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CANADA  
MEDICAL & SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

*Surgical Eye Cases.*—By T. G. RODDICK, M.D., Professor of Clinical Surgery, McGill University, attending Physician to the Montreal General Hospital.

(Read before the Medico-Chirurgical Society, of Montreal.)

Mr. President and Gentlemen:—It is a remarkable fact that among all the papers read before this Society from time to time during the past five years, one only has reference to the surgery of that most important and much-abused organ, the Eye. This is a matter for regret, as in a city like this, when specialists for sundry reasons have never flourished, at all events until very recently, many of our members must have had, now and then, eye cases of surgical interest, which it would have been well had they related here.

The cases, which make up the paper I have hurriedly prepared for this evening, happened among other injuries and surgical diseases treated by me in the wards of the Montreal General Hospital during the first quarter of this year.

*Case 1.*—W. W., aged 56, laborer, was admitted into the Montreal General Hospital on the 1st March under my care, suffering from certain injuries received while blasting on the mountain side. On examination I found sundry wounds and bruises, mainly of trifling character, on the hands, arms, and face. The eyes were, however, closed, (lids very much swollen) and apparently the seat of the graver injuries. As it was impossible, on account of the

spasm and photophobia to open the lids sufficiently to make anything like a satisfactory examination of the more important structures within, chloroform was administered. Dr. Chipman, I might mention, had succeeded at the time the man was admitted, some two hours before, in extracting from between the lids of the right eye a considerable quantity of dirt, containing minute splinters of wood, from a pole, for ramming down the powder, which the man held in his hand. Under the anæsthetic I removed from between and within the lids of the same (right) eye, what might be considered in this situation an enormous quantity of the same material, with this addition that there were two splinters of wood, jagged and united by a minute fibre, in size equal to the ordinary match, and sticking far into the swollen conjunctiva, in a direction from below upwards and inwards at the outer angle of the eye. Otherwise the ball appeared uninjured, with the exception of a general abrasion of the corneal surface.

Turning to the left eye, I found also an incredible amount of debris, with one splinter much larger than anything yet described, sticking through the conjunctiva and into the cellular tissue at the inner angle of the eye. This looked exactly as if it had been chewed, and one of the little bundles of fibres teased out from the rest had taken a separate and more oblique course, and pierced the sclerotic coat at about two lines from the margin of the cornea. I separated with a scissors, what we might, to be more clear, designate the sclerotic from the conjunctival portion. The latter I rapidly and easily removed, while the other requiring more caution in its manipulation, I extracted with some difficulty, owing to its jagged and uneven nature. The wound remaining appeared about a line and a half in length, with a slight angle about the centre. Through it, following the splinter, immediately flowed a small quantity of vitreous. I was anxious to use a fine suture to bring the edges together as well as possible with the hope of a more speedy union, but there was no needle to be had at the time sufficiently fine

for the purpose. On more careful examination of the eye, I now noticed a slight opacity of the cornea, although this fact was not easily established, owing to a haziness of the aqueous humour from the effusion, probably from the iris, of a minute quantity of blood.

A strong solution of Atropine was introduced into both eyes, and ice water ordered to be sedulously applied. Internally a grain of opium was prescribed to ensure freedom from pain and rest.

The question now arose in my mind as to the possibility of a portion of the splinter remaining embedded in the deeper structures of the eye, where it was destined almost assuredly to bring about trouble sooner or later. Under the circumstances, however, no surgical interference, I take it, was justifiable at this juncture. Careful examination of the lens failed to indicate the presence of any foreign body there, or extraction would have been called for. There was a probability, and a fair one, that the wound in the sclerotic would heal, and the man be left with a damaged and comparatively useful eye.

On the day following the accident, as might have been expected, the lids and conjunctivæ of both eyes were very much swollen and chemosed. The man complained of very little pain, however. To relieve the congestion, I everted the lids and scarified the conjunctiva most freely, the bleeding being afterwards encouraged for two or three hours with hot water fomentations. Atropine was again dropped in, and a brisk cathartic in the shape of a black draught ordered.

*March 3rd.*—Dr. Chipman informs me that owing to the great supra-orbital pain complained of by the patient last night it became necessary to administer morphia hypodermically, and repeat the same by the mouth in six hours. I found the man still suffering very great pain in the left forehead and temple, pulse 112, tongue furred, entire loss of appetite and nausea. I found the cornea very hazy, and the aqueous beyond appeared turbid—all signs and symptoms of grave import. I now ordered four leeches to the

temple and changed the cold applications for hot fomentations of belladonna and poppy water mixed; internally, powders containing one grain of Opium and two grains of Calomel, to be given every four hours.

*March 4th.*—The change for the worse to-day in the appearance of the eye is greater than could have been anticipated. The cornea has now entirely lost its brilliancy, pus being evidently deposited between the layers. There is also a large hypopion, or deposition of pus, in the anterior chamber, all unmistakable signs of general suppurative choroiditis. What was still more serious, however, the man states that since yesterday he has felt an uneasiness about the good eye in the shape of slight darting pains through it, momentary flashes of light, &c., which bother him considerably, and tend to make him desponding and nervous.

I have now fully made up my mind, notwithstanding the active disease present, to extirpate the eye-ball and thus ward off the almost inevitable sympathetic trouble to the other organ, which, by the way, was all this time being rapidly repaired. Dr. Ross, who was also attending the hospital at the time, was kind enough to see the case with me. We argued to the question of paracentesis and incision of the ball, treating it after the fashion of an ordinary abscess, but at length came to the conclusion, that our chief aim being the health of the other eye, nothing short of removal would insure perfect protection.

The patient was at once put under the influence of ether, and the operation of excision proceeded with by the subconjunctival method. This was done rapidly and without any trouble, and the part dressed with the cold compresses. Dr. Ross kindly dissected the eye for me before his clinical class, but failed to find any foreign body. There was, however, slight opacity of the lens as we had made out almost conclusively on the first day. The vitreous was opaque and almost purulent looking in places, while the retinal membrane was raised in little spots and very much congested.

Without further comment, I might state, that the case

made an excellent recovery. The troublesome symptoms, sympathetic in character, already described as occurring in the right eye, entirely disappeared on the second day after the operation. There was a superficial ulcer on the cornea of the remaining eye, however, which resisted treatment for three or four weeks, but at length healed over leaving a slight opacity. The man was discharged from hospital in the sixth week after admission.

CASE 2.—This I thought I would mention, more from its being an extraordinary accident, than on account of its possessing any special interest for us at this time.

T. H., aged 23, a powerful young Irishman, and companion of the man whose case I have just described, was, it appears, also holding the wooden rammer, when the explosion took place. His face was scarred by the fragments of stone, wood, &c., beyond recognition. The swollen condition of his eyelids, however, pointed, as in the other man, to more serious mischief within. With the aid of chloroform I found between the lids of the right eye a considerable quantity of foreign matter, with fragments of stone, wood, &c. Two or three of the splinters of the latter of considerable size, stuck firmly into the conjunctiva in different directions, but were all readily removed.

Turning to the left eye,—as soon as I raised the upper lid a firm clot of blood, equal almost in size to the eyeball, was squeezed out, leaving what proved to be on more careful examination, an organ thoroughly disorganized, so that I could immediately pass my finger far back to the very fundus without being met by any of the more anterior structures of the ball. I found now what I had not before observed, that a fragment probably of stone, had carried away a considerable portion of the bony external boundary of the orbit, evidently ploughed its way through the structures of the globe and passed out at the inner angle. I washed out the cavity of the orbit thoroughly with a weak warm carbolic lotion, and applied cold lead lotion to both eyes.

For a few days there was very considerable constitutional disturbance, but otherwise the man made a good recovery, while the stump of the left eye is as good as can ordinarily be obtained by excision of the ball.

CASE 3.—This is a case of cataract on which I operated, and which I now bring before you to illustrate some of the difficulties occasionally encountered in this department of ophthalmic surgery.

W. F., aged 64, was admitted into the Montreal General Hospital under my care on the 10th of March of this year. He was found to be suffering from double cataract. That in the left eye being of five years standing; that of the right as many months, but of rapid growth. The man had been a farmer, and was, considering his age, in robust health. I looked upon the case as one favorable for operation by the extraction method.

*March 12th.*—The pupil of the left eye, the seat of the more advanced cataract, being fully dilated, and the patient being apparently under the influence of ether, assisted by my friend Dr. Ross, I proceeded with a Beer's knife to perform the lower flap operation, that being at the time to me the most convenient. I had entered the point of the knife fairly into the anterior chamber for a distance of nearly two lines, when the man recovering sensation moved his head violently from side to side. Fortunately I was enabled to withdraw the blade without doing any further damage, excepting the loss of a considerable quantity of aqueous. The question now arose should I proceed working in an anterior chamber partially empty and run the risk of wounding the iris, or close the eye and await the reaccumulation of aqueous. I chose the latter alternative.

*March 14th.*—The incision made in the cornea the day before yesterday is imperceptible, and the anterior chamber is now full as before. I have decided in again attempting the extraction. The patient being thoroughly anæsthetized I made the lower flap and coaxed out the lens without

the slightest difficulty, nothing occurring to complicate the operation—there was no wounding or protrusion of the iris, and the flap fell into its place and there remained. There appeared to be a small quantity of cortical matter occupying the pupil, but that I thought would be absorbed and hence did not meddle with it. Both eyes were closed with a compress of cotton wool and a bandage.

*March 15th.*—The man has been perfectly comfortable since the operation, having little or no pain in the eye excepting at times a slight smarting, which rapidly passed off. I looked at the eye to-day for the first time, and was rather disappointed at finding a considerable protrusion of the lower margin of the iris through the wound. An accident which I have known to happen after this operation had now occurred, being the displacement of the flap by the lower lid constantly pressing against it. Otherwise the case promised to be most favorable. The patient could see with very considerable distinctness, counting fingers placed up before him, and distinguishing the various faces round his bed. I did nothing further in the way of treatment than simply instil a four grain solution of atropine, apply a firm compress and bandage the eye as before.

For the three days following I made no change in the treatment, but on the fourth, all inflammatory action consequent on the operation having subsided, I touched the protruding iris (now about the size of a hemp seed) with the solid nitrate of silver. The daily instillation of atropine and the compress were continued.

The application of the caustic was followed for some hours with very great pain and lighted up more inflammation than I thought was beneficial. After three days no improvement in the size or condition of the prolapse was noticeable. I now ordered the part to be brushed each day with a ten grain solution of the nitrate, the atropine to be continued as before. The protruding iris had now assumed

a vesiculated appearance although as large or even more prominent than before. The vision however had not become impaired. The pupil was very much altered in shape being much longer in its vertical than its longitudinal diameter. The caustic solution and compress having signally failed after a fair trial, I desired to adopt the plan recommended by Mr. Bowman, and which has been so successful in his hands, namely, puncturing the prolapse with a fine needle. This I did with an ordinary sewing needle, introducing it far enough to enter the anterior chamber and evacuate a small portion of the aqueous, with a view to relieving the pressure from behind. This proceeding I repeated every third day with a marked improvement each time, and was gratified at the end of ten days to find the prolapse entirely gone and the parts closely and apparently firmly united.

These cases, Gentlemen, may appear, and I have no doubt are to many of you commonplace enough in character, and you wonder, I dare say, why I have taken so much trouble to lay them before you, but to me two of them, at least, have taught most valuable lessons.

Had I to deal with case 1 again, I believe I should adopt a somewhat different course. I would not fail for instance to close the wound in the sclerotic with a suture, as I originally intended. I have been much struck in looking up the literature of the subject with a case similar in almost every particular with my own—reported by Mr. Lawson in his very excellent little work "On the Diseases and Injuries of the Eye." He says the man came under his care a few hours after he had met with the following accident. Whilst engaged breaking stones, a fragment flew up, and struck him on the left eye, causing a jagged wound in the sclerotic in the lower part of the eye, at a distance from the cornea. There had been evidently an escape of a small quantity of vitreous. The wound was gaping, and its lower edge was prominent and stood away from the upper margin which was somewhat depressed.

From the man's account it was clear that there was no particle of stone lodged within the eye. As it was impossible to bring the edges of the wound together without a suture, I introduced a single thread and brought the divided parts into apposition. The patient progressed most favorably, and the wound completely united. The presence of the stitch produced no irritation.

It is easily understood, as the same able ophthalmologist explained, how difficult a matter it is to heal wounds of the sclerotic when we take into consideration its cup-like character, and the inability to adapt itself to the sudden diminution of bulk induced by an escape of the vitreous. Another difficulty also is the constant oozing of the vitreous through the wound, tending thus to keep the cut edges apart, and also prevent the eye from being again plumped out by an abundant secretion of aqueous. The employment of the suture will, as a rule, by promoting the escape of vitreous bring about a speedy union.

As to the propriety of excising the ball under the circumstances in which I performed the operation. The question might here also be raised,—Would not paracentesis or incision have answered every purpose? As to the former proceeding I find ophthalmic surgeons are not united in its favor. Mr. Lawson, whose opinion I am inclined to respect as equal to any other living authority, states that in severe, bad cases of ophthalmitis which have come under his observation, he is satisfied that the ultimate destruction of the eye has been hastened by an injudicious paracentesis of the cornea. Besides where suppuration proceeds with the rapidity witnessed in the case I have reported, the natural surmise is that a foreign body is present embedded deep in the structures of the ball, and how, it may be asked, could paracentesis be of any permanent benefit here. Incision even might fail to meet the difficulty.

In a word, it must be remembered that we have a sound organ standing in imminent danger of being affected by

sympathy, and that the proceeding which will most rapidly and effectually remove the cause of that jeopardy is *the* proceeding par excellence to be adopted.

As to the third case—that of cataract—I thought I learnt here two valuable lessons, but as the paper is now much longer than I had at first intended, I will be very brief.

It will be remembered that owing to the movements of the patient, only partially under the influence of the anæsthetic, I found it necessary to withdraw the knife, whose point had then reached nearly to the centre of the aqueous chamber. Rather than hazard a failure, I closed the eye and determined to await the accumulation of the aqueous humour. I find it is recommended by some in a contingency of this kind to proceed with the operation using a narrow or Graefe's knife, introduced into the original incision. At the risk of being thought over-cautious, or of incurring the displeasure of my patient, I should pursue no other course than that adopted on the occasion referred to.

The prolapse of the iris which gave so much trouble in the case, I would endeavour to avoid in the future. It is an objection constantly raised to the lower flap operation that the lid is very apt to interfere with the flap. The same does not obtain where the upper section is made, and as the choice simply depends on the dexterity of the operation I should in the future prefer the upper flap operation. Mr. Williams of Boston, I understand, introduces a simple, fine suture into the flaps and in that way draws them nicely in apposition, and I believe that would meet this objection to the lower flap, but as few of us have the dexterity of a Williams, I am inclined to think we might often do more mischief in making the attempt than could be easily repaired.

The treatment of the prolapsed iris is also a matter of some interest to us. It will be remembered that the ordinary measures adopted of compression, and the application of caustics, both in the solid form and in solution, failed completely in having any good effect on the prolapse, and that the method of puncturing with a fine needle, three times repeated only, completely removed it. I might state that I met the cataract patient in the street a day or two after he was discharged from hospital, and that he recognized me.

## Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE  
MONTREAL GENERAL HOSPITAL.

*Case of Dislocation between the 6th and 7th Cervical Vertebrae; fracture of Transverse Process of 7th on the left side. Death. Autopsy.* Under care of DR. REDDY.  
Reported by CHARLES H. MURRAY, B.A.

Richard Mitchell, aged 55, about 5 ft. 9 in. in height, a very muscular, stout, strong man, was brought to the Montreal General Hospital on the 12th May. The account he gave of himself was, that on the night before he had taken some gin for a cold, and feeling thirsty about four in the morning, went down to the tap for a drink, he slipped down the last two steps and jerked his head to one side; he remembers nothing after that. When he was discovered by the people of the house, he was found kneeling on the lowest step, his arms and head resting on a step above; his head was not jammed in any way. He had never been subject to epileptic fits.

Present state, 12.30: He is sensible but is heavy and drowsy, the effect of the gin, of which his breath smells, not having yet passed off. His left pupil is dilated, the right is of normal size; has no headache. The only place where he feels pain is in the back of the neck at about the 6th cervical vertebra. This is perfect and symmetrical anæsthesia of the extremities and all parts of the body below the line of the clavicles. There is hyperæsthesia of the right side of the neck, so that the state of the vertebral column cannot be ascertained. On the left side there is no hyperæsthesia, but there is perfect sensation. Sensation of the face is perfect. There is perfect loss of muscular power of the lower extremities. On tickling and pinching his feet, there was no reflex action at all in the left leg; very slight in the right; the legs are perfectly

flaccid. The muscles of the trunk are all paralysed, with the exception of the diaphragm and probably of the serratus magnus anticus, which is supplied by the external thoracic nerve. By these two muscles respiration is performed. The abdominal and intercostal muscles are paralysed. Inspiration is performed by the diaphragm chiefly, but if the dislocation be between the 6th and 7th the serratus magnus anticus must aid powerfully. This muscle is supplied by the external thoracic nerve which emerges between the 4th and 5th, and 5th and 6th cervical vertebræ passes behind the axillary plexus and is distributed to the serratus which arises from the base of the scapula and is inserted into the eight superior ribs. When the shoulders are fixed it lifts and expands the upper part of the chest, and also counteracts the diaphragm in depressing and drawing together the lower margin of the thorax and hence renders the act of inspiration more perfect. Expiration is performed by the recoil of the lungs and by the elasticity of the structures generally, and also by the weight and elasticity of the abdominal viscera and parietes causing the diaphragm when released to recede into the thorax, and in proportion as the ser. mag. ant raises the thorax the more will the parts be stretched and the greater will be the recoil. There are sonorous rales over the front of his chest. He frequently tries to cough but can't do so with any force whatsoever, expectoration being accomplished by the diaphragm and possibly of muscular fibres round the air tubes. By these means he is able to get the sputum into his mouth from whence it is wiped out. His abdomen is very prominent. Although there is anæsthesia in the upper extremities, yet there is no loss of motor power. His right arm is kept by his side and forearm at right angles to arm. Shaking continually. His left arm is also kept close to his side; and every few minutes he puts his left thumb into his mouth and sucks it and bites it alternately, but not so as to damage it. He continually grinds his teeth. His voice is not distinct. He can swallow

liquids easily. His eyelids are usually closed. When spoken to he opens them with a terrified look and stares, regains consciousness and answers rationally. Occasionally there is spasmodic contraction of Levator palp. sup. There is frequent rolling of eyeballs. The position in which he rests is peculiar: he lies on his back, his head drawn towards left side so that his left cheek almost touches his shoulder. There is no rigidity of muscles of neck. The general surface of the body is cool. His face is pale. Heart-sounds barely heard; pulse 54, regular, small; resp. 30; temp. in axilla 96°. There is no mark of injury to head or neck, no bruising. His neck is exceedingly short and thick, so that no symptoms of dislocation or fracture can be made out. He had no headache; bladder distended; no dribbling of urine; no priapism. Dr. Reddy diagnosed dislocation between the sixth and seventh, possibly complicated with fracture. He ordered his urine to be drawn twice daily; air bed, and ol. Tig. gtt. i statim.

*13th, Morning.*—Last night slept but little; he beat his chest with his hands very much during the night. Towards morning, two or three times, his foeces escaped involuntarily. Very liquid in character, and once this morning again. To-day he is in much the same state. Sensation has however returned to the radial side of both his forearms and hands. There is not acute cutaneous sensibility along the line of junction between the sound and paralyzed parts. The dilatation of his pupil is less to-day. When his bed-clothes were being changed this morning, one of the patients held his body in the sitting posture for about a minute; he held his head leaning forward on his chest without any assistance. When laid down, did not suffer any evil consequences. He can shake his head from side to side, and occasionally does so, without experiencing much pain, but not from before backwards. Following mixture was ordered: Pot. Iod., ʒij.; Pot. Brom., ʒij.; Tr. Digital., ʒiv.; Aquæ ad., ʒvi.,—a table spoonful every four hours.

Two ounces brandy to be given in divided quantities daily.

6 o'clock P. M.—Has had no motion since morning. Has been breaking wind all day. He complains of chilliness, but has no tactile sensibility: He speaks much plainer; is not nearly so drowsy. Asks for porter; he takes milk and beef tea. He has now sensation in all parts of both arms, with the exception of the little finger and ulnar half of ring finger in both hands. He has a greater degree of sensation in his right than left arm. He has recovered sensation of top of chest, above a line passing about two inches above the nipples round the chest, but there is no motion of the intercostal muscles in this region. He complains of a great oppression at his stomach. The pain in the back of the neck is a stabbing pain, and is present all the time; there is no pain at any other part of his spine. Resp., 29. Pulse, 60. Temp. in axilla, 97 2-5. He does not throw his hands about in the same way, but he often rubs the wrist of his left hand over the top of his head for twenty seconds at a time.

14 1/2, 9 A. M.—Seems a little brighter in his mental faculties. Left pupil nearly same size as right. Has great difficulty in getting up the phlegm; his face gets quite congested in the exertion. In breathing the phlegm rattles in his throat. His pulse is stronger—56; resp., 36. He asked to be moved higher up in bed, and was able to hold up his head when this was being done. The hyperæsthesia of right side of neck is gone. The abdomen is very tympanitic. Still breaks wind frequently. Has a frequent desire to pass his urine, but has not the power. The urine does not dribble away. He has ceased to grind his teeth. Temp. in axilla, 98 3-5. He feels very weak; only takes a few mouthfuls of beef tea, &c. He takes corn starch, sago, and a little porter, as he asked for it. His feet were pricked with pen-knife. No reflex action. Was ordered an injection of Turpentine, ʒss. Starch Op.

15 1/2.—He has ceased to pass wind from the large bowel since last night. Abdomen very tympanitic, and breathing

is proportionately distressed. His body and limbs have become quite warm. Heart weaker. He is very restless, and says he is going to die. Dr. Reddy ordered O'Berne's tube to be passed up the large bowel to draw off flatus, with a view to relieve the breathing. At 5:30 P. M., O'Berne's tube had been in an hour, considerable amount of flatus and some feculent matter had escaped. The breathing, however, was not much relieved. Dr. Reddy then passed a very fine acupuncture needle into the colon above the cæcum; a little flatus escaped; then into the centre of the transverse portion, when a little more escaped; then into small intestines, when jets of air escaped for a short time. The man asked to be raised in bed, when the needles were withdrawn, and then a considerable quantity of flatus came up the œsophagus. Notwithstanding all these measures, the action of the diaphragm is nearly stopped from the distention, and asphyxia seems most threatening.

*16th, Morning.*—Condition much same. The distention of bowels steadily increasing. Temp., 90.4-5; pulse, 48. Brandy was increased to 4 oz. Towards evening his temperature was below 90.2-5. About 10 o'clock P. M., he asked the nurse for a drink, and then to be turned on his side. In about five minutes, when the nurse returned to see how he was, she found him dead. He died quietly, and was sensible to the last.

*17th. Autopsy.*—Seventeen hours after death, weather moderately warm. Cadaveric rigidity well marked. Face livid; body not discolored; both pupils dilated; left one most so; no bed sores.

Resting on the rect. ant. majores there was a considerable quantity of dark clotted blood in the cellular tissue. About the seat of injury there was extensive extravasation of blood. There was dislocation between the bodies of the 6th and 7th cervical vertebræ, the 6th projecting forwards in front of the 7th about half an inch. The ligamentum nuchæ, inter-spinous ligament, ligamenta subflava, and post common ligament, were all ruptured, and on the right

side, the inter-transverse ligament. There was dislocation between the articular surfaces of 6th and 7th on the right side. The articular processes on the left side were not dislocated, but there was a fracture extending through the base of the transverse process of the 7th; this part of the vertebra was broken into three pieces. The only union between the 6th and 7th was by means of the anterior common ligament, which was intact. The distance between the vertebræ was such that the finger could be introduced easily between the two bones. The cord was evenly compressed, and hence the paralysis was symmetrical. The pia mater was injected a couple of inches up from the seat of dislocation, and it was observed downwards for about three inches (as far as the end of bones which were taken out), but it probably extended further down than this. There were a couple of small clots beneath the dura mater, at the seat of injury. The grey matter of the cord was softened and very red. This redness extended up and down for about three-quarters of an inch. The white matter was softened but not congested.

*Lungs.*—The posterior and dependent parts are extensively congested. Anterior portion not much congested; crepitant.

*Heart.*—About  $2\frac{1}{2}$  oz. fluid in pericardium; two patches of lymph on visceral layer; none on parietal. Left ventricle hypertrophied. None of cavities distended with blood. A large ante-mortem clot in right ventricle adherent to the walls. All valves sufficient. An atheromatous nodule size of a small pea at the bottom of one of sinuses of Valsalva.

Spleen and liver congested. Kidneys especially congested. The marks where the needles had entered the bowels, visible; slight redness round each aperture, and in one place where several apertures had been made as the needle had been partially withdrawn and again pushed in, several times, the vessels of the intestines, for several inches on

either side, were beautifully injected. Head not examined.

REMARKS.—The dilatation of left pupil was, I think, probably due to irritation of nerve of iris, through injury to the sympathetic system in the neck, possibly of inferior cervical ganglion on the left side.

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*Case of Stricture of Urethra, almost impassable, cured by Divulsion, by Sir Henry Thompson's American Modified Divulsor, in which the Filiform Whalebone Bougie was used as a director.* By JOHN REDDY, M.D., Attending Physician to the Montreal General Hospital, assisted by DR. WILKINS, Outdoor Attending Physician. Reported by C. H. MURRAY, B.A.

Thomas Cahill, aged 45, a native of Ireland, was admitted into the Montreal General Hospital under the care of Dr. Reddy, 30th April, 1875. A stout, able-bodied man, of medium height. Has been for the most part of his life a temperate man. About eleven years ago he had an attack of gonorrhœa, which he says was cured, but from his history it would appear that he had chronic gleet after this, continuing up to the present time. He had no pain or difficulty in micturating till seven years ago, when one very cold day, while shovelling snow in Québec, he felt a sudden desire to make water, which was attended with severe scalding. The scalding lasted for three or four days and then ceased. The stream began from that period to diminish in size, and has continued to diminish up to the present time. Urinating has since been always attended with pain. If he took anything sour or drank spirits the desire to micturate was frequent and the act very painful. The symptoms were more severe in cold than warm weather. About three years ago his state became more distressing. He had pain and scalding in passing urine; the stream was then, for the first time, of a cork-screw shape and smaller than before; he had to pass his water more frequently and to strain at the same time or it would

not come away; he never could empty his bladder completely. These symptoms were more urgent in the daytime than at night; he very seldom had to get up at all at night, and never more than twice. At this time he sought advice from several doctors in Quebec, who tried to pass instruments, and usually after each attempt some bleeding took place. All failed from not having small enough instruments, as they told him. In the winter of '73 Dr. Lemieux passed a small bougie several times with difficulty and bleeding. This gave him some relief. The doctor told him to go to the hospital, where he could give more attention to him, but he did not go, and from that time up to the present, though his distress has increased steadily, he has had no attempts at passing an instrument made. He has lately noticed a slight gleet discharge from the meatus in the mornings before micturating.

*Present Condition.*—On attempting to micturate the urine comes away drop by drop. In order to hasten the process he presses the end of his penis to close the meatus and strains; when the urethra is distended, he presses from behind forwards, and forces out a small, straight stream. In this way he can relieve himself in from three to four minutes, but does not completely empty his bladder as some urine drops away afterwards. There is not much scalding or severe pain. After every attempt to urinate he has a slight rigor lasting for a few seconds. Micturition is more frequent in daytime than at night, he rarely if ever being disturbed at night. For three or four hours after drinking spirits or acids he has to micturate every ten or fifteen minutes, and the act is more painful. For the last two years the perineum and urethra are excessively itchy after micturition and he has often scratched the skin off in his distress.

As the stricture was permeable to no instruments in the hospital, Dr. Reddy determined to avail himself of the use of the instruments kindly placed at his disposal by Dr Wilkins, who assisted him at the operation.

4th.—The patient's bowels having been previously opened and his diet regulated, he was brought to the operating theatre and placed on the table for greater convenience than could be obtained in the ward. No anæsthetic was used. 4.30 o'clock: No previous examination had been made, for Dr. Reddy had decided, on account of his previous history, that to avoid irritation he would not explore the passage till he made the attempt with the whalebone filiform bougie, the utility of which he was most anxious to test. The stricture was found to be situated in the membranous portion of the urethra close to the prostatic portion. There were numerous false passages opening near this point, the point of the bougie running into oblique narrow passages to the right. A No. 2 French gum elastic bougie failed to pass; it was caught at the commencement of the stricture, as was also Sir Henry Thompson's probe-pointed catheter modified by Otis. A whalebone filiform bougie 14 inches long, was tried without success, one of smaller diameter 2 feet long also failed. Warm olive oil was then injected into the urethra, the bougies were then again tried but all stopped at the same point and were directed off to the right, the patient who had the most exquisite sensibility of the position of the instrument gave warning whenever it entered a false passage which was an aid, as then the instrument was withdrawn partially, and then slightly rotated, being at the same time pushed forwards. Notwithstanding this all their efforts were unavailing. Filiform catgut bougies were then inserted to engage their points in the lacunæ and false passages, and then the whalebone filiform bougies were inserted to find if possible the orifice of the stricture. Several times this object was thought to have been attained and the other bougies were withdrawn, but it was an illusive hope, again and again the same means were tried. The finest manipulation and dexterous devices being exhibited by both Drs. Reddy and Wilkins but without success, till finally when success seemed to be about hopeless Dr.

Wilkins by a fortunate manoeuvre succeeded in passing a whalebone filiform bougie 14 inches long into the bladder. This was felt with the finger in recto. Sir H. Thompson's Divulsor, (American modified) was then carefully introduced by Dr. Reddy over the whalebone guide, Dr. Wilkins holding the latter, till the point of greatest dilatability corresponded to the centre of the stricture, the instrument was ascertained to be in bladder by the finger in recto, the handle was then rapidly turned till the blades were separated so that their circumference as afterwards measured was  $1\frac{1}{4}$  in., equal to the amount of dilatation that would be caused by a No. 14 English gum elastic bougie. The stricture was distinctly heard to tear. The instrument in being unscrewed was pushed on farther into the bladder and so avoided enclosing in the closing blades, a fold of mucous membrane, at this point of junction. The operation of Divulsion caused a good deal of pain, after the withdrawal of the instrument some blood appeared, not much in amount, and then a full stream of urine, about 2 oz. were passed. The delight of the man was extreme, such a stream he had not seen for seven years. A No. 11 English gum elastic bougie was passed, this was ordered to be left in three-quarters of an hour and if he took a chill Pulv. Dover gr. x to be given. He was carried to his ward and put in a warmer bed—the operation lasted one hour and a-half.

*Evening.*—He had several chills since the operation. At 8 o'clock was feverish. Dr. Cline, Assistant House Surgeon, gave him Pulv. Dover gr. x, he had still several chills and could not sleep, At 12 o'clock Dr. Cline gave him Pulv. Dover gr. x, Quinine gr. iii. After this the chills ceased and his pulse became calmer but he did not sleep during the night—had a headache in the morning when he next passed water it came in a full round stream.

*5th.*—Urine acid, no albumen—has pain in urethra and headache when he urinates, pulse 56 full, firm, strong tongue whitish, temp.  $100\frac{1}{2}$ ; was put on milk diet, milk, beef tea, porridge extra.

6th.—Pulse 53, resp. 20. temp. 98 $\frac{2}{3}$ ; stream large, no pain, had Liq. Morphiæ mur. *M* xl last night—slept for a few hours—feels quite well to-day.

9th.—Sleeps well; full stream; not the slightest pain.

11th.—A No. 10 English Catheter was tried but failed to pass. A No. 11 gum elastic bougie was passed and left in for one-and-half hours.

15th.—A No. 10 Catheter again failed. A No. 7 passed into bladder easily. Steel sounds would have been the proper instrument to have used, but at that time none were available.

18th.—No. 7 Catheter passed. This was also done on the 22nd.

There is not now the slightest difficulty in passing the Catheter and the cure is a perfect one; the instrument will be passed at intervals for some time to come.

This operation shows what may be done with filiform bougies intelligently used, so that it may be said that impassable strictures will be one of the greatest rarities in a surgeon's practice, and it also shows that in future Syme's operation need not be had recourse to till Divulsion has had at least a fair trial.

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## Periscopic Department.

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### SURGERY.

#### *Bertholdt on Dislocation of the Cervical Vertebra.*

Dr. Bertholdt, of Nurnberg, communicates (*Aerztliches Intelligenz-Blatt*, April 6, 1875) the following case of dislocation of the sixth cervical vertebra towards the right side. The patient was a young man aged nineteen, who in washing his neck sharply turned his head towards the left side, and felt a crack on the right, accompanied by severe pain, and inability to get his head back again into its proper position. An hour afterwards he was seen by Dr. Bertholdt,

who found him with his face congested and red, the head askew, the chin resting on the left shoulder. On the right side there was stretching and undue prominence of the muscles of the neck, and on the left a corresponding hollow. The spinous processes of the cervical vertebræ were not in a straight line but in a curve, the convexity of which was directed towards the right side. The patient complained of intense pain in the neck, and any attempt at movement was unbearable. The diagnosis was easy. Reduction was attempted in the following way. Dr. Bertholdt got on a stool and fixed the patient's head by taking the occiput and chin in both hands, making extension upwards, using the weight of the body for counter-extension, and by means of a subsequent rotary movement, the dislocation was reduced. The patient was able to move his head readily in all directions afterwards, and soon recovered.—*London Medical Record.*

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#### *Sir H. Thompson's Operations for Stone in the Adult:*

Sir Henry Thompson compares in the *Lancet*, his last 100 cases of operation in *the adult* with Martineau's famous series of 84 cases with only 2½ deaths. He has not included any patient below 22 years of age, at which there happens to be one. There are only four patients, including that one, below 50 years of age, while in Martineau's series of 84 there are not less than 54 below that age. Of the 100 cases, sixty-five are above 60 years of age (only twelve are above that age in Martineau's list), and the mean age of the entire 100 cases is not less than 63½ years (the mean of Martineau's entire adult series is under 47 years).

Ninety-six were adult males, four were adult females.

Of the 96 males, 87 were operated on by lithotrity and 9 by lateral lithotomy.

The mean age of the 87 operated on by lithotrity is 63½ years, the oldest being 83, the youngest 22, but only 4 were below 50 years.

The mean age of the 9 operated on by lithotomy was  $63\frac{1}{2}$  years also, their respective ages being 36, 59, 59, 61, 63, 70, 75, and 79.

Among the 87 operated on by lithotripsy were 4 deaths, the ages were 61, 65, 66, and 81.

Among the 9 operated on by lithotomy were 2 deaths—viz., at 61 and 63.

Thus it will be seen that there was a total of 6 deaths in 96 patients, with a mean age of  $63\frac{1}{2}$ , by the two operations.

Alluding to what has been termed a run of successful cases in practice, Sir H. Thompson observes that in this 100 there was one more remarkable than he has ever before heard of. He had a succession of 51 elderly adult cases without a single death. They occurred between July, 1873, and June, 1874. These 51 cases (7 more than Martineau's entire adult series of all ages) had a mean age of 64 years.

—*The Doctor.*

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### *Ophthalmoscopy in Cerebral Diseases.*

Mr. Bouchut has recently given in the *Hôpital des Enfants Malades* the results of his labours with the ophthalmoscope as a means of investigating the condition of the brain. His lectures, of which an abstract appears in *La France Médicale*, opened with an exposition of the anatomical and physiological relations of the eye with the brain and spinal cord, in order to show the influence of cerebro-spinal lesions upon the optic nerve, the retina, and the choroid. He lays down four laws as to the formation of intra-ocular lesions caused by diseases of the brain, the cord, and the meninges:

1. Whenever the circulation is impeded in the cranium or in the sinuses or meningeal vessels by compression of the ventricles distended by serum or other cause, an arrest of the venous circulation takes place, which produces in the eye swelling, hyperæmia, and œdema of the papilla, varicosities of the veins, and sometimes hæmorrhages.

2. When a tumour with encephalitis, or when partial encephalitis exists, it causes an inflammation which brings about sclerosis of the optic nerve and exudations which imprison the papilla, and, at length cause its atrophy.

3. If the cord is affected either by anterior or posterior sclerosis it acts upon the eye through the great sympathetic, giving rise to hyperæmia of the papilla ending in atrophy. This occurs in locomotor ataxy.

4. In every diathesis and in cases of poisoning when the whole body suffers the eye suffers with it, and we meet with certain forms of neuritis or choroiditis.

M. Bouchut exhibited more than 100 figures drawn during the twelve years over which his researches have extended, and then demonstrated the various ocular lesions produced by diseases of the nervous centres. He showed cases of spinal neuritis, and those which result from locomotor ataxy; and then of neuritis and neuroretinitis, produced by meningitis (tubercular, typhoid, or rheumatic); by cerebral hæmorrhage and softening; by hydrocephalus and thrombosis of the sinuses; by chronic encephalitis, and by the same condition resulting from heart disease; by tumours of the brain; by tuberculosis; by syphilis; by albuminuria; by tuberculosis; by syphilis; by albuminuria; by leucæmia; and, finally, neuritis resulting from paralysis of the sixth pair consequent upon certain forms of epilepsy, hallucinations, concussion of the brain, &c.—*The Doctor.*

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## MEDICINE.

### *Kramer on Two Interesting Cases of Variola.*

The first of these cases, which are reported by Emmanuel Kramer in the *Vierteljahrschrift für Dermatologie und Syphilis* (1874), was that of a young man, aged seventeen, admitted to the small-pox hospital at Vienna on June 13, 1874, on the fourth day of his attack. Vesicles were disseminated all over the body, and were beginning to change

into pustules here and there. There was diffused erythema all over the body, most intense at the level of the right femoral triangle: it disappeared on the 15th. On the 17th, the eighth day of the illness, there was a scarlatinous redness of the whole body, deepest on the pelvis, arms and thighs. Redness, with punctured ecchymoses on the velum palati and adenitis of the cervical glands, especially on the left side, were also present. Some of the variolous pustules were in a state of suppuration, whilst others were already dried up. The urine contained albumen. Temperature  $103.60^{\circ}$  Fahr. On the 18th the variolous eruption was dried up; there was double submaxillary adenitis, with a little albumen in the urine. Temperature  $104.72^{\circ}$  Fahr. On the 20th there was a miliary eruption at the bend of the elbow; on the 23rd the scarlatinous eruption began to desquamate; on the 27th erysipelas of the face made its appearance, but disappeared very rapidly. Convalescence set in at the beginning of July, but the patient had two attacks of erysipelas in the face, one on July 20, the other on the 29th; both, however, were extremely mild and almost apyretic.

The second case was one of variola immediately consecutive on a previous attack. The patient was a young man, aged eighteen, who came into the small-pox hospital on the fifth day of an attack of variola discreta. The pustules began to dry up at the end of a week. On the sixteenth day after the appearance of the disease the patient had violent shivering, a temperature of  $103.8^{\circ}$  Fahr. and lumbar rachialgia. On the 29th day there was diffused generalised erythema, and at night the fever rose to forty degrees. On the thirty-first day variolous efflorescences made their appearance on the face, hands, and feet. The first signs of the drying up of the fresh eruption appeared on the face on the thirty-fourth day, and recovery ensued without any accident.—*London Medical Record.*

*Spontaneous visible pulsation of the Retinal Vessels in connection with Aortic Regurgitation.* By STEPHEN MACKENZIE, M.B., M.R.C.P., Assistant-Physician to the London Hospital.

Although recognized and described, spontaneous pulsation of the retinal vessels in aortic regurgitation has not met with much attention at the hands either of ophthalmologists or physicians. My object is not to write an exhaustive paper on this subject, but briefly to record a series of cases under my care in which the phenomenon in question was present.

The subject has been studied with great care by Dr. Otto Becker (*Graef's Archiv*, 18 Band., Abth. i., p. 206, of which an excellent abstract is given in the *Royal Ophthalmic Hospital Reports*, vol vii., p. 641, and which is alluded to by Mr. Soelberg Wells in the third edition of his "Treatise on Diseases of the Eye," p. 344).

Dr. Becker, who refers to the independent discovery and previous publication of similar observations by Dr. H. Quincke (*Berlin Klin. Wochensch.*, 1868, No. 34, and 1870, No. 21), found that spontaneous pulsation of the retinal arteries and veins was present in nearly all of a large series of cases where there was aortic insufficiency. He describes, indeed, three kinds of pulsation—arterial, venous, and capillary. The latter—a systolic blush and a diastolic pallor,—he says, he has only lately been able to verify; and I must confess to not having yet arrived at sufficiently intensive observations to discern it.

Dr. Becker especially advises that the attention of the observer be closely directed to the light streak on the arteries, which will be found to increase in breadth, and at the same time the broader streaks at either side widen at each beat of the heart. He also points out that the widening of a curve and the elongation of an artery can be best seen in the periphery of the retina, and that the pulsation can often be best made out where a vessel gives off one or more branches at an abrupt angle.

From my own observations I have found spontaneous visible pulsation in the retinal arteries and veins in a large proportion of cases of aortic regurgitation. It is especially marked when the ventricle is hypertrophied. Secondary dilatation of the mitral orifice does not interfere with its occurrence as long as the power of the ventricle is maintained; and the phenomenon is generally most marked when the pulse characteristic of aortic regurgitation is most developed.

The pulsation is most obvious in the veins, but its occurrence in them is of little importance unless there is also arterial pulsation. Pulsation of the central veins just at the point of emergence is common in healthy eyes, and under various morbid conditions. The arterial pulsation is variable in extent and range. It is sometimes limited to a few vessels of one eye, or, at least, is more readily detected in some than in others. Sometimes it is visible in nearly all the arterial trunks and many of the smaller branches. It is often most marked, and occasionally confined to the limits of the disc; but more usually extends for a considerable way along the retina, for a distance equal to two or three diameters of the disc. It is generally well seen where a vessel makes a more or less sudden curve, the amplitude of which may be observed to increase at each beat of the heart. Sometimes a vessel may be seen to elongate most distinctly, and when the pulsation is present in a very small vessel, it may collapse and disappear from sight during the diastole, and reappear at each systole.

The explanation of the phenomenon is obvious. We here have an opportunity of seeing—as, by palpation at the wrist, we have of feeling—the sudden forcible systole and the sudden collapsing of the pulse, due to the want of arterial tension from the insufficiency of the aortic valves. Considerable practice and much patience are required to detect its occurrence, and in most cases the employment of the erect image is essential.

The reader is reminded that spontaneous pulsation some-

times occurs in healthy eyes without any vascular derangement ; and that pulsation of the veins and arteries is a well-recognised symptom of glaucoma, and may be produced in healthy eyes by increasing the intraocular pressure by slightly compressing the globe. In these cases the pulsation is limited by the margin of the disc, and is explained by the altered resistance which the vessels encounter at this point.—(Jacobi, *Centralblatt*, 1875, xix.)

I will now briefly record the cases the subject of these remarks, all of which have been under my care at the London Hospital.

*Case 1.*—W. S., aged forty-five, admitted October 26, 1874. Had followed various occupations, some of them laborious. Had been a free drinker. Never had a rheumatic fever. Suffered from palpitation on and off for twenty years ; it had been worse and accompanied by dyspnoea during the last eight months. A pallid man, with slightly puffy face ; considerable dyspnoea. Apex-beat in fifth interspace, an inch and a half to the left of nipple ; diffused. Cardiac dullness bounded by mid-sternum, fourth rib, and a line an inch and a half to the left of nipple. A loud to-and-fro murmur, heard loudest at mid-sternum, but conducted freely in all directions. Radial arteries very visible and tortuous. Pulsation in both arteries and veins of retina very distinct, and extending for some distance beyond the margin of the disc. The patient improved for a time, and was sent to a convalescent home. He soon relapsed, however, and was re-admitted. He died on February 5.

*Autopsy, same day.*—Acute endocarditis. The aortic valves were covered with vegetations, and perforated in several places. Left ventricle hypertrophied and dilated.

*Case 2.*—A. B., aged fifty, admitted December 17, 1874. Never had rheumatic fever. Was, according to her statement, well until a month before admission, when she was attacked robbed, her mouth being filled with mud to prevent her cries. A wasted woman, with silver-white hair (since girlhood), anæmic ; skin fairly elastic. Apex-beat

outside nipple line, somewhat heaving. Cardiac dulness from a finger's breadth to right of sternum up to nipple line. Strong pulsation at episternal notch and over right sternoclavicular articulation, and equally in both carotid arteries. No tumour or dulness at base of chest. A loud systolic murmur at the head of sternum, and a diastolic murmur conducted well downwards. Pulsation of the two radial arteries sudden, forcible, and collapsing; equal on the two sides. Pupils equal; larynx healthy; no dysphagia or dyspnoea. Visible arterial and venous pulsation extending for some distance over the retina. Patient improved slightly; now attending as an out-patient.

*Case 3.*—F. F., aged twenty, barman, admitted November 20, 1874. States he had rheumatic fever when seven years old, which lasted three weeks; since then has never been well. Fifteen months ago had another attack, by which he was laid up six weeks. Has had cough six months; dyspnoea one month, more urgent the last fourteen days; very anæmic; breathless. Heart's impulse most distinct two and a half inches below and half an inch to the left of nipple, heaving, and accompanied by a thrill. Cardiac dulness much increased. A blowing murmur with the systole at the apex, conducted into the axilla; and a sound which precedes the impulse, but appears to be exocardial. At the base of the chest a systolic and diastolic murmur, conducted for some distance, especially the latter downwards. Pulse at wrist very characteristic of aortic regurgitation; similar pulse in carotid and posterior tibial arteries. The pulsation in the retinal arteries and veins was extremely marked in this case, and extended for a considerable distance from the margin of the disc. The lad is now attending as an out-patient.

*Case 4.*—F. P., aged thirteen, admitted November 11, 1874. Had rheumatic fever when four and a half years old, which kept him in bed for six or seven weeks. He came to the hospital more for a pain in the head and discharge from the ear than for his cardiac condition. Impulse

in fifth interspace, immediately below nipple, stronger and more diffused than natural. A systolic murmur at apex conducted into axilla, a double murmur at the base, the diastolic very loud and freely conducted downwards. Pulse at wrist characteristic of aortic insufficiency. Visible pulsation of both arteries and veins over a considerable area of the retina. Now attending as an out-patient.

*Case 5* G. H., aged fifty-one, stoker, admitted March 15, 1875. Had "rheumatism" when a child, and "rheumatics" on and off since. For two years occasional dyspnoea—used to find going up the ladder tried his breath—and had great heaviness at the chest; cough fourteen months; swelling of legs three weeks; vomiting and sweating a few days. Cardiac impulse in fifth interspace, a quarter of an inch to the left of nipple, somewhat heaving. Dulness bounded by mid-sternum, upper border of fourth rib, and a quarter of an inch to left of nipple. A systolic murmur at apex conducted into axilla, and a short systolic and a loud and prolonged diastolic murmur at the right margin of the upper part of the sternum. Very visible pulsation in the carotid, temporal, and facial arteries; the pulse can be seen to travel down from the axilla to the radial arteries at the wrist, which are very tortuous. The pulse is, in an extreme degree, that characteristic of aortic regurgitation. There is spontaneous visible pulsation in the retinal vessels of the left eye, for a short distance beyond the margin of the disc. In the right eye the veins can be seen to pulsate, but not the arteries. Still in the hospital.

*Case 6.*—G. R., aged twenty-six, labourer, admitted March 9, 1875. Stated to have been well until three months ago, when he caught cold. Shortness of breath two months. A cough came on, which has continued ever since. Three weeks before admission the face and then the legs began to swell. Has had no pain in chest. Has been a very free drinker. Always had very good health previously. Never had rheumatic fever. Anasarca; extremely anæmic; a few purpuric spots on arms and legs.

No affection of gums, Very breathless. Blood, albumen, and casts in urine, Cardiac impulse in fifth interspace, immediately below nipple. Dulness extends from mid-sternum along third interspace to nipple line. On the evening of admission a systolic murmur was heard at the apex, conducted upwards and into the axilla, and a diastolic murmur heard very distinctly at the third left interspace. When I saw the patient on March 12 the heart-sounds were so obscured by rales that I could only make out that the second sound was not natural. The pulse at the wrist was that characteristic of aortic regurgitation, and the artery was very visible at the bend of the elbow. On making an ophthalmoscopic examination, at first sight only venous pulsation could be detected, but on a more prolonged and careful examination most distinct pulsation could be seen in a small artery of the left eye. most markedly on the disc, but extending for some distance beyond its margin. In the opposite eye the pulsation was less distinct. The patient died March 22.

*Autopsy, same day.*—Acute endocarditis, especially affecting the aortic valves, which were perforated in several places. Mitral valves affected, but less severely. Left ventricle hypertrophied. Large mottled kidney. Embolism in spleen.

*Case 7.*—G. G., aged thirty four, railway porter, admitted March 13, 1875. Had rheumatic fever eleven years ago, and has been subject to rheumatism on and off since. Cough and dyspnoea one month; œdema of legs three weeks. A pale, spare man, with œdema of legs and scrotum. Apex-beat two and a half inches below and an inch to the left of nipple; diffused and slapping. Cardiac dulness bounded by right margin of sternum, upper border of fourth rib, and a line an inch and a half to the left of nipple. A loud harsh systolic murmur at apex conducted well into axilla; a very loud systolic murmur of different character, at the junction of second right rib with sternum; and a diastolic murmur at the same spot, which increases in in-

tensity as the middle of the sternum is approached. Carotid and radial pulses very visible, and have markedly the aortic-regurgitation quality. Retinal arteries and veins readily seen to pulsate for a distance equal to two diameters of the disc. Patient still in hospital.

*Case 8*—A. R., aged twenty-two, domestic servant. admitted March 10, 1875. Has not been quite well for three or four years; had vague pains in back, side, and chest. Had rheumatic fever twelve months ago, which laid her up for three months. Since then has had shortness of breath, increased on exertion; has had pains in chest; has sweated, and has lost a good deal of flesh. Very anæmic, with bright eye and burning skin; fluctuating temperature; no rigors. Cardiac impulse in fifth and sixth interspaces more than an inch to the left of nipple, heaving. Dulness bounded by left margin of sternum, lower border of fourth rib, and a line an inch to the left of nipple. A very loud systolic murmur heard all over the front of chest, but loudest at the upper and right margin of sternum; and a diastolic very loud and prolonged. Pulsation very visible in carotid arteries, but not elsewhere; pulse at wrist very abrupt and collapsing. There is distinct visible pulsation in the retinal arteries and veins extending for some distance over the retina. Patient still in hospital.—*Medical Times and Gazette.*

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## M I D W I F E R Y .

### *Hubert on Antenatal Baptism.*

In the *Cours d'Accouchements*, a recent work on obstetrics by Dr. L. J. Hubert, Obstetric Professor in the Catholic University of Louvain, especially dedicated to the young gentlemen who come to that University to receive their medical education, the author finishes by a special chapter on the subject of antenatal baptism of infants.

When an infant is not in immediate danger of death, it

is at the church and by a priest it should be baptised ; but when its life is imperilled, baptism may be conferred everywhere and by everybody (ecclesiastic or laic, man or woman, believer or infidel), and it is valid, provided it is administered with the intention, the material, and with the formula required.

Who, in case of peril, should administer baptism ?

If the child be born, and a priest be present, he should always perform the rite. The father or mother may perform it only in the absence of any other qualified person. If the infant be born, and there be a man present capable of performing it, he should do it in preference to any woman, or even a midwife. But if the fœtus be not born, baptism *in utero* should be administered, either by the obstetrician or midwife in attendance.

The general purpose or intention to do what the Church does is sufficient.

The material is water, pure water from spring, river or well, and whether previously blessed or not.

The formula is : I baptise you in the name of the Father, of the Son, and of the Holy Spirit.

This formula should be articulated, and loud enough to be audible to the person himself.

The baptism is absolute or conditional according to circumstances, as we shall proceed to show. The manner varies as to whether the child is born or not.

A. If the child be born, the baptiser should himself pour water on the head of the child at three times, corresponding with the mention of the respective names of the Holy Trinity.

If there be any doubt respecting the life of the new-born, the formula should be modified thus : ' If thou art living, I baptise thee, etc.'

If there exists any doubt of the human nature of the being to be baptized (viz., if a marked monstrosity or rudimentary embryo), it should be added, ' If you are a rational being,

I baptize you,' etc. Abortions should receive the rite in the same manner as the infant at term.

If the ovum should be expelled entire, the baptism should first be done through the membranes, saying : 'If you are fit to receive baptism I baptize you,' etc., then having opened the membranes the rite is repeated, adding, 'If thou hast not been baptized.' When the baptism is thus conditional, the conditions mentioned must be distinctly articulated ; it is not sufficient to merely think or will it. Such is the canonical law.

B. Supposing the foetus is still in whole, or in part unborn, it then becomes necessary to baptise it *in utero*, varying the method according to circumstances.

a. If the head be delivered it may be baptised either absolutely or conditionally, as if the birth were completed, and no subsequent baptism will be required.

b. If an arm or a foot present, these parts should be baptized, and the danger persisting, the chest and the head should be baptised, with the formula : 'If thou hast not been baptized,' etc,

c. But if the foetus be still enclosed in the uterus, the baptism should be performed by carrying the fingers or a piece of lint, or sponge, or using a syphon or syringe, and with the formula as before stated, and modified according to the circumstances. After birth, it may be baptised, if alive.—*London Medical Record.*

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#### *Thomas on the Treatment of Extra-Uterine Fœtation by Operation.*

On February 7th last, Dr. Thomas of New York, operated successfully in a case of extra-uterine fœtation. He first made an opening into the sac through the vaginal wall, using the galvano-cautery in order to avoid hæmorrhage. Then seizing the feet, he brought the body of the foetus through the aperture, using a small pair of forceps to extract the head. Part of the placenta came away readily ; but in

the attempt to get the remaining portion, such profuse hæmorrhage came on that he was obliged to inject a solution of persulphate of iron into the sac. Afterwards packing it with cotton-wool. With the exception of some slight symptoms of septicæmia, which soon disappeared under the persistent use of an injection of carbolized water, the patient's recovery was without a drawback. This was the seventh case of extra-uterine pregnancy which Dr. Thomas had seen ; all the others had proved fatal except one, in which the foetus was passed by the rectum. In making the diagnosis of extra-uterine pregnancy, Dr. Thomas lays great stress upon the spasmodic attacks of agonizing pain, which show that the dilated Fallopian tube has begun to contract upon its contents. This is Nature's warning ; and, unless prompt interference be attempted, rupture of the cyst and fatal collapse are almost certain to follow. The case is reported in full in the *American Medical Weekly*.

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## MATERIA MEDICA AND CHEMISTRY.

*Will and Charteris on Chloral as an antidote to Strychnia.*

BY J. W. LANGMORE.

The *British Medical Journal* for January 23rd contained a report by Dr. Hughes Bennett, on behalf of the committee appointed by the British Medical Association to investigate the antagonism of medicines, in which it was shown that in the lower animals chloral acts as an antidote to poisonous doses of strychnia. Dr. Ogilvie Will, of Aberdeen, records, in the *Edinburgh Medical Journal* for April, an opportunity which he lately had of demonstrating that this fact is true also of the human subject.

A druggist's apprentice, aged eighteen, swallowed with suicidal intent, a quantity of pure strychnia. The lad thought he had taken five or six grains—'certainly not less than four'—but the exact amount could not be ascertained as he had emptied it out of a bottle at haphazard ; but from

the rapidity with which the symptoms appeared—only a few minutes after swallowing the poison—and, from the severity, it was evident that the dose must have been a large one.

Medical assistance was quickly obtained ; and when Dr. Will saw the patient, an emetic had been given and other attempts made to induce vomiting, but without success ; violent attacks of convulsions had already commenced, recurring at intervals of about five minutes ; often several fits would follow in succession with only a minute or two between each. Dr. Will at once sent for some chloral ; but whilst this was being procured the fits rapidly increased in severity and in duration, and when it arrived the patient appeared actually moribund—as if he could not live many minutes. Thirty grains of chloral were at once administered by the mouth, and ‘in a few minutes the good effects began to manifest themselves—the intervals between the spasms became longer and the spasms themselves lessened in severity.’ Another thirty grains were then injected under the skin, and almost immediately afterwards a further change for the better was observed. Later in the afternoon, however—the poison having been taken a little before 2 p.m.—the fits again began to increase gradually in frequency and intensity ; accordingly at 5 p.m., thirty grains of chloral were again given by the mouth, and at 6.30 fifteen grains were injected hypodermically. After this the fits subsided ; occasional twitchings continued for a few hours : these ceased during the night, and next day the patient was convalescent.

Dr. Charteris, of Glasgow, reports a very similar case in the *Lancet* for April 10. In this instance the patient, a very strong healthy man, aged thirty-nine, deliberately swallowed the contents of two sixpenny packets of ‘Gibson’s Vermin-Killer’ mixed with whisky and ginger-beer, each packet containing fully two grains of strychnia. The poison was taken at about 11.30 A.M., soon after a very substantial meal of ham and eggs, etc., and the symptoms came on slowly and gradually. It was not till 3.30 P.M. that

he was taken to the Royal Infirmary; violent attacks of convulsions were then occurring about every ten minutes. The stomach-pump was used but the fits continued to increase in severity and frequency until 4.50, when ten grains of chloral were given, and the dose was cautiously repeated at intervals of about twenty minutes. There was little change until forty grains had been given, but then the improvement was rapid and marked; the spasms subsided into mere muscular twitches, and the patient became calmer. The chloral was now given at longer intervals; about 3 A.M. the spasms ceased altogether, and the patient complained only of aching and soreness in the muscles. He recovered completely in three or four days.—*London Medical Record.*

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*Pavesi on the External Applications of Hydrate of Chloral.*

Dr. Carlo Pavesi, in the *Annali de Chimica (Milano)* for August, 1874, remarks that chloral was discovered in Germany by Liebig; its mode of preparation has been perfected by Dumas, Roussin, and Städeler, in France, and that it was first used as an hypnotic by Liebreich, at Berlin. It is, however, in Italy that its various antiseptic antifermentative, antiputrescent, and coagulative qualities were first discovered. It is likewise in Italy that it received its first successful applications at the hands of Pavesi, Ciattiglia, Merini, and Porta. At a later period, experimentalists of all countries have borne witness to its good effects both in medicine and in surgery, and even in veterinary surgery. In Italy Signor Amici used it to preserve different kinds of vegetables, potatoes and ergot of rye, and also to destroy the itch-acarus. Prato Giurkeo used it to preserve and disinfect leeches; and many others have utilised its different properties.

Dr. Pavesi states that by continuing the researches and experiences undertaken on this head in Italy, he has kept butter for eighteen months in an atmosphere charged with

chloral. With the exception of a slight odour, which, however, is not disagreeable, and disappears if the butter be washed in fresh water, it was in a perfectly sound and sweet condition. Meat and fish of all kinds, preserved for three years, lost all odour and flavour of chloral on being macerated in fresh water. After this maceration, the substance which had been submitted to these experiments regained their freshness and natural colour, and furnished products which had all the qualities requisite for good alimentation. The fibrine and the albumen were both in a perfectly satisfactory state. Dr. Cogniard, in a recent thesis on the external applications of hydrate of chloral, has made a summary of the numerous works written on this question, and does full justice to the part the Italian *savans* have had in discovering the peculiar qualities of chloral already specified.—*London Medical Record*.

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*Dr. Weir Mitchell on Nitrite of Amyl in Epilepsy.*

The *Philadelphia Medical Times* for March 6 contains a paper by Dr. Weir Mitchell, on the use of nitrite of amyl in epilepsy, and in various other forms of spasm. He states that he has made extensive trials of this remedy during the last few years, and in April, 1872, published cases illustrating its power of arresting epileptic attacks, thus anticipating Dr. Crichton Browne's able essay on the same subject, which was published in the *West Riding Asylum Reports* for 1873. Dr. Mitchell does not think that the nitrite is capable of diminishing the frequency of the fits, but he has never known it fail to arrest an attack actually threatened when there was time to use it. Unfortunately it is only available for use by the patient in those somewhat rare cases in which the fit is preceded by a distinct aura. He directs such patients always to carry with them a phial containing a few drops of the remedy, and to inhale it freely on the first occurrence of the sensation; but in other cases, those who are familiar with the premonitory

symptoms can frequently check fits when the patient himself cannot. Dr. Mitchell has used the nitrite with more or less success in various other forms of intermittent spasm, some allied to *petit mal*, and others apparently hysterical in character. He thinks that it may also be occasionally used with advantage as an aid to diagnosis. Thus it is sometimes difficult to distinguish attacks of vertigo due merely to cerebral congestion from those due to *petit mal*; but in the one case inhalation of the nitrite will aggravate, or even produce the attacks, in the other it will give relief. In conclusion, Dr. Mitchell says that he has never met with any bad effects from the use of this remedy, though nervous patients occasionally complain of the throbbing and sense of fulness in the head which it causes.—*London Medical Record*.

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#### *Action of Iodine.*

Free iodine, according to Kammerer (*Virchow's Archiv.*), acts by destroying the parts with which it is brought into contact, and he further considers that the general effect of iodide of potassium is due to the decomposition of the salt in the blood, iodine being set free.

Prof. Binz, of Bonn, believes that iodide of potassium undergoes the following changes when taken internally. In a healthy stomach, a part is changed by the hydrachloric acid into hydriodic acid ( $K I + H Cl = K Cl + H I$ ); another portion is acted on by the chloride of sodium, so that iodide of sodium is formed; and if the dose be large enough, a part remains unaltered. All the three combinations quickly pass into the circulation. The hydriodic acid here meets with soda, and forms iodide of sodium: but the alkaline combinations of iodide are again acted on in the tissue by carbonic and other acids, and iodine is set free. This free iodide has the property of combining with certain albuminous bodies; and in this, Binz believes, lies the ex-

planation of the therapeutic action of the preparations of iodine.

Kammerer cannot agree with Binz, as iodine acts upon a watery solution of an alkaline carbonate with a formation of an iodide and an iodate of the alkali.

Beside the free iodine, Kammerer supposes that another body is formed, upon which iodine does not act, probably superoxide of potassium, which easily oxidises organic bodies, by which it is reduced to potash, thus increasing the metamorphosis of tissue. The organic bodies to be oxidised may be miasmatic substances and ferments, or later, fibrin and albuminous bodies.

Buchheim, after stating (*Archiv. f. Exper. Path. und Pharm.*) that iodide of potassium is an easily dialysable salt, and as such rapidly eliminated from various mucous membranes, finds in the ozone which is always developed wherever watery evaporation is rapidly going on, and therefore on the skin and mucous membranes, an agent capable of setting free the iodine from its combination, thus giving rise to coryza, &c. The acne-like eruption is due to the iodide eliminated with chloride of sodium in the perspiration.

Buchheim cannot admit the increased destruction of albuminoid material spoken of by Kammerer on either chemical or clinical grounds. A destruction of miasmatic substances and ferments is not among the observed effects of iodide of potassium. Neither the temperature nor the excretion of urea is increased by its use, as they should be according to Kammerer's theory. The emaciation and dyspeptic symptoms observed from the use of tincture of iodine and of Lugol's solution are not necessary consequences even of the long-continued use of iodide of potassium.

Buchheim suggests that the free iodine acting upon the walls of the smaller blood-vessels and capillaries may so irritate them as to cause their contraction, and thus a diminished blood supply to certain very vascular organs, as the thyroid gland and the spleen, which show especial susceptibility to the action of this drug. With small doses this action is felt only upon organs having a specially favourable organisation for it, as in those just mentioned, while if the dose is larger the action is a more general one.—*The Doctor.*

CANADA

# Medical and Surgical Journal.

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MONTREAL, JUNE, 1875.

## BURIAL OR CREMATION, WHICH?

The subject of Cremation is agitating the public mind at present, and is without question, the best means of disposing of human remains. What can be more purifying than fire; and viewed as a sanitary measure, destruction of all decomposing animal and vegetable material by fire, is far preferable to covering it up with earth. The object in entombment, is simply to bury the dead out of our sight, so that it may not be an offence to the living. To contemplate the gradual destruction of any body by decomposition, is most revolting; the gradual changes which occur during the process of decay, is a subject which is not sufficiently dwelt upon, and if it were, there are few of us living who would not consider it far more desirable to undergo the rapid destruction of our tissues by fire, than, permit them to be submitted to the more gradual, but equally certain disintegration which occurs in the grave. There is to our mind a feeling akin to horror at the thought of being placed in a deal box, or even in a metal casket, and buried with six feet of earth above our heads. We suppose it would matter very little to us how our remains were disposed of; nevertheless, personally, we should prefer the aid of a Sieman's furnace to reduce to its elements, in the space of half an hour, the tissues of which our body is made up. There are many arguments which can be advanced in favor of Cremation, not the least of which is the possible injury decomposing material can do to the living.

These are days in which utilitarian ideas are becoming

more general. Could there be less superstition mixed up with those sentiments, greater good would result to mankind in various ways. For instance, there is a very general feeling of respect for the dead, but this respect is carried just so far as is considered advantageous. It hardly survives a generation. We confess to a certain amount of sentiment as regards the remains of those we knew in life, loved and respected, and when we see their last resting place torn up and desecrated, we cannot but feel a certain amount of painful regret, that their bodies had not been submitted to the devouring element and their ashes scattered to the winds of heaven. There is a large amount of deception practiced in the present day in the treatment of the bodies of the dead. But that deception, we suppose, has not arisen in this 19th century. The Church leads its votaries to believe in the essential necessity of what is termed Christian burial. We will not speak of the pomp and circumstance, the ringing of bells, etc., etc., which is considered genteel, but is in verity a tax on the living. It is a business, and a profitable one. What essential good is to be derived by this treatment of our dead? No earthly good to the survivors except, perhaps, in being looked upon by their fellow-mortals as well-to-do in this world because they paid for a fine funeral. We have heard a story of a Scotch Highland Chief whose funeral beggared his family. We know of a case in our own city where the head of a family was struck down suddenly, and where the survivors had to borrow some twenty-five or thirty dollars to bury their relative—half a cord of wood at eight dollars a cord would have reduced his remains to ashes; and if a Sieman's furnace had been at hand, a bushel or two of gas coke would have been sufficient. Viewed, therefore, from an economic point, and from a sanitary point, Cremation has everything in its favor.

Then, again, with regard to burial of the dead in consecrated ground, the thing is a fraud. The ground is consecrated to preserve the superstitious belief of

the faithful. Just so long as it is quite convenient to the circumstances of the day will consecration last ; as soon as the ground in question becomes of value by the encroachments of the living, will the consecration be removed, the resting places of the dead rooted up, and the ground itself sold for the purposes of the living. If monuments have been placed by a former generation to mark the hallowed spot, these must in turn give place, there is no practical use in retaining them, even though they did cost, perhaps, the price of many a meal, which has been abstained from by the destitute, rather than that so sacred a duty as raising a monument to the memory of the departed should be omitted. These thoughts have been suggested by the very practical manner in which the two burial grounds in this city have been disposed of.

In the case of the old English burial ground, the property is situated in the heart of a populous district. It has been for over ninety years the burial place of protestant citizens of this City. In the year 1856, a By-Law was passed forbidding any further intramural interments and that ground was closed. In course of time, a Church of England Congregation, sought to secure the ground for the purpose of erecting thereon a free seat church, but so many conflicting elements existed in this connection, that the proposal was found to be impracticable. Subsequently an Act of Parliament was obtained, authorizing the sale of this property to the City, and a certain amount of money we believe was paid by the City to the Mount-Royal Cemetery Co., ostensibly for the purpose of removing all the bodies of the dead lying in that ground, and placing them in the Mount-Royal Cemetery. This has not been done, the required time has elapsed, and the City of Montreal has entered upon occupancy of the ground in question, all the monuments are being rooted up, destroyed and reduced to fragments, the ground is to be levelled and converted into a garden, and in due course of time, we will have fountains playing and other modern improvements, which certainly

will be more agreeable to the eye and more healthful to the residents in the vicinity. Now we do not object to all this, but we simply say let us be consistent; do not on the one side condemn the disposal of the remains of the dead by fire as heathenish and demoralizing, and on the other treat the remains of the dead of a generation or two back, in a way in which heathens would have considered as demoralizing and contrary to law and order. Who now can believe in the sacredness of any parcel of land? Who will believe that there is any necessity for the hollow mockery of parading our dead through the streets, taking the remains to a church, and, if we can afford it, having a requiem sung, and from thence taking them to a consecrated burial ground? Who will now raise a monument to preserve the memory of any worthy or unworthy son of Adam? Better by far reduce his body to ashes by aid of a Sieman's furnace. But supposing the destruction of bodies by fire were to become general, it would not prevent the performance of any religious ceremony, as we suppose society is not prepared to submit to any sudden alteration in this respect.

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### THE CITY SMALL POX HOSPITAL.

We observe that the city authorities are becoming tired of keeping up the small pox hospital, and are returning to the old cry of establishing two separate institutions, one under the management of the Sisters of the Hotel Dieu, to constitute a Roman Catholic small pox hospital; the other to be under the charge of the Corporation of the Montreal General Hospital, and to constitute a Protestant establishment. We are surprised that this idea is again mooted, as public opinion was somewhat pronounced against such a measure. We have not seen any statement of the actual cost to the city of keeping up the small pox establishment at the Hall house, but suppose this action of the Corporation proceeds from the expensive

nature of that undertaking. We have heard that the Sisters of the Hotel Dieu demand an extra subsidy from the city for having treated so many cases of small pox, at so much a head per day. We believe that the Committee of the Montreal General Hospital refused to accept any payment from the city for cases of small pox treated in their wards, alleging that inasmuch as they already receive a grant of money from the Government they would not be doing quite the square thing to accept a subsidy from the city chest. This is perfectly correct in principle, but the Hotel Dieu Hospital is precisely in the same position; they, too, receive a grant from Government to aid in carrying on their charity.

It is desirable that a hospital, separate and distinct and not denominational, should be established. To carry out this idea it would be well to appoint a special committee, and although nothing like parsimony should be permitted, nevertheless, economy should guide its management. The money to be expended is public money, and will be advantageously spent if in the end it leads to the stamping out the disease small pox. The fact of the existence of small pox in an epidemic form has materially injured the trade of this city. The disease has declined in consequence of the more favorable weather for the ventilation and cleansing of our houses; but it still exists, and therefore the watchfulness and care of the City Health Department should not relax. In fact to be of further use redoubled energy should be shown; certainly to omit further precaution would be to give the disease a chance of a fresh outbreak, which would be exceedingly damaging to the best interests of the city.

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## RESULTS OF VACCINATION IN BOSTON, MASS.

"LOCAL VARIETIES.—There was not a case of small pox in Boston for the year ending May 1st, which is the first time the remark could have been made with truth for twenty years."

We extract the above from the Boston *Herald* of Monday, 17th May, 1875, and the gentleman who kindly sent it to

us adds : "*Boston a été vaccinée il y a deux ans ; quel argument pour le Dr. Coderre.*" Truly it is an argument which is unanswerable, but one which has been oft repeated. Casper, of Berlin, gives the returns of death by small pox in that city for three decennial periods. From 1792 to 1801 there perished in Berlin, from small pox, 4,453 persons. In the year 1800 vaccination was introduced and practiced extensively ; from 1802 to 1811 the death rate from small pox was reduced to 2,955 ; and in the next decennial period the deaths from small pox were further reduced to 500 souls. Take the instance of Sweden : from the official government returns we learn that in the year 1799, 11,500 persons perished by small-pox ; in 1800 there were 12,800 deaths from that malady. In the year 1800 vaccination was introduced into Sweden and rendered compulsory ; in the year 1801, the deaths from small-pox were reduced to 6000, and in 1822 there were only 11 cases of death from small pox recorded as occurring throughout Sweden. We have always considered it a fearful mistake on the part of our Legislators the neglect to enforce a rigid compulsory system of vaccination throughout the length and breadth of this land. We do not know whose business it is to legislate on this matter for under the present cumbrous system we have been informed that all questions of public hygiene are regarded as subjects for municipal government, and that any amendment to the vaccination act, which was passed by the parliament of United Canada in the year 1861, would have to be brought up for consideration before the Local Legislatures of each province. The act referred to, strange to say, renders vaccination compulsory, or rather gives to the councils of certain cities the authority of enforcing vaccination, under a penalty of five dollars, for neglect on the part of parents, or persons having the care and nurture of children, to take such child within three months after birth to the public vaccinator, said vaccinator to be appointed by the council of the said city ; nothing whatever is said about country municipalities, and the natural inference is that they

were either without children, or that their offspring, if they had any, were considered by the Legislative Solons of 1861, to be quite incapable of contracting the disease smallpox. In fact for the past few years we have adopted the very wise *laissez faire* system; "we have sown the wind and are now reaping the whirlwind," inasmuch as there is hardly a locality throughout the country, where smallpox has not entered and is doing its work of destruction.

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### CHANGES IN THE FACULTY OF MEDICINE, MCGILL UNIVERSITY.

At the termination of the last session of the Medical Faculty of McGill University, Dr. Campbell, the Dean of the Faculty and Professor of Surgery, announced his intention to resign his Chair as a teacher in the school, but said he would still remain in connection with the Faculty and retain the Deanship. This action necessitated a number of changes, and the following is a list of the appointments recently made by the Governors of the University:

Emeritus Professor of Surgery, GEORGE W. CAMPBELL, A.M., M.D., J.L.D., Dean of the Medical Faculty.

Theory and Practice of Surgery, G. E. FENWICK, M.D.

Clinical Surgery, THOMAS GEORGE RODDICK, M.D.

Medical Jurisprudence, WILLIAM GARDINER, M.D.

Hygiene, ROBERT T. GODFERY, A.M., M.D.

Dr. Campbell has been connected with McGill University and has lectured on surgery, without interruption, for forty years. His course was most instructive and eminently practical. We trust that the severing of his connection with the teaching body of this school will not in any way prove detrimental to the interests of the University. At a subsequent meeting of the Faculty of Medicine Dr. Frank Shepherd was named by them Demonstrator of Anatomy, rendered vacant by the appointment of Dr. Roddick to the Professorship of Clinical Surgery.

## MONTREAL GENERAL HOSPITAL.

The office of House Surgeon to this institution, rendered vacant by the resignation of C. H. Chipman, M. D., was filled at the last quarterly meeting of the Governors of the Hospital, by the appointment of the Assistant House Surgeon, J. C. Cameron, M. D. The post vacated by Dr. Cameron was filled by the appointment thereto of J. D. Cline, B.A., M.D., who had served during the last twelve months as apothecary to the hospital; and the vacancy created by the advancement of Dr. Cline, was filled by the appointment of W. H. Burland, Esq. Mr. Burland has fulfilled all the requirements, and passed all the examinations necessary to entitle him to receive the degree of M.D., C.M., from the McGill University, but not being of the full age of twenty-one years, he only awaits his majority before he can graduate. We congratulate these gentlemen on their several appointments.

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## THE SANITARY ASSOCIATION OF MONTREAL.

We observe that a number of prominent citizens of Montreal have formed themselves into an association with the above title, their professed object being to improve, if possible, the sanitary condition of our city. The association is not in any way antagonistic to the legally constituted health department, but is desirous of seconding the efforts of the health department in every way in its power. Great good may result from the formation of this association. There are many subjects which will legitimately engage its attention, but we believe its mission lies in arousing public and individual attention to the urgency of adopting sanitary measures; in other words, of educating the masses in subjects with which they should be familiar, leaving the details of enforcing sanitary regulations to the police. We will refer again to this subject.

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We have to acknowledge the receipt of communications from Dr. Duncan, Cowansville, Dr. Wood, Faribault, and Dr. Shepherd, Vienna, Austria. They will appear in our next.