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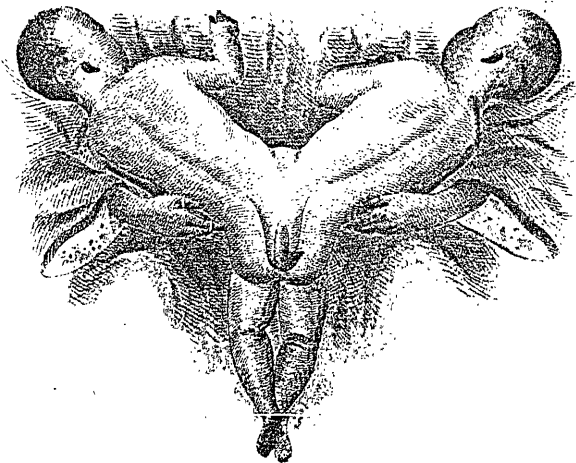
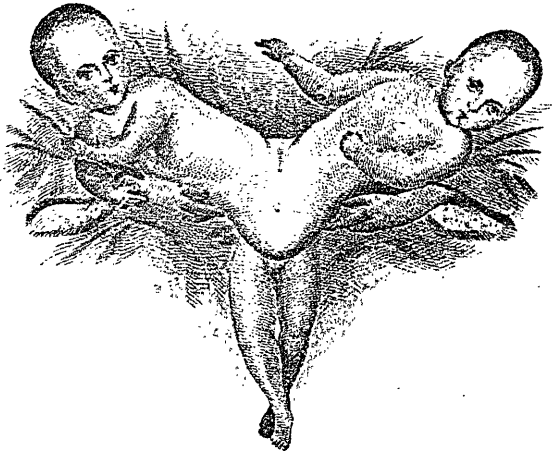
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CANADA
MEDICAL & SURGICAL JOURNAL

OCTOBER, 1878.

Original Communications.

A DESCRIPTION OF THE CONJOINED TWINS,
MARIE-ROSA DROUIN.

By D. C. MACCALLUM, M.D., M.R.C.S., Eng.

Professor of Midwifery and Diseases of Women and Children, McGill University.

This remarkable specimen of the fusion in part of the bodies of two female children was brought to Montreal for exhibition during the month of April, 1878. It was exceedingly difficult to make a thorough examination of the children, as the mother was strongly opposed to having them handled or touched. By frequent visits, and by obtaining the consent of the mother to see the children whilst she was washing and dressing them, I succeeded in making out, not only the most important points relating to their union, but also in obtaining an excellent drawing, by Hawksett, of the appearances which they present anteriorly and posteriorly. The specimen belongs to St. Hilaire's class of *Monstres Doubles*; *Famille-Sysonien*; *Genres-Psodyme*; to Playfair's division of *Dicephalous Monsters*.

The children lie in their mother's arms much as they are represented in the plate, the two upper separated portions being about in a line with each other, and each forming nearly a right angle with the single trunk. The one to the left of the observer, named *Marie*, resembles the mother, has a fairer complexion, is

more strongly developed and healthier looking than her sister *Rosa*, who is smaller, darker, more delicate-looking and resembles the father. They are both bright, lively and intelligent-looking children. The two bodies, from the heads, as far as the abdomen, are well formed, perfectly developed, and in a state of good nutrition. The union between them commences at the lower part of the thorax of each, and from that part downwards they present the appearance of one female child; that is, there is but one abdomen with one navel, a genital fissure with the external organs of generation of the female, and two inferior extremities. The floating ribs are distinct in each, as is also the ensiform cartilage. The lateral halves of the abdomen and the inferior extremities correspond in size and development respectively to the body of the same side; and the same remark applies to the labia majora. The spinal columns are distinct and appear to meet at a pelvis common to both, although the fusion of the children commences at some distance above their junction. From near the extremity of each spine, a fissure extends downwards and inwards, meeting its fellow of the opposite side at the cleft between the buttocks near the anus, including a somewhat elevated soft fleshy mass, thicker below than above. At a central point between these fissures, at the distance of *two and a half inches* from the point where the vertebral columns meet, and *three and a half inches* from the anus there projects a rudimentary limb with a very movable attachment. This limb, which measures *five inches* in length, and is provided with a joint, tapers to a fine point, which is furnished with a distinct nail. It is very sensitive and contracts strongly when slightly irritated.

The respiratory movements are not synchronous, nor do the pulsations of the hearts correspond—*Marie's* heart beating at the time of examination 128 per minute; *Rosa's*, 133. The sensation of hunger is not always felt at the same time, as very frequently one child sleeps while the other is nursing. When one child cries and the other is tranquil, the abdomen on the side of the crying child contracts and expands, and the limb of that side is agitated, while the corresponding

parts of the opposite side are at rest. There is slight movement of the lateral half of the abdomen on the side of the quiet child, but this is evidently communicated. Precisely the same phenomena are observed when either child forces during a motion.

From these observations it would appear that the spinal, respiratory, circulatory and digestive systems of these children are quite distinct. They have each a separate diaphragm, and the abdominal muscles on each side of the mesial line, and the limb of that side are supplied with blood by the vessels and are under the control of the nervous system of the corresponding child. They have each a distinct stomach and an alimentary canal, which probably opens at a point close to the common anus. It would follow also that the accessory organs of the digestive system are distinct for each child.

The two fissures behind are evidently the original clefts between the buttocks of each child, one buttock remaining in its integrity, whilst the other in a rudimentary condition is fused with that of the opposite child, forming the soft fleshy mass from the upper part of which the rudimentary limb projects.

These children are the products of a second gestation. They were born at St. Benoit, county of Two Mountains, on the 28th February, 1878. The mother, a fine healthy looking woman, aged 26 years, states that she experienced unusual sensations in the womb during the period of gestation, and that towards its close the abdomen became so prominent she was ashamed to be seen by her friends. The weight also greatly fatigued her, and the movements of the children were very distressing. During her labour she was attended by a midwife. It lasted seven hours, commencing at 1 a.m. and terminating at 8 a.m. One head and body were first born; this was shortly followed by the lower extremities, and immediately after the second body and head were expelled.

REMOVAL OF THE END OF THE RECTUM WITH
THE SPHINCTER ANI FOR EPITHELIOMA.

BY GEORGE E. FENWICK, M.D.,

PROFESSOR OF SURGERY, MCGILL UNIVERSITY.

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

The operation which I desire to describe to the Society this evening is rather novel in procedure, simply from the fact that very few cases are met with in which it may be considered suitable; extirpation or amputation of the rectum or rather a portion of that bowel has been practiced for over half a century. Lisfranc performed it as early as 1826, and claims to have relieved six out of nine cases. Other continental surgeons have, in isolated cases, removed several inches of the end of the bowel with variable success. It is an operation which has received unqualified condemnation from British surgeons, but I am under the impression that their opinions are too sweeping, as in my own limited experience there are occasionally met with undoubted cases of malignant disease of the end of the bowel which are capable of safe removal. In the 4th vol. of Holmes' Surgery, Mr. Henry Smith, in writing on this subject, remarks: "Some surgeons were, a few years since, in the habit of performing excision of the lower part of the rectum when affected with cancer; but this proceeding must be looked upon both as barbarous and unscientific, and is now happily exploded from the catalogue of surgical operations." This was the opinion of Mr. Smith in 1870, but from the more recent light that has been thrown on this subject, he may have greatly modified his views. Mr. Erichsen, in the last edition of his work just published, remarks (vol. 2, page 680): "When it (cancer) occurs as a primary disease it is usually in the form of epithelioma and may then form around the anus, just as it does at other muco-cutaneous apertures. If limited and detected in the early stage it may advantageously be excised, but at a more advanced period of the disease such a practice can scarcely be adopted with any prospect of success, in consequence of the impossibility of removing the whole of

the structures implicated." Mr. Allingham, in his work, holds much the same opinion. He observes: "In any form of cancer, save epithelioma, I do not think excision can be recommended." But although in epithelioma he admits the possibility of removal, yet only then when very limited. I may remark here that it is seldom that the surgeon meets with a suitable case for extirpation in cancer of the rectum. The disease does not attract early attention; a certain amount of discomfort is experienced, and this may continue for months, as the disease advances slowly and insidiously. The patient may believe he is suffering from piles and may resort to various quack remedies, or he may consult his surgeon, who without examination, pronounces the symptoms present as due to piles, and gives him an ointment of tannic acid or galls. Hence it is that in very many cases the real condition of the parts is made out when it is too late to resort to operative measures for the removal of the disease. One of the prominent objections to the operation is the danger of injury to the peritoneum, besides which in advanced cases the parts in the vicinity become so infiltrated as to preclude the chance of removal.

Continental surgeons have adopted this measure of removal of the end of the bowel, and we read of the variable success of Lisfranc, Velpeau, Billroth, Volkman and others. The latter surgeon does not attach such importance to a wound of the peritoneum as others, as his system of treatment is simply after the manner of Bister, and if the peritoneum is opened he does not hesitate to deal with it much in the same manner as is followed in ovariectomy. Volkman, who has had very considerable experience in these cases, attaches great importance to free drainage, and he holds that with these precautions the patient is insured against the dangers of diffuse pelvic cellulitis which is so apt to spread behind the fascia and result in fatal septicæmia or peritonitis. He states that he has seen three permanent cures, by the early removal of undoubted cases of cancer of the rectum, and that in these cases the disease had not returned at the end of six, five and three years. This, certainly, is very encouraging, and has led him to believe that

cancer invading the rectum is less liable to become disseminated, and hence its early removal will greatly serve to protect the patient from systemic infection. Quite a number of cases have recently been performed in New York by various operators, and Dr. Van Buren has, in a recent number of the *New York Medical Record*, published a lecture delivered on this subject with a report of three cases. The case annexed is the first of the kind I have seen which, in my own opinion, was suitable for the operation. I have met with several cases of cancer of the rectum, and have performed colotomy in that affection on several occasions, not as a curative but as a palliative measure; but the case under review, notwithstanding the patient's great age, seemed to be one suitable for extirpation, which operation was carried out with success. The notes are as follows:

July 22nd, 1878, I was requested to see Mrs. N., an old lady of seventy years, who was reported to be suffering from dysentery. She was a hale and well preserved woman and had been the subject of procidentia uteri for many years. She was of a constipated habit, and whenever she went to stool the straining was so great that the uterus and bladder would be forced out and had remained so during the past six weeks. There was great difficulty in relieving her bowels, and for the last week or ten days, I was informed, she had a dysenteric attack, passing liquid fæces in small quantities, but very frequently, mixed with blood and mucus. The tenesmus was very distressing, and there existed a constant feeling of fullness and distention. There was also a burning, dragging feeling, extending up the course of the bowel, with pain over the sacrum and down the thighs. From the history and symptoms, I supposed that the bowel was filled with impacted fæces which was locally keeping up the irritation. I prescribed a dose of castor oil. This operated three or four times and gave much relief. The tenesmus, however, still continued, and she passed much blood and mucus. On the 26th, her daughter informed me that she had bleeding piles and that they were ulcerated. This led to a careful inspection, when the following condition was observed:—

Completely surrounding the anus was a fungus mass, ulcerated, with everted and ragged edges, presenting much the same appearance as is seen in epithelioma of the lips. On exploring the bowel with the finger, I found that the disease implicated about two inches of the anterior wall; the point of the finger reached above the diseased mass; the rugæ were large, corrugated and thickened, but the mucous membrane above and along the posterior wall was smooth and healthy to the feel. There could be no doubt as to the nature of the case, and I believed it to be one suitable for removal, and advised the performance of the operation. A consultation was demanded by the friends, and I met Drs. Howard and Drake the following morning. These gentlemen coincided with me in the nature of the case, and agreed in the advisability and feasibility of the removal by operation.

Some delay followed in consequence of objections on the part of some members of her family, but finally arrangements were concluded, and the operation performed in the following manner on the 6th of August, 1878. Dr. Roddick acted as my direct assistant, the other gentlemen above named were present, and assisted with their counsel and advice.

A dose of castor oil had been given the evening previous, and the lower bowel well washed out with an enema. Ether having been administered, the operation commenced by making an elliptical incision on either side of the anus. Cutting wide of the disease, the knife sank in well on either side into the ischio-rectal fossa, freely exposing the levator ani muscle. This was divided as far forward as was deemed advisable. There was no chance of saving the sphincter ani, as it appeared to be engaged in the disease. The posterior wall of the vagina, which was perfectly healthy, was readily reflected, and the bowel, freed from its attachments, was easily drawn down. All bleeding points were immediately secured with carbolized gut. At this stage of the proceedings, between three and four inches of the end of the rectum was hanging out of the wound, and I proceeded to ablate, cutting with a pair of scissors directly across the gut, fully above the diseased mass. Having divided about one

quarter of the entire extent of the bowel, the mouths of the vessels, both proximal and distal, were tied, and then the entire thickness of the bowel was stitched to the healthy skin. A second slice of the bowel was then made and treated in the same manner, and so on until the entire diseased mass was removed. As we proceeded, all bleeding points were secured, so that the amount of blood lost did not exceed six ounces. In attaching the bowel to the skin on either side deep sutures of silk were used, and where there was any gaping fine carbolized cat-gut sutures were introduced between those of silk. As much skin had to be sacrificed, it was necessary to close the wound posteriorly approximating the edges of the healthy skin on either side of the wound, and passing well down, two large-sized drainage tubes which were secured in position. These were with difficulty retained, and they had to be removed on the following day, as they appeared to be doing no good. After closing the wound, the parts were covered with a piece of lint soaked in carbolic oil and supported by a pad of cotton batting with a firmly applied T bandage. To avoid all straining, as well as to save the parts from injury, the urine was drawn off with the catheter; a full dose of morphia by hypodermic injection was given at night. At the evening visit the patient was perfectly comfortable; there was no straining or tenesmus, and she complained only of slight soreness. Her temperature was 99° F.

August 7th.—She passed a good night, slept well and comfortably, the urine was well secreted, healthy in appearance, and had been removed by the catheter twice during the night; she has taken milk and beef-tea in fair quantity, temperature, 99°; pulse, 100; tongue rather furred, and she suffers from nausea, in all likelihood due to the ether. The dressing was removed, and I found that the drainage tubes had been forced out of their position so that they were taken away. The wound was bathed with tepid water, thoroughly cleansed and dressed in the same manner as above described. The case progressed favorably. On the third day the bowels moved freely without pain or straining, suppuration was in due time established, and

the process of cicatrization went on kindly. The stitches were all removed on the eighth day: this added to her comfort, as during the last two days the action of the bowels was attended with some pain.

Union was complete by the twelfth day. There was no tendency to prolapsus of the rectum; the uterus and bladder still come down but are readily returned, in this respect the patient is no worse off than before the operation. At the present time, September 27, the parts are in a very satisfactory state; there is inability to retain the fæces, but she is fully aware when the bowels are going to act, and has sufficient warning to enable her to make preparations necessary for cleanliness. She is in excellent spirits, is able to go about the house, and has ventured out for a drive on several occasions. She has greatly improved in appearance and in condition, and expresses the hope of soon being able to have control over her bowels. The results are so far very satisfactory, and add one more case to those already published by other surgeons. It points to the necessity for an early examination in affections of the rectum, a rule insisted on by all practical surgeons, as it may be presumed that some cases at least are permitted to advance beyond the reach of surgical aid by the neglect of a careful and thorough examination as to condition in cases where such a serious malady may be suspected.

I have on a former occasion reported a case of epithelioma of the rectum in a young girl of twelve years, but in this case the disease extended up the bowel for a considerable distance, too far to permit of removal. In this case colotomy was performed as a palliative, with considerable relief to the distress and misery endured by the sufferer whenever the bowels acted.

Personal.

Drs. GEORGE ROSS, and WILLIAM OSLER, returned to Canada on the 25th ultimo, after a three months' holiday in Great Britain and on the continent. Dr. ROBERT CRAIK, has also been absent in Europe since last July, and is daily expected to return.

Hospital Reports.

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

Case of Pyæmia.—Under care of Dr. WILKINS. Reported
by JAMES BELL, M.D., Assistant House Surgeon.

M. C., æt. 23, was admitted on the evening of August 21st, 1878, with a painful swelling on the left antero-lateral aspect of the neck, and high fever. She was a servant girl of less than medium height, stout and well built. She was bright and intelligent-looking, but with very prominent eye-balls. Her family history was good and she had always enjoyed good health until five years ago, when she began to suffer from palpitation of the heart, and noticed an enlargement of her neck. She came to the hospital, and was found to have all the characteristic signs and symptoms of exophthalmic goitre. A prominent cyst in the left lobe of the thyroid gland was tapped, after which she says she did not suffer from palpitation or any other symptoms of this disease for two years, until the gland again became enlarged. Two years ago she had pneumonia and was treated in hospital. She menstruated for the first time two years ago and since then has not been regular, menstruating at intervals of one, two or three months. Her present illness began five days before admission with head-ache, back-ache, pain in her neck and fever. After the first day of her illness she had frequent chills and was very restless, not being able to sleep either by night or day. On admission, her temperature was 104° F., face flushed, breathing hurried, pulse rapid and intermitting. The eye-balls were very prominent, the anterior aspect of the neck much enlarged and painful, and towards the left side extremely tender. Two distinct and separate cysts could be easily made out—one at the extreme left of the gland very tense and tender, the other over the isthmus, pretty full, but not at all tender on pressure. She complained of pain in the tumor which extended down the sternal region. All the other organs were healthy. She did not sleep, and was very

restless, and at 1 a.m., had a severe chill, which lasted half an hour. The temperature was not taken after this chill. At 1 p.m., on the 22nd, she had another severe chill, followed by a temperature of 105° F. She was ordered 20 grains of quinine, to be taken at once, and an application consisting of equal parts of fluid extract of belladonna and glycerine to be applied to the tumor; also a mixture containing liq. ammon. acet. and tinct. aconiti, and she was given milk diet. The pulse was now pretty regular and rapid (124). No intermissions in the rhythm were subsequently noticed.

August 23rd, temperature 100½ in the morning; pulse 120; neck swollen and œdematous on left side. Left parotid gland enlarged and hard. She complains of sore throat and severe pain in the left ear. Ordered a linseed meal poultice instead of the belladonna application to the neck, and tr. digitalis m. iij. to be added to each dose of the febrifuge mixture, which was given every four hours; she had also twenty grains of quinine. She had a severe chill at 9.30 p.m., the temperature rising to 107° F. She had twenty grains of chloral at night, but did not sleep.

August 24th, temperature 100½ in the morning. All the symptoms already mentioned are more marked, especially the swelling and œdema of the neck. The painful cyst at the left extremity of the gland was aspirated and found to contain pus, which forced its way out drop by drop from the puncture made by the hypodermic needle. It was then opened with a scalpel, and about half an ounce of pus escaped. This gave considerable relief, and the evening temperature was only 102° F; pulse 100. She had again 20 grains of quinine in the afternoon.

August 28th, she became delirious in the afternoon, and by 10 p.m. had to be held in bed. She was given chloral and bromide of potash in large doses, an ice cap was applied to the head and she became quiet; temperature 99½ in the morning and 101½ in the evening. She perspired profusely during the day and had four loose feculant stools. She had no chills after the 23rd, but perspired freely and had two or three stools daily from the 25th.

August 29th, still delirious but quieter; abscess still discharging. Both parotids much swollen, so that the mouth can hardly be opened. Ordered 6 oz. brandy daily.

August 30th. Condition scarcely changed for the last two or three days. Pulse 90 to 100; temperature $99\frac{1}{2}$ to 102. Patient restless and more or less delirious all the time. Digitalis omitted.

September 2nd. Patient seems quite rational and says that she feels better. Ear-ache quite gone. About 1 p.m. she became suddenly quite furious. The ice-cap, which had been removed for two or three days, was now re-applied to the shaven scalp. Ordered chloral and bromide again. No symptoms of brain trouble except the delirium. The delirium persisted and urine and feces were voided in the bed. At 9 p.m. the right arm was found to be quite paralyzed. As she was quite unconscious it was impossible to say whether there was any paralysis of the legs or not.

September 3. There is now complete paralysis of both sensation and motion in the right arm. There seems to be paralysis of motion in the right leg, but sensation does not seem to be interfered with. There are frequent spasmodic movements of the left arm and leg. There is no strabismus nor any affection of the pupils. Patient evidently sinking rapidly. She died at 5 p.m., the temperature being $107\frac{1}{2}$ about half an hour before death.

Autopsy 19 hours after death.

Body that of a medium-sized young woman fairly nourished. Very slight mammary development. There is symmetrical swelling in the region of the thyroid, on the left side of which is a small opening discharging on pressure creamy pus. There is also considerable exophthalmus. On opening, abdomen organs appear healthy.

Thorax.—Pericardium normal and contains a small quantity of clear serum.

Heart.—235 grms. Substance and valves healthy. The right auricle and ventricle contain a good deal of friable clot.

Lungs.—There are firm adhesions over a considerable portion of both lungs, especially the left. Lungs crepitant. On

pressure they exude a good deal of frothy serum. Equally distributed through both are small dark patches (infarcts), the largest about the size of a bean. In two or three places there are thromboses of the pulmonary arterial branches, the vessels being about one-fifteenth of an inch in diameter. None of the infarcts have suppurated or softened. The lungs are light in color and in general appearance healthy.

Liver.—1080 grms. On section, the cut surface is obscurely mottled, but no definite infarcts are to be seen. Gall bladder, moderately full.

Spleen.—Rather large and firm. Malphigian bodies very firm. No infarct.

Pancreas normal.

Kidneys.—300 grms. each. Capsules not adherent. Numerous dark patches on the surface of both organs (infarcts). The left has a couple of small abscesses, each about the size of a pea, and a small quantity of pus in the pelvis, apparently derived from one of these.

Stomach and intestines apparently healthy.

The *thyroid gland* consists chiefly of cysts of various sizes, between which are tracts of gland tissue, the latter almost entirely confined to the right lobe; a large sac occupying nearly all the left lobe of the gland, and, opening externally, contains a small amount of pus. A cyst rather larger than a pigeon's egg occupies the isthmus, and lies upon the trachea. This contains sero-purulent fluid. The right lobe contains numerous cysts, varying in size from a pea to a marble. Some of these contain clear serum and others caseous matter. The cellular tissue of the left antero-lateral region of the neck, especially that between the deeper muscles, is infiltrated with pus. The left parotid gland is large and firm, and in its substance are several suppurating cavities. The right parotid is very much swollen and hard, but is not suppurating.

Brain.—1280 grms. The superior longitudinal, straight and right lateral sinuses, with the superior cerebral veins down to their finer branches are filled with a firm black clot, in which are noticed two or three suppurating points. The dura and

pia mater are much congested, and the surface of the convolutions very red. (The brain was not dissected when fresh, but preserved for some time in nitric acid solution). On dissection, the whole interior of the left hemisphere forming the roof of the lateral ventricle is found to be quite soft and broken down. A smaller spot of similarly disorganized cerebral substance is found in the centre of the right hemisphere. This softening is probably post mortem. A black clot, fusiform in shape and about an inch long by half an inch in diameter, is found extending into the anterior extremity of the middle frontal convolution of the left anterior lobe parallel to the longitudinal fissure. It extends into the brain from the surface, but no definite connection with any of the vessels can be made out.

Case of Puerperal Eclampsin.—Occuring at the University Lying-in Hospital. Under care of DR. MACCALLUM.
Reported by Mr. W. R. SUTHERLAND.

Mary Welsh, æt. 20, was admitted into the University Lying-in Hospital 16th March. 1877, pregnant of her second child. History elicited from her at previous confinement, Dec. 1875, was as follows :

She is well built, healthy looking, about 5 ft. 6 in. in height, fair complexion, dark hair, and rather stout. Has always enjoyed good health, never having been ill since her childhood, when she describes having a fever. At times of menstruation she is always unwell for a long time, great quantity of discharge. Since gestation commenced has suffered severe headaches and occasional dizziness.

She is of an apparently healthy family, but says her mother always has convulsions at time of labor.

Since recovery from her first attack, in January, 1876, she has been anæmic and suffering from Bright's disease. For the last week she has complained of severe headache, pain in the stomach, perversion of special senses, flashes of light before her eyes, momentary blindness and ringing in the ears. Menses stopped July 1876.

March 18th, Sunday, at 8 p.m.—Complained of blindness, and sent for the Matron, who, on going to her immediately, found her in a convulsion. This was followed by drowsiness and partial insensibility; half an hour afterwards she had another convulsion. I saw her just after the spasm had ceased, she was then in a condition of deep stupor, but could be roused by a loud question, and complained of severe headache. We removed her to the Lying-in Room. I then drew off the urine, it was very high-colored, contained at least 80 per cent. of albumen. Pulse 120; skin moist and cool. No convulsions for an hour.

At 11 p.m.—Dr. MacCallum visited her and ordered pulv. jalap co., to be given at once; potass bromide, grs. xx every hour, 3rd dose to be intermitted and replaced by 20 grs. chloral. If purgative did not act in 3 hrs., she was to have an enema. Patient was now in complete stupor. Pulse 120. Foetal heart heard very loudly about an inch below umbilicus in median line. On making vaginal examination, found os uteri firmly contracted, uterus high up almost out of reach, presenting part could not be felt through the walls of uterus. No uterine contractions. (Preceding convulsions lasted about 1 minute each.)

1 a.m.—7th fit lasted 90", followed by stertorous breathing for about 5 minutes.

2 a.m.—8th fit, very severe. No action of the bowels; gave an enema; brought away a small amount of faecal matter. Head rolling from side to side, convulsive twitching of eyelids, eye balls rolling, pupils much dilated but respond readily to light. Legs and arms in constant motion. From this time (2.30) till 7 a.m., she had seven more convulsions, long and severe, and occurring at intervals of 30 and 45". Emptied the bladder only about 3ss. of urine, dark in color, and more albuminous than before.

7 a.m.—16th fit, lasted 1 minute; pulse 130; surface warm but somewhat cyanosed; conjunctivæ insensitive to touch; pupils normal; irregular spasmodic jerking of body and limbs.

7.15.—Lasted one minute, followed by stertorous breathing.

7.30.—Same in character.

7.40.—Lasted one minute ; foetal heart cannot now be heard.

7.50.—An attack of well marked opisthotonus lasted two minutes ; tongue swollen and protruding ; no clonic spasms.

8.15.—Lasted 80 ". Face and upper extremities now quite cynaotic. Pulse 140 ; weak, can hardly be counted ; swallows with difficulty. Loud mucous gurgles in trachea and pharynx. Respiration seemed to be impeded by the accumulation of mucous ; the handle of a spoon was inserted crosswise between the teeth and kept there, the result being of manifest advantage.

10.00 a.m.—Lasted one minute ; less rigidity. Patient appeared a little better. Fit preceded by spasmodic contraction of recti muscles.

11.45.—Lasted 45 " ; omitted regular dose of chloral.

1.40 p.m.—Very severe ; lasted two minutes ; gave P. Jalapæ co. $\bar{3}$ i, followed by an enema at 4.30 p.m., which removed a large amount of serous fæcal matter. Has taken beef-tea freely to-day.—Brandy now added.

4.30.—Removed $\bar{3}$ i of dark, smoky-looking urine—the accumulation of three hours. Pulse 1.40 ; respiration moaning. Urine solidifies on testing.

5.00 p.m.—Uterine contractions noticed. Os dilated, size of half a dollar. Labor proceeded regularly ; no more convulsions. Breech presentation. 2nd dorso posterior or 4th position—child delivered easily. Pains strong ; scarcely any intervals between them. Delivery occurred at 8.00. a.m. The medicine was discontinued at 5 p.m. Child—female—still born, weight, 3 lbs.

Placenta, adherent, but easily removed ; uterus well contracted, not uneven.

10.00 p.m.—Pulse 140 ; temperature 102°.

Very restless throughout the night ; difficult at times to keep her in bed from the tossing about.

20th.—Urine more abundant this a.m. ; color more natural ; only 20 per cent. albumen. Pulse 120 ; temperature 101°.

Afternoon.—Patient quiet—protrudes tongue when asked to do so. Temperature 101.

21st.—Quite conscious ; feels very sore. Breasts enlarging ; is aphonic ; throat sore, cough, headache.

7.30 p.m.—Temperature, 100 ; feels better ; pulse 120.

Lochial discharge free.

22nd.—Pulse 120 ; still hoarse ; looks well ; is very low spirited. Albumen in urine about 10 per cent.

23rd.—Pulse 100 ; still low spirited ; has had general headache and amaurosis ; at times, flashes of light ; sees things coloured green, red, &c. This state of things is decreasing. Bowels have been moved two or three times each day since delivery. Hoarseness less marked. Pharynx rather more sensitive, though it can still be freely handled without producing much discomfort.

25th.—Spirits good ; pulse 98. Tongue clean and moist. Eats well. Urine still contains a little albumen.

28th.—Recovered voice and is now quite convalescent.

Laryngeal Diphtheria.—Tracheotomy.—Recovery.— Under

DR. RODDICK —Reported by H. N. VINEBERG, M.D.

L. L., æt. 6, was admitted January 15th, 1878, into the wards of the Montreal General Hospital, with symptoms of laryngeal diphtheria, great dyspnoea, labored breathing, base of chest retracted, and lips and finger nails quite cyanotic. On examination the tonsils were found enlarged, and covered with a greyish-white membrane, which extended downwards as far as the naked eye could see. There was no enlargement of the cervical glands. Three days before admission the little patient was attacked with a "sore throat," but croupal symptoms did not set in until forty-eight hours afterwards. The usual treatment for laryngeal diphtheria having had no effect, and the symptoms becoming more alarming, the medical attendant advised the parents to bring the child to the Hospital, with a view of performing tracheotomy. Accordingly the child was admitted at 12, noon, and very shortly after, as there was no time to lose, Dr. Roddick, assisted by Dr. Ross, performed tracheotomy, (the high operation) in the ordinary way. The opera-

tion was attended with scarcely any hæmorrhage. Just as the incision was being made into the trachea, there was intense spasm of all the respiratory muscles, but as soon as the tracheotomy tube was introduced, the spasm passed off, and quite a mass of membrane was brought up through the tube. After a few powerful expiratory efforts the breathing became much improved, and within an hour after the operation. the patient's lips and finger-nails regained their natural colour. Carbolized lint and oiled silk was introduced between the rim of the tube and the edges of the wound, and a large woollen cloud was wrapped around the patient's neck. He was then put in the "Infectious Ward." Steam, impregnated with carbolic acid, was kept up about the patient's head, and he was ordered to be given salicylate of soda, grs. 5, in solution, every three hours plenty of milk and 3 oz. of brandy.

January 16th.—Coughed up several pieces of membrane this morning. Carbolized lint removed, and nothing but oiled silk intervening between the tube and the wound. Wound healthy looking. Takes plenty of nourishment.

17th.—Removed the tube to-day for the first time since the operation. After cleaning it, it was re-introduced. The patient had to be put under chloroform at the time. Cervical glands slightly swelled, poultices to be applied to them. Ordered to burn 3ss of sulphur in the ward every two hours. Takes plenty of milk, but cannot be made to take the brandy. To have beef tea. Tinct. ferri mur. and glycerine in equal parts were ordered to be applied to the inside of the throat, but the nurse found it impossible to carry this out.

19th.—Has brought up, through the tube, several pieces of membrane. Breathing considerably embarrassed to-day, and it is feared the disease had extended downwards. Removed tube and replaced it by one of Trousseau's. Considerable redness about the wound, and a number of small white vesications near its margin. Lead lotion to be applied. At 4 p.m. the breathing became much easier after bringing up a small piece of membrane. Moderate discharge of a puriform fluid through the tube ever since the operation.

20th.—Vesications about the wound are extending. Appearances suspicious of diphtheritic action. To add hydrocyanic acid to the lead lotion.

21st.—Removed the tube. Patient doing well. Tested the power of breathing in the natural way, by closing the opening in the trachea with a cork, and found it to be very defective. Accordingly after the tube was cleaned it was re-introduced. Tincture Ferri. Mur. in small doses was ordered, but the patient could not be made to take it. The swelling of the glands has almost entirely disappeared. The white vesicles are diminishing and have been caused, no doubt, by the glycerine and carbolic acid dressing. A weaker solution to be used hereafter. Ordered lime water spray through the tube. Temperature since the operation has ranged from 100° to 101° F. Pulse from 112 to 140. Respirations from 24 to 36. Pulse, resp. ratio from $3\frac{1}{2}$ — 5 to 1.

22nd.—Not so well to-day. Had a severe fit of coughing early this morning.

Breathing somewhat laboured. Discharge through tube increased. Does not take his nourishment so well. Urine is clear, copious, and contains albumen (33 per cent.) for the first time, it having been tested daily. Tongue is coated with a heavy white fur, a few coarse bronchial rales heard over the chest. Temperature 100° F. Pulse 112. Respirations 30.

23rd.—Passed a good night, and is much better to day.—Changed for the better yesterday evening. On removing the tube it was found very much discoloured. Tested breathing, and finding it still defective, the tube was reintroduced. Redness and vesicles about wound disappearing. Takes plenty of milk, but will not take stimulants of any kind. Urine of amber colour, deposits a slight sediment, and contains 25 per cent. albumen. Under the microscope an occasional hyaline cast, and a few white globules are seen. Temperature 99.4°. Pulse 108; respirations 30.

25th—Yesterday afternoon, the nurse noticed little bits of orange coming out through the tube after the patient had partaken of some. Complains of considerable pain on swallowing.

To-day the nurse noticed some egg which patient had eaten come out through the tube. Otherwise patient is doing well.

Percentage of albumen in urine somewhat less.

28th.—Milk and food taken escapes through the tube freely. A drink of milk excites a fit of coughing, and then the milk streams out through the tube. Introduced to-day a new tube with a fenestrum in it. Opening of tube was closed by a cork, and the patient breathed through the natural passages, but with great difficulty, for about 15 seconds. Urine high coloured. Albumen almost disappeared. No casts to be seen with the microscope.

Temperature suddenly went up yesterday evening, from 98° to 100° F. Pulse 124; respirations 36.

29th.—Ordered to be fed in the recumbent posture, and it is found that not so much food escapes through the tube in this way. After several successful trials of the power of breathing, *per vias naturales*, the tube was removed and left out. Patient speaks now more distinctly, but still in a whisper. A rather copious eruption of varicella came out to-day all over the body, explaining the sudden rise of temperature. Urine contains about 25 per cent. albumen. Temperature 101.2° F. Pulse 125; respirations 40.

February 1st.—About 4 p.m. yesterday patient was suddenly seized with vomiting, became very faint, surface and extremities grew cold, the breathing became hurried, and the face livid. By applying warmth to the body, and giving stimulants internally, he rallied in about 45 minutes.

He had a tolerably fair night after this attack. He is not so well this morning, and has had a spell of rapid breathing, (80 per minute), again.

2.00 p.m.—Breathes nicely now, and is much better. As the food taken by mouth still continues to escape through the tube in considerable quantities, enemata of beef-tea and brandy every four hours were ordered in addition. The enemata are well retained. Has some retention. Has only passed 4 ounces of urine during the last twenty-four hours. It contains about 10 per cent. of albumen. Some of the varicellar vesicles are matur-

ating while others are coming out. Temperature 101° F. Pulse 120. Respirations 40. From this time until complete convalescence was established, the temperature was normal (98° F.) Pulse ranged from 110 to 120, and the respirations from 36 to 40.

5th.—Complains of pain in the back of the head, and for the last few days has had pain in the lower limbs, and some numbness. Still suffers from some retention. Eruption of varicella has disappeared. Takes food by mouth much better, it does not excite so much coughing. To have an enemata only every six hours. Wound healthy-looking.

10th.—The patient is doing very well, no more food passes through the opening in the trachea. Wound doing nicely, and is strapped with adhesive plaster.

Retention has passed off, urine still contains a small percentage of albumen.

18th.—Allowed to sit up. Wound healing nicely.

25th.—Patient was taken home by his parents to-day.

30th.—After he left the hospital the wound healed rapidly, but for a long time the little fellow suffered from a hoarse barking cough, which was much worse at night. Loud rhonchi were heard over the root of both lungs behind during this time. The voice continued husky for a long time after the external wound had completely closed. For the first four weeks after he left the Hospital he improved in general health but slowly, but after that he picked up wonderfully, and is now quite fat and well in every respect.

This adds one more case to those already published of the success attending the performance of tracheotomy in laryngeal Diphtheria. The case was most urgent, the symptoms at the outset were severe and pronounced, the results most gratifying. As it is the rule in practice, one closely followed in this Hospital, to open the trachea whenever, from extension of the disease, implicating the larynx, the life of the patient is threatened, we may reasonably hope that ere long other successful cases will be chronicled.

Reviews and Notices of Books.

The Physicians' Visiting List for 1879.—Twenty-eighth year of its publication, well bound in leather, with tucks, pocket and pencil. Philadelphia: LINDSAY & BLAKISTON.

We have received a copy of the Physicians' Visiting List for the year 1879. It comes to us in the same familiar form like an old friend with a new garment, and as full as ever, with all the requirements needed by a physician in a work of this kind.

We have seen many other somewhat similar lists, but this, "The Physicians' Visiting List" is the parent of them all, we have become accustomed to its use and could ill be without it. These lists can be had of any bookseller to supply space for 25, 50, 75 or 100 patients a week. The book is convenient in form, not too bulky, and in every respect the very best visiting list published.

Elementary Quantitative Analysis. — By ALEXANDER CLASSEN, Professor in the Royal Polytechnic School, Aix la-Chapelle. Translated with additions by EDGAR F. SMITH. A.M., M.D., &c., &c., with thirty-six illustrations. 8vo. pp. 328. Philadelphia: HENRY C. LEA, 1878.

We hail with satisfaction the translation of this little work. We have been acquainted with it for some time as a practical and concise guide, and we believe it will be found to fill an important niche in the library of the real practical chemist. It is a compact and useful manual of quantitative analysis. The author has sought in these pages to illustrate his subject by examples, beginning with simple determinations, following on with a number of alloys, and then proceeding to the analysis of minerals and other products which are submitted in the various departments of applied chemistry. It is sufficient to mention the fact that this book has been adopted as a class book in nearly all the laboratories of continental schools, and has taken rank by the side of larger and more voluminous works on this subject,

and even in Great Britain and the United States, it has been most favorably received as a thoroughly reliable guide. This is the opinion of those who have used it in the original, but their work will be greatly facilitated, at least, we refer to English-speaking students, since they have now an excellent translation, and one which has received at the hands of the translator such additions as the advance of scientific facts rendered necessary.

A Guide to the Practical Examination of Urine.—For the use of Physicians and Students.—By JAMES TYSON, M.D., Professor of General Pathology, &c., &c. Second edition, 8vo. pp. 172. Philadelphia: LINDSAY & BLAKISTON, '78.

In this the second edition of this little work, the author has carefully corrected and revised it, and has incorporated into its pages such additional facts as were deemed consistent with the original purpose in its publication. This has been done without increasing the size of the volume. The author at the outset mentions the theory of Ludwig, of the method of secretion of urine. He then mentions the reagents and apparatus required for quantitative as well as approximate analysis. The selection of a specimen of urine for examination is then referred to, and in making the selection the necessity for obtaining a part of the total amount of urine passed in the twenty-four hours is mentioned. The general physical and chemical characters of the urine are next given. He then passes on to the study of the different constituents of urine in health and disease, taking up first the organic constituents and then the inorganic. Urinary deposits forms the subject of the next section, the closing sections being on the differential diagnosis of renal diseases, and urinary calculi. The directions given throughout the work are clear and distinct. Those who desire more elaborate information on the chemistry of the urine will have to consult larger treatises on the subject, but we regard this little work as containing all that is really essential in a concise form. It is just such a treatise as the busy practitioner will find of the greatest service, and we can, without hesitation, commend it to our readers.

The Antagonism of Therapeutic Agents and what it teaches.

The essay to which was awarded the Fothergillian Gold Medal of the Medical Society of London for 1878. By C. Milner Fothergill, M.D. Edin., &c., &c. 8vo. pp. 160. Philadelphia: HENRY C. LEA, 1878.

The author in this essay gives a short and pithy view of the subject of the antagonism of toxic agents. He divides the subject into two departments, experimental and practical. That is he gives the results of experiments which he and others have made with various substances, keeping in view throughout the work the practical bearing of these experiments.

It is quite recently that the subject has demanded attention prominently. Formerly chemical antidotes were those only known, or those giving mechanical results. We knew that an alkali would neutralize an acid. That tannin in any form would form an insoluble compound with tartar emetic, and that sesquioxide of iron would throw down arsenic, provided it was in sufficient quantity. These effects were observed alone when the poison was in the alimentary canal but if a deleterious substance had entered the blood nothing could be done, but wait patiently with the hope that it would be eliminated.

This little work consists of seven chapters. The first two are described as being upon experimental inquiry and practical inquiry, the one being a continuation of the other. The third chapter treats on the effects of drugs on the nerve centres. Chapters IV and V are on the action of drugs on the circulation and on the respiration respectively. In the sixth chapter we are taught the practical use of a knowledge of the antagonism of drugs, in cases of actual poisoning. And in the last chapter, we have a concise but lucid description of the uses of a knowledge of antagonism of drugs in ordinary practice. This is really a most interesting little work, and the contents should be familiar to all, as its practical bearing and teaching is quite indispensable to the physician who desires to follow his art with ordinary success.

A Clinical History of the Medical and Surgical Diseases of Women.—By ROBERT BARNES, M.D., Lond., Censor of the Royal College of Physicians, &c., Obstetric Physician and Lecturer on Obstetrics and the Diseases of Women to the St. George's Hospital. Second American from the second London edition, with 181 illustrations. 8vo. pp. 784. Philadelphia: HENRY C. LEA, 1878.

The first edition of this work appeared in 1874, but since then the book has received at the hands of the author a thorough revision, by which he states that many changes have been made; space has been gained, by pruning and re-arrangement, so that additional material is given without increasing the size of the the volume. A new chapter on the relations of bladder and bowel disorders to affections of the uterus and appendages is to be found. Many new illustrations have been added, and when these have been borrowed from other works, their source is duly accredited.

We have in this work the experience gained by Dr. Barnes after years of patient labour and study as a practitioner, teacher and examiner, what he has himself observed he has had faithfully illustrated, but he has endeavored to correct his own observations by the illustrations of others.

The work is divided into twenty-nine chapters, the first six being introductory, giving the anatomy of the pelvic organs. The uterus and its appendages, Douglas' Pouch, the axis of movements of the uterus, changes which occur during menstruation. The conditions indicating a necessity for local examination, constitutional reaction, disturbed function, such as amenorrhœa, menorrhagia, dysmenorrhœa, leucorrhœa, irritable uterus, irritable ovary, martodynia, neuralgia, such as spinal irritation, paraplegia, mental derangement, reflex nervous phenomena, vomiting, convulsions and epilepsy, hysteria vaginismus, sterility. The significance of symptoms connected with the bladder, peri-uterine affections, ischuria; cystitis; foreign material found in the bladder, causing an irritable condition

of that organ. This calls to mind a case which we published in the last number of this journal of the passage of hair in the urine in a child. On this point the author observes at page 132. "Hair, fat and teeth may find their way into the bladder and urine. They afford conclusive evidence that a dermoid cyst has contracted adhesions with the bladder, and established a fistulous communication." This bears out the assumption we made in respect to the case above referred to, no dermoid tissue or cyst was found in that remarkable case, and therefore we were forced to look for some other to account for the phenomenon.

A description of the instruments serving for diagnosis and treatment of uterine affections is given in chapter iv.

The various methods of examination are described in chapter V. The pathology of the ovaries. The history of menstruation and disorders of menstruation are next treated of in the succeeding five chapters. Diseases of the ovaries, absence of the ovary, congenital displacements, cysts and their treatment, extra uterine gestation, &c., are described in the next six chapters. There is a chapter on the spinal pathology of the uterus, in which the author takes a rapid view of congenital abnormalities, as he observes this is necessary before entering upon uterine pathology proper, because, these conditions are often attended with disordered function, and give rise to symptoms which are extremely puzzling unless these special conditions were known as likely to exist. This chapter is illustrated with a number of engravings showing various abnormalities, such as a uterus strongly developed to the right, probably a specimen of important development toward the left side, double or biconate uterus, with a single cervix from a specimen in the museum at Guy's Hospital, another of double uterus and vagina also from Guy's Museum. These are of interest from their rarity. The next chapter is on the effects of labour and lactation, involution in defect and excess, conditions marked by altered vascularity, metritis, endometritis, or uterine catarrh, with intra-uterine medication, is the next treated upon. Pelvic cellulitis, pelvic peritonitis, and intro-peritonitis are then dis-

cussed : blood effusions in the neighborhood of the uterus, with groups of cases is given in chapter xxi.

Displacements of the uterus forms the subject of the next chapter. These have always been a source of trouble and difficulty to the practitioner, and we need only to refer to the numerous mechanical contrivances each claiming pre-eminence for the relief of uterine displacements, to indicate the very unsatisfactory practical knowledge we possess on the subject. The author alludes to the fact that some have declared that they have failed to recognize displacements of the uterus, and therefore they refuse to believe in their existence ; of such we can only say they must be obtuse in a degree surpassing belief, as it is impossible to fail to recognize these conditions, if a careful and intelligent examination be made. With regard to pessaries, the author remarks in reference to tho their use, that a prolapsus is a hernia, and a pessary a tennis, and that although surgeons have with ingenuity introduced several operations for the radical cure of displacements, yet " pessaries are still found necessary." But before applying them he points to the necessity of careful examination with the aid of the sound, so as to ascertain the presence or absence of adhesive bands.

The author gives a description of many forms of pessary, and refers to the objectionable features of some, especially Zwanck's instrument. The expanded wings of this instrument are apt to produce ulceration of the vaginal walls, and in some instances, the author states, he has found difficulty in removing the instrument as it had become incarcerated by union of granulation tissue, and contraction of the ulcerated surfaces. Hodge's lever pessary is, perhaps, the least objectionable of all forms of uterine support, but even this instrument will in some cases utterly fail of giving relief. Thomas' pessary, which is a modification of Hodge's instrument, is often of great use in extreme cases of prolapsus, but the author states that in practice he has found a pessary invented by Dr. Scott, of Woodstock, Canada West, to answer the purpose far better. The various operations for the relief of prolapsus uteri, are referred to. Versions and flexures of the womb are next discussed, and the various

methods of treatment given. Chapter xxiv is devoted to tumours of the uterus, malignant and benign, their structure, seat, shape, density, vascularity, the law of growth, &c., and their treatment. He does not condemn, nor yet speak hopefully of the removal of tumours of the uterus by abdominal section, either alone or with the uterus, and he remarks that the time has not yet come for giving a confident opinion; "at present there is little ground for enthusiastic advocacy of the practice." That for the present the question must remain *subjudice*.

Uterine polypi, tubercle, and cancer of the uterus are next discussed, and the last two chapters are devoted to diseases of the vagina and of the vulva. The arrangements of the subjects discussed are peculiarly his own, and open to objection, but the subject matter is particularly readable. We commend this work to our subscribers, it is a valuable addition to the literature of the subject, and to the practical man will be found an invaluable guide.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Circulation of the Blood in the Extremities.—Professor Lister, of London, on the influence of position on the circulation of the blood in the extremities, lately communicated to the Paris Academy of Medicine the results of his personal researches on this important subject. In the ordinary operations for resection of the wrist joint the hæmorrhage was quite abundant; and with a view to remedy the evil, he raised the arm to be operated upon, and kept it elevated for several minutes, after which the tourniquet of Petit was rapidly adjusted so as to arrest the circulation in it. By this procedure the arm was almost completely deprived of blood, and the surgeon allowed the double advantage of being able to avoid the hæmorrhage, and to inspect the parts with care and precision. The advantage thus obtained seemed sufficiently important to Professor Lister to recommend the method in other operations.

Towards the close of the year 1873 he explained to his students the value of this method. He raised one of his arms perpendicularly, while the other was allowed to hang at his side, to shew the difference in color of the two hands placed in such different positions. The reduction in temperature which occurred in the elevated hand convinced him that something was going on which purely mechanical effects could not explain, and that the diminution of the blood pressure within the vessels was due to a stimulus of the vaso-motor nerves of the arm, and to a reflex contraction of the muscular fibres of the arteries.

Some physiological experiments on animals have confirmed the author's opinion; and he concludes from them that the facts observed cannot be explained as purely mechanical results of the diminution and increase in the blood pressure in consequence of the change in position of the limb. The arteries are but little disposed to yield to an increase of pressure coming from within. Thus, notwithstanding the powerful force with which the blood is propelled by the cardiac contractions, their diameter may be considered constant during the systolic and diastole. M. Lister made the following experiment before the Academy: applying an elastic band on a limb near its juncture with the body, after having been elevated for several minutes, it was observed to remain free from blood, although the limb was allowed to hang down. On raising the limb the second time and in that position removing the band, it rapidly filled with blood, notwithstanding the fact that the position was the same which caused the blood to leave before the application of the tourniquet.

These results are explained thus by Prof. Lister: After the tissues of a limb have been deprived of blood, for a certain time, then arises, so to speak, a circulatory want, and this acts as a stimulus to relax the arteries by acting through the vaso-motor in the same manner as heat. This stimulus of the circulatory want causing relaxation of the arteries, becomes stronger than the stimulus of relaxation of the veins excited by gravity, which, in another case, would cause their contraction.

Another experiment consists in exciting the circulation by a few minutes running, and then to raise the arm and lower it

after a few moments. The limb is seen to redden and congest exactly as it does after the cessation of cold applications.

In order to prove that all these phenomena depend on reflex action, Prof. Lister remarks that if the course of them was purely mechanical and physical, the lower part of an artery of an elevated limb would enlarge, because there would be a reflux of blood from the upper part. It is the opposite which is true, as was determined by the Professor in exposing the inferior portion of the femoral artery in a large calf very near the abdomen. After the contraction produced by the operation had subsided, he measured the exact diameter of the artery externally in different positions of the animal; and the results obtained confirmed his theory.

He also explained to the academy the results of an experiment performed on a horse. With the aid of a rope and pulley he had been able to change the position of the animal so that at one time he could be placed upon the back with his feet in the air; at another on the side, his limbs in the horizontal position; and at another be allowed to regain his feet. The metacarpal artery was exposed in its inferior part, and on elevating the limb, it was seen to be without pulsation; and the wound deprived of blood, resembled a wound in a cadaver. The diameter of the vessel was measured with a pair of compasses. When the leg was elevated it hardly exceeded that of the same artery divided and emptied of its contents, while in the horizontal position, and especially, when the limb had hung down, its enlargement was considerable. In calculating the internal calibre from the external diameter of the artery, it was found that in changing the elevated to the horizontal position, the calibre was more than three times as great, and in allowing the limb to hang, it was six times as great.

It is necessary to note that for the surgeon there is no appreciable difference in the diameter of an artery between the systole and diastole. Moreover the well-known experiment of Holles, who fixed a long vertical tube in the carotid of a horse to see how high the blood would ascend under the influence of the cardiac impulse. This experiment demonstrated that if it had

only to resist the action of gravity, it would ascend to a height of more than eight feet, or more than twice the length of the limb.

Prof. Lister closed his communication by pointing out some of the medical and surgical applications of which his theory is susceptible. He recalled the happy results of raising the arm in the treatment of epistaxis. According to him elevation of the arm causes a reflex contraction of the arteries in the upper extremities, and secondarily, a sympathetic contraction of the arteries of the face.—*La Tribune Medicale*.—*The Cincinnati Lancet and Clinic*.

The Odor of Sanctity. — Dr. Hammond, of New York, is fully persuaded that many of the saints of the earlier days of the church were highly odoriferous; and this peculiar quality he distinguishes from the ill-smelling savour, due to a neglect of washing, and attributes it to an affection of the nervous system. Several curious instances of fragrant saintly emanations are quoted. When the blessed Venturin of Bergamos, we are told officiated at the altar, the people struggled to get as near as possible in order to enjoy the perfume he exhaled. St. Francis de Paul gave off most sensibly a delicious odor, after he had fasted thirty-eight or forty days, and had subjected himself to frequent disciplinary inflictions. The body of the blessed Liduine emitted a delicious redolence, which was sensible not only to smell but to taste, as it left on the tongue and palate an impression like that of chewing camelia. Dr. Hammond refers to three cases which have fallen under his notice, in which specific odor has been given off from the body, as a result of affections of the nervous system. In the first, a young married lady, of strongly hysterical tendencies, exhaled an odor of violets, which pervaded her apartment, and was distinctly perceptible at a distance of several feet from her. This pleasant fragrance was given off from the left half of the chest only, where the perspiration was remarkably increased, and could be obtained in a concentrated form by collecting the perspiration in a cambric handkerchief, heating this with four

ounces of spirit, and distilling over one-fourth of the spirit. The distillate was strongly impregnated with the perfume of the violets, which was converted into that of pine-apple on the addition of bicarbonate of soda. It is assumed that this perfume was dependent upon the presence of butyric ether in the perspiration. The administration of the salicylate of soda ultimately relieved the lady of the violaceous redolence, which she was most anxious to part with. In the second case a pineapple odor was exhaled with insensible perspiration by a young lady suffering from chorea. In the third case, a violaceous odor was emitted by a hypochondriacal gentleman. Dr. Hammond has known unpleasant odors to be emitted from the body during emotional excitement. A young lady suffering from sick headache, smelt of Limburg cheese. At present, all that we can say is that the peculiar odors referred to are the result of nervous disturbance.—*Michigan Med. News.*

Tight Strictures of the Urethra.—On the use of Gouley's tunnelled instruments in the treatment of tight strictures of the urethra, by Reginald Harrison, F.R.S., (Surgeon to the Liverpool Royal Infirmary) at the last meeting of the Lancashire and Cheshire Branch, I advocated the more general employment of Gouley's tunnelled bougies in the treatment of tight strictures of the urethra. I have recently had under treatment, in my wards at the Liverpool Royal Infirmary, three cases which well illustrate the observations I then made as to the great service these instruments were capable of rendering.

CASE I.—On June 27th, 1878, J. P., aged 27, was admitted suffering from stricture of several years' duration. On this, as well as on a previous occasion, it was found necessary by my house-surgeon, Mr. Hodgson, to tap the bladder above the pubes with the aspirator. This gave immediate relief. Two days after his admission, he again had retention whilst I happened to be in the infirmary. I succeeded in passing one of the finest filiform bougies, and upon this a tunnelled catheter, which was retained for some hours; from this date, dilatation upon the same princi-

ple was gradually commenced, the size of the tunnelled instrument being increased from time to time, until a number 9 ordinary bougie passed easily, when the patient left the hospital.

CASE II.—J. W., aged 60, was admitted under my care on June 12th, 1878. Thirty years previously, he had a fall on his perinæum, rupturing his urethra, for which perineal section was successfully performed by Dr. Evans of Belper. Unfortunately the patient does not appear to have followed up the treatment of his own case, by that regular introduction of bougies which in all cases of traumatic stricture is absolutely necessary, and occasional attacks of retention was the natural consequence. As I expected I found a very tight stricture, which would only admit a filiform bougie. Upon this a tunnelled bougie was passed, and dilatation continued until a Holt's instrument could be introduced. On several subsequent occasions, I passed Holt's instrument, using it as a dilator on the principle of a glove-stretcher; by these means the dimensions of the urethra were soon enlarged, and the patient was able to leave the Infirmary passing urine in a good stream.

CASE III.—W. J., aged 42, was admitted on July 5th, 1878, suffering from retention of urine, which had existed almost completely for a week, it having been found impossible to pass a catheter. On admission, I could only get into the bladder the finest filiform bougie, upon which a catheter was passed sufficiently large to allow of the bladder being washed out. In addition to the cystitis, there was a large suppurating pouch behind the stricture, with extensive kidney disease. The condition of this patient illustrated the consequences which may arise where a stricture of the urethra is allowed to remain untreated. He gradually sank with symptoms of uræmia, and died on July 14th. A *post mortem* examination showed what had been predicted—viz., a suppurating pouch behind what had been a very tight and extensive stricture, cystitis, and suppurative nephritis.

In commenting upon my remarks, Mr. Lund drew attention to an objection that can be raised to the use of these instruments—viz., that, on passing the metallic bougie along the

whalebone guide, unless care be taken, the bougie is apt, on reaching the stricture, to double upon the guide, and then, if force be exercised, a false route may unintentionally be made. Short of failing to introduce the guide, this is the only accident that is likely to occur in the use of these instruments. It does not, in my opinion, detract from their efficacy, inasmuch as I can hardly imagine any surgical instrument being made without requiring in its use that skill and knowledge which can only be acquired by experience and observation. I admit the propriety of Mr. Lunds's comment, and record it as a point to be remembered when using these instruments.—*British Med. Journal.*

Nephritic Abscess.—(Nephritic Abscess—opened by lumbar incision—great relief—bronchitis—death.)—M. J., aged 42, was admitted into Lydia ward on November 28th, 1877, under Mr. Bryant's care. The family history was good, as also was her own. She had had small-pox and scarlatina, and was accustomed to a cough every winter, with expectoration, but did not spit blood. She was a married woman, and the mother of eight children, seven of whom were living. Her last child died two years before admission. The labour was long lasting from 2 a.m. on Sunday until 7 p.m. the next day. There was hæmorrhage during the whole time, and she was unconscious for several hours. Instruments were used to extract the child. Her catamenia since that time had been very irregular, pale, and extremely small in quantity. She had become much weaker, since her confinement. Her water had become thick, and there was also much pain accompanying micturition. When admitted, the patient was a healthy-looking woman, but weak and rather thin. On examination she had no noticeable abdominal enlargement, except a slight one behind, and in the region of the right kidney, behind which there was considerable tenderness on pressure. Urine normal in colour, specific gravity 1011, albuminous, having a large deposit, which proved to be nothing but pus. The pus was tolerably pure, and was not mixed with mucus. No renal casts were visible under the microscope.

December 5th.—On tolerably firm pressure, half-way between the umbilicus and anterior superior spine of ilium, a not very well defined lump was felt extending through to the lumbar region. Pain was felt at the anterior end of the lump and in the lumbar region. The lump could be moved between the fingers placed in front and in the loin. The urine was abundantly loaded with pus, the proportion of which had been increasing. The amount of urine had been decreasing in quantity.

9th.—A glass of urine was, on being left to settle, opaque with pus to within about half an inch of the top.

7th.—Swelling scarcely so apparent. The patient had ether administered, and Mr. Bryant made an oblique incision in the lumbar region, about three inches long, above the posterior part of the crest of the ilium, at the juncture of the lower third with the middle third of the distance between it and the last rib. The subperitoneal fat was cut down upon, and a director passed into the kidney, when about two ounces and a half of pus were evacuated. Afterwards the finger was passed into the wound, and Mr. Bryant considered the finger penetrated into the pelvis of the kidney. The cavity was then washed out with a lotion composed of three drachms of the compound tincture of iodine to a pint of water, a drainage tube introduced and fixed by means of a silk ligature, and the wound strapped and dressed.

8th.—She vomited a little in the night, but did not sleep. She thought the pain was less since the operation. The pus in the urine had greatly decreased. The wound looked well, and there was very little discharge.

10th.—Pus had disappeared from the urine; there was slight discharge of pus from wound.

12th.—She felt pretty well; no bad symptoms except that her temperature was a little high.

13th.—Temperature 104°. She had great retching, without vomiting; bowels very much relaxed; one pint and two ounces of urine were excreted, specific gravity 1026.

14th.—Patient complained of burning heat over the abdominal parities, which could be distinguished easily with the hand. Temperature 102·8°. She was ordered pil, opii in one-grain doses. Urine ten ounces, specific gravity 1026.

15th.—Temperature 102·8°.

16th.—She was much worse during the night, breathing with difficulty; complained of great pain in side. She died about noon.

Post-mortem by Dr. Goodhart.—The ascending colon and cæcum were intimately adherent over the kidney and psoas muscle. The bowel was rather contracted. The supra-renal capsules were healthy, but the right was somewhat tough, embedded in fibrous tissue. The left kidney was large and weighed about nine ounces, white, mottled, and contained many cysts. The other was small and embedded in a tough mass of tissue; capsule firmly adherent and dense. The pelvis opened into the abscess described. There was a still unopened cyst in its lower part. The ureter was evidently dilated, so also the renal cavity as far as the brim of the pelvis, where it became matted up in a thick mass of fibrous tissue connected with the right ovary; it was traced along and found pervious to this part; then for an inch it was lost, being damaged in extraction; below the missing part it was again pervious, but not dilated. There was no broad ligament on this side nor yet on the other. All the parts were matted up together, and the ovaries were not found without difficulty. The uterus was healthy, rather large, and transverse. The bladder was small, its mucous membrane red and velvety, and in a state of subacute cystitis. All the mischief looked like some old inflammation in both broad ligaments, leading to puckering of the ureters, and so to renal hydro- and then to pyo-nephrosis.—*Medical Times and Gazette.*

Acute Ascending Paralysis.—M. DEGERINE has announced to the Académie des Sciences the observation of changes in the anterior roots of the spinal nerves in cases in which a careful, naked eye, and microscopic examination revealed no lesion of the spinal chord. The method of examination employed was the hardening in osmic acid, and examination by means of picrocarmin. In each preparation a number of nerve-tubules presented the appearance of parenchymatous neuritis, fragmentation of the myelin in drops and

droplets, an increase in the protoplasm of each inter-annular segment, and multiplication of the nuclei of the sheath. In some of the tubules so changed the axis-cylinder had entirely disappeared. Most of the nerve-tubules presented no appreciable alteration. The same appearances were observed in each part of the chord. - A similar alteration of some of the nerve-tubules was found also in the intra-muscular nerves of the paralyzed limbs. Attention is drawn to the point without much weight being laid upon it, and its relation to the disease may admit of some doubt when we consider how small a proportion the few degenerated tubules bear to the great amount of paralysis.—*Lancet*.

Cartilaginous Degeneration of the Capsule of the Spleen.—By W. F. MURRAY, M.B., Officiating Civil Surgeon, Gya.—On the 26th April last the body of a Hindoo, age about 60 years, was brought to Gya for examination. He was said to have fallen into a well. In making the *P. M.* I found a tendency to ossification all over the body. The cartilages of the ribs had become ossified; there was commencing ossification of the coronary arteries; there was atheromatous disease of the mitral valves, with thickening of the walls of the left ventricle of the heart. But the peculiar phenomenon which I met with was on examining the spleen, when I found *the whole external surface to consist of a cartilaginous plate about $\frac{1}{4}$ inch in thickness.* The remaining surface of the spleen was normal, and the substance of the spleen, except for some slight congestion. Signs which I need not enumerate showed drowning to be the immediate cause of death, but I thought this case worth sending to your journal, as I do not remember having ever heard of an exactly similar one.—*Indian Medical Gazette*.

Cessation of Epileptic Fits with Ultimate Cure.—Dr. SCHULTZ (*Berlin Klin. Woch.*) reports a case of epilepsy occurring in a sailor, 18½ years old, formerly healthy, who for a month had suffered from epilepsy. He had a fit regularly every mid-day. The usual remedies were

employed without the least benefit. The fit was preceded by weariness and a feeling of pressure on the chest, and was followed by several hours sleep. By the administration of a teaspoonful of common salt before the time for the fit, it was warded off for a week. By the continuation of this treatment (a teaspoonful of common salt every mid-day) the case was cured, at least, the patient at the time of publication of the case had had no fit for seven weeks.— [Quoted in *Centrallblatt f Med. Wissensch.*]

Report of a Case of Malignant Cholera

—in which thirty-two grains of Chloral-Hydrate were hypodermically injected: recovery.—Augustus R. Hall, M. R. C. S., Eng., reports the following case in the *British Medical Journal*:

M. M., the wife of a soldier, a very spare woman, aged 30, the mother of four children, was carried to the Female Hospital, Fortress Gwalior, about three o'clock in the afternoon of October 27th, 1877, suffering from Cholera. From a statement subsequently made by herself, it appears that on that same morning she was feeling well till after breakfast. About 11 o'clock she felt uncomfortable and oppressed, and laid herself on her bed. She went to sleep, and, about 1 o'clock, woke up, and found that copious watery evacuations were literally flowing from her, and saturating her bedding. Vomiting and cramp soon set in, and her husband then sent for a *dooly*, and had her conveyed to the hospital. On admission she had the usual symptoms of well-marked collapse. The skin was cold, lips blue, eyes sunk, tongue and breath cold, finger-ends shrivelled, voice sepulchral; the pulse could not be felt at the wrist, nor even in the brachial artery. As she was a very thin woman, it could have been easily felt there if it had been present. There were cramps in the hands and feet, and a good deal of vomiting, but not very much purging. The temperature in the axilla was 95.2 degs. Fahr. On examining the thorax by percussion, it was found that the usual area of cardiac dulness emitted a resonant sound. On application of the stethoscope, the beating of the heart could be scarcely heard, and at times seemed lost; but respiration was detected over the part of the chest where the heart-sounds are usually perceptible.

Shortly after admission, one scruple of chloral-hydrate, dissolved in three ounces of water, was given by the mouth, but was rejected ; it was therefore determined to administer that drug subcutaneously at once. At 4 o'clock p.m., six grains of chloral, dissolved in sixty minims of water, were injected into the substance of the left deltoid muscle in the following manner : As the hypodermic syringe employed held only twenty minims, containing two grains of chloral, the point of the cannula was passed through the skin and into the muscle perpendicularly for about the depth of one inch ; the syringe was then emptied, and the cannula was withdrawn until its point reached the areolar tissue, but was not withdrawn through the skin. It was then thrust in a slanting direction at about an angle of forty-five degrees into another portion of the muscle. The cylinder of the syringe was then unscrewed, filled with twenty minims of the solution, screwed on to the cannula, and again emptied. The point was then plunged into the muscle in an opposite direction, and twenty more minims injected. By these means sixty drops of the solution were injected into three different portions of the muscle with only one puncture through the skin, thus lessening the chance of irritation of the cutaneous nerves. These details are given thus minutely, as a strict attention to them is considered a very essential part of the method of treatment recommended.

Observations were taken with the clinical thermometer in the axilla every twenty minutes. Half an hour after the first operation, sixty more minims of the solution were put into the deltoid muscle of the right arm in the manner described above. The temperature in the axilla now began to rise steadily.—By 6 o'clock, eighteen grains of chloral in 180 minims of water had been injected through three cutaneous punctures, and the thermometer registered 97.8 degs. Fahr. The cramps had ceased by this time, and the vomiting was much less. Some serous evacuations had been passed.—At 7 o'clock, she passed a small quantity of urine. Four grains more chloral were injected into a muscle, the left pectoral.—At 8 o'clock, the temperature was 98 degs. Fahr.—Soon after 9 o'clock, she had a motion of serum

slightly tinged with bile. The pulse was now felt for the first time in the brachial artery, and the heart-sounds were louder. She complained of intense thirst all the time, for which she had as much cold water to drink as she liked, quite irrespectively of the vomiting; at times, she had a little soda-water for a change. On a few occasions, the water she drank was slightly acidulated with dilute sulphuric acid. This she liked, at intervals, as she said "it cleared the mouth".—At 10 o'clock, the temperature fell a little, being recorded at 97.8 degs. Fahr.; and, shortly afterwards, six grains more chloral were injected into one gluteal muscle.—At midnight, four more grains were injected into the other gluteal muscle; so that, within eight hours, she had thirty-two grains of chloral injected altogether.

At 4 o'clock a.m., (Oct. 28th), the temperature was marked 98.2 degs. Fahr., and she had some sleep. The liquid motions were now pretty well covered by bile.—At 7 o'clock a. m., the pulse could be felt in the radial artery, 82 per minute; respiration 20. She was drowsy, apparently from the effects of the chloral, but could be easily roused, and answered questions. The voice was still very sepulchral and eyes sunk; tongue and breath not so cold. She was drinking water continually, most of which she retained. The temperature, which was now taken every two hours, varied between 97.4 and 98.2 degs. Fahr.—At 1 o'clock p.m.; she passed some urine. Liquid bilious stools were repeatedly passed during the afternoon.—At 6:30 p. m., she said she would like "a good sleep", and one scruple of chloral in three ounces of water, and some syrup, was given by the mouth, which she kept down. She had 2 hours' sound sleep. At 8:30 p.m., the temperature was normal; she had, altogether, a good night. The urine that she passed was tested, and found to contain a quantity of albumen. The heart-sounds had gradually become normal.

On the sixth day after the attack, the temperature rose to 100.6 degs. Fahr., but never higher, so that she can hardly be said to have had any secondary fever. Some quinine, however, in five-grain doses was given, but more as a precautionary measure. She was fed with plenty of milk, chicken-broth, and beef-

tea, when reaction was established, but had no stimulant whatever until a few days before she went out of the hospital (on November 13th), when a little brandy and soda-water were allowed. At the places where the injections had been given, there was a little superficial redness and tenderness for a few days; but some mild arnica lotion was applied to the skin, and no further inconvenience resulted. She made a very good recovery; and, more than four months afterwards, is in good health, and has shown no ill effects whatever on the result of the disease.

REMARKS.—Although the particulars here given are only those of a solitary case, still they may be worth publication in the pages of the *British Medical Journal*. At all events, they apparently show, that a very considerable quantity of a powerful vascular depressant, like chloral-hydrate, can be introduced into the system during the cold stage of cholera without doing any harm. And this, taken in conjunction with the fact now generally recognised, that alcoholic stimulants do positive injury in that stage, may give some indication as to the correct principle of treatment that is required.

Without going into the different symptoms enumerated above in this paper, the writer desires to invite particular attention to two of them, viz., the resonant sound emitted by the usual area of cardiac dulness, and the almost total absence of the sounds of the heart, and ventures to give the following attempt at an explanation of their causation.

From personal experience of an attack of cholera, the writer feels convinced that at the commencement the contractions of the heart become more forcible, the calibre of the arteries become smaller, and there is generally increased arterial tension, probably caused by excessive stimulation of the vaso-motor centre. As the cold stage becomes intensified, the spasm of the muscular walls of the heart is so strong that there is almost a continuous systole, the diastole not being allowed to take place so as to dilate the cavities as in health. It, therefore, occupies a smaller space than usual, and the first sound is only faintly heard, the second being indiscernible. Then, the whole of the arterial muscular fibres being also in a state of contraction, it

has occurred to the writer that the heart may be pulled upwards and backwards to a slight extent by the aorta, thus allowing a portion of the lung to occupy its usual position. We are told by minute anatomists, that the small arteries are very contractile, and that the large ones are very elastic, but possesses little contractility. But it may happen, that the intense stimulation to which the aorta is thus supposed to be subjected, may cause it to contract the heart in the manner indicated. The heart, therefore, may be so contracted, and occupy such a much smaller space than normal, that a portion of the lung may get in front of it, and occasion the resonant sound heard on percussion.

However, whether this may be an approach to the truth or not, the fact may be tested repeatedly, that, in deep cholera collapse, the heart-sounds are not heard. There are, in addition, the cold skin, and no pulse, or very little, felt in the usual localities. Now this state might be brought about if the heart were in a state of diastole when there would be true syncope. But if this were the actual condition in cholera, it may be affirmed that alcohol would do good instead of harm; as it is universally admitted that, where there is real atony of the heart, alcoholic stimulants produce a temporary benefit. But if, as is supposed here, the heart be in a condition of almost continuous systole, not dilating sufficiently to allow much blood to enter its cavities from the gorged veins, and the arteries be so reduced in diameter as not to allow that little blood to flow properly through them, then the administration of alcohol would, it is presumed, do harm, which experience has shown to be the case. Hence, apparently, a state of pulselessness may be produced by two opposite conditions: in one of which, where there is syncope, stimulants do good; in the other, as cholera collapse, they do absolute harm.

Turning now from theory to practice, there are a few points which must be attended to by those who may use chloral subcutaneously in cholera. The strength of the solution employed may be laid down at one in ten; if it be stronger than this, it will probably cause great irritation, ulceration, or even sloughing (as it has done in some cases). Besides, if the

specific gravity of the solution be too high, it will probably not be absorbed as it ought to be.

Then, as to the mode of injecting: it is most strongly recommended that the solution should be put, not merely under the skin, but into the substance of a muscle. In cholera-collapse, where the skin is cold, absorption may be said to be reduced to a minimum, and the drug employed may lie inert, if it be not introduced as deep into a muscle as is consistent with safety. Mr. Higginson, lately chief surgeon of Kheri, in Oudh, in his report of cases treated by him, published in the *Supplement to the Gazette of India*, February, 14th, 1874, of which seventeen out of nineteen recovered, writes, "The injections were made in the arms and thighs, the cannula of the syringe being plunged pretty deeply into the flesh"; and, in a letter to the *Indian Medical Gazette*, which appeared in the October number for 1873, he writes, "I think it is essentially necessary to plunge the cannula deeply into the flesh; merely inserting its point underneath the skin will not do." It does not appear, even after this advice, that this precaution has been taken by those who have used chloral hypodermically.

In conclusion, the writer emphatically recommends the following course of treatment in cholera. When premonitory diarrhoea is observed, let all alkalies and opium be specially avoided, as well as alcohol. Dilute sulphuric acid, in half a drachm to drachm doses, in a bottle of gingerade or some syrup and water, diluted as much as will only give a strong, but not disagreeably acid flavour, will probably be found the best thing to take, as often as may be required.

If collapse should set in, or the patient be first seen in that stage, inject at once. Let the clinical thermometer determine the amount of chloral to be administered. The lower the readings, the faster the injections. It may be yet proved, in very severe cases, when the temperature is down nearly to 90 degs. Fahr., that as much as one drachm of that drug may be necessary before a decided effect is produced. Take frequent observations with the thermometer, and be guided by it. Give the patient plenty of cold water (no ice) to drink. Never mind if

it should be rejected ; it relieves the great thirst. But do not, under any circumstance, give any wine, spirits or opium. We sometimes hear of the sedative action of opium ; but, perhaps, this term may tend to mislead as to its real therapeutic effects. Poisonous doses of the true sedatives, as pointed out many years ago by Dr. Headland, produce death by syncope. Opium causes death by coma apnoea. It is a stimulating narcotic, according to Dr. John Harley.

Should reaction be established, milk, nourishing soups and broths, and afterwards more solid food, may be constantly given in gradually increasing quantities. Not even then it is recommended that alcohol be prohibited until convalescence is assured.

If secondary fever should manifest itself, then quinine, according to circumstances, by the mouth, or hypodermically, if the stomach will not bear it. The neutral sulphate is now always used in India for injections. Again, let the clinical thermometer be the guide ; the higher the body-heat, the more quinine.

The writer earnestly begs those of the readers of this paper who may have opportunities to carry out all the details recommended above, and hopes, in spite of adverse statements, that the treatment advocated may be attended with success. At all events, he trusts that these remarks may be the means of inducing medical men to give the method a complete trial, and that reports that may be published before long may settle definitely the question whether in chloral-hydrate we have, or have not, a remedy of efficacy in malignant cholera.

Ruptured Pericardium ; Fractured Pelvis, and Ruptured Urethra.—(Under the care of Dr. PUZEY)—R. M., aged forty-eight, was admitted on Feb. 27th, 1878, having been knocked down and crushed by a bale of cotton striking him on the back. The diagnosis was, fracture of both pubic bones, with rupture of membranous urethra. There was considerable hæmorrhage from urethra ; extravasation of blood slight. He complained of great pain in the cardiac region ; and had an incessant painful cough and a markedly anxious expression.

A broad belt was firmly applied round the pelvis, a gum-elastic catheter was tied in the urethra, and a stimulating expectorant mixture was given.

For a week after admission there was considerable rise of temperature. Examination showed slight pneumonia. The patient would take only warm fluids. The catheter was removed on the 6th March, and he could then pass water without difficulty. Temperature became quite normal on the 10th March, and continued so until the 25th, when pleurisy and pericarditis developed; and he died on the 27th, a month after admission.

Necropsy.—Thorax: There was recent pleurisy in both pleurae. The right side contained six ounces of serum, the left three ounces, and there were effusion of lymph over a large extent of both lungs. There were œdema and congestion of the lung. The pericardium showed evidence of a rent through the whole length on the left side. The state of parts was as follows: On removal of the sternum nothing abnormal was noted, but on trying to raise the anterior part of the left lung from the pericardium, it was found to be adherent by its anterior margin, and anteriorly was thinned out and insinuated around and behind the apex of the heart. These adhesions were readily broken up by the finger, and then entire absence of pericardium proper from the left side of heart was manifest, and the internal surface of left lung acting as pericardium. It was now seen that the anterior margin of the left lung had adhered to the retracted right border of the pericardial rent; and that the left side of the ruptured pericardium appeared as a band three quarters of an inch broad, running parallel with the long axis of the body, behind about the middle part of the heart, and presenting a free border. The portion of lung pleura in contact with the left side of the heart had not undergone any alteration in appearance. In this improvised pericardium there was over an ounce of turbid serum, and there was a layer of recent lymph on the heart and parietal surfaces.—Abdomen: There was fracture of both pubic bones, each being separated into three pieces, and the pubic part of acetabulum was fractured without displacement. Union was pretty firm, and there was a large amount of callus. There was separation of the left sacro-iliac synchondrosis, with fracture of the left ala of the sacrum. There was blackening of all the parts in false pelvis. A clot lay behind the posterior wall of the membranous urethra, and there was evidence of slight rupture in the posterior wall. The kidneys together weighed 12 oz.; the liver 4 lb., and was fatty.—*The Lancet.*

CANADA

Medical and Surgical Journal.

MONTREAL, OCTOBER, 1878.

THE RECOGNITION OF COLONIAL DEGREES.

Legislation in Great Britain in matters medical has so far miscarried, that recognition of Foreign and Colonial degrees is for the present deferred. To this we do not take exception. While we believe it politic to recognise degrees hailing from the institutions of this Dominion, we do not regard it as so urgently necessary as to demand immediate action without due and careful consideration.

We have heard arguments against colonial recognition, urged with the utmost narrow-mindedness, this, in a great measure, proceeding from an absolute ignorance of the nature and character of our institutions, sometimes even of their geographical position.

The mistiness which exists in some British minds touching anything American or Canadian is very surpassing. Especially is this the case in the present day when the means of transit to and fro have been so facilitated that a man can run over the entire continent of North America, almost from the pole to the southernmost point of the Gulf of Mexico, and from the Atlantic to the Pacific, and return to his native Island home, in a surprisingly short space of time, without much fatigue, and at comparatively trifling cost. The manners and customs of a people,

and the character of their educational system are better learnt by personal intercourse than by any amount of book lore.

We are all working in the same groove, all anxious to elevate the standard of our profession for the benefit of the human family, but we doubt much if this result will follow a systematic abuse and misrepresentation of schools and colleges, of which frequently the self-imposed authority has no absolute knowledge. It is painful to observe the repeated *gaucheries*, perpetrated by the medical press and by contributors in the way of correspondents. There are many facts connected with Canadian Universities which are entirely ignored, whether unintentionally or with a direct object we cannot say.

The Canadian Universities, three in number, in this Province, all hold Royal charters, and the privileges granted under these charters are the same as those granted to the Universities of the Mother country. Where then lies the difference? The preliminary examinations are equally stringent, the curriculum of medical study is the same as that in British Universities and Colleges, and the professional examinations are a literal copy of the method of testing the candidate followed by those institutions. In nearly all our schools the professorial chairs are held by British Graduates. But to add to the security of the public that the work is systematically and faithfully performed, the Provincial Medical Board have introduced, under act of our Local Legislature, a method of visitation. Two members of the College of Physicians and Surgeons of the Province of Quebec, are appointed by the Board to visit and attend the Medical examinations of the various Universities, Colleges and incorporated medical schools of the Province, and who shall report to the Provincial Medical Board upon the character of those examinations. Those visitors or assessors cannot be chosen from among the teachers or professors of any of the Universities, Colleges, or Medical Schools. Laxity in the work done, in the examination of candidates, if reported on, the Provincial Medical Board has the power to refuse registration of the degree or diploma of the institution so reported against, until such a method of examination shall have been amended.

This is the law as it exists in this Province and as it is administered. In what relative position do the institutions of Great Britain stand with reference to this law? Graduates and Licentiates of the Universities and Colleges of Great Britain and of France are admitted to registration on what their credentials set forth, without examination. The Act is so far liberal that, although it compels visitation to our own colonial schools, it accepts in good faith the examinations of British and French schools without question. But, although this is the practical working of this local act, it may not be retained in its present integrity. There is a growing interest, a desire to have the institutions in this country recognized for all they are worth. We should be sorry to have to chronicle any change in our law, with a view to ignore all foreign degrees—be they from Great Britain or elsewhere. Such a scheme was proposed, but did not carry; it might be again brought up and become the law of the land.

It should be remembered that in all matters of educational interest, we possess the right of legislating for ourselves. We should be very sorry to see any such system of exclusion adopted, yet it must be confessed that nothing is more likely to follow, if a good lead is given us, the exclusion first coming from the other side. Each year we become of greater importance on the world's face, because we are a growing country, with abundance of room for a population of forty times our present limit. The country is being steadily but gradually opened up and there are local interests at stake which will without doubt in time attract attention. Our youths can not be shut out from serving their country or fellow man in any capacity. If, through the enterprise of Canadians, lines of steamships are established between Canadian ports and those of Great Britain or any other country, it would be hard indeed to refuse service to a young Canadian surgeon, simply because he did not hold a British qualification. Yet this has been done, but we trust will never be again repeated.