have used it with great advantage; but for simplicity, and perhaps less cost, it is rivalled by the instrument made by Weiss and Son."

"The most important of all the substances used is the nitrate of silver, a solution of which may be employed in strength varying from two to four scruples of the salt to an ounce of distilled water. This can be directly applied to the interior of the larynx, by means of the curved sponge and whalebone, or, what is still better, a brush and bent whalebone, which I was the first to adopt. Indeed, I have wholly abandoned the sponge, from the irritation it produces, and the manner in which it

scrapes and injures the delicate membrane of the larynx. A large, full-bellied camel or squirrel's hair brush is to be employed instead, and which will readily pass, with the aid of the laryngeal mirror, between the lips of the glottis, or around the base of the epiglottis, or any other part of the throat, as circumstances may demand. I wholly agree with many writers, that a solution of less strength than that named should not be applied; but, if it is necessary, according to the recommendation of Dr. Green, even a stronger may be made for use, when the ulcerations are extensive upon the epiglottis, or about the opening of the larynx, ulcerations which it is desirable to arrest at once."

In referring to the more chronic form of diseases of the windpipe, the author says, in section 2:

"In its importance, chronic disease of the windpipe ranks next to the follicular inflammation of the throat considered in the preceding section, for we have now to deal with one of its consequences. It ensues as the result of many other throat-affections besides follicular disease, and would seem in very many instances to follow in their wake, as is shown in other parts of the present work. The frequency with which it is encountered, both in its mild and aggravated forms; the tendency it has to involve the lungs by sympathetic irritation, as well as by spreading along a continuous membrane; and the obstructed or interrupted free admission of a sufficiency of air for the purposes of breathing, the result of impaired action in the vocal cords from thickening or submucous deposit,—necessarily invests its consideration with an amount of importance which must at once suggest itself to the mind of the reader. In many instances, unfortunately, the mischief is allowed to proceed and spread to such an extent as to become utterly irremediable, whereas timely interference might have done much to save life."

In the third section the author refers to that condition of the disease under consideration, in which the cartilages of the windpipe become involved in the ulcerative destruction, and in some cases actually exfoliate.

"When the general symptoms of chronic disease of the windpipe, described in the previous section, continue to progress, and the ulceration of the mucous membrane and its subjacent areolar tissues spread and extend more deeply, the cartilaginous framework of the larynx becomes involved, and serious mischief generally ensues. The parts which are exposed to the ravages of ulceration are the thyroid, cricoid and arytenoid cartilages, the epiglottis, and the rings of the trachea. Besides these, the delicate muscles and ligaments, the latter including the vocal cords, participate in the morbid action, and add to the general complexity of the disease.

The ulcerative process gradually eats into the attachments of the cartilages, which produces at first a partial displacement, especially of the arytenoid, which seriously embarrasses the breathing, and produces fearful attacks of spasmodic dyspnœa; in the mean time their destruction goes on, ending in a state of necrosis or death, and finally they are thrown off and expelled, and the poor sufferer obtains some temporary relief. When a portion only of the cricoid or of the thyroid cartilage is discharged and thrown off, it then constitutes a distinct exfoliation."

We have been arrested in further contemplating these diseases, although of great importance from their frequency and occasional formidable consequences, our limited space precluding more than a very hasty reference to this part of the work, as we are desirous of noticing other portions of equal excellence and equal practical importance.

In the fourth chapter the author takes up the subject of specific diseases of the throat; and first on his list appears that occasionally formidable malady "Diphtheria." Many regard the disease as a recent scourge to the human family; but here again is found the old proverb, "nothing new under the sun," because the disease has been observed and carefully described by all writers on medicine during the last 400 years.

"*Pathology.*—Diphtheria is essentially a blood-disease, and manifests its great peculiarity in all its forms by the exudation of a distinct membrane over some part of the throat-apparatus, namely, on the tonsils, soft palate, uvula, and pharynx; the lining of the mouth, cheeks, and the nose; the larynx, trachea, and bronchi; and even the eyes and other external exposures of the mucous membrane may be affected, as well as the skin.

"In its chemical character the membrane is a coagulated albumen, and is analogous to that occurring in croup or other diseases of the air-passages. Under the *microscope* it is found to consist mainly of masses of epithelial scales or cells of all forms, mixed with granules and molecular particles; it can be split into a number of layers, which thus rather shows its distinct epithelial character.

"A pathological symptom of some importance, first noticed by Dr. Wade, of Birmingham,* is the presence of albuminuria, which is a forerunner of grave mischief in the majority of instances. It is noticed both in the mild and severe forms, and when observed in the former, when no risk is apprehended, the patient is perhaps suddenly seized with croupy breathing, and in a few hours life is sacrified. The necessity of examin-

* "Observations on Diphtheria."

ing the urine frequently, or morning and evening, is a matter that should not be overlooked in the apparently mild cases."

The author adopts the division of Mr. Hart, into "Simple Diphtheria," "Croupal Diphtheria," and the malignant form of the disease, characterised by the intolerable fetor, gangrenous condition of the tonsils and adjacent parts. A very clear and interesting description of the occasional Sequelæ of Diphtheria is given in this chapter, together with illustrative cases, which have come under the observation of the author. We can not conclude these remarks, without most heartily recommending this eminently practical work to all our readers. It contains throughout engravings on wood, taken, we presume, from nature, but not as we think of artistic merit: it may be that our ignorance of the appearances of the larynx reflected in the mirror of Garcia, affects our judgment. This does not in any way detract from the merit of the work itself. In the hands of the practical man it becomes a necessity: without it his library is incomplete.

The typographical execution is in Churchill's best style.

PERISCOPIC DEPARTMENT.

SURGERY.

Aneurism of the Ascending Aorta, communicating with the Superior Cava.

John M—— was admitted into Guy's Hospital on the 5th February, 1864. He had formerly been a private in the army, and went through the entire Crimean campaign; while there suffered from cough and dyspnœa, with which he has ever since been affected, especially in winter. About Christmas, 1863, his face began to swell, and became of a purplish hue. His neck grew puffy, then the right arm, and after the left slightly. On admission, the patient, presented the following appearance: when stripped, the head, neck, thorax and arms seem to belong to a full bloated man, while the abdomen and lower extremities seem to belong to another man, being of normal color and dimensions. The lips and cheeks have a purple tinge, and very puffy, the color disappearing upon pressure; the veins of the skin of the thorax are gorged, and give the skin a mottled appearance, which extends from the clavicles as low as a line drawn round the body on a level with the apex of the ensiform cartilage. Below this, there is no mottled appearance, but the large veins are full, and on putting a piece of tape round the centre of the abdomen,

the superficial abdominal veins fill from above. A vibratile thrill, synchronous with the second sound of the heart, is perceptible to the eye over the right side of the chest. Percussion normal, except that cardiac dulnesss is a little low in the recumbent posture. At the apex, first sound of the heart difficult to make out. Second sound clear. No murmur with cardiac sounds. All over the ascending and middle portion of the arch of the aorta a soft whizzing sound is heard. At the commencement of the arch it is diastolic. Upon moving the stethoscope upwards, the murmur is heard to be both systolic and diastolic, but more diastolic. Over the third right costal cartilage, the sound is heard with greatest intensity. The character of the whizz is venous—a continuous churning sound. No sound in the right side of neck. There is bronchial breathing at the base of the anterior part of the right lung, but otherwise pulmonary sounds are normal. Is troubled with a short sharp cough, which produces much congestion of face and neck, at each attack. The radial pulse is small, but regular in rhythm—the right being less than the left. Beats 108 per minute, respirations 33. He continued much in this condition till the 21st February, when the weather became very cold, and the dyspnœa and cough increased. In the evening of the 21st there appeared under the right axilla a mottled redness of skin, which is hot. Was ordered ℞ Julep ammoniæ ℥ j. œth. chlor. m. xx. lig. opii sed, (Battlei) m. iii., quartis horis, sumend; Brandy, 3 oz, 9 p.m. Pulse 140, respirations 52. Great tenderness in right axillæ. 22d. Pain in axillæ worse—inflammation spreading slowly in all directions. 29th—Inflammation has spread down the right arm and to the trunk; next the left axillæ and shoulder took on the same action, also the skin of the left side of the abdomen. He died at 8 p.m.: a post mortem was made eighteen hours after death. On opening the pericardium, a few flakes of lymph were seen floating in an opaque fluid, showing recent pericarditis. The aorta bulged forward on its right side, and here the lung was adherent. On removing this protrusion, it was found to be an aneurism of the size of a man's closed fist, It occupied the right side and posterior wall of the ascending aorta: commencing about an inch above the valves, it reached the inominata artery. This description applies to the opening into the sac; the latter projected both higher and lower than this, being seen, indeed, in the pericardium. The sac contained a recent clot, but no ante-mortem fibrine. The walls were remarkably thin, and at one spot ready to give way into the pericardium. Passing along the front of the aneurism was the superior vena cava, with the brachia cephalic at the upper part. On opening the vena cava a perforation was seen at its back part, just as it entered the auricle. This entered the aneurismal sac, so there was a free communi-

cation between the aorta and vein. The opening was about the size of an ordinary lead pencil; its edges were smooth, and everted toward the vein. The opening was evidently not very recent. The aorta elsewhere was covered with atheroma. Heart of natural size.—*Condensed from the Medical Times and Gazette, April* 9, 1864.

PARTICULARS OF THE TREATMENT OF A CASE OF TETANUS, IN WHICH THE CALABAR BEAN WAS FREELY ADMINISTERED.

By Holmes Coote, F.R.C.S., Surgeon to St. Bartholomew's Hospital.

I take no credit whatever to myself for the treatment of the following case. The patient was seen shortly after the manifestation of the first indications of trismus; the symptoms did not advance rapidly; the man was always hopeful, and endued with great moral courage; he received during his stay in the hospital the greatest possible attention. But I publish the case that it may serve to illustrate the action of certain medicines in the treatment of this unmanageable affection—viz., croton oil, calomel, the Calabar bean, morphine by hypodermic injection, and quinine; and these, too, in no small doses, but fully administered and in quick succession, as is necessary in the treatment of a disease in which the symptoms of every hour possess an untold value for good or for evil.

It may not be out of place to remark that a previous case of tetanus under my care likewise recovered. He was a lad, also with a crushed finger. In this case I amputated the member, administered croton oil, and produced rapid salivation. The after treatment consisted in the exhibition of sulphate of quinine.

For the particulars of the following case I am indebted to Mr. Nash, my house surgeon.

William P——, aged thirty-five, a healthy-looking man, crushed the last joint of the right forefinger on Feb. 11th, 1864, with a heavy iron roller. A fortnight afterwards (Feb. 25th) he applied at the hospital, when he was seen by Mr. Nash, who found the whole of the last phalanx exposed, denuded of periosteum, and dead, and who very properly removed it by operation, and closed the wound. In doing this the usual silver wire sutures were employed. No unpleasant symptoms ensued until two days afterwards, when the patient complained of stiffness in the lower jaw, a condition which he attributed to cold, and which, he added, had existed in a slighter degree from the former date (the 25th). When seen on the 28th he exhibited unmistakable evidences of trismus: the mouth could not be more than half opened, and there was some difficulty in the act of swallowing. He was admitted into the hospital, and, as the

bowels were confined, one minim of croton oil was immediately administered. He was ordered essence of beef and six ounces of port wine daily. Seven p.m.: The croton oil has acted freely. To take twenty-five minims of Battley's sedative solution at night.

Feb. 29th.—He slept well; bowels not open since last night; pulse 85. He thinks that he can open his mouth a little better, but the difficulty in swallowing is the same. His jaws "snapped" on several occasions during the night. One minim of croton oil to be repeated. I saw the patient at two p. m., and, as the bowels were still inactive, ordered two minims of croton oil immediately.—Seven p.m.: The bowels acted twice freely; the motions dark-colored and offensive.—Half-past ten p.m.: Has been purged since seven. He says that whenever he drops to sleep, the jaws "snap."

March 1st.—Slept badly, having been disturbed by a delirious patient. Bowels not opened since last note. Abdominal muscles tense.—Two p.m.: I ordered two grains of calomel and a third of a grain of opium every three hours until salivation was produced.—Seven p.m.: The bowels have acted twice. He says that he should be quite comfortable except for the difficulty in swallowing.

2nd.—Slept well; pulse 88; bowels open; abdominal muscles less rigid; the jaws open more freely; the gums touched by the mercury.

3rd.—The "snapping" of the jaws disturbed his rest; abdominal muscles less rigid; pulse 88.—Seven p. m.: Altogether not so well; the tongue is very sore; wound in the finger healthy and suppurating; pulse 96.

4th.—He was ordered one minim of the extract of the Calabar bean, (Messrs. Bell and Co.) in glycerine (equal to four grains of the powdered bean), every hour or every two hours, according to the effect.

5th.—Jaw tightly closed; pulse 104; abdominal muscles tense. Owing to some mistake of orders he discontinued the use of the Calabar bean after the third dose.—Noon; he was directed to resume the employment of the Calabar bean, one grain of the extract in glycerine every hour. He took one dose every hour till eight p.m.—equal to *thirty-two grains* of the powder. No perceptible effect, but he dropped off to sleep.—Twenty minutes past ten p.m.: He awoke and took another minim.

6th.—One a.m.: Awoke again, and says he feels easier. Ordered two drops of the extract of Calabar bean, equal to eight grains of the powder—Half-past eight a.m.: Spasms of the limbs; pain in the pit of the stomach; pulse 104—Ten a.m.: Has taken since noon of March 5th urteen minims of the extract of Calabar bean, equal to fifty-six grains of the powder. (One bean weighs about a drachm.) No marked im-

provement.—Eleven a.m.: Ordered to discontinue the use of the Calabar bean. To produce continued sleep, half a grain of the acetate of morphia was injected beneath the skin; also the same quantity at one p.m. and four p.m. respectively. At one p.m. an enema of beef tea and brandy was administered.—Eight p.m.: In a deep sleep.—Ten p.m.: Pupils much contracted; still asleep.—Forty minutes past ten: He awoke, and drank twelve ounces of strong beef tea and two ounces of brandy. He says he feels better. Pulse 136. Injection of half a grain of acetate of morphia.

7th.—He awoke and took some beef tea and brandy. At ten minutes past two a.m., and again and half past eight and eleven, one grain of the morphia was injected hypodermically.—Forty-five minutes past five p.m.: Has slept continuously. Motions passed of a light color; has taken nourishment.—Twenty minutes past seven p.m.: Feels more comfortable. The morphia injection (half a grain) was repeated.

8th.—Ten a.m.: Injection of a grain of acetate of morphia; pulse 128.—Five minutes past two p.m.: The spasms are much diminished; he lies in a comfortable sleep; pulse 120, and feeble. Ordered five grains of disulphate of quinine to be administered three times a day at proper intervals.—Quarter past eleven p.m.: Injection of half a grain of the morphia.

9th.—One grain of the acetate of morphia injected. The "snapping" of the jaws diminished, and he moves his arms and speaks with ease.—Five p.m.; One grain and a half of the acetate injected.—Eight p.m.: One grain of the morphia injected.

10th.—Passed a good night. At fifty minutes past two, one grain, and at a quarter past eight two grains, of the acetate were injected.

11th.—He seems quite comfortable.—Quarter past eleven: Injection (two grains) repeated.

12th.—Convalescent.

22nd.—The medicines have been gradually discontinued.—*Lancet.*

REPORT OF A CASE WHERE A PORTION OF TOBACCO-PIPE WAS BROKEN INTO THE BLADDER.

Successful removal after the use of the Lithotrite.

By Henry Smith, F.R.C.S., Assistant-surgeon to King's College Hospital.

J. H——, aged nineteen, was sent to my house on Saturday, Jan. 16th, by Dr. Riding, with the following story: Three months previous, having a difficulty in micturition, he conceived the idea of passing a long clay pipe down his urethra into his bladder. He was so success-

ful in his exploit that he repeated it ten days before I saw him, on a similar emergency occurring, but on withdrawing the pipe he found that it was shorter by at least iwo inches than it ought to be. Relying, however, upon the efforts of nature to expel the body, he consulted no one, although he had great pain and irritability of the bladder, which went on increasing until his parents, hearing his groans whilst he was passing urine, made him confess the accident. He was immediately taken to Dr. Riding, who sent him to me.

On introducing a sound, I at once struck the pipe, lying on the right side of the bladder. The urethra was fortunately a capacious one, free from stricture, and not at all sensitive. I sent him home, told him to go to bed, and retain his urine for three hours before my arrival, and on the same afternoon I proceeded to operate. I at first had some hopes of being able to extract the entire portion of pipe by means of a very fine lithotrite, but, either owing to my own awkwardness, or to the abrupt curve of the instrument, I had so much difficulty in introducing it that I changed my tactics, passed in an ordinary sized lithotrite, and, readily catching the foreign body, broke it in two pieces. I then seized one of the halves—the waxed end, as it proved to be, and broke it up. I then washed the bladder well out with warm water, using a catheter with very large eyes, but I got nothing away. At ten p.m. I called on the patient and found that he had passed about half of the waxed end of the pipe, and he was very comfortable. On calling the following morning, to my great astonishment I found that the patient had passed in its entirety the half unbroken portion of pipe, measuring exactly one inch and an eighth, and numerous fragments besides. On placing them all together it was evident that the whole two inches had come away. I washed the bladder well out on that and the following day, removing a quantity of powder and minute fragments of clay; and on the next day but one the patient walked a long distance to my house, free from every symptom.

This case is an interesting addition to the two cases recently published in THE LANCET, where, in the first instance, Mr. Ferguson removed an entire bougie from the bladder by means of a lithotrite, and in the second Mr. Henry Thompson was equally successful in extracting a hair-pin, and, together with them, it goes to prove what may be done with the lithotrite in cases of foreign bodies in the bladder. It is doubtful whether I could have succeeded in extracting two inches of a rigid body from the bladder along the urethral canal with safety had I introduced a proper instrument. However the result of the treatment I adopted, if not so brilliant a *coup de main* as in the cases referred to, was equally satisfactory. There is one reflection which this case suggests in reference to

perhaps the most important point connected with lithotrity—viz., as to the treatment of fragments. The speedy and spontaneous expulsion of the foreign body after it had been broken up, conveys the hint that we should be content with simply breaking up a stone, and leaving nature to do the rest. At the same time, however, it must be borne in mind that in this case the bladder was perfectly healthy; whereas in cases of stone we often meet with a bladder more or less diseased, sometimes partly or entirely paralyzed, and then we appreciate the value of that treatment which consists in extracting the greater portion or the whole of the fragments by means of a small and well-constructed lithotrite. I shall shortly have to detail perhaps one of the most extraordinary cases where this line of practice was adopted with great success.—*Lancet.*

MEDICINE.

ON THE USE OF NITRATE OF SILVER IN THE PARAPLEGIA OF CHILDREN.

Dr. Bouchut employed the nitrate of silver internally in the case of a child, aged seven years, in the Hospital of Sainte Eugénie. The patient had had a fall from a height of a few feet, and immediately complained of acute pain in the dorsal region. From this time the child was unable to walk, and when she was placed upright the legs bent and sank down under the weight of the body. The speech became slow, difficult and indistinct, and the food partly escaped from the mouth during mastication. For nearly a month only the expectant treatment was adopted; but Dr. Bouchut then conceived the idea of treating the paralysis with nitrate of silver, according to the views of Wunderlich, Charcot, and Vulpian. He therefore prescribed one centigramme of the nitrate, divided into two pills, to be taken every day; and this treatment (occasionally varying the dose) was continued for more than a month with success, for at the end of this time the child left the hospital perfectly cured. Dr. Bouchut remarks that this was a case of paraplegia from direct violence, depending apparently upon a state of commotion of the spinal cord, and that the use of nitrate of silver was attended with manifest advantage. The expectant treatment had been tried without any avail, but as soon as the nitrate was employed the improvement became apparent: in twelve days the child began to walk alone, and at the end of six weeks of the treatment, the cure was complete. Although the nitrate of silver was successful in the present case, Dr. Bouchut thinks that it would not be a suitable medicine for cases of paraplegia in which

there are symptoms of acute inflammation of the spinal cord or its membranes.—*Bull Gén. de Thérap., Jan. 30th*, 1863.

ON THE INTERNAL EXHIBITION OF ATROPIA AND STRYCHNIA.

Dr. Fleming has for several years employed solutions of atropia and strychnia for internal use, and he prefers them to the ordinary preparations of belladonna and nux vomica, on account of their greater safety and efficiency. The solutions of both alkaloids employed by Dr. Fleming are so proportioned in strength that ten minims is the ordinary commencing dose, which easily admits of increase for the adult, and of diminution for the child. The solution of atropia is prepared from one grain of atropia, and five drachms of distilled water. The alkaloid is to be thoroughly dissolved with the aid of a few drops of hydrochloric acid, and sufficient rectified spirit is to be added to make ten drachms. This solution keeps well, and is of uniform strength, and ten minims of it, containing one-sixtieth of a grain of atropia, is the commencing dose for an adult. It should be given in a little water, once daily, at bed-time, and on an empty stomach. For children of one year, and all ages under one year, the commencing dose is one minim; of two years, two minims; of three years, three minims, and so on up to ten years, when ten minims may be given. The diseases in which Dr. Fleming uses atropia are epilepsy, asthma, constipation, and hooping-cough. He uses it *once* a day, because the action of one dose does not subside completely for sixteen or eighteen hours; and if a second is given before the effects of the first have passed away, there is a risk of producing cumulative action. It should be given on an empty stomach, because the dose of atropia requires, for its due action, to be promptly absorbed; and when mixed with the contents of a full stomach it enters the system very gradually, and manifests its usual effects very imperfectly, or not at all. This is one reason why the drug, when taken into the stomach of the rabbit, has no action, for it always meets there a large quantity of food, and mixing with it, enters the system very gradually. Several experiments made by Dr. Fleming have satisfied him that this explanation accounts in some measure for the immunity of grass-feeding brutes from the effects of certain poisons, for their stomachs are always full. Atropia should never be given in pill, which may undergo solution very slowly or not at all, lest when two or three pills accumulate in the stomach or bowels, they may, from some change in the gastro-intestinal fluids, be suddenly dissolved, and excite severe atropism.

The solution of strychnia is made with two grains of strychnia and five

drachms of distilled water; the strychnia is to be thoroughly dissolved by means of a little diluted hydrochloric acid, and rectified spirit is to be added to make ten drachms. This solution, like that of atropia, is uniform in strength, passes readily into the circulation, and the dose can be apportioned with accuracy. The commencing dose is ten minims, and contains one-thirtieth of a grain of strychnia. When employed for its *tetanic* action, the solution should be taken in the morning, half an hour before breakfast, and in half an ounce of water, and the dose increased two or four minims daily until a slight degree of its physiological action, such as stiffness about the jaws or neck, or spasmodic movements in the paralysed muscles, is manifested, when no further increase should be made. It should be given only once daily, to avoid the risk of cumulative action; it should be taken in the morning, so that its action may be over before bedtime, and the sleep be not disturbed; and it should be given on an empty stomach and diluted with water, to ensure its prompt and easy absorbtion. Strychnia should never be given in pill, for it is hard of solution in the weak acids of the stomach, and several pills may remain unchanged and accumulate there, or in the bowels. When the strychnia is employed as a *tonic*, the dose of the solution is five minims, and it may then be exhibited twice daily with safety and advantage.—*Edin. Medical Journal.*

CASE OF PYÆMIA SIMULATING ENTERIC FEVER.

WITH ACUTE NECROSIS OF THE ILIUM, STERNUM, AND ACROMION, AND A PULSATING ABSCESS IN FRONT OF THE STERNUM.

By Charles Murchison, M.D., F.R.C.P., Physician to the London Fever Hospital; Assistant-Physician, Middlesex Hospital.

Henry A——, aged 18, was sent to the London Fever Hospital, as a case of "fever," on November 22nd, 1863. His history and symptoms on admission bore a close resemblance to those of enteric fever. He had been ill about nine days; he had suffered much from diarrhœa before admission, and a few hours after coming to the hospital he passed a light watery motion. The abdomen was tense and tympanitic, and there was considerable tenderness on pressure over the cœcum. The tongue was red and fissured, with the papillæ rather enlarged, and there was occasionally a circumscribed pink flush on both cheeks. Pulse 120; no headache or delirium; pupils dilated. Still, neither on admission nor at any time subsequently was an eruption discovered on the skin resembling that of either typhus or of enteric fever. On the other hand, from the first day that the patient came under observation the respirations were quickened—36 in the minute; there was a dry cough, and

there was slight dulness, deficient breathing, and diminished vocal resonance at the base of the left lung, extending as high as the lower angle of the scapula behind, and as high as the nipple in front.

The diarrhœa ceased on the day of admission into hospital, and after a few days the motions were found to be solid, but the tympanitis and abdominal tenderness continued, and the patient had sleepless nights with some delirium, necessitating a recourse to opiates.

On the 25th he began to complain of great pain in all the joints, increased by the slightest movement, but no swelling could be discovered, and there had been no rigors. The pain was particularly marked in both hip-joints when the patient was made to sit up in bed.

On the 26th there was an erythematous blush on the knuckles of the right hand.

On the 29th a similar redness, with great tenderness, was noticed on the dorsum of both big toes, and on the following day half an ounce of pus was let out by incision from beneath the skin over the dorsum of the left big toe. A dirty discharge continued to escape from the wound, which had an unhealthy appearance.

On December 3rd a soft fluctuating swelling made its appearance, somewhat suddenly, over the middle of the sternum. It was circular and nearly two inches in diameter, and the skin over it was moderately red. The remarkable circumstance, however, was that this swelling indicated most distinctly each impulse of the heart, and was rendered tense by coughing. Very little air could be heard entering the base of the left lung below the left nipple in front and the lower angle of the scapula posteriorly, and pleural friction was heard over the dull space in the axillary region. At first sight, the pulsating swelling, in connection with the dulness at the base of the left lung, suggested the idea of a pulsating empyema; but there was no bulging of the left ribs, the intercostal depressions were equally marked on both sides, and there was no displacement of the heart's apex. Pulse 104; respirations 36. On the following day the swelling had increased in size, and was very tender; its pulsating character was even more strongly marked than before. A small trocar was now introduced into the swelling, and about six drachms of laudable pus, not at all fœtid, let out. No more could be obtained, although the patient was turned on his right side. The pain, redness, and pulsation subsided at once with the disappearance of the swelling. Poultices were applied; but the opening closed up, and by the end of twenty-four hours the swelling had returned with its former characters, and with such an amount of pain and dyspnœa, that a free incision was made into it, and about an ounce of bloody pus let out.

On December 16th there was still much distress in breathing. Pulse 108; respirations 40. A thin sero-purulent discharge escaped from the wound, which was not increased by turning the patient on either side. During respiration the air passed inwards and outwards through the wound. On introducing a probe, it passed completely through the sternum by a channel surrounded on all sides by bare bone. When the probe was left in, it moved upwards and downwards synchronously with the action of the heart. At the situation of the opening, the lower third of the sternum was separated from the upper two-thirds, and the two pieces of bone could be made to move upon one another with a grating noise.

Considerable relief was obtained from the free exhibition of opiates and stimulants; but on December 11th the patient appeared much worse. He had become very emaciated. There was a deep red circumscribed flush on both cheeks. Tongue try in the centre. Pulse 112, very feeble. Breathing at times was very hurried, at others, tolerably full and easy. Nearly two ounces of pus were let out by an incision made at the top of the right shoulder. This abscess did not seem to have any connection with the shoulder-joint. The physical signs of the chest did not indicate any extension of the pulmonary mischief.

The dyspnœa increased. Great pain and distress were occasioned by the two portions of sternum riding over, and grating on each other during respiration. On December 12th the lad's face was very dusky, and he was evidently sinking, and at six p.m. he died, his entire illness having lasted about thirty days. The skin did not present the slightest tinge of yellow, and at no stage of his illness had there been any rigors.

Autopsy Forty-four Hours after Death.—Body much emaciated. Right thigh and leg swollen and œdematous; left lower limb not so. The right femoral vein was compressed by an abscess beneath the fascia at the upper and anterior part of the thigh, which contained about an ounce of pus. On laying open the abscess above the right shoulder, the extremity of the acromion was found exposed and dead, and a portion of necrosed bone the size of a pea was loose and detached. The shoulder joint was intact. Chest.—The artificial opening in the skin led into an empty circumscribed cavity behind the sternum nearly two inches in diameter, bounded in front by the sternum itself, which was bare and black, and posteriorly by the ligaments and aponeurosis. At the level of the third rib, the sternum was completely separated into two pieces at what appeared to be a natural articulation. An inch and a-half of the lower portion and half an inch of the upper were quite bare, and of a dark hue on their posterior aspect. The opposed ends of the two pieces

could be made to overlap to the extent of a quarter of an inch. The left pleural cavity contained half a pint of puriform fluid. The outer surface of the lower lobe of the left lung and the corresponding costal pleura were of a deep red color, and were glued together by a quantity of soft yellow lymph. The lower lobe of the left lung was condensed (at many places sinking in water) and tough, as if from pressure of pleuritic fluid. Its section was nowhere granular. The lower lobe of the right lung was œdematous, and in its substance, near the anterior margin, was a circumscribed cavity the size of a hazel nut filled with thick yellow pus. The pleural surface of the lower lobe was coated with a few flakes of recent lymph, which were most abundant along the free margin of the base. There was no communication between either pleura and the post-sternal abscess. The pericardium contained four ounces of clear straw-colored serum; the lining membrane of the right cavities of the heart was stained of a deep red hue; the right cavities contained a small coagulum partially decolorised. The valves and muscular tissue of the heart were normal. Abdomen and Pelvis.—There was no fluid or lymph in the peritoneum. Liver and spleen healthy. Both kidneys much injected, and both, especially the left, contained several circumscribed deposits of pus, up to the size of a pea. The stomach and intestines were healthy; there was no abnormal injection or elevation of Peyer's patches, or of the solitary glands. There was a large abscess containing fully a pint of pus in the concavity of the right ilium. The bone over a space measuring two and a-half inches in diameter was quite bare and bathed by the pus; this exposed portion of bone was of a dark hue, and surrounded by a distinct line of demarcation in the form of a superficial groove; the abscess extended some inches downwards, behind the pelvic fascia, towards the perinæum; the right psoas muscle passed through it, and was surrounded by the pus. The right sacro-iliac joint was laid open, and the ligaments and cartilage destroyed, so that the finger could be inserted between the bones; and when the limb was rotated, there was considerable movement of the one bone upon the other. The lumbar vetebræ were not reached by the pus, and appeared healthy; there was also an abscess containing several ounces of pus outside the pelvis over the convexity of the right illium. This abscess communicated with that within the pelvis through the sacro-iliac joint. The right ilium, on its convex aspect, was also bare and bathed by pus over a space measuring about two inches in diameter. The bone here resembled the bare bone on the inner surface, and corresponded to it in situation. Two other abscesses were discovered, one beneath the fascia at the upper and anterior part of the right thigh already described, and

another containing about an ounce of pus in the substance of the left iliacus muscle, but in no way implicating the bone.

Remarks.—This case presented some remarkable features in reference to diagnosis. The early symptoms were closely assimilated to those of enteric fever, and the resemblance was increased by the existence of tympanitis and tenderness over the cœcum. The absence of rose spots, which were carefully looked for every day, was the sole point of distinction; but even in enteric fever these spots are not of universal occurrence. The pulsating tumor over the sternum might, at first sight, have been readily mistaken for an aneurism or a pulsating empyema; but the rapidity of its development, and the absence of the ordinary physical signs of empyema, negatived both of these suppositions. As regards the pyæmic nature of the case, the complete absence of rigors or of any peculiar discoloration of the skin is worthy of notice. The origin of the whole mischief is somewhat obscure. The boy had sustained no wound or injury, that could be discovered to account for the pyæmia; he had no sign of scrofula, nor was there any absolute proof that the pyæmia resulted from the circulation of any specific poison in the blood. The condition of the intestines showed that there had been no enteric fever; but it may be mentioned that the boy came from a locality where typhus was very prevalent, and although no eruption could be discovered on his skin, it is not impossible that he had passed through an attack of typhus before he came under observation. A formidable form of pyæmia, with purulent deposits in the joints, is well known to supervene occasionally upon attacks of typhus in certain epidemics, although this sequela has certainly been rare of late years in London. Surgical writers also speak of acute necrosis as not uncommon in "those debilitated states of the constitution that so frequently follow upon typhus fever." At the same time, it is right to add that the boy's symptoms before he was brought to the hospital were not those of typhus fever, and therefore I am inclined to conclude that the acute necrosis and pyæmia were the common result of some other unknown morbid condition of the blood.—*Medical Times and Gazette.*

TRICHINIASIS IN GERMANY.

A FEW months ago there was a festive celebration in Hettstädt, a small country town near the Hartz Mountains, in Germany. Upwards of a hundred persons sat down to an excellent dinner, and having enjoyed themselves *more majorum*, separated and went to their homes.

Of these one hundred and three persons, mostly men in the prime of

life, eighty-three are now in their graves; the majority of the twenty survivors linger with a fearful malady; and a few only walk apparently unscathed among the living, but in hourly fear of an outbreak of the disease which has carried away such numbers of their fellow-diners.

They had all eaten of a poison at that festive board, the virulence of which far surpasses the reported effects of *aqua tophana*, or of the more tangible agents described in toxicological text-books. It was not a poison administered by design or negligence; it was a poison unknown to all concerned; and was eaten with the meat in which it was contained, and of which it formed a living constituent.

When the festival at Hettstädt had been finally determined upon, and the dinner had been ordered at the hotel, the keeper of the tavern arranged his bill-of-fare. The introduction of the third course, it was settled, should consist, as usual in those parts of the country, of *Rostewurst und Gemüse*. The *Rostewurst* was, therefore, ordered at the butcher's the necessary number of days beforehand, in order to allow of its being properly smoked. The butcher, on his part, went expressly to a neighoring proprietor, and bought one of two pigs from the steward, who had been commissioned with the transaction by his master. It appears, however, that the steward, unfortunately, sold the pig which the master had not intended to sell, as he did not deem it sufficiently fat or well-conditioned. Thus the wrong pig was sold, carried on a barrow to the butcher, killed and worked up into sausages. The sausages were duly smoked and delivered at the hotel. There they were fried and served to the guests at the dinner-table.

On the day after the festival, several persons who had participated in the dinner were attacked with irritation of the intestines, loss of appetite, great prostration and fever. The number of persons attacked rapidly increased, and great alarm was excited in the first instance by the apprehension of an impending epidemic of typhus fever or continued fever, with which the symptoms observed showed great similarity. But when, in some of the cases treated by the same physician, the features of the illness began to indicate at first acute peritonitis, then pneumonia of a circumscribed character, next paralysis of the intercostal muscles and the muscles in front of the neck, the hypothesis of septic fever, though sustained in other cases, had to be abandoned with respect to these particular cases. Some unknown poison was now assumed to be at the bottom of the outbreak; and an active inquiry into all the circumstances of the dinner was instituted. Every article of food and material was subjected to a most rigid examination, without any result in the first instance. But

when the symptoms in some of the cases invaded the muscles of the leg, particularly the calves of some of the sufferers, the description which Zenker had given of the fatal case of trichinous disease was remembered. The remnants of sausage and of pork employed in its manufacture were examined with the microscope, and found to be literally swarming with encapsuled trichinæ. From the suffering muscles of several of the victims small pieces were excised, and under the microscope found charged with embryonic trichinæ in all stages of development. It could not be doubted any longer, that as many of the one hundred and three as had partaken of *Rostewurst* had been infested with trichinous disease by eating of trichinous pork, the parasites of which had, at least in part, escaped the effects of smoking and frying.

This awful catastrophe awakened sympathy and fear throughout the whole of Germany. Most of the leading physicians were consulted in the interest of the sufferers, and some visited the neighborhood where most of the afflicted patients remained. But none could bring relief or cure. With an obstinacy unsurpassed by any other infectious or parasitic disease, trichiniasis carried its victims to the grave. Many anthelmintics were arrayed to destroy, if not the worms already in the flesh, at least those yet remaining in the intestinal canal. Picric acid was employed until its use seemed as dangerous as the disease; benzole, which had promised well in experiments upon animals, was tried but was unavailing. As case after case died off, and the dissection of each proved the parasites to have been quite unaffected by the agents employed, the conviction was impressed upon every mind that a man afflicted with flesh-worm is doomed to die the slow death of exhaustion from nervous irritation, fever, and loss of muscular power, in systems essential to existence.

But medical science had only just unravelled a mystery; and if it could not save the victims, it was determined at least, to turn the occasion to the next best account. The cases were, therefore, observed with care, and chronicled with skill. All the multifarious features of the parasitic disease were registered in such a manner, that there can hereafter be no difficulty in the diagnosis of this disorder. A valuable diagnostic feature was repeatedly observed—namely, the appearance of the flesh-worm under the thin mucous membrane on the lower side of the tongue. The natural history of trichina in man was found to be the same as that in animals.

All observations led to the conviction that the trichina encapsuled in the flesh is in the condition of puberty. Brought into the stomach, the calcareous capsule is digested with the flesh, and the trichina is set free. It probably feeds upon the walls of the intestines themselves; for the

irritation of the intestines begins before the bringing forth of young trichina has taken place. Copulation is immediately effected; and within a few hours, or a short portion of days, from sixty to eighty live embryos leave the female, and begin their own career of destruction.

This consists, in the first instance, in an attempt to pierce the walls of the intestinal canal. Great inflammation of the entire surface ensues, ending not rarely in death of the villous or mucous membrane, or in the formation of masses of pus on its surface. Sometimes there are bloody stools. But these severe symptoms only ensue when much trichinous meat has been eaten. When less has been consumed, pain and uneasiness in the abdomen are produced, accompanied, however, in all instances by wasting fever and prostration. The embryos actually pierce the intestines, and are found free in the effusion, sometimes serous, sometimes purulent, which is always poured out into the abdominal cavity. Thence they again proceed towards the periphery of the body, pierce the peritoneum, causing great irritation, and sometimes peritonitis, to the extent of gluing the intestines together to a coherent mass. They next proceed to the muscles nearest to the abdomen; arrived at the elementary muscular fibres, which, under the microscope, appear as long cylinders with many transverse striæ, they pierce the membranes, enter the fibres, eat and destroy their striated contents, consume a great part of the granular detritus, moving up and down in the fibres until grown to the size necessary for passing into the quiescent state. They then roll up in spiral or other irregular windings, the bags of the muscular fibres collapse, and only where the trichina lie, a calcareous matter is deposited, perhaps by the trichina themselves, which hardens into perfect capsules round the parasites. A muscular fibre may harbor one or several parasites; but every fibre invaded by a single parasite loses its character entirely, and becomes a bag of detritus from one end to the other.

If it be remembered that one ounce of meat filled with trichina may form the stock from which, in a few days, three millions of worms may be bred; and that these worms will destroy in the course of a few weeks not less than two millions of striated muscular fibres—an idea of the extent of destruction produced by these parasites can be formed. We are not in a position to say to what proportion of the fifty or sixty pounds of muscle required for the performances of the human body these two millions of elementary fibres actually amount. In the muscles nearest to the abdomen, the destruction is sometimes so complete that not a fibre free from parasites can be found. This amounts to complete paralysis. But death is not always produced by the paralysis; it is mostly the

result of paralysis, peritonitis, and irritative fever combined. No case is known in which trichiniasis, after having declared itself, became arrested. All persons affected have either died, or are in such a state of prostration that their death is very probable.

Most educated people in Germany have, in consequence of the Hettstädt tragedy, adopted the law of Moses, and avoid pork in any form. To some of the large pig-breeders in Westphalia, who keep as many as two thousand pigs the sinking of the price of pork has been a ruinous—at the least, a serious—loss. In the dining rooms of the hotels in the neighborhood of Hettstadt, notices are hung up announcing that pork will not be served in any form in these establishments. To counteract this panic, the farmers' club of the Hettstadt district gave a dinner, at which no other meat but pork was eaten. But it has had no appreciable effect. The raw ham and sausages of Germany are doomed to extinction. The smoked and fried sausages must necessarily be avoided.

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In the south of Germany, some people now say that the Hungarian pigs are most frequently affected with trichina. This rumor, like the famous pork dinner of the farmers' club, may, however, have been set up with the intention of quieting apprehension about the native pigs. We have already mentioned the accident which befell the crew of a merchant vessel. They shipped a pig at Valparaiso, and killed it a few days before their arrival at Hamburg. Most of the sailors ate of the pork in one form or another. Several were affected with trichina, and died. Of those whose fate could be inquired into, only one seems to have escaped parasites. Another outbreak in Saxony has carried away twelve persons. A fourth wholesale poisoning by trichina is just reported from Offenbach, the Birmingham of Hesse-Darmstadt. Of upwards of twenty persons infected, three had already died when our correspondent's letter left. Numerous sporadic cases of fever, and epidemics of inscrutable peculiarity, but referred to an anomalous type of fever, are now claimed by medical authors, and with much show of reason, to have been outbreaks of trichiniasis, or flesh-worm disease. Several German physicians experimentalized with a view of finding a cure for this terrible disorder. Professor Eckhardt at Giesen, we are told, has obtained permission to try the disease and supposed remedies upon a murderer under sentence of death. We have not been told whether his reward in case of success is to be a commutation of his capital sentence; but should hope this to be the case. The experiment, even if it should not have the romantic character indicated, will probably teach some curious details of the life of these parasites. Almost everywhere, the commonest rules of cleanli-

ness are disregarded in the rearing of pigs. Yet pigs are naturally clean animals, avoiding like dogs and cats, all contact with ordure. Though they burrow in th earth, and in summer wallow in the mud, they abhor the heaps of excrements mixed with straw in and upon which they are frequently kept. A due regard to cleanliness will prevent trichina in the pig. In wild boars, of which many are eaten in the country round the Hartz Mountains, trichina has never been found. Neither has it been met with in sheep, oxen, or horses. Beef is the safest of all descriptions of meat, as no parasites have ever been discovered in it. They have also never been found in the blood, brain, or heart, of those animals in whose striated muscles they love to reside.—*British Medical Journal.*

[Lately, the common ground-worm has been found to be infested by trichina, one of the probable sources of the infection of swine.]

TREATMENT OF DYSENTERY BY NITRATE OF SILVER.

Dr. Berger calls attention to the treatment of dysentery by nitrate of silver. His attention was directed to the employment of it by the ravages caused by dysentery among the soldiers in 1848–9 during the Italian war, in spite of the use of the most varied and best authorized means. His communication is founded on his treatment by this agent of ninety-nine cases in the Military Hospital at Traiso, only three of which proved fatal. In the mildest cases in which there is only hyperemia and superficial erosion of the mucus membrane of the intestinal canal, the fæces being mixed with spawn-like, translucent masses of slime, the tenesmus moderate, a regulated diet and mild therapeutical measures suffices for a cure. In cases of the next degree of severity, where there is inflammation of the mucus membrane, and commencing ulceration, a cure may be effected by mucilagous mixtures, and a clyster, with ten to fifteen drops of tincture of opium, every three or four hours, with warm poultices. Ipecacuanha, he considers, removes the gastro-billious symptoms which often accompanies dysentery, without exercising any influence upon the disease itself; of the operation of calomel and opium he has no experience. When the above simple method of treatment fails, and symptoms of advancing ulceration are present, recourse must be had at once to clysters of nitrate of silver. The internal exhibition of it, in pills or solution, as recommended by Bamberger, is of no use; but employed locally, no other means has so lasting and salutary an effect upon the disease. A clyster of nitrate of silver, grs. vi. to gr. viii. and even grs. x., to three ounces, with a few drops of tincture of opium, is to be given three or four times in the twenty-four hours. A mucilaginous vehicle weakens

the favorable cauterizing effect of the salt. Small doses as recommended by Gros—or clysters given at long intervals, are uncertain, and delay the cure. These means are to be continued—so long as stools appear—one to three days. Afterwards an emulsion of castor oil is necessary. The patient must be kept in bed, and his diet regulated.—*British Medico-Chirurgical Review, January*, 1864.

A CASE OF TRAUMATIC TETANUS TREATED BY ACONITE AND NICOTINE.

The following case occurred under the care of Mr. Cam, at the Hereford Infirmary:—

Thomas L——, aged 37, a gentleman's servant, on the 20th of Feb. last met with an accident from a thrashing-machine, which deprived him of the index, and portions of the middle and ring fingers of the left hand, the laceration extending about an inch into the dorsum and palm. The wound had been dressed by a Surgeon, and he was admitted into the Infirmary on February 22, when the sutures were removed and replaced by adhesive plaster. He was in his usual health, and the hand looked well.

On March 1, the tenth day after the injury, he complained of stiffness between the shoulders, and on the 3rd took to his bed. He was then flushed and perspiring, and troubled with dyspnœa. A dose of calomel and colocynth was administered, and a free evacuation of the bowels followed. On the evening of the next day (4th) the stiffness had extended to the jaw, and he had had some muscular twitches. Two grains of calomel and a quarter of a grain of opium were given every four hours during the night.

5th.—This morning the symptoms were much more marked, the teeth were clenched, the corners of the mouth retracted, giving to the countenance a peculiar smile; the cervical muscles rigid and prominent; lumbar and abdominal muscles hard. He had pain at the pit of the stomach extending to the back, and frequent but not severe opisthotonic spasm; deglutition not seriously impaired; the skin was bathed in perspiration; pupils contracted; pulse 120; respiration 34 per minute; mind calm, and free from extreme anxiety. Wine and beef-tea *ad libitum* were ordered, and half a grain of extract of cannabis indica given every three hours, the dose being increased to a grain hourly, and finally to two grains.

6th.—He had a bad night; the spasms continue, especially on the approach of sleep. Ordered eight minims of Fleming's tincture of acon-

ite immediately, to be followed by four minims every hour. 8 p.m.—The spasm and rigidity have somewhat diminished, the former affecting chiefly the muscles of the hip and thigh. He lies with the lower extremities semi-flexed; pulse 100—96; pupils natural. He takes food at intervals.

7th.—Has slept a little during the night; spasms unaltered; pulse 104; respiration 32. The dose of tincture of aconite increased to six minims hourly, and an aperient administered consisting of one drop of croton oil and ten grains of extract of colocynth, which acted freely. 9 p.m.—Rigidity much less; spasms in lower extremities frequent, but not very painful; slight opisthotonos; pulse and respiration unchanged; supuration in wound much diminished. He has felt some tingling of the fingers to-day for the first time.

8th.—A good night, with more sleep than heretofore; the spasms are weaker; pulse 84; surface warm and perspiring; pupils natural. At 5 p.m. the dose of tincture of aconite was increased to eight minims hourly. 6 p.m.—Pulse 100; respiration 32; the spasms are rather more violent; tingling of hands and feet continues.

9th, 1 a.m.—The spasms are stronger than they have been before, and appear to cause him intense pain. He cries loudly when they come on. At half-past twelve eight minims of the aconite were administered, and now ten additional minims—these large doses not having the effect of controlling or even weakening the violence of the attacks. At half-past one a drop of nicotine dissolved in spirits of wine and added to two tablespoonfuls of wine, was given. His pulse was then 120; respiration 32. In less than five minutes his eyes closed, and he became more tranquil, breathed more freely, and within twenty minutes fell into a sound sleep of one hour's duration. 2 a.m.—Pulse 108. 3 a.m.—Pulse, 92. He is able to put out his tongue. Sweating continues, but clammy, and devoid of snuff odor. 5 a.m.—He took a second drop of nicotine. 9 a.m.—Has had three or four hours' sleep, is refreshed, and complains but little of pain 2 p.m.—During the morning he had frequent slight spasms, but slept at intervals. Rigidity of upper and lower extremities, and masseters continues. Pulse, 100; pupils natural. Given one drop of nicotine. 4 p.m.—Nicotine repeated. 10 p.m.—Pulse 140; respiration 36—40. Has rambling delirium; the arms are curved; spasms continue, and affect the right arm more than the left.

10th 10 a.m.—Pulse 120. Abdomen covered with a pustular-looking eruption. Lower maxilla falls as he dozes; but he is unable to open his mouth. He died at 11 this morning after severe convulsion.

Remarks.—The above case appears to confirm the observations of Pro-

fessor Haughton, of Dublin, on the use of nicotine in tetanus. It can, scarcely, however, be said to have afforded a fair test of the value of that alkaloid, inasmuch as it was not employed until the ninth day from the commencement of the symptoms, and when the disease was in active progress. Its influence over the severe spasm and its capability, in some cases at least, of alleviating acute suffering and procuring sleep will, I conceive, place it in a high rank among those means by which this fatal disease is henceforth to be combated. It may not be unworthy of remark that the treatment with aconite was during the early period satisfactory; and that much of that peculiar resistance to the specific action of powerful agents which characterizes this disease was manifested during the exhibition of the latter remedy.—*Medical Times and Gazette.*

Discharge of a Portion of the Ileum per Anum.—Dr. Bare relates the case of a woman who, jumping from a fence, felt something give way in the abdomen, causing severe pain. When he saw her four hours afterwards, the pain, seated below and to the right of the umbilicus, had become excruciating, and the skin being cold and clammy, the pulse thready and 122, and the thirst incessant. Believing this to be an example of intussusception of the ileum, Dr. Bare studiously avoided all means calculated to increase peristaltic action, gave large doses of opium and morphia, with an occasional blue pill. Demulcents, with laudanum, were also injected. On the third day the bowels were evacuated by means of a more stimulating injection, and the abdomen being distended, a large blister was applied. On the fifth day, air passed through the intestines. On the seventh day, castor-oil and laudanum were given; and from the eight to the tenth days, excessive diarrhœa prevailed, requiring acetate of lead and opium. The patient's strength was kept up by injections of chicken-broth; and on the thirteenth day a portion of intestine, about thirteen inches long, was discharged. From this time the patient gradually recovered, and six months after only suffered from indigestible food as it passed the stricture.—*American Quarterly Journal.*

Syphilitic Disease of the Brain.—Recovery.—A woman aged 30 was lately admitted into the Lariboisière Hospital, with a well marked pustular syphilitic eruption on the arms. During several weeks she complained of very severe occipital headache, she had obstinate vomiting, in consequence of which, the iodide of potassium, which had been given her, produced no effect. The patient now began to grow feeble; she stumbled, walking became more and more difficult, and at last she was con-

fined to bed. While lying down, she had perfect voluntary power over both lower and upper limbs; there was therefore no ordinary paralysis, nor wasting palsy, but great muscular weakness. She had also double convergent squint, complicated with diplopia. The intellect and sensation, and the principal functions, remained intact. She had no fever nor cough; nutrition was interfered with by the vomiting. A syphilitic affection of the cerbellum was diagnosed. Mercurial treatment was employed, and in a week there was marked improvement. The pain in the head was less, and the vomiting ceased. The patient recovered her strength, and was soon able to sit up, and to stand; the squint also disappeared. At the end of six weeks she was dismissed, cured, and when seen some time afterward, remained well.—*Gaz des Hospitaux, Mars,* 1864.

MEDICAL NEWS.

On the 11th March last a physician in Paris was brought before the *Tribunal Correctionnel* charged with having revealed the secret disease of one of his patients; and by the judgment of the Court he was condemned to a year's imprisonment, and a fine of 500 francs, with costs. At the expiration of his sentence, he is to remain under the *surveillance* of the police for five years, and to pay the plaintiff 1000 francs for damages, or in default go to prison for another year.

During the past winter session, at New York, Boston and Philadelphia, the number of students in attendance was largely in excess of the previous winter.

The town Council of Liverpool, England, have adopted a bill enabling the Corporation to borrow £100,000 for the sanitary improvement of the town. The death rate has been very large there the last few years, owing to the overcrowding of that portion of the town occupied by the laboring classes.

A new cure for Pertussis.—Several children, suffering from whooping-cough at Calais, France, have been taken to the gas works of that town, and caused to inhale the fumes which are disengaged during the purification of gas by lime. The success is said to have been very remarkable; great relief following the first visit, and two or three visits sufficing to complete the cure.

Dr. Thomas Watson has been re-elected President of the Royal College of Physicians, London. Immediately after his election he presented the College with fifty volumes of medical works, chiefly American. He

had received them as a donation from Messrs. Blanchard & Lea, of Philadelphia. This firm had published Dr. Watson's lectures, without permission; and as they had profited by their publication, had sent, of their own accord, the volumes in question. Dr. Watson thought they would be more useful upon the shelves of the College than in his private library.

A very extraordinary trial for murder is going on in Paris. The person accused is a physician named La Pommerais, and the charge against him is the poisoning of Madame Pauw by digitalis, between September and November last year. The circumstances of the murder, as related in the official indictment, are that La Pommerais induced Madame Pauw to effect insurances upon her life in eight offices, to the amount of 500.000f. This being done, he prevailed upon her to assign all the policies to himself, and, in fact, to make over her entire property to him by will. He then suggested that she should pretend to be seriously ill, and make the insurance offices believe that she was on the point of death, in order that he might induce the companies to cancel the policies, on the terms of paying her a life annuity of 600 francs a year. The foolish woman assented to this arrangement, and in order to give better effect to the trick she proposed to play upon the doctors sent to see her by the insurance companies, she allowed La Pommerais to physic her. This he did so effectively, that Madame Pauw at last fell a victim to her own avarice and credulity, and died. Immediately after her death, La Pommerais began to use the deeds he had induced Madame Pauw to sign, and he applied for the 500,000f. for which her life had been insured. Suspicion, however, was by this time awakened, and he was arrested on the charge of having murdered Madame Pauw by administering to her doses of the subtle poison digitalis. This is the substance of the present indictment. There is also another charge against La Pommerais, accusing him of having poisoned his mother-in-law in 1861.

Trichinial Infection.—While removing a cancroid growth from the neck of a patient arrived from the country, Dr. Langenbeck remarked that the Platysma presented an unusual appearance. Microscopic examination, showed that it contained an immense number of dead trichinæ, contained in calcified capsules. Inquiry was made, as to the circumstances under which the immigration had probably occurred, and the following was the result: In 1845 a commission, composed of eight persons, went to a town in the district of Lawsitz, to inspect the schools. A collation composed of hams, sausages, roast veal, and white wine, was

served to the commission; only seven of the members partook of it, the eighth was absent at the time and only took a glass, of red wine at dessert. Three or four days after, the seven who had partaken of refreshment, were seized with intense diarrhœa, pain in the neck, and œdema of the face and extremities. In four the attack proved fatal, and the other three, including the person on whom M. Langenbeck, had operated, only recovered after a tedious illness.—*Edin. Medical Journal.*

Per Chloride of Iron and Collodion.—This combination is of great use as a hœmostatic in cases of cuts, leech bites, &c. One part of the crystallized perchloride of iron is to be dissolved in six parts of collodion; but this must be done very gradually, or the heat which is produced will cause the ebulition of the collodion. The mixture is a yellowish red, limpid fluid, which, when applied to the skin gives rise to a small yellow pellicle possessed of great elasticity.—*Reine Med., Nov. 15th,* 1863.

In April an inquest was held in Liverpool upon a man named Lingard, who died from taking five grains of strychnia, instead of five grains of James' powder, which had been prescribed for him. The mistake was made by a druggist's assistant, the two medicines being in similar bottles, and near each other. The Jury returned a verdict of culpable negligence against the assistant.

The British army Medical Department are advertising for doctors for "temporary service." Pay to be at the rate of ten shillings per day, and allowances equal to those of a staff Assistant Surgeon. No one over forty years of age need apply. There is something wrong in the management of this department, which in time of peace, renders such a call necessary.

Five resident Physicians of Bellevue Hospital, New York, have lately died from typhus fever, contracted while attending to their professional duties, and three others are now dangerously ill with the same disease.

It has been decided that the King and Queen's College of Physicians, Ireland, has no right to grant the degree or title of Doctor of Medicine.

Canada Medical Journal.

MONTREAL, JULY, 1864.

In assuming the task of the editorial conduct of a medical periodical (to be, we tru t, the organ and representative of the medical profession in Canada), we are induced to hope that our attempt will be rightly appreciated, and that our professional brethren will extend to us that assistance,—not alone pecuniary,—without which this journal cannot long continue. We are all bound by a common tie, that of advancing the best interests of our noble calling, and as a portion of a great fraternity, to emulate those who have devoted their time and energies in advancing the science of medicine and surgery. Past experience has shewn a decided indifference on the part of members of our profession to publish the results of their observations: is it because there are few who take the trouble to observe? No! Is it because there exists a sense of unworthy rivalry peculiar to medical men? Again we would say, no! Why, then, what is the reason, that here in this extended country, numbering its physicians by thousands, there should exist so marked a diffidence, so decided a disinclination, to communicate to one another the experience gained by bedside observation. It becomes a duty incumbent on all, and is for the general good: it is *the talent, delivered for a season to our keeping*, which should not be wrapt in a napkin and buried in the earth, but be ma le use of, that we may be prepared to yield to him who giveth, his own with usury. To the surgeon we say, that as a true surgeon he should publish the results of all his important cases, be they successful, or the reverse. In a statistical point, and in view of the justifiableness of any given surgical operation, the result of each case becomes but a continuation of the history of the whole. The same may be said of medical cases, and of obstetric observation; but inasmuch as these latter are of more frequent occurrence,—some of epidemic character in some localities, and at certain seasons,—we suggest the propriety of keeping accurate notes of any given disease, with any peculiarity or complication, and submit them, with any peculiar system of treatment which may have been specially beneficial. We would remind our readers that in Canada

there are six medical schools, each enjoying the advantage of large hospitals, and dispensaries. Assuredly we do not expect too much, in looking to the officers of these institutions for help, in the way of original communications of worth and general benefit. We do not depend alone upon this source: we look forward with confidence to the intelligent practitioners throughout the country,—and their name is legion,—to give the results of their observations. New and peculiar phases of disease are of daily occurrence: many there are capable (aye, and we feel willing,) to give to the world their bed-side experience. It is to be hoped that all will become identified in the good work; for, as we said before, this journal can alone be sustained by the united efforts of all. Let every man feel that he is personally interested in its success. We devote ourselves to the task: we are, gentlemen, your servants, working for the common weal: will you assist us, not alone by your subscription,—that of course is a necessity, without it the printer cannot live,—but what we regard of equal importance, a fair and meritorious contribution of bedside observation. Many we believe there are who, possessing the ability, will be stimulated to respond freely and heartily to our call for aid, and give to the Canada Medical Journal a permanent existence. To you we leave the issue.

THE CAUSE OF THE INNOCENTS.

We resume the publication of tables of mortality compiled from the returns of interments in the City Cemeteries, and however unreliable and defective they may be, they at least serve to show the actual death rate. On a former occasion we drew attention to the necessity of enforcing a uniform system of enregistration, pointing out the defects which existed, and suggesting as a type to be copied with advantage, the laws and ordinances relative to the preservation of the public health in the city of New York. It is to be regretted that so little notice has been taken of this important subject. We cannot too urgently call upon our city authorities to mark the increasing mortality, especially among infants. A careful search into the causes which lead to this waste of human life, and the best means of applying the remedy becomes an imperative duty on our health committee What has become of the notices of motion which have been laid on the table of our City Council to appoint a medical commission, with the avowed object of investigating into these causes, and of giving a report on the best means of removing them—have they fallen through, or is the suggestion to form a large public slaughter house, deemed sufficient? What is the health committee doing? We ask for information. We have heard it rumored that

nothing is to be done, until the present improved system of drainage, (which is far from perfection,) has been tested. Is this not trifling of the very worst nature, where such high interests as the lives of our fellow beings are at stake? It is not necessary that we should quote the results of commissions for like purposes in all the large cities of other countries, the annals are before the world, and the beneficial results form the subject of comment by all writers on sanatory reform. Will not our city fathers awake from their lethargy, and follow in the wise footsteps of similarly constituted bodies of cities of any size among civilized nations in the known world?

It will be observed that we commence with the months of January and February of the current year, and that there may be no loss of reading matter to subscribers, the publishers have added four extra pages. The mortality tables are accompanied by the Meteorological Observations of Dr. Smallwood, kindly furnished by him, in which are carefully noted the amount of ozone observed in the atmosphere, a substance said to have much connection with the occurrence of epidemic disease. This subject is at present in its infancy, many conflicting opinions existing. We trust that the facts here recorded may induce observers in other parts of our country to establish similar comparisons.

McGILL UNIVERSITY.

The winter Session of the University of McGill College closed on the 2nd of April last, the number of students in attendance being 177. On the 5th of May the annual convention for conferring degrees in Medicine and Law, was held in the William Molson Hall of the University. The weather was unpropitious, yet notwithstanding which, there was a large gathering of the *elite* of Montreal. Dr. G. W. Campbell, Dean of the Faculty, announced that the prizes given by the Medical Faculty had been awarded as follows:

William Wood Squire, M.A., for the best thesis; Daniel Howard Harrison, for the best final examination; Kenneth Reid, for the best primary examination; Messrs. Bullen, Reid, Kempt, and Church's theses, were considered worthy of competing for the prize; William Wood Squire, M.A., Herbert Tew, Professors' prizes in clinical medicine; W. H. Fraser, Professor's prize in botany; W. H. Fraser, Professor's prize in zoology.

The graduating class were then severally presented, and received the degree of Doctor of Medicine, and Master in Surgery. The following are their names, places of residence, and subject of their theses:

William Wood Squire, M.A., Montreal, C. E., Pathology and Treatment of some forms of Partia lParalysis; Griffith Evans, Montreal, C. E., Pathogenesis and Histology of Tuberculosis; James Patterson, Almonte, C. W., Fractures of the Femur; David Howard, Harrison, St. Marys, C. W., Bronchitis; Herbert S. Tew, Montreal, C. E., Cod Liver Oil; Chas. F. Bullen, Delaware, C. W., Clinical thesis, on cases of continued Fever, as observed in the Montreal General Hospital; Richard A. Kennedy, Montreal, C. E., Vesico-Vaginal Fistula; David Robertson, Milton, C. W., Ovarian Cystic Tumours; George Dice, Milton, C. W., Anæmia; Alex. A. Ferguson, Cornwall, C. W., Morbus Addisoni; Horace P. Redner, Belleville, C. W., Enteric Fever, as observed in the neighborhood of Belleville; John Dodd, Port Hope, C. W., Acute Rheumatism; William Kempt, Lindsay, C. W., Diphtheria; Peter A. McDougall, Aylmer, C. E., Traumatic Tetanus; Marcel Richard, St. Jaques, C. E., Smallpox; Charlemagne Dubuc, Montreal, C. E., Pathologie General des Secretions; John D. McCord, Montreal, C. E., Hydrocyanic Acid; Alex. R. Pinet, St. Laurent, C. E., de l'Hysteria; Mills Kemble Church, Merrickville, C. W., Scarlatina; Edward B. Gibson, Ottawa, C. W., Digitalis Purpurea; Kenneth Reid, Huntingdon, C. E., Chloroform; Montrose A. Patten, M.D., St. Louis, Missouri, U. S., The Ophthalmoscope and its Revelations; Sam. Pratt, Woodfull, Asst. Surgeon, Royal Artillery, Toronto, C. W., Paralysis.

The number of students who passed the primary examination, which includes anatomy, chemistry, materia medica, institutes of medicine, botany and zoology, was 31, as follows:

Messrs. John W. Blight, Quebec, C. E.; Kenneth Reid, Huntingdon, C. E; George C. Butler, Brystow, C. W.; John B. Christie, Oxford Mills, C. W.; Edward B. Gibson, Ottawa, C. W.; Edward B. Hurd, Eaton, C. E.; Henry L. Vercoe, Fingall, C. W.; Prosper Bender, Quebec, C. E.; Mills K, Church, Merrickville, C. W.; James Fitzgerald, Fenelon Falls, C. W.; Napoleon Mongenais, Rigaud, C. E.; James T. Halliday, Bowmanville, C. W.; Alfred Beaudet. Coteau du Lac, C. E.; Malcolm R. Meigs, Bedford, C. E.; Egerton R. Switzer, Earnestown, C. W.; John C. Jones, Prescott, C. W.; Stewart Creighton, Prescott, C. W.; Silas J. Bower, Kemptville, C. W.; Alex. R. Pinet, St. Laurent, C. E.; John W. McVean, Montague, C. W.; Chas. E. Graham, Ottawa, C. W.; Timothy Biglow, Whitby, C W.; Abraham C. Godfrey, Chicago, U. S.; Walter J. McInnes, Victoria, C. W.; Alfred Codd, Ottawa, C. W.; Richard T. Langrell, Ottawa, C. W.; Henry C. Rugg, Compton, C. E.; Hannibal W. Wood, Durham, C. E.; T. A. Dufort, St. Mark, C. E.; John Cassidy, Goderich, C. W.; George Sherk Walpole, C. W.

Prosper Bender; James A. Temple, and John R. Richardson, all of Quebec, C. E., passed their examinations for graduation, but not being of age, could not receive their degrees till next convocation.

Professor Scott, M.D., then addressed the graduates. The Professor observed that as they were about entering on the duties of their calling, he would give them a few parting words, the occasion being one of mingled pleasure and regret. After discussing the difficulties of a physician's career, and the motives which ought to actuate him, he observed they had all heard with delight of the liberal donation to the Faculty of Arts of three additional gold medals. He was, however, astonished that the Faculty of Medicine, which had been thirty-nine years in existence, and was the only one which was self-supporting, had been overlooked. He had no doubt, however, from the known liberality of the residents of Montreal, that at the next Convocation their esteemed Dean would have the pleasure of announcing the presentation of a gold medal to the Faculty of Medicine. He recommended that it should be founded in memory of Prof. Holmes, than whom no man lived more conscientiously, or died more beloved. He referred the matter to the ladies, who would thus furnish a strong incentive to professional excellence to students in the profession.

The valedictory address on behalf of the graduating class was read by Dr. Squire. He dwelt, in an eloquent manner, upon the fact of the members of the class meeting together for the last time, and that it behoved them to scan the future and recall the memories of the past. He then alluded to the motives which ought to actuate a student of medicine, as well as upon the duties of a true physician. After discussing various other topics in an interesting manner, he concluded with acknowledging the obligations of the students to their Professors.

COLLEGE OF PHYSICIANS AND SURGEONS, C.E.

The semi-annual meeting of the college for the purpose of examination was held on the 10th May. The following gentlemen having presented their diploma from McGill University, received the license of the college:—Messrs. R. A. Kennedy, M.D., David H. Hamson, M.D., Alex. Pinet, M.D., Charlemagne Dubuc, M.D., Marcel Richard, M.D., Charles H. Church, M.D., Angus McDonald, M.D., William W. Squire, M.D., Herbert S. Tew, M.D., Keneth R. Reid, M.D., J. S. Mason, M.D.

The following, after undergoing the usual examination on the various branches of medicine and surgery, were licensed to practice:—Horan French, Adelard Bazin, A. L. A. Laferrière, Fr. LaBelle, O. Dagenais, O. Bonin, Elijah Rowell, James Townley.

The following gentlemen were licensed as druggists and apothecaries:—Richard Tate, A. R. Davidson.

The following were admitted to the study of medicine after having passed a preliminary examination on the classics and general literature:—Henri Chaquette, Mederic Dorval, Henri Beliveau, Joseph S. Archambault, Joseph N. Dugaray, Rounald Fisit, Désiré Drainville, Edouard Badeaux, Amable Laferrière, Etienne Valcourt, Benj. Vigneau, Lectance Brodeur, Siméon Longtin, Isaac Gingras, Pierre Valois, Damase Olivier, Constant Henotte, Norman A. Smith, Hector Gaboury, J. Demers, Isaïe Sylvestre, Adolphe Garneau, Solfrid Larue.

And for the study of pharmacy:—Jules Robitaille, Jos. Levy.

We hear that the secretary received positive instructions to institute immediate legal proceedings against all unlicensed practitioners, a step much needed, as the city appears to be crowded with quacks.

McGill College Graduates Abroad.—We learn with great pleasure from our London cotemporaries, that Dr. Alexander Grant, of Ottawa, a graduate of McGill College of the class of 1854, has recently successfully passed the examinations, necessary for the following diplomas:—Licentiate Royal College of Surgeons, Edinburgh; Member Royal College of Physicians, London; Member Royal College of Surgeons, London. Dr. Blanchet, of Quebec, another graduate of McGill College, of the class 1863, also successfully passed his examination in January last, and was admitted a Member of the Royal College of Surgeons, London. On the 16th of March he underwent a still further examination before the same body, and received his diploma as a Licentiate in Midwifery.

We send the first number of the *Canada Medical Journal* to every medical man whose address we have been able to obtain. We appeal to all who receive it, to aid us in the effort we are now making to establish a journal to be the organ of the profession generally. The amount of support which has already been promised by those who have heard of our intention, is very encouraging. We hope to deserve it by presenting a journal filled with original and selected matter of practical value to the physician and surgeon. Communications and books for review are to be addressed to the editors; business letters to be directed to the publishers. All communications must be prepaid.

Obituary.—We regret to have to announce the death of Dr. George M. Douglass, who for nearly twenty-eight years was Medical Superintendent of the Grosse Isle Quarantine Station. This melancholy event took place at Isle aux Noix, on the 1st of June.

There are a number of McGill College graduates serving as Surgeons in the Federal Army.

The number of children vaccinated, so far this year, by the Public Vaccinators of Montreal, is largely in excess of any year since their appointment.

It is in contemplation to build a detached building on the property of the Montreal General Hospital, to be used for Fever and Small-Pox cases.

Physicians in the country are informed that fresh Vaccine Lymph can always be had by directing to Dr. Francis W. Campbell, Montreal. Scabs $1 each.

The number of medical students in attendance during the past session at the Montreal School of Medicine was fifty-seven.

The Medical Council of Great Britain have decided to admit reporters to their meetings.

A peculiar skin disease was prevalent this spring in London. In some cases the eruption resembled roseola, in others lichen urticatus. The symptoms are red patches, especially on the face and extremities, mixed with pimples, itching and tingling, some headache, but no sore throat, and no catarrhal symptoms. The Medical *Times* says that many experienced practitioners have been puzzled to give a name off-hand to the eruption.

A little girl, twelve years of age of a very excitable disposition, living at Havre, having been scolded by her parents, went and purchased some vitriol and drank it off. She endured great suffering, but died in six hours.

There has been no examination for the Indian Medical Service for three years.

The British Pharmacopœia is being severely criticised.

Dr. T. K. Chambers of St. Mary's Hospital, London, has had his leg amputated by Mr. Paget. It appears that he was suffering from poplitual aneurism for exactly ten days; on the 11th day it burst, and in spite of compression, kept upon the artery, by a relay of Medical students, the leg became filled with extravasated blood; it was amputated at six p.m. the same day.

MORTALITY OF THE CITY OF MONTREAL IN JANUARY 1864.

Compiled, from the Cemetery Returns, by G. E. Fenwick, M.D.

Mount Royal Cemetery.

Disease.	Male.	Female.	Total.	Still-born.	Under 2 years.	From 2 to 10.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	From 90 to 100.	Over 100 years.	Centre Ward.	West Ward.	East Ward.	St. Antoine.	St. Ann.	St. Lawrence.	St. Louis.	St. James.	St. Mary.	Not of Montreal	Native Born.	Foreign.
Still-born	2	2	4	4															1	3					1	4	
Infantile Debility	2	1	3		3																1		1			3	
Senile Debility		2	2										2								1			1		2	2
Small Pox																											
Measles	1		1		1														1						1	1	
Scarlatina	2	2	4			4																			1	2	2
Fever	1	1	2		1														1	2	2	1				4	4
Inflammation of Brain	0	2	2		0					1		1										1			1	2	
Apoplexy	2		2				1		1																	1	
Paralysis																											
Croup	1		1			1													1							1	
Hooping Cough	1		1		1																					1	
Inflammation of Lungs	6	1	3		4				1	1		1							3	2	2					4	3
Consumption	6	2	8		1			2		1		1							4	2	1		1			3	5
Disease of Heart	1		1						1																	1	1
Dentition	1	1	2		2															1	1					1	1
Inflam. of Bowels	2	1	3		1					1		1							1	1						1	2
Disease of Liver																							1				1
Inflam. of Uterus		1	1						1															1		1	
Childbirth		1	1							1															1	1	
Disease of Knee Joint		1	1						1																	1	
Cancer	1		1						1												1					1	
Killed	1	1	2		1		1															1	1			1	1
Total	36	18	54	4	21		2	2	9	5		4	2					3	14	16	9	4	4	2	2	28	26

Roman Catholic Cemetery.

Disease.	Male.	Female.	Total.	Still-born.	Under 2 years.	2 to 10 years.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	From 90 to 100.	Over 100 years.	Centre Ward.	West Ward.	East Ward.	St. Antoine.	St. Ann.	St. Lawrence.	St. Louis.	St. James.	St. Mary.	Sœurs Grises.	Not of Montreal	Native Born.	Foreign.
Still-born	4	5	9	9															1	2	1	1	1	2		1	9	3
Senile Debility	3	0	3										2	1					1	1							3	3
Infant. Debility	66	52	118		118												1		15	12	3	15	10	11	47	4	104	14
Small Pox	6	4	10		3	7																2	6				8	2
Measles	1	4	5		1	4													1	1		1	1				5	0
Scarlet Fever	27	31	58		8	50													1	12	4	4	5	16	12		49	9
Fever	2	8	10		3			4	1		2										1	2	3	1			9	1
Inflam. Brain	2	2	4		1	3											1				2		1			1	3	1
Delirium Trem		1	1					1														1		1			1	1
Apoplexy	2		2						1		1									1	1						2	
Paralysis		2	2									1	1													2		
Croup	11	3	14		14														4	1				4	1	12	14	
Hoop'g Cough	3	2	5		3	2													1	1		1	2				4	1
Inflam. Lungs	8	2	10			4					2	2								2	2	3	1				8	2
Consumption	5	5	10				3	1	3	2	1									1	4		2	2	1		6	4
Disease Heart		1	1					1																		1	1	
Dentition	5	6	11		11					1									1	1	1		1	2	4	1	10	1
Inflam. Bowels		1	1																			1					1	
Disease Liver		1	1						1											1							1	
Dropsy	5	4	9							1	2	3		1						2	4		2			1	8	1
Childbirth		1	1					1														1					1	
Rheumatism		2	2						2											1	1						2	
Cancer		3	3						2	1										1	2						3	
Abscess	1	1	2			1						1							1							1	2	
Accidental	2		2			1						1								1	1						2	
Total	151	149	300	9	145	89	3	8	10	8	9	10	3	5	1		2		2	36	34	35	41	46	35	47	22	257	43

MORTALITY OF THE CITY OF MONTREAL IN FEBRUARY 1864.

Compiled, from the Cemetery Returns, by G. E. Fenwick, M.D.

Mount Royal Cemetery.

Disease.	Male.	Female.	Total.	Still-born.	Under 2 years.	From 2 to 10.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	From 90 to 100.	Over 100 years.	Centre Ward.	West Ward.	East Ward.	St. Antoine.	St. Ann.	St. Lawrence.	St. Louis.	St. James.	St. Mary.	Not of Montreal	Native Born.	Foreign.
Still-born	2	2	4	4																1	1	1				1	4	
Senile Debility	2	2	4										3	1								1	2			1	4	4
Infantile Debility	3	1	4		4														1	1		1	1				4	
Small Pox	5		5		1			2	2											1		1	3			2	3	2
Scarlet Fever	6	7	13		4	9														4	3		4	1		1	9	4
Fever	1		1		1																	1					1	
Inflammation of Brain		4	4		3	1														2						2	4	
Apoplexy		2	2					1		1										1	1							2
Paralysis																												
Croup																												
Hooping Cough	1	1	2		2													1				1					2	
Diphtheria	1		1		1																		1				1	
Inflammation of Lungs	5	3	8		5	2					1								1	2	2		2	1			7	1
Consumption	4	2	6				1	2	2	1							1					1	2			2	3	3
Disease of Heart	1		1						1											1								1
Dentition																												
Inflam. of Bowels	1	1	2		1			1													2					1	1	
Diarrhœa																												
Dropsy	1	1	2							1				1						1						1		2
Erysipelas		1	1								1													1				1
Charbon																												
Cancer		1	1							1																1		1
Childbirth		1	1							1										1								1
Accidental																												
Total	33	29	62	4	22	12	1	6	6	4	1	1	3	2			1	1	2	15	9	7	15	2	1	9	39	23

Roman Catholic Cemetery.

Disease.	Male.	Female.	Total.	Still-born.	Under 2 years.	From 2 to 10.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	From 90 to 100.	Over 100 years.	Centre Ward.	West Ward.	East Ward.	St. Antoine.	St. Ann.	St. Lawrence.	St. Louis.	St. James.	St. Mary.	Sœurs Grises.	Not of Montreal	Native Born.	Foreign.
Still-born	4	4	8	8													1			1	1		1	1	2		1	8	
Senile Debility	2	3	5									1	3	1							2				1			5	
Infant. Debility	46	30	76		76												1		1	10	7	4	2	7	9	30	5	67	9
Small Pox	4	8	12		6	5	1													2	2	1	6		1			12	
Scarlet Fever	52	59	111		26	81	4										2			26	18	6	9	19	20		11	82	29
Fever	1	2	3				1			1	1													2	1			3	
Inflam. Brain	3	1	4		1	1		1		1											1	1	2					4	
Apoplexy	4	2	6								5	1								1	4		1					4	2
Paralysis	2	2	4								1	1	2							1		2				1		4	
Croup	8	1	9		4	5														3		1	1	1		3		8	1
Hoop'g Cough																													
Inflam. Lungs	5	2	7				1	1		2	2	1								1	2	1	1	1		1	4	3
Consumption	10	6	16			2	1	5	2	5	1									2	1	3	5	3	2		14	2
Disease Heart																												
Asthma																												
Dentition	1	3	4		4															1	1			1	1		4	
Inflam. Bowels																												
Diseaae Liver	2		2			1		1									1								1		2	
Dropsy	1	5	6						1		4	1								1	1	1	1		1	1	4	2
Erysipelas	1	1	2				1	1													1		1				2	
Childbirth		8	8				4	2	2												1		2	3	1	1	4	4
Abscess	1	1	2					1															1		1		2	
Cancer		2	2				1				1		1				1				1						2	
After Surg. Op.		1	1			1														1							1	
Accidental																												
	4		4		1	1			1		1										2		1	1			1	3
Total	151	141	292	8	118	97	9	13	6	13	11	9	7	1			6		1	50	44	23	33	40	40	31	24	237	55

ABSTRACT OF METEOROLOGICAL OBSERVATIONS,

Taken at the Montreal Observatory, Latitude 45° 31′ N. Longitude 4h. 54m. 11s. W. of Greenwich. Height above level of the Sea 182 feet. For the month of January 1864.

BY CHARLES SMALLWOOD, M.D., LL.D.

Day of Month.	Reading of the Barometer, corrected, and reduced to 32° F.			Reading of the Thermometer.			Mean Tension of Vapor.	Mean Humidity of the Atmosphere.	General direction of Wind.	Horizontal movement in 24 hours in miles.	Mean extent of Clouds in 10ths.	Depth of Rain in inches.	Depth of Snow in inches.	Ozone in 10ths.	Weather, &c.	Remarks for the Month.
	Highest	Lowest.	Mean.	Max.	Min.	Mean										
	Inches.	Inches.	Inches.													
1	29.133	29.414	29.242	35.0	13.4	27.2	.130	.898	S W	87.82	6.3	Inapp	....	2.6	Rain.	
2	.900	.636	.766	8.0	-9.1	0.5	.044	.843	W	440.40	2.0	Inapp	....	1.3	Rain.	Barometer.... Highest, the 30th day, 30.314 inches. Lowest, the 19th day, 29.211 " Monthly Mean, 29.937 " Monthly Range, 1.103 "
3	.898	.859	.872	18.9	-2.0	11.7	.079	.846	S W	465.90	1.3	....	Inapp	2.0	Snow.	
4	30.100	.888	30.019	19.4	0.0	10 6	.076	.846	S W	200.00	1.6	....	....	1.6	Aurora Bor.	
5	29.834	.700	29.772	10.0	-2.0	6.7	.067	.871	N E	34.40	6.6	....	2.20	2.6	Snow.	Thermometer Highest, the 25th day, 47°1 Lowest, the 7th day, -16°9. Monthly Mean, 21°52. Monthly Range. 64°0.
6	30.149	.893	30 074	6.2	0 0	5.4	.057	.895	S W	72.10	6.3	....	Inapp	2.0	Snow.	
7	.330	30.110	.237	9.6	-16.9	-0.8	.044	.863	W	57.66	2.6	....	....	1.3		
8	29.800	29.790	29.844	24.2	5.0	15.7	.192	.883	S W	24.70	10.0	....	....	2.6		
9	.760	.541	.640	23.7	11.4	17.5	.100	.844	S W	56.52	6.6	....	Inapp	3.0	Snow.	Greatest intensity of the Sun's rays, 64°7.
10	.614	.600	.605	25.3	18.9	23.2	.127	.877	S W	299.44	10.0	....	....	2.6		Lowest point of Terrestrial radiation, -18°4.
11	.604	.499	.554	27.1	18.1	23.2	.146	.889	S W	104.06	6.6	....	1 20	2.6	Snow.	Mean of Humidity, ·857.
12	.648	.462	.559	29.6	16.4	24.4	.137	.902	N E	60.90	10 0	....	....	3.0		Rain fell on 5 days amounting to 0.100 inches.
13	.600	.433	.511	37.8	29°4	34°1	.205	.944	S W	77.30	10.0	....	....	3.0		Snow fell on 16 days amounting to 32·85 inches.
14	.900	.681	.801	34.9	23.2	27·6	.152	.869	S W	34.50	4.0	....	....	6.6		Most prevalent wind, S. W.
15	.709	.572	.627	36.6	13.1	26.6	.147	.889	N E	96.50	10.0	....	3.20	4.6	Snow.	Least prevalent wind, W.
16	30.098	.837	.977	25.2	4.0	15.4	.086	.837	W	130.57	4.0	....	0.20	1.3	Snow.	Most windy day the 3rd day, mean miles per hour, 20.24.
17	.040	.971	30.037	32.2	21.0	28.3	.165	.920	S W	54.00	4.6	....	....	2.6		Least windy day the 8th day, mean miles per hour, 1.02.
18	29.998	.962	29.975	37.8	27.4	34.4	.188	.912	S W	202.80	10.0	....	3.10	4.0	Snow.	
19	.879	.211	.520	26.7	24.0	25.9	.151	.936	N E	38.20	10.0	....	4.10	5.0	Snow.	
20	30.094	.519	.791	28.0	18.1	22.1	.119	.849	W	239.12	9.3	....	2.05	2.6	Snow.	Aurora Borealis visible 1 night.
21	.255	30.200	30.234	32.2	3.8	16.6	.105	.860	W	174.38	0.0	....	....	2.3		Zodiacal light, bright.
22	29.875	29.855	29.864	34.1	17.4	28.8	.169	.929	S W	45.19	6.6	Inapp	Inapp	2.6	Snow. Rain.	Imperfect Solar Halo, 20th day.
23	.845	.525	.723	35.2	21.2	30.9	.178	.919	W S W	124.10	7.6	Inapp	1.10	3.3	Snow.	
24	.482	.298	.383	40.1	30.1	38.7	.231	.924	S W	28.14	10.0	0.100	....	4.6	Rain.	
25	.533	.329	.424	47.1	30.1	36.8	.217	.902	W	58.13	6.6	....	....	2.6		
26	.731	.325	.602	38.7	17.3	27.7	.153	.867	N E	112.72	3.3	....	5.60	3.3	Snow.	
27	.877	.568	.728	28.1	15.0	23.6	.131	.882	N E	146.04	10.0	....	Inapp	3.0	Snow.	
28	.924	.829	.904	42.0	22.1	33.3	.180	.833	S W	91.68	10.0	....	....	3.0		
29	30.300	30.177	30.253	25.1	15.8	19.8	.198	.794	N E	115.48	7.0	....	....	2.6		
30	.314	.150	.221	19.0	11.5	16.3	.091	.811	N E	146.70	10.0	....	8.19	4.0	Snow.	
31	.234	.148	.247	24.1	18.9	20.2	.106	.820	N E	243.30	6·6	....	2.00	2.6	Snow.	

ABSTRACT OF METEOROLOGICAL OBSERVATIONS,

Taken at the Montreal Observatory, Latitude 45° 31′ N. Longitude 4h. 54m. 11s. W. of Greenwich. Height above the level of the Sea 182 feet. For the month of February, 1864.

BY CHARLES SMALLWOOD, M.D., LL.D.

Day of Month.	Reading of the Barometer, corrected, and reduced to 32° F.			Reading of Thermometer.			Mean Tension of Vapor.	Mean Humidity of the Atmosphere.	General direction of Wind.	Horizontal movement in 24 hours in miles.	Mean extent of Clouds in 10ths.	Depth of Rain in inches.	Depth of Snow in inches.	Ozone in 10ths.	Weather, &c.
	Highest	Lowest.	Mean.	Max.	Min.	Mean									
	Inches.	Inches.	Inches.												
1	29.986	29.643	29.809	26.1	2.5	24.2	.133	.893	S W	454.00	10.0	....	13.6	5.0	Snow.
2	.650	.450	.607	39.8	29.0	34.7	.199	.911	S W	423.60	10.0	Inapp	0.3	5.0	Snow.
3	.511	.424	.472	40.0	29.2	32.3	.178	.832	NE by E	23.80	10.0	Inapp	0.50	4.0	Rain—Snow.
4	.581	.495	.525	38.4	20.4	30.7	.165	.883	NE by E	46.36	8.0	Inapp	Inapp	5.0	Rain—Snow.
5	.632	.431	.535	36.3	4.2	33.8	.186	.882	S W	102.97	10.0	0.30	Inapp	4.3	Rain—Snow.
6	.690	.673	.681	37.2	25.2	33 1	.175	.894	W S W	37.77	9.3	....	0.30	2.0	Snow.
7	.571	.430	.477	35.4	23.0	32.2	.176	.887	S W	300.50	10.0	....	....	4.0	
8	.472	.201	.318	43.2	26.0	34.6	.169	.854	S W	588.00	6.6	....	0.40	3.3	Snow.
9	.816	.604	.739	27.0	7.4	16.6	.096	.847	W	175.59	1.3	....	0.40	2.0	Snow.
10	30.155	.924	30.028	15 3	-8.9	3.0	.055	.844	N W	112.20	1.3	....	....	1.0	
11	.146	.570	29.886	22.0	-4.7	12.2	.037	.851	S W	221.41	7.6	....	1.00	3.3	Snow.
12	29.581	.478	.522	41.1	18.4	28.6	.162	.879	W	190.99	4.0	....	2.40	3.6	Snow.
13	.489	.354	.414	38.8	25.1	33.4	.184	.877	S W	154.37	10.0	....	Inapp	3.0	Snow.
14	.728	.376	.501	27.9	14.0	22.0	.132	.885	N E	195.24	6.6	....	....	3.6	
15	30.010	.550	.823	7.1	-10.1	0.5	.065	.899	N	145.24	4.6	....	5.25	2.6	Snow.
16	29.262	.078	.154	20.0	6.8	14.2	.089	.884	N E	81.56	8.6	....	4.10	2.6	Snow.
17	.901	.324	.377	-6.3	-19.4	-12.5	.033	.824	W	128.50	5.3	....	0.50	2.0	Snow.
18	30.221	30.161	30.194	13.9	-20.4	-3.1	.042	.809	W S W	168.96	6.0	....	....	2.0	
19	.256	.025	.161	22.0	-12.0	8.1	.078	.824	W by S	73.43	2.6	....	....	2.6	
20	29.971	29.891	29.947	37.3	10.0	24.4	.138	.876	W by S	156.60	6.0	....	Inapp	2.6	Snow.
21	.900	.898	.900	37.4	29.2	33.1	.178	.862	W by S	108.00	8.6	....	....	2.3	
22	.861	.459	.699	40.8	29.2	36.8	.207	.880	S W	152.91	10.0	Inapp	....	3.6	Rain.
23	.600	.472	.525	48.9	33.1	41.3	.236	.858	W S W	277.96	6.0	0.380	....	3.3	Rain.
24	.500	.344	.432	58.2	34.6	45.5	.291	.874	S W	100.28	8.0	....	....	3.3	
25	.781	.626	.693	42.2	28.4	32.6	.174	.845	NE by E	66.79	3.6	....	....	2.3	
26	.762	.711	.748	35.1	14.5	28.3	.151	.847	N N W	207.39	2.0	....	....	2.3	
27	.882	.863	.873	42.3	11.2	28.7	.163	.860	W	125.47	0.0	....	....	2.3	
28	.642	.599	.624	38.9	33.4	37.1	.196	.809	S W	234.33	10.0	....	....	2.0	
29	.998	.599	.826	40.2	26.4	31.5	.167	.897	S W	95.32	3.3	0.110	....	2.6	
														2.6	Rain.

Remarks for the Month.

Barometer.... Highest, the 19th day, 30.256 inches.
Lowest, the 16th day, 29.078 "
Monthly Mean, 29.929 "
Monthly Rang, 1.178 "

Thermometer Highest, the 24th day, 58°2.
Lowest, the 18th day, -20°4.
Monthly Mean, 25°32.
Monthly Range, 78°6.

Greatest intensity of the Sun's rays, 74°0.
Lowest point of Terrestrial radiation, -22°7.
Mean Humidity ·865.
Rain fell on 7 days amounting to 0.790 inches.
Snow fell on 15 days amounting to 28.75 inches.
Most prevalent wind, S. W.
Least prevalent wind, N. W.
Most windy day the 8th day, mean miles per hour, 24.50.
Least windy day the 3rd day, mean miles per hour, 1.40.
Zodiacal light, bright.