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CANADA

MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Another Case of Ovariectomy:—Successful. By ROBERT CRAIK, M.D.,
Professor of Chemistry McGill University, Consulting
Physician and Surgeon to the Montreal General Hospital,
&c., &c., &c.

It will be remembered by some readers of the Journal, that in July, 1869, I published the reports of two cases of Ovariectomy occurring in my own practice, one of which was unsuccessful and the other successful. I have now to add a third case which has also, I am happy to say, proved successful, and which—apart from the obvious duty of placing all such cases on record, whether successful or unsuccessful—may be considered of sufficient interest to repay perusal, on account of its involving several important points of practice.

Mrs. G., aged 37, the mother of four children, the youngest born in 1865, consulted me on the 10th of August, 1869. She had been increasing in size during the previous five or six months, without pain, and without cessation of the menses. Her circumference at the time of my examination was $32\frac{1}{2}$ inches at the umbilicus, and a distinct fluctuating mass could be felt extending upwards from the left iliac fossa, and causing the abdomen to project as in the seventh month of pregnancy. There was dullness on percussion over the tumour, and resonance towards the lumbar regions and ensiform cartilage.

A vaginal examination showed the uterus of its normal size, and slightly displaced downwards, and to the right.

As the patient's general health had scarcely at all suffered although there was undoubted evidence of an ovarian tumour of considerable size and of rapid growth, it was a very serious question what to advise under the circumstances. I need scarcely say that no other mode of treatment than that by operation was for a moment entertained, but the embarrassing question was *when* should the operation be undertaken, whether would it be better

to operate early, while her general health and strength were still unimpaired, or to wait until the disease had begun to tell seriously upon both.

If the operation were one not attended by much danger, there can be no doubt that the sooner the operation were performed the better; but when we reflect, that even in favourable cases the mortality is great, it becomes a serious question whether we are justified in recommending such a risk, so long as the patient enjoys a moderate degree of health and comfort.

On the other hand, there are risks to be incurred by deferring the operation to too late a stage, such as the bursting of the sac, (which occurred in one of my former cases, and nearly proved fatal by collapse,) inflammation with adhesion, extreme debility, &c., &c., and which would seriously interfere with the success of an operation undertaken at this stage.

To my mind, therefore, the safest course seems to lie between these two extremes, neither risking a dangerous operation at a stage when the patient's health and comfort are scarcely impaired, nor deferring it till the occurrence of serious complications have rendered it almost hopeless.

In accordance with these views, I simply advised her to avoid everything which would tend to promote the growth of the tumour, or to excite inflammation, and to wait patiently for the proper stage for operation.

August 30th, 1869.—I saw her again to-day, just twenty days after my first examination, and found that the circumference of the abdomen had increased one inch, being now $33\frac{1}{2}$ inches. In other respects the symptoms were unaltered.

July 13th, 1870.—Eleven months from my first visit. No important change has occurred in her condition, except a moderate increase of size. The abdomen now measures $38\frac{1}{2}$ inches at the umbilicus, an increase of six inches in eleven months. Her general health is quite unimpaired, and she is still quite able to attend to her household duties.

May 11th, 1871.—Ten months since last report. Scarcely any change occurred after last report until a few weeks ago, when rather severe pains began to be felt in the left hypochondriac region, particularly after exercise. It was unaccompanied by fever or other inflammatory symptoms, but was sufficiently severe to confine her almost entirely to the sofa, and her health is in consequence beginning to suffer. The growth of the tumour has been remarkably slow during the last ten months, the increase in circumference amounting only to one inch and a half.

As she has now reached that stage when the tumour by its

bulk and pressure is beginning to tell seriously upon her general health, and as the hot summer months are approaching, I have thought it my duty to advise her to submit to the operation without delay.

My friends Drs. G. W. Campbell, Howard, Fenwick and Drake, having seen her with me in consultation, and agreed as to the suitability of the case for operation, and the propriety of operating without further delay, the 31st of May was fixed, with her consent, for the operation.

THE OPERATION, May 31st.—Having taken the usual precaution of administering a dose of castor oil on the previous evening, and the patient having taken a very light and early breakfast, the operation was begun about 1 o'clock P.M., about a dozen of my medical friends from this city and elsewhere being present.

Ether having been administered by my friends Drs. Ross and Roddick, of the General Hospital, and Drs. Campbell and Fenwick kindly acting as my chief assistants, I made an incision about four and a half inches in length in the mesial line, extending from about an inch below the umbilicus, to within an inch and a half of the pubes. The several layers were then rapidly divided upon a director, and the tumour exposed.

No adhesions being found within reach, the patient was turned over almost upon her face at the edge of the table, thus making the projecting tumour the most dependant part, and of course making it impossible for any of the fluid to flow into the abdominal cavity. The cyst was then punctured with a large trocar, and as the fluid escaped, pressure was gently and evenly exerted upon the sides of the abdomen, thus causing the tumour to protude more and more until a slight effort at vomiting caused by the ether, expelled the whole mass, much as a sharp pain sometimes expels a placenta. The tumour was now slit up freely with the scalpel, to get rid of the weighty contents more quickly, and I then proceeded to secure the pedicle. The pedicle was long and thin, and was easily secured by transfixing it with a stout double hempen ligature well carbolized and waxed, and tying it in two portions. The ends of the ligatures having been cut off short and the tumour removed at a distance of about half an inch from the ligatures, the free end of the pedicle was brushed over with concentrated carbolic acid, the excess wiped off with a moist sponge, and the pedicle with its ligatures was dropt into the abdominal cavity.

Having examined the other ovary and found it perfectly healthy, I proceeded at once to close the wound, by passing strong silver sutures through the whole thickness of the abdominal parieties, being careful to include the edges of the peritoneum. A little

oozing of blood occurred at the lower end of the wound, from a superficial vein which crossed the line of incision, and was of necessity divided, but the bleeding had entirely ceased before the last suture was applied. The wound was then dressed with a carbolic lotion (about 1 to 30) and oiled silk, the abdomen covered with a thick layer of cotton wool and a couple of thick compresses, and firmly supported by a flannel roller, and the patient was finally removed to her bed.

The pulse at the close of the operation was exactly 100, and of natural volume and force. There was no pain, nausea, nor uneasiness, and scarcely any thirst. I made my arrangements to remain with her during the afternoon and night to secure perfect quiet, and to be prepared to give prompt attention to any unfavourable symptoms, should any such arise. The weight of the tumour with its contents was 23 pounds.

June 1st, 10 A.M.—She passed a most comfortable night, and slept a little towards morning. There was some slight reactionary fever in the afternoon and evening, when the pulse rose to 110, but the reaction subsided towards morning, and the pulse fell to 105, at which it still continues. Skin moist, no nausea or pain beyond a little smarting in the wound. She passed about eight ounces of healthy urine at 4 A.M., (15 hours after the operation) without any difficulty. She has had nothing but little bits of ice occasionally since the operation.

4 P.M.—Dr. Roddick who kindly relieved me for a few hours, reports everything going on favourably; pulse 105. She has again passed urine without difficulty, and she has taken a few spoonfuls of beef juice with relish.

June 2nd.—No change worth reporting. Pulse fluctuates from 106 to 110. Skin moist, no thirst, nausea, nor pain. Has passed urine twice during the last 24 hours, and has taken small quantities of beef juice, and bits of ice occasionally. She slept considerably during the night. Dr. Roddick again kindly relieved me at intervals, and has arranged to remain with her to-night.

June 3rd.—All going on well. Has had considerable sleep; pulse 103. Replaced dressing upon wound. There were very slight traces of pus at some points. To have barley water alternately with the beef juice.

June 4th.—Doing well. About a teaspoonful of sanguinolent pus escaped from the lower end of the wound. No rigor nor other unfavourable symptom.

June 5th.—Suppuration at lower end of wound rather more free. There is evidently a small pocket of pus in the subcutaneous cellular tissue, probably caused by a clot of blood, as the pus is

still sanguinolent. In all other respects doing well. To have a saucer of porridge and milk twice a day.

June 6th.—Doing well. Complains of slight colicky pains and flatulency. Prescribed an enema of soap and water.

June 7th.—Bowels slightly moved from enema. Appetite good. Allowed a piece of broiled steak.

June 9th.—Doing remarkably well, sleeps and eats well. Suppuration diminishing; pulse 88.

After this date there was nothing special to report; the sutures were removed from time to time, and the suppuration soon ceased entirely, while her health soon became entirely re-established, and is now quite as good as it has been for many years.

REMARKS.—The points in the above case which seem of sufficient interest to call for special notice, are: 1st. The proper time for operating in chronic cases, namely, after the disease has begun to interfere seriously with health and comfort, and before complications are likely to arise. 2nd. Turning the patient over before puncturing the cyst, so as to prevent the possibility of the fluid finding its way into the abdominal cavity, an accident which can scarcely be avoided in any other way. 3rd. Brushing the stump of the pedicle with at least tolerably strong carbolic acid to prevent decomposition, bearing in mind that it is cut off by the ligature from the circulation, and is therefore more prone to decomposition than it would otherwise be; and lastly, securing the pedicle by means of the carbolized ligature, instead of the clamp. Although aware of the preference of some great ovariologists for the clamp, I prefer the ligature from the simple fact, that in this city the ligature has been used in all the successful cases, and in every case where the clamp has been used, the case has not done well. Although I am far from attributing the success in the one set of cases to the ligature, or the want of success in the other to the use of the clamp; yet as there seems to be no special objection to the ligature when properly applied, and as its prestige is with us decidedly greater than that of the clamp, I would be loth to change a practice which has hitherto given such good results.

Place d'Armes Hill, September 1st 1871.

CHARCOAL IN BURNS.

A piece of vegetable charcoal laid on a burn at once soothes the pain, says the *Gazette Médicale*, and, if kept applied for an hour, cures it completely.—*Nashville Journal of Medicine and Surgery*.

Vulcanite Plate with three Artificial Teeth, swallowed and retained in the stomach or bowels. Read before the Halifax County Medical Society, June 6th, 1871. By Honble. D. McNeill Parker, M.D., Edin., L.R.C.S.E., Member of the Legislative Council of Nova Scotia, Halifax, N. S.

Mrs. H., a lady's maid, aged 25 years, a pale, thin, and small woman, of delicate constitution, had worn for some length of time, a vulcanized plate containing originally five artificial teeth, which had been manufactured and fitted by a Dentist, in Liverpool, England.

It occupied the front portion of the upper jaw and held teeth, to represent the two incisors and canine of the right superior maxilla, and the second incisor, and first bicuspid of the left bone; both the latter being absent at the date of the accident. The platinum pins (four in number) which had connected the two lost teeth to the plate, projected from its surface.

Absorption of the alveolar process, and an altered condition of the gum had caused the plate which at first fitted well, to become loose, and hence difficult to be kept in position. On rising from bed on the morning of March 3rd, 1870, she sneezed violently, and this was immediately followed by a deep inspiration. The former act displaced the plate from its position, and the latter, (the deep inspiration) drew it instantly into the pharynx, where it was fixed for some little time, beyond the reach of the finger. The contractile action of the pharynx and œsophagus, by degrees forced it downwards, so that on her arrival at my office a few hours after the accident, she felt it near the lower part of the sternum; and before I could use an instrument, she was aware that it had escaped from the œsophagus to the stomach.

I immediately passed a probang, but failed to discover it. She had suffered much from pain and difficult respiration during its descent. The pain continuing in the cardiac extremity of the stomach, an opiate was administered, rest was enjoined, and she was admitted shortly after to the Provincial and City Hospital for treatment. Efforts were there made to discover its locality, but without success. She was put on a diet of farinaceous food, with milk and prunes *ad libitum*. The latter (the prunes) were given with the idea that their outer and less soluble parts would be likely to become entangled in, and firmly connected with the plate and teeth, so as to round off the sharp points, and thus lessen the risk of injury to the canal. She was soon dismissed by the surgeon in charge, relieved from suffering, but with the foreign body still in the stomach, or some other part of the alimentary canal.

Since then she has from time to time, suffered from general

abdominal tenderness and swelling, nausea, vomiting, frequently recurring attacks of diarrhœa, accompanied by inflamed mouth, tongue, and pharynx; (when these latter symptoms have been present, she has always with one exception, tasted throughout the attack, the vulcanite of which the plate was composed,) temporary suppression of urine, loss of voice, pain and numbness in left arm, hand, face, and sometimes of whole left side.

On several occasions she has been faint, powerless and unconscious for some hours. I have never seen her while thus attacked, but from the description of her then condition, given me by others, I may state that her symptoms resemble those of a person suffering from a form of hysteria not unfrequently met with in young females. It is necessary here to add, that she had on more than one occasion been somewhat similarly affected prior to the accident.

The menstrual function has never been interfered with, and I have generally found the heart's action undisturbed.

At times she has been apparently well, and for some weeks after her discharge from hospital, her health was as good as usual; but recently she has failed in strength, and has more frequently suffered from some of the local or reflex symptoms above referred to, and will be obliged to relinquish her situation from physical inability to perform its duties.

REMARKS:

The measurements taken by me of the space occupied by the plate—as defined by the patient—would make its length about three inches, and its breadth fully one inch; but it is probable that the figures given by A. C. Cogswell, Doctor of Dental Surgery of this city, who has written an account of this case in the *Canada Journal of Dental Science* for November, 1870, are more accurate. He states the measurement to be respectively 2 inches, and $\frac{3}{4}$ of an inch. Allowing these figures to be correct, it seems difficult to imagine how a plate of this size, with three teeth attached,—its curve being more acute than usual, in consequence of the formation of the superior maxilla of the woman—could have passed down the canal from the mouth to the stomach.

By a most unhappy circumstance, the deep inspiration which drew the loosened or detached plate into the pharynx, carried it thither, with its long axis directed backwards and downwards; else it never could have entered the narrow superior strait of the canal. Being properly directed by the contractions and propelling power of the stomach, it may have passed through the pylorus; but I think this is not probable. There is not, neither has there

been, any persistent local symptom which would indicate with any degree of certainty its true position.

The efforts made to detect it in the stomach having proved abortive, the idea of snaring or hooking the plate by appliances which had suggested themselves to the surgeons of the hospital, could not be carried out,—hence she still wears the teeth, but in a locality where I fear they will rather retard than assist the process of digestion.

Within the past year a case almost identical with that now under discussion, was recorded in the London *Lancet*, if I mistake not, in which a hospital surgeon, not only discovered the site of the plate, but successfully extracted it by means of an instrument used for the purpose of removing coin or other foreign bodies from the œsophagus. To have hooked or seized such a body, in a large, distant, and dark cavity like the stomach, and to have caused it to enter the œsophagus in its long axis, precisely as desired, was, to say the least, a most happy result, and one that might not be attained again, even by the same operator, in 90 cases out of a 100.

In this connexion I may remark, that a practical difficulty may meet the surgeon seeking to remove such a foreign body as a plate, with teeth attached to it, from the stomach.

He might be able to seize it firmly, and yet fail to get it to enter the œsophagus; and still have further and greater difficulty in detaching the instrument from its hold of the plate or teeth, without doing serious violence to the stomach; and this difficulty might very readily occur where snares of wire or twine are used for such a purpose. Hence the necessity of being guarded in selecting the surgical appliance for such an operation.

The question arises—What will become of this foreign body if it is not passed “per vias naturales?” And a second enquiry very naturally follows the first—What will become of the patient if it remains in the alimentary canal? If I am correctly informed, the material of which it is composed is not likely to be dissolved by the action of gastric juice, or by any of the secretions it may come in contact with, should it pass the pylorus. Dr. Cogswell in the article already referred to, says:—

“I felt desirous to know what mineral acids would dissolve vulcanite rubber, hence I experimented with the various muriatic, sulphuric, and nitric acids, found the two former had no effect upon the piece placed in it, but by applying nitric acid and chloroform, after 24 hours the piece had become quite like a sponge in softness, could easily express the colouring material from it, and in drying it could be rubbed up like powder between the fingers.”

If these strong mineral acids have failed to dissolve, or chemically change the material of which vulcanite is composed, I think we may safely conclude that the secretions of the digestive organs will hardly be able to accomplish it, and that the plate in question will, if not passed "per rectum," long continue in the canal without material alteration.

In reply to the second question—What will become of the woman should the foreign body continue in the canal? No certain statement can be given; but bearing in mind the history of recorded cases, somewhat analogous in their general features to that now under consideration, it may be remarked that it is possible, and even probable, that this vulcanite plate and teeth may be retained for years without destroying life, or even producing very alarming symptoms. On the other hand, grave symptoms may unexpectedly present themselves; the patient's life may be placed in jeopardy; or death may suddenly occur from inflammation, from ulceration, and perforation, or from its becoming impacted and obstructing the canal.

Dreading these not improbable contingencies, I objected to her being sent across the Atlantic to her friends in England, shortly after the accident occurred, on the ground that sea sickness, if troublesome and violent, would be likely to produce irritation and perhaps fatal consequences.

The practical lessons to be learned from this case, are:

1st. That badly fitting plates holding artificial teeth are unsafe, and should not be worn—especially at night.

2nd. That much larger bodies than we would suppose, may find their way (accidentally or otherwise) into the stomach.

3rd. That when received there, even large and irregularly shaped bodies, may—and often do—remain for a length of time without producing alarming symptoms.

September 14th, 1871.

I heard from this woman about the first of the present month, at which time she was a resident in the State of Rhode Island. She still wears the plate in the alimentary canal, and says that her health is quite as good as it was prior to the accident.

Femoral Aneurism successfully treated by Digital Compression. Reported by A. P. Reid, M.D., Professor of Practice of Medicine, Dalhousie College and University, Halifax, N.S.

August 22nd, 1871.—Was called in consultation with Dr. Almon, to see Mr. D. F. S., tobacconist, aged 29, who had a pulsating tumour about the size of a hen's egg, situated six inches below

Poupart's ligament on the right femoral. About a week previous had consulted Dr. R. Craik, of Montreal, who suggested the treatment by digital compression, but circumstances required the patient's immediate leaving for Halifax.

Being a case in every way favourable for treatment by "compression," this was decided on, as it had been successful in a less favourable case in this city a little over a year ago.

August 23rd, 11 A.M.—Treatment commenced. A sufficient relay of assistants being secured, who were easily taught how to apply the compression with the thumb, just below Poupart's ligament. This was kept up unremittingly until the 26th, at 7 A.M., when the pulsation in the tumour stopped suddenly, on the accession of a paroxysm of pain, which caused the patient to jump out of bed with a loud scream.

The duration of the treatment was 63 hours, and there has not been the slightest impulse in the tumour since (4 weeks). As a precautionary means, compression with a 7lb. weight, resting by means of a pad along the course of the vessel, was kept up for 24 hours longer, as it produced little or no inconvenience. On the 29th, the patient went out in a waggon to see the races; has been well and attending to his business since. The tumour is gradually diminishing in size, and the femoral pulsating up to its edge. The strength of the limb is improving all the time, but he complains of a numbness in it, and that it is easily fatigued. The temperature is normal.

REMARKS.—For the first 24 hours of the treatment, he was very restless under the pressure, which was relieved by gr. i of opium every two hours—afterwards it was better borne—he had snatches of sleep every night. Compression was tried by means of various instruments, but it could not be borne but for a few minutes. It required a weight equal to 25lbs. to prevent the impulse from being conveyed to the tumour, and this could only be borne through the thumb of an attendant. The relays had to be changed every 10 or 15 minutes. After the first 24 hours the tumour was painful on pressure and a little hardened, but the impulse continued on removal of the pressure up to the time it so suddenly ceased. The temperature of the limb was not interfered with during the whole time, and it received no treatment.

The patient could assign no cause for the Aneurism; the first intimation he had, being the discovery of a beating tumour a few days before he called for medical aid.

HALIFAX, N.S., September 19th, 1871.

Hospital Reports.

Montreal General Hospital.—Cases in Medicine and Surgery under the care of Dr. D. C. MacCallum.

CASE 1—CARCINOMA MAMMÆ. REMOVAL BY EXCISION.

(Reported by Mr. W. Osler.)

C. S., aged 47, was admitted into Hospital on the 1st of July, under the care of Dr. MacCallum. The tumour was situated in the left mamma, to the inner side of the nipple, where it was felt as a hard circumscribed mass about the side of an egg. The disease appeared limited to the gland structure, the skin and subjacent parts being unaffected. On questioning her as to its origin and progress, she stated: that she noticed it first, about four years ago, as a small round lump, the size of a bean. There was no pain in it and she forgot about it for three months, when her attention was drawn to it again by the pain which it caused. She then perceived that it had increased somewhat in size. From that time until a few months ago its growth has been slow and the pain, especially at night, caused much uneasiness. Lately its growth has been much more rapid and the pain increasing in severity. These circumstances exciting her fears, caused her to consent to its removal.

Having been placed under the influence of chloroform, Dr. MacCallum proceeded to excise the tumour, by means of two elliptical incisions about six inches in length, and inclosing the nipple, the direction of the incisions being downwards and inwards. The whole gland was removed, exposing the fascia of the Pectoralis major. There was but little bleeding, a few small vessels requiring torsion. The edges of the wound were brought together by means of wire sutures, and carbolic acid dressings applied.

GENERAL AND MINUTE STRUCTURE.

On removal it was found to be an irregular, hard mass covered with fat, connective tissue, &c. On section a distinctly creaky feel was communicated to the knife, and a large quantity of dark turbid matter,—cancerpus—exuded. This was contained principally in numerous small cysts, scattered through the structure. The cut surface was of a greyish white colour, intersected with numerous irregular bands of firm connective tissue. The microscopical structure agreed in the main with that of schirrus, the cells were however much broken down, especially those of the cysts, and the arrangement of the stroma and contained cells presented a greater irregularity than is common.

4th.—Complains of slight pain in the part, but feels pretty easy. Pulse 96.

5th.—Slept very well, no pain, but has been troubled with vomiting. Ordered, Spt. Chlorof. ζ ii. Tinct. Cardam Co. ζ vi, Aquæ ad $\bar{\zeta}$ vi, a tablespoonful to be taken every third hour. Pulse 126, Temp. 102.

6th.—Passed a tolerable night, complains of headache. The bandages were removed for the first time. An erysipelatous redness exists about the part, extending as far as the arm. The edges of the wound have united firmly, preventing the matter (which was discovered by fluctuation) from escaping. To relieve this two stitches were removed, and a considerable amount of pus came away. Ordered P. Quiniæ Sulph. gr. i Tinct. Ferri Mur. gtt. x, every four hours and lead lotion to be applied to the breast. Pulse 112.

7th.—Had an uneasy night. Breast very painful. Erysipelas not diminishing. Discharging freely.

8th.—About the same. Redness appears diminishing.

9th.—Had a good night and feels much better. Appetite pretty good.

10th.—Not as well, bad night, much heat and redness about the wound, and the discharges continue free.

11th.—Slept better than usual. A small slough is forming where the stitches were removed. Redness still present.

12th.—Stitches all taken out. The wound has united completely, with the exception of the spot where the slough has formed.

14th.—Discharge more profuse to-day. Erysipelas disappearing.

16th.—Is improving fast. Heat and redness not nearly as intense.

18th.—Erysipelas altogether gone, but complains of pains shorting down the arms.

19th.—Got up for the first time. Discharges diminishing.

20th.—Not nearly as well, very feverish. As the pus appears to collect in a pocket some distance, from the orifice of exit, a drainage tube was put in to enable it to escape. Ordered the Quinine and Iron mixture again.

22nd.—Better. Fever has disappeared. Discharges very free.

24th.—The discharges still persist, and a good deal of hardness exists about the inner margin of the wound.

28th.—Not much change, discharge still continues, but seems to come entirely from a sac that has formed at the inner extremity of the wound.

1st.—The discharge has sensibly diminished and the spot where the slough came away is granulating nicely.

6th.—The healing process appears very slow, but the discharge has almost ceased.

12th.—Only a small surface remains unhealed. The discharge has ceased entirely, but a slight induration exists.

18th.—Discharged cured.

CASE 2.—LUPUS EXEDENS OF THE NOSE.

(Reported by Mr. Geo. A. Starke.)

A. McD., 29 years of age, was admitted into the Montreal General Hospital, June 25th. 1871, under care of Dr. Reddy, who was succeeded by Dr. MacCallum. He is about 5 feet 9 inches in height, and comparatively speaking, a well built and healthy looking man, of fair complexion. He has a high forehead; light brown eyes, high cheek bones, florid cheeks and light brown hair.

He says about three months ago, while at Ottawa, he experienced a feeling of lightness, &c., about the head, and his nose had an injected or reddish looking appearance. He also thought that it was somewhat swollen at the tip. At the same time he was troubled with a discharge from the nose; which was of a thick consistency; tenacious and somewhat dark coloured. His nose felt itchy.

He did not feel anxious about it in any way as he thought it was merely the result of a cold, and would soon pass away. However, it did not leave him; and about a month ago, he noticed a little spot appear externally—of a somewhat greenish colour, just where the integument covering the ala of the left side of the nose becomes continuous with that covering the face. It did not encroach upon or extend to the skin of the face, but was entirely confined to that of the left ala. He also states that his nose first felt sore internally, and he attributed the spot on the outside to the irritation caused by the habit of picking his nose. The spot felt sore, itchy, and annoyed him a good deal, his nose still presenting the reddish and congested look.

He applied for advice and was given a bottle containing a liquid, which was to be used as an injection three times a day. This not proving efficacious, he next tried, as he says, a pot of the salve known as the "Poor Man's Friend," and applied it to the part, but to no purpose.

He then came to the M. G. H., on the 28th June, 1871.

Present condition :—

The external spot has extended its boundaries, and spread so as to involve nearly the whole of the inferior and terminal part of the

left ala. The mucous membrane is also involved. Is somewhat sensitive to the touch, but not markedly so. His nose presents a reddish look and seems slightly swollen. The redness presents a slight violet tinge. The mucous membrane seems to have been first affected. I also noticed a number of dusky red lines which seemed to be small vessels in a congested state running from the surrounding integument to the spot where the disease is seated. The sore has the appearance of elevations or tubercles covered with crusts or scabs of a somewhat greyish colour.

Dr. Reddy ordered a poultice to be applied.

July 1st.—The crusts being removed, the sore underneath, which presented soft tuberculous looking eminences, was well exposed. The patient was then put under the influence of chloroform and a solid stick of chloride of zinc thoroughly applied by Dr. MacCallum to the external tubercles and to those within the nose, after which they were carefully covered with teased lint, so as to form a complete covering for the diseased part; and in the event of much pain resulting from the application, was ordered Pulv. Opii gr. i, to be repeated if necessary. He was also ordered the following:—

R. Liq. Arsenicalis gtt. LXXII.

Aquæ $\bar{\text{v}}$ vi.

Take a tablespoonful three times a day.

July 6th.—Slight headache; tongue slightly coated except at the tip and edges; did not sleep well last night. Felt well otherwise.

July 7th.—Feels comfortable; a slight discharge from the left nostrils. Medicine agreeing well with him.

July 8th and 9th.—Inflamed appearance subsiding; doing well;

July 10th to 14th.—Doing well; redness almost none on the 13th. Is in good spirits. Medicine agreeing well with him. The covering taken off and dressed with simple dressing and covered with lint.

July 15th.—Looks well; lint smeared with simple cerate is put up the left nostril and an ointment composed of the following; viz:

R. Hyd. Amm.chlor: ʒi.

Ungt Simpleicis: ʒi.

To be thoroughly mixed and applied to the part externally, He says considerable discharge escaped from the left nostril to-day. The disease seems completely subdued—merely a small elongated crust is seen along the centre of the anterior margin of the left ala, at the junction of the skin with the mucous membrane. Redness gone and looking well.

July 15th to 21st.—Doing well, carefully dressed every day with the above—does not require a second application of Zinc Chlorid.

July 22nd.—Discharged quite well.

CASE 3.—JACOB'S ULCER OF THE EYELID,

(RODENT ULCER,) REMOVED BY EXCISION, AND THE PORTION OF EYELID AFFECTED RESTORED BY PLASTIC OPERATION.

(Reported by Mr. Geo. A. Starke.)

J. L., 48 years of age, Canadian, was admitted into the Montreal General Hospital, July 13th, 1871, under the care of Dr. MacCallum.

The patient states the disease showed itself first about 12 years ago, appearing like a little pimple about the size of the head of a common pin. It felt somewhat hard. It often broke and then crusted over again. It felt sore and ached a good deal. When it was about to rupture there was a sort of lancinating, stabbing or pricking pain felt in it. Had no pain in the eye or head. The period of this breaking was also indicated by the red appearance which it presented and its hardness, and at these times it discharged a sanious looking fluid. It often bled of itself as well as when touched. She felt well every other way. It first appeared about $\frac{1}{2}$ or $\frac{3}{4}$ of an inch below the outer canthus on the lower eyelid. She applied to several medical men, &c., for advice: Salves, caustics, &c., were recommended and tried, but to no purpose. It grew very gradually, bled frequently, and annoyed her a good deal. The pain was lancinating, or as she calls it "pricking." It grew half of its present size during the last two months.

When she was admitted into Hospital, the diseased part measured either way diagonally one inch and a quarter, and about an inch in diameter, measuring from any two of its opposite sides. Its outer side measured one inch and a quarter, inner three-fourths of inch, lower an inch, and upper side one inch. It is oblong in shape; except that its external superior angle projects upwards past the outer canthus, and involves a small portion of the upper lid in that situation. The upper side is marked by the margin of the lower lid, with the exception of the projecting angle just mentioned. Its inner side is about one inch from the side of the nose. It occupies that portion of the face, immediately below the outer half of the lower lid, and extending outward a little beyond the outer canthus, corresponding to the measurements given above. It is directed somewhat obliquely from above downward and outward. The margins

of the ulcer are well defined, and elevated above the level of the surrounding parts (especially the outer and lower) into hardened portions presenting a tuberculated appearance. The centre which probably at one time was similar in appearance, is now somewhat depressed and covered with a dark bloody looking encrustation like dried blood, which if touched bleeds freely and easily. It does not seem very sensitive to the touch, but feels hard. It seems to involve only the skin, having formed no attachments to the subjacent textures; is quite moveable. She complains of nothing else, and is a strong and hale looking woman of a swarthy complexion. She was put on milk diet, &c., no medicine.

July 15th.—The patient being placed under the influence of chloroform, an incision was made, beginning well in the healthy textures, commencing a little internally to the middle of the lower lid, cutting through the tissues comprising the lid, it was then carried through the parts not involved by the disease—so as to secure the removal of the affected parts—until it was carried to a point which corresponded to the centre of the lower margin of the ulcer, and about an inch below it. A similar incision was made to meet this at an acute angle from the outside, beginning above, ending below. The portion of the upper lid involved was then detached from the healthy parts, and the triangular portion—containing the ulcer—which lay between these incisions was carefully dissected off. The first incision was two inches in length, the second a little longer. The cut edge of the upper lid was next stitched to that portion of the integument opposite and external to it, being the upper part of the incision, which was carried external to the ulcer. This done, a horizontal incision was carried outward on a line with the outer canthus, extending from the outer incision just named above about two inches and a quarter.

Lastly, this last cut was made to form the upper boundary of a triangular portion of integument, by carrying an incision from its outer extremity so as to meet, if carried far enough, the lower extremity of the second incision made. This latter was not done, but simply carried so far as to leave the space of about half an inch between them, to serve as a base for the flap and also to nourish it. This flap was then dissected off and turned into the place of the portion removed with the ulcer. It was retained in situ by interrupted wire sutures, and the edges of the two last incisions made, were brought together as closely as possible with wire sutures also. Thus only a small extent of bare surface was left to granulate. The length of the first of these last two incisions was two inches and a quarter; of the last, two inches and a half.

The sections of the growth, on microscopical examination, presented some analogy to the epithelial cancer, consisting of flattened layers of cells above, deeper down smaller and less matured ones; while towards the base, connective tissue interwoven with cells, and elastic fibres made up the growth. Towards the centre the growth was more cellular.

July 15th, night after operation.—Pulse 100, nausea and vomiting, the effect of the chloroform. Cold dressing to the part, and bandage to keep the dressing in situ.

July 16th.—Pulse 92, doing well, upper lid slightly swollen, flap looking well.

July 17th and 18th.—Progressing favourably. Pulse 94 and 80 respectively, parts almost healed, feels wonderfully pleased with the result of the operation.

July 19th, 20th and 21st.—All the stitches removed, doing well. Pulse 80.

It is unnecessary to enter into any further details concerning the progress of healing. Suffice it to say that the result was all that could be desired, and she was discharged on July 31st, the wound having healed perfectly. The incisions in part could scarcely be noticed, the repair having been so thoroughly accomplished. I may further state, that in winking and closing the lids the flap partook of the movement, much the same as the old part did, which was a source of great satisfaction to the patient.

CASE 4.—FISSURE OF ANUS.

(Reported by Mr. W. Osler.)

M. B., aged 21, a delicate looking girl, was admitted into Hospital under the care of Dr. MacCallum, on July 1st, with a fissure or rather an ulcer, situated at the side of the anus. It was of a triangular form, half an inch in length, one-eighth of an inch in breadth, being partly within and partly without the bowel. On inquiry into her history it was ascertained that she had been the subject of piles for over a year, and latterly since the fissure occurred, has had shooting pains in the loins and limbs. Ordered a dose of castor oil.

July 2nd.—The bowels having been freely opened by the oil, chloroform was administered, and Dr. MacCallum proceeded to operate by making an incision through the fissure down to the sphincter and extending beyond the margins of the sore. The wound was dressed with lint and simple ointment, and a dose of opium ordered.

July 3rd.—Had an uneasy night, but the pain and intolerable itching has subsided a little.

July 4th.—Much better, had an easy night, very little pain in it, ordered a dose of castor oil.

July 5th.—Quite easy, had a motion without much distress.

July 6th.—Keeps improving, cut surface is granulating.

July 8th.—Complains of a little pain in it, got up for the first time.

July 10th.—The edges of the wound are cicatrizing freely, the granulations over the rest appear healthy.

July 12th.—Motions now cause little or no pain.

July 14th.—The granulations in the centre were too exuberant, and were treated with nitrate of silver freely.

July 17th.—Only a small surface remains which is rapidly cicatrizing.

July 19th.—Surface completely healed over, no pains in the part.

July 20th.—Discharged from hospital cured.

CASE 5.—ANGINA LUDOVICI.

(Reported by Mr. W. Osler.)

G. B., at 26 was admitted into hospital with the above named disorder, on the 11th of July, under the care of Dr. MacCallum. He stated that for about a fortnight, he has been suffering from a severe cold in the head; and about a week ago, felt at the outer side of the body of the lower jaw a hard painful swelling of small size. It remained stationary for a few days, and then began to extend upwards over the parotid, downwards over the sub-maxillary region, extending nearly as far as the clavicle and backwards, to some extent over the sterno—cleido mastoid muscle. It is very red, firm, and hard, and deglutition is very much interfered with. It has not involved the base of the mouth or tongue to any extent, as speaking is not at all difficult. The constitutional disturbance is very slight, pulse not much accelerated, tongue is coated, and appetite is diminished. Linseed poultices were ordered to be applied to the part.

July 12th.—Not much change, very red and painful, and seems to be extending. Looks as if it were going to point about the angle of the jaw.

July 13th.—Deglutition exceedingly painful, had a bad night, very little sleep.

July 14th.—Distinct fluctuation having been discovered, an opening was made over the angle of the jaw, when about an ounce of thick pus came away which gave him great relief.

July 15th.—Much better, slept well, can swallow without much

pain, all heat and redness have disappeared, but the parts are very much indurated.

July 16th.—Continues to improve. The brawny hardness still remains.

July 18th.—Face reduced to natural size. The induration is confined now to a patch over the side of the lower jaw, quite well otherwise.

July 20th.—Discharged from hospital cured.

CASE 6.—SUPPURATIVE NEPHRITIS.

(*Reported by Mr. W. Osler.*)

G. C., a discharged soldier, was admitted into Hospital on the 10th of July, under the care of Dr. MacCallum, with general anasarca. Enquiry into his previous history elicited the following facts, viz: that he had been a soldier twenty years, nine of which were spent in India, where he had secondary Syphilis; his general health has always been very good and he has never suffered from any serious disease; has been a steady but not a hard drinker, and has had a gleet for several years. Cannot account for the present attack, did not catch cold, but felt unwell for several weeks before it came on. Exactly a month previous to his admission, the severe symptoms came on suddenly one night with pain in the back, across the lumbar region, and at the lower part of the belly. There was no vomiting or any head symptoms. The pain was very severe, quite preventing sleep. Micturition was hourly, very little being passed at a time, and that of a dark colour. These symptoms continued for a few days, accompanied with fever, when he noticed an enlargement of abdomen, and about the same time a puffiness of the eyelids in the morning, and soon the scrotum began to swell also. In the meanwhile the pain had abated some what, but the constant nocturnal micturition worried him greatly. About ten days from the commencement of the attack the feet and ankles began to swell, and have, with the belly, gone on increasing in size ever since, until now the tension is considerable in both; there being considerable pain in the abdomen especially after eating. The scrotum did not enlarge to any extent, and is now almost normal in size. He has had a slight hacking cough since the attack, and what little sleep he gets, is disturbed by frightful dreams. His general health on admission was very good, though he has a blanched anæmic appearance appetite is excellent, skin dry and cool, and for the last few days he has had a diarrhœa.

July 10th.—Pulse 76 quantity of urine 30 ozs. deposits a sediment of 4 ozs. of a white colour and not glairy, reaction alkaline, sp gravity

1014. Examination of the deposit showed it to consist of nothing but pus corpuscles, exhibiting well the amyloid movements, no traces of renal epithelium or casts. Ordered Quinæ. Sulph. gr. i. Tinct. Ferri. gtt. xv, every four hours and a diet of eggs, mutton-chop, milk and beef-steak.

July 11th.—Feels much better, did not get up as frequently in the night. Abdomen and legs less swollen, ate a good break-fast without the usual pain accompanying it, eyes very puffy, cough not as frequent, diarrhœa continues, urine 48 ozs. with 6 ozs. of sediment of a viscid character; examined again for traces of renal structures with negative results.

July 12th.—Did not sleep so well, disturbed by frightful dreams. Not up as often. Perspired profusely towards morning; urine 69 ozs. muco-purulent, sediment less.

July 13th.—Slept well, was not up at all through the night. Pains in the abdomen almost gone, anasarca steadily diminishing. Urine ozlxx sp. gr. 1015.

July 14th.—Slept pretty well, bad dreams again and was up several times. Has a slight headache, the first since admission. Bowels not quite as free, only twice to day. Urine 95 ozs.; that passed through the night dark in colour, that in the morning quite light and straw coloured. Purulent sediment seems about the same in quantity but is quite changed into a glairy mass a few hours after micturition. The pus corpuscles are much more broken up than formerly. Still no traces of casts.

July 15th.—Abdomen and legs have been steadily decreasing in size and are now almost the natural size. Urine 110 ozs. that of the night dark, the morning pale.

July 16th.—Improving rapidly, his excellent appetite continues. Urine less in quantity 70 ozs. keeping the same distinction between the morning and night.

July 17th.—Still troubled with the nocturnal micturition. Complains of weakness and is not so well to day. Cough and diarrhœa have stopped entirely, urine 80 ozs., and comparatively much less sediment.

July 18th.—Urine 75 ozs.; of a much better colour. Got up to day for three or four hours and feels all the better for it, abdomen and legs quite normal in size.

July 19th.—Much better, up all day and is gaining in strength rapidly. Urine 60 ozs., purulent deposit still continues but is diminishing. Examinations still continue to give the same results.

July 20th.—Urine considerably diminished in quantity only 40 ozs. passed. Remains up all day, says he feels quite well and is regaining his colour.

July 21st.—Urine 45 ozs., much less purulent deposit, troubled still with the getting up at night.

July 22nd.—Urine 50 ozs. sp. gr. 1016. General appearance much improved. Works about the wards most of the day.

July 23rd.—Urine 40 ozs. Pus still in some quantity. Has discontinued the Quinine and Iron.

July 24th.—Urine 42 ozs. only passes it four or five times a day complains of nothing and is apparently well.

July 25th.—Urine 50 ozs. sediment very much less, was up several times through the night.

July 26th.—Urine 52 ozs. with very little deposit.

July 27th.—General health excellent. Urine 48 ozs.

July 28th.—Wants to go out, urine quite normal in quantity and the deposit is now trifling.

July 30th.—Keeps well, Micturates only about five times a day, sediment very slight.

August 2nd.—No change for the worse. Continued to gain strength and improve generally until the 10th when he was, discharged apparently cured.

CASE 7.—ACUTE OTITIS.

(Reported by Mr. Wm. R. Nicol.)

August 24.—T. Stewart, aged 19 years, admitted into the Montreal General Hospital, August 24th, under charge of Dr. MacCallum, complained of great pain in and around the ear, great heat and fullness of all parts, and on pressure, the parts corresponding to the tragus and ante-tragus. It first commenced on the morning of the 21st of August, with violent headache, followed by intense acute, gradually increasing pain in the ear, and loud or beating noises. Afterwards a sense of burning or distension was experienced in the ear, eyes became injected, countenance anxious, skin hot, pulse frequent, disorder of the bowels and pain continues unabating up to the present date. Pulse 100; Resp. 20; tongue furred, breath foul, bowels constipated.

August 25th.—Pulse 105; Resp. 20. Visited by Dr. MacCallum to-day, found acute inflammation of the Tympanum, lining membrane of meatus swollen, dry, and pinkish, and exceedingly painful on examination, also corresponding side of pharyngeal passage over end of eustachian tube, exceedingly sensitive to touch.

Ordered—R. Hyds. chl. Mittiis gr. iv followed by a black draught.

Locally—Linseed meal poultices, glycerine and opum to be dropped into the ear.

August 26th.—Pulse 80; Resp. 20. Pain not so severe nor so radiating. There is a slight discharge from the meatus auditivus externus, which is very offensive. Tongue covered with a creamy fur, breath exceedingly offensive. Had four stools.

Ordered—R. Tinct. Aconite (Fleming), gtt xvi Liq. Ammon. Acetatis ʒii; Aquæ ʒviii one tablespoonful every 4 hours.

August 27th.—Pulse 80; Resp. 19. Pain still continuing to abate, tongue furred, breath foul, had one stool.

August 28th.—Pulse 64; Resp. 18. Slept well last night, slight discharge yet, which is very offensive. Hears much better with affected ear.

August 29th.—Pulse 95; Resp. 26. Tongue clearing.

August 30th.—Pulse 96; Resp. 24. Marked improvement.

August 31st.—Pulse 96; Resp. 24. Very little pains now.

September 1st.—Pulse 96; Resp. 24. All right.

September 2nd.—Discharged.

CASE 8.—MITRAL REGURGITANT DISEASE OF HEART—WITH TRICUSPID REGURGITATION.

ANASARCA—ASCITES—BRONCHITIS.

(Reported by Mr. Hamilton Allan.)

Mary L., a widow, aged 49, mother of two children, the younger 11 years old, was admitted into the Montreal General Hospital, July 25th, 1871, suffering from heart disease.

Her history was as follows:—About fourteen years ago she had an attack of Acute Rheumatism. Till last August her health had been tolerably good. About that time, while living in the United States, in the capacity of servant, and doing very hard work, she became subject to distressing palpitation of the heart with frequent attacks of hemoptysis. She soon afterwards removed to Montreal, and has been twice since a patient in the General Hospital, suffering from disease of the heart.

Her condition when admitted: Countenance anxious, lips livid, complexion sallow, great difficulty of breathing, amounting to orthopnoea, being unable to lie down, but compelled to sit up in bed supported by pillows. The lower extremities œdematous from the knees downwards, abdomen distended from ascites, veins of the neck greatly distended, and there is pulsation of the jugulars. A short frequent cough with severe headache. The area of cardiac dullness was increased. On auscultation a well-

marked systolic bruit was heard over the left apex. It was less distinct over the right apex, and diminished in intensity towards the base of the heart. This murmur was transmitted towards and heard at inferior angle of the left scapula. The action of the heart tumultuous, the pulmonic second sound intensified. Dry bronchitic râles heard extensively over both lungs. Pulse small, feeble, 100 and intermittent, breathing very quick, temperature 99°. The urine had a specific gravity of 1.020 acid, and contained no albumen.

The patient was ordered—

Potass. Acetatis ʒii
 Sp. Eth. Nitr. ʒss
 Infuss. Digitalis ad ʒvi

Sig.—A tablespoonful to be taken three times a day.

It would occupy too much space to give the condition of the patient from day to day, during the time she was in hospital; suffice it to say that under the above treatment all her symptoms rapidly improved. In about a week she was able to lie down in bed, her breathing was easy, the swelling of her feet and legs had entirely disappeared, her headache was less, pulse improved but still irregular, and temperature normal. In about twelve days she was able to go about, the bruit was still heard having the same characters, but the veins of the neck were no longer prominent, her breathing not short, except on exertion, her cough occasionally troublesome, pulse stronger and more regular. On the 18th of August she left the hospital, all the symptoms of mitral regurgitation having disappeared with the exception of the murmur which was still heard over the left apex.

CASE 9.—PLEURO-PNEUMONIA WITH DELIRIUM TREMENS.
 DEATH. AUTOPSY.

(Reported by Mr. W. Osler.)

Edward C, aged 49, was brought to the hospital on the 15th of July, in a state of extreme prostration, and suffering apparently from the effects of a prolonged drinking bout. He was recognized as an old toper who had previously been in hospital with Syphillis. His breathing was very short, pulse 120, short dry cough, and a pinched haggard look about the face. He had also a bad diarrhoea. Through the night he was very noisy, did not sleep, and the first symptoms of delirium tremens appeared.

July 16th.—Not much better, pulse 128, respiration 36, temp. 102. He continued delirious all day, and at times was so violent,

that it was found necessary to tie his hands down. The usual hallucinations and phantoms peculiar to this disease were present in full force. A thorough examination of the chest was quite impracticable from his restlessness and constant chattering, but crepitation was heard over both lungs in front, and a loud friction murmur in the mammary region of the left side. Evening—Pulse 124, respiration 32, temperature 102½. He was ordered stimulants, nourishing diet.

July 17th.—Passed a very bad night, and in the morning was very weak. Pulse 132, temperature 102½, respiration 36. Delirium is less noisy, incessant grinding of the teeth came on and continued through the day. The diarrhoea is still very bad. In the evening he became more delirious, and was given grs. XL of chloral, under the influence of which he slept some time.

July 18th.—Exceedingly weak, and appears sinking rapidly. Delirium of low and muttering kind, breathing very short, pulse small and almost beyond counting, and he died comatose at 10.30 in the evening.

SECTIO CADAVERIS.—Body ill nourished, emaciated, features pinched, and the whole body covered with the scratched bites of the pediculus corporis. Numerous cicatrices existed on the shins and about the prepuce, shewing the situation of the old syphilitic sores.

PLEURÆ.—On opening the thorax, recent adhesions, easily torn, were found on the left side, extending along the anterior and lateral portions of the lung. 80 ozs. of clear serous fluid was taken from the left pleural sac, neither adhesions nor fluid occurred on the right side.

LUNGS.—Left weight 44 ozs. The leaflet which covers the heart was in this case almost separated by a deep fissure from the rest of the lung, forming a separate lobe. This, together with the major part of the upper lobe, was in a state of purulent infiltration. It was firm to the touch, sank readily in water, and entirely airless. When cut, the section presented a grayish granular appearance, was friable, and on pressure much pus exuded. Microscopical examination of these sections showed the air vesicles completely filled with pus cells, together with much free pus on the slide, and small aggregated masses which looked like casts of the air cells. The lower lobe of this lung was at its upper part red in colour, very firm, airless, and sank in water (red hepatization). The remainder of the lobe was very congested, much viscid, frothy serum of a reddish colour bathing the cut surface, extensive pleuritic effusions covered this lung in front and behind. *Right lung*—Weight 31 ozs., intensely hyperæmic posteriorly, and on section

several spots darker in colour than the surrounding textures and isolated, looked not unlike apoplexy. At the apex there was considerable puckering, and red hepatization extended for some distance down the lobe.

BRAIN.—(On removing the calvarium, the dura mater was seen elevated with effusion, which amounted to 3 ozs. Large clots filled up the longitudinal and transverse sinuses. Surface of the organ anæmic; veins of the pia mater not full. Convulsions seemed in places flattened, and the sulci very shallow. The consistence was good throughout. Puncta vasculosa were scarcely observable. Choroid plexuses pale, and in many places had undergone the hydatidiform degeneration. Only a slight amount of fluid in the ventricles.

HEART.—Weight 11 ozs., with contained clots 16 ozs. All the chambers filled with decolourized clots, some of them strongly interwoven with the valves and chordæ tendinæ. The mitral and tricuspid valves were quite healthy, but the aortic semilunar presented thickened bases, and in one a calcareous plate. The examination of the heart fibre showed it fatty, but not to an extreme degree. The chordæ tendinæ were also fatty. Patches of atheroma covered the ascending aorta and arch.

SPLEEN.—Weight 4 ozs. firm on section, rather pale, capsule thick.

LIVER.—Weight 6lbs. 4oz., firm, shining and of a bright red colour. Hepatic system congested. A curious fissure about four or five inches in length, extended through the right lobe, from about the middle of its upper surface, to the lower margin of the posterior border. Examination of the liver substance showed to be in an advanced state of fatty degeneration, the oil globules predominating over the liver cells. With reference to the fissure above described, it may be stated that these have been referred by some, to destruction of the parenchyma of the liver by syphilitic hepatitis, the substance being replaced by connective tissue; and although in the present instance, the patient had suffered from constitutional syphillis, and the bottom of the sulcus was filled up with condensed fibrous tissue, yet the absence of syphilitic induration or gummata in other organs, as well as the rounded natural appearance of the walls of the fissure, would lead one to suppose that it was congenital.

KIDNEYS.—Left 8½ ozs. Right 7½ ozs. The capsules tore off readily, no cysts in either kidney. Medullary portion congested, cortical pale. The renal epithelium was degenerating in many places especially at the cortex, and was slightly fatty. The malpighian bodies appeared normal. The left kidney presented upon

one side, a lesion both interesting and rare, viz.: a spot of hæmorrhagic infarction. It showed externally as a firm white elevation, round, and about half an inch in diameter. On section it presented the usual triangular form, the base directed outwards; the apex inwards towards the hilus. The spot measures about three-quarters of an inch in diameter, and half an inch in depth, surrounded by a dense white capsule, varying in thickness from 3-5 lines. There was no zone of blood vessels about the spot, but the tissues of the kidney abutted directly on it. The cavity was filled with softened material and disintegrating blood clots. Examination of the wall and contents of the cyst proved of interest: the former, from its firm feel and bright white aspect, was thought to be of fibrous structure, but it turned out to be of a cellular nature; in fact, it seems nothing more than the normal textures of the part, condensed, interspersed with fibrous tissue and undergoing fatty degeneration. The contents were made up partly of renal structures, tubuli uriniferi, malpighian bodies, &c., and partly of blood clots, together with numbers of small oval laminated bodies, varying much in size, some irregular in outline, but all agreeing in having a central spot surrounded by concentric laminae. Some of these were imbedded in the wall of the cyst, and were then encapsulated with fibrous tissue, but in the cavity they were scattered among the disintegrating contents. The exact similarity of these bodies to those figured as corpora amylacia, led at once to the supposition that they were of like nature; but the usual tests for these bodies gave negative results, while the application of sulphuric acid caused rapid effervescence. This proved them to be of mineral origin, and they doubtless come under the same category as "brain sand," the concentric bodies of the prostrate, &c., whose true relation to the corpora amylacia of organic origin is still undermined.

PERISCOPIC DEPARTMENT.

Surgery.

EXCISION OF ELBOW AND KNEE-JOINTS.

By JOHN ELLIOTT, A.M., M.B., Waterford.

In June, 1869, I excised the elbow of a young woman, (Mary Costello,) aged 18, who for more than two years had been labouring under strumous disease of the joint which was laid open by

abscess, with abscesses also extending up the humerus. Very high inflammatory action followed the operation, so that I thought it right to keep the parts irrigated for a fortnight or longer by cotton wick leading from a reservoir. Two sinuses leading down to uncovered bone followed, and did not close till twelve months had elapsed.

As the limbs now hang by the side, the humerus forms with the forearm an angle of 123° , but the parts can be flexed on each other through an arc of 31° . Pronation and supination are perfect, and there is complete use of the wrist, thumb, and fingers, in fact of the whole hand. So the limb is still a very useful one, and much more serviceable than an artificial substitute would be.

Margaret Power, aged about 30, and for some years subject to previous rheumatic attacks, began about five years since to suffer from pain in the left knee, which gradually became so severe and continuous as to give her little respite by day or by night, and finally was attended with permanent flexion and rigidity of the joint, aggravated by frequent painful startings.

As she had undergone a variety of treatment both local and constitutional without relief, and her health, strength and spirits were giving way under constant suffering, I was inclined either to amputate above the knee or to excise it in the spring of 1870. Some doubt, however, was thrown on the diagnosis of the case, I was therefore induced to temporise, and tried the actual cautery over and round the joint. This was followed by some alleviation of pain which, however, was slight and not permanent. The summer and autumn wore on with manifest deterioration of her condition, and in the ensuing month of November, it became obvious that unless relief could be procured the case would terminate fatally.

Accordingly, with the concurrence of all whom I had consulted and with the patient's willing consent, on the 15th of that month I undertook the operation of excision, having the co-operation of Dr. Burkiit, my colleague in the Workhouse Hospital, and also the kind assistance of Dr. George Mackesy and Dr. O'Neill of this city.

When the joint had been laid open by the H incision, the synovia which escaped was observed to be not larger in quantity than usual. It was also quite transparent without the smallest purulent admixture. The cartilages on both the femur and tibia were however deeply eroded. When I had cut off the top of the tibia and the condyles of the femur, I was induced from some suspicious appearances on the section of the latter to remove another thin slice.

We then found that the segments of the limb would not lie in a straightly extended position, and so in order to bring them into the desired apposition, I removed another wedge-shaped portion from the end of the femur—the thick end of the wedge looking forward—and thus obtained the required rectification. The patella seemed healthy and therefore was not meddled with, nor were the ham-string tendons divided—two omissions which I had no reason to regret. Lastly, an opening was made with a large trocar through the soft parts towards the outer side of the popliteal space, to provide a ready exit for any possible accumulation of pus, a precaution which in the sequel was happily found to be unnecessary. Little blood was lost, nor did any artery require ligature or torsion. The skin was brought together with nine or ten points of suture, and a piece of wet lint was laid over the wound and covered with waterproof cotton cloth drawn round and under the limb, which was then deposited in a box splint made expressly for the occasion, and so constructed that the sides and foot piece were separately removeable, thus permitting complete inspection and examination, as well as the necessary attention to cleanliness and renewal of the dressings, without causing the slightest displacement or even disturbance of the parts. One opening was made in the back of the splint to receive the point of the heel, and another just under the site of the operation where the parts rested on a small air-pillow, to the equable support of which we probably owed our immunity from bagging or pocketing of pus. The extension necessary to steady the parts was made with a broad strip of adhesive plaister, which passed from the top of the tibia down one side of the leg, under the foot leaving a loop there, and up as far on the other side. That part which passed down the outside of the leg was kept to the front of the lateral mesial line, and that which passed up the inside was kept behind it, so as to obviate the tendency which the foot has to rotate outward on such occasions. Over the adhesive plaister the leg was bandaged from the foot upwards with an elastic roller. This part of the apparatus required neither renewal or re-adjustment till the patient left her bed some three moths afterwards. An elastic tape passed from the loop below the foot to the foot piece. Finally the space between the limb and the sides of the box splint was packed with curled hair—as recommended by Mr. Butcher—which I found very valuable from its firmness and elasticity.

As the operation was performed in the afternoon and had been rather tedious with a proportional large expenditure of chloroform, she remained under its influence in the evening, and no opiate was administered. Next day apparently from the same

cause, there was anorexia with vomiting and a good deal of prostration. I therefore put her on small does of prussic acid combined with tincture of nux vomica, which settled the stomach, and in the course of a day or two completely restored the appetite. During the second day I was also able to procure for her use a large water pillow, which extended from the nates to the neck, and was of the greatest possible benefit, as the comfort it gave alleviated the irksomeness of maintaining the same posture, and prevented restlessness. The night's rest was secured by a hypodermic dose of 1-5th grain of hydrochlorate morphia qualified with 1-100th grain of sulphate atropiæ.

Being now relieved from all pain and taking her meals with a good appetite, as well as a moderate proportion of stimulants, the case went on so favourably that the wound in the soft parts had united before the end of the second week, with the exception of a sinus, at the bottom of which the probe detected a point of bare bone.

During the third week the air unfortunately escaped during the night from the small air-pillow. The displacement thus caused was followed by an access of what the patient called "mad pain." I then found it desirable to supplement the evening hypodermic dose of morphia with gr. xv of hydrate chloral, to be given at 2 and 3 A.M. As the parts became hot and tender, I laid over them a piece of wet spongio-piline, and in view of her constitutional peculiarities, I put her on the use of ioduret potassæ. This pain subsided in the course of a week with no other local bad result than the formation of another sinus below the patella. I then left off the hypodermic dose of morphia and atropine, and substituted for it a double dose of the chloral hydrate, giving 15 gs. at bed hour, and 10 gs. more if found necessary early in the morning. The sinus which then formed, as well as that which more immediately followed the operation, had closed before the end of January, when I discontinued the chloral, as I thought it produced a lowering effect, and she slept well without it.

About the middle of February, finding the parts were tolerant of pressure, I moulded on them at each side a piece of thick gutta percha softened in hot water and enclosed in a double layer of linen, by means of which they could be fastened on. I preferred this apparatus to a starch bandage, because if from an access of pain or tenderness, to which she was at that time still liable, it became irksome, it could be readily removed as well as re-applied. On the 26th February, she left her bed for the first time, after I had further strengthened the limb with a strong but narrow splint

reaching from the trochanter to the heel, and secured to the limb at both places and also at two intervening distances.

From that time she began to move about the ward on crutches, and now she is able to take exercise in the open air.

She has gained flesh and strength since the operation, and her appetite is good, but her convalescence was for some time retarded by anomalous febrile attacks attended with palpitation of the heart, to which she had long been liable. They have now almost entirely ceased.

With respect to the limb as seen from the front, it lies quite straight, viewed laterally the thigh makes with the leg an angle of 168° or 170° , which can be lessened on flexion to about 160° . The patella adheres firmly to the subjacent parts, and she is able easily to raise the limb from the bed as she lies on her back, but it is evident that complete and general bony union has not yet taken place, though consolidation continues to make progress. The shortening is rather more than three and a-half inches.—*Medical Press and Circular.*

PROFESSOR ERICHSEN ON WRIST-DROP IN FRACTURES— PARALYSIS OF THE MUSCULO-SPIRAL NERVE.

A most interesting clinical lecture on the above subject, delivered at the University College Hospital by Professor Erichsen, has been reproduced by *The Lancet*.

Professor Erichsen considers that simple fractures of the long bones are seldom accompanied by serious complications, on account of the interposition of muscles between the vessels and nerves and the bones, by which the ends of the fractured fragments—as a consequence—are prevented from exercising the injurious action on the vessels, &c., they otherwise would in many cases be certain to do. There are two exceptions to this general rule,—one in the upper extremity and one in the lower extremity—viz., in the relation of the musculo-spiral nerve to the shaft of the humerus in the upper extremity, and in the position of the posterior tibial artery and the upper end of the tibia in the lower extremity. The position of the nerve and the vessel in both these exceptions is such as to lead to serious injury in cases of fracture of the contiguous bones.

Injury to the musculo spiral nerve in cases of simple fracture of the humerus must be of rare occurrence, for no mention is made of it in standard surgical works; nor has Professor Erichsen met, until recently, an instance of it; but there have been under his

care lately three cases in which injury to the musculo-spiral nerve, or its branches, caused complete paralysis of the muscles supplied by that nerve, and this injury was, in each case, attributable to fractures of the humerus.

In complete paralysis of the musculo-spiral nerve both the supinators of the forearm, and all the extensors of the wrist and fingers lose their power: the hand consequently falls into a state of pronation and flexion, and presents the characteristic signs of "wrist-drop." But when the posterior interosseous division of the musculo-spiral nerve only is injured, the loss of supination and of extension is not so complete, and as the supinator longus, and the extensor carpi radialis longior are supplied by branches from the main trunk of the nerve, they are not paralysed; and thus a certain, though a limited, movement in the sense of supination and extension is preserved although the forearm and hand become pronated and flexed.

A girl, aged 29 years, an ironer, was admitted to the University College Hospital on the 16th of December. Ten weeks previously she had had a fall and fractured her humerus about its centre. She had been treated for the injury in the usual manner, and the limb was put upon an angular splint so as to fix the elbow-joint. When the splint was removed she noticed wrist-drop, but thought it was weakness of the part.

On examination it was found she had marked wrist-drop with pronation. She cannot extend the hand. The right forearm, hand and fingers are swollen; the hand feels colder than its kindred one, and occasionally she experiences a feeling of "pins and needles" down the hand and fingers. The thumb and index finger are numb on the dorsal aspect, and there is imperfect sensation in them. The temperature of the affected hand is less than 85° , and of the kindred hand 90.6° . All the muscles supplied by the musculo-spiral nerve are paralyzed. She has no power to extend the wrist, the thumb, nor the fingers from the metacarpophalangeal articulations; but when the fingers are completely flexed, she can extend the joints between the first and second, and second and third phalanges; this is accomplished by means of the interossei and lumbricales, which are attached to the expansion of the extensor tendons on the dorsum of the fingers lower down than the metacarpophalangeal articulations. On forcing the index finger down, and asking her to try and extend it, the thumb is drawn towards the palm of the hand by the attachment of the first dorsal interosseus to the metacarpal bone of the thumb. Supination can be imperfectly performed, and only when the forearm is flexed. Flexion of the wrist, hand, and fingers is perfect.

She has been galvanized by faradisation regularly, and regains power over the affected muscles, and can extend the wrist and the fingers from their metacarpo-phalangeal articulations.

A patient, aged 30 years, a lace-cleaner, slipped on the right elbow. Fracture of both condyles with supination was clearly diagnosed. There was a small clean cut at the posterior aspect of the arm an inch from the elbow, apparently the result of protrusion of bone at the time of accident. A probe could pass in different directions amongst the tissues. From November 17th till December 21st, the limb was kept on an angular splint on the inner side, and the wound treated in strict accordance with Lister's rules for antiseptic dressing. On November 24th there was much swelling, redness, and tension, it was thought too that fluctuation existed, and an incision of about three-quarters of an inch long was made a little below the elbow-joint. Much serous fluid—but no pus—followed, and continued for a fortnight. The tension disappeared. Passive motion was commenced on 21st December, and the splint was removed on the 23rd of that month. On January 23rd, the patient can bend the elbow to an angle of 45° and can straighten it to about a right angle and a half, can also close the hand to within an inch of the palm, and it can be forcibly closed completely without much pain being experienced. There is a flexing and opposing power in the thumb. And when the hand and forearm are supinated, the wrist is quite straight. When the hand and forearm are pronated, there is complete wrist drop, and she cannot raise the wrist or fingers, nor move the thumb outwards nor backwards. There is perfect power of supination when the elbow is fixed. When the fingers are completely flexed she is able to extend the joints below the second and third and first and second phalanges by means of the lumbricales and interossei; and as the hand is very thin, the interossei may be seen at work. There is numbness on the back of the thumb and index finger, but no absolute loss of sensation. The temperature of the hand has not fallen.

A patient, aged 7 years, in June fell over a croquet-hoop and fractured the right humerus at its lower part. At the time of the accident it was supposed she had dislocation, and a non-medical gentleman then present, pulled the arm with violence, but subsequently the patient was treated by a qualified practitioner. Splints were applied which reached to the finger-points; the latter were kept expanded, and on the removal of the splints seven weeks afterwards, the fingers became flexed. She can crochet with the right hand, write a letter, and she is able to extend her wrist. Her hand is pronated, and can only be imperfectly supinated. The fin-

gers are flexed and drawn to the palm, and on the wrist being dropped the last two phalanges of the fingers can be extended by the patient. There is no tension of the palmar fascia on forcibly extending the fingers and wrist, but there is great tension of the flexor tendons above the wrist. The hand is congested and cold.

A splint was constructed and applied to permit gradual extension of the fingers, and her arm was faradised daily. The contractility of the extensors and supinators has increased. The index-finger is but little improved: the middle finger is better, and the little and ring fingers very much so, and are almost straight. The wrist can be extended and the knuckles brought to a level with the back of the forearm. When so extended, the fingers are half shut, but when the wrist is dropped they can be extended by the patient, and, in doing so involuntarily spread out like a fan, owing to the action of the dorsal interossei.

The chief resistance to proper extension is due to the contraction of the flexor carpi radialis, and the flexor tendon of the index finger. Professor Erichsen proposed to divide these subcutaneously, but the patient's friends objected.—*The Doctor.*

Medicine.

DIARRHŒA AND CHOLERA :

THEIR SUCCESSFUL TREATMENT BY MEANS OF THE SPINAL ICE-BAG.

A summary record of Cases and Results. By JOHN CHAPMAN, M.D.,
M.R.C.P., Physician to the Farringdon Dispensary.

The fundamental principles on which the treatment described and exemplified in the following pages reposes may be stated summarily as follows:—

Negative Principles.

1. That though, in exceptional cases, diarrhœa as well as cholera, may present itself associated with the presence of a blood-poison, neither the one nor the other is, as a general rule, the product of such a poison;* and that there are very strong and very numerous reasons for believing that the hypothetical so-called "cholera-poison," of the existence of which no proofs have ever been adduced, exists only in the imagination of certain pathologists.

* The doctrine that the blood of cholera patients is poisoned, is held by Parkes, Goodeve, Johnson, and a host of other pathologists.

2. That the existence of the so-called "cholera-germs," † which are alleged to be produced and disseminated in terrific abundance from the gastric and intestinal discharges of cholera patients, has never been shown to be probable by even one particle of evidence, and that there are numerous and very strong reasons for believing that they are creations as exclusively hypothetical and subjective as is the imaginary "cholera-poison" itself.

3. That the pathological changes constituting the phenomena of cholera are not referrible, as suggested by Dr. Gull, "to an early and severe depression," or "extreme exhaustion of the great ganglionic nervous centres in the abdomen;" that "the vital energy of the nerves distributed to the respiratory, the circulatory, and the secreting organs, is either uncommonly depressed, or entirely annihilated, is" not "shown by the nature of the characteristic symptoms constituting the malady," as it is affirmed to be by Dr. Copland; and that a vast array of authentic facts disproves the assertion of Dr. Goodeve, that "in the intestines a sort of paralysis of the smaller arteries and capillaries seems to exist, much as occurs in the sections of the sympathetic nerve in the neck in Bernard's experiments."

4. That cholera does not "travel" from place to place, as in almost every history of its manifestations it is said to do; that it can originate *de novo* in any place in which certain definable conditions co-exist; and that it may even be generated afresh, without the aid of "cholera-germs," and without any contact or relation of any kind with cholera patients, by either the stupid conduct or conscious efforts of man himself.

5. That, though in the focus of a cholera epidemic the influence generating the disease is often felt by persons who are not actually attacked by it, and though when that influence tends to render all within the sphere of it liable to attack, the emanations of cholera patients, like any other foul or unwholesome emanations, may operate as exciting causes of the disease, whereas they would not do so under other circumstances; nevertheless, cholera is neither infectious nor contagious; and that the costly and vexatious international regulations, often involving great suffering, by which Governments attempt to resist invasions of the disease, are no defence whatever against the attacks, whereas its development and continuance are, probably, often favoured by the enforcement of the laws of quarantine.

† The "cholera-germ" theory was held by Dr. Snow, and has been most zealously advocated by Dr. Budd, of Bristol.

Affirmative Principles.

1. That both diarrhœa and cholera, however induced, are essentially and invariably disorders of the nervous system.

2. That the nature of the summer diarrhœa of temperate climates, and that of the diarrhœa which often preludes, and indeed constitutes the initial stage of cholera in tropical climates, are essentially identical.

3. That the summer diarrhœa of temperate climates, the so-called cholérine, English or European cholera, and Asiatic cholera, are also essentially or etiologically one and the same disease—these several kinds of it being only the several expressions of the several degrees of intensity with which the force causative of them operates.

4. That all the phenomena of diarrhœa and cholera are due to hyperæmia, and consequent excessive action of the spinal cord and of the ganglionic or sympathetic nervous system.

5. That all these phenomena are naturally divisible into two classes as follows:—

First Class.—ACTIVE OR POSITIVE PHENOMENA—DUE TO HYPERÆMIA OF THE SPINAL CORD.

Abnormally copious and pale urine.

Albuminous urine.

Super-abundant secretion of bile.

Super-abundant secretion of pancreatic juice.

Excessive exudation of serous fluid by the serous membranes.

Borborygim.

Excessive activity of the mucous membrane of all the glands of the alimentary canal.

Abnormally high temperature within the rectum.

Excessive activity of the mucous membrane of the gall-ducts and gall-bladder, of the pelves, of the kidney, and of the female genital organs.

Abdominal gripings.

Excessive expulsive activity of the stomach and bowels.

Simultaneous excessive activity of the thoracic and abdominal muscles.

Sweat in all its grades of copiousness and fluidity.

Disorders of sensibility.

Tremors.

Muscular twitchings.

Fixed stony expression of the face.

Tonic hardness of muscles.

Tightness across the lower part of the chest.

Cramps and convulsions.

Extreme contraction of the urinary bladder.

Restlessness and tossing of the limbs to and fro.

Second-Class.—PASSIVE OR NEGATIVE PHENOMENA—DUE TO HYPERÆMIA OF THE SYMPATHETIC GANGLIA.

Slight headache.

Deafness of various grades.

Tinnitus aurium.

Dizziness, slight faintness, syncope.

Drowsiness, sleepiness.

Mental states characteristic of diarrhœa and cholera.

Absence of tears, saliva, bile, and urine.

Short, struggling, and rapid respiration.

Cold breath.

Enfeeblement of the voice, aphonia.

Oppressive and burning pain at præcordia and left epigastric region.

Algid symptoms; Progressive changes in the visage and in the colour, temperature, and general aspect of the skin.

Loss of cutaneous sensibility.

Serous exudation into the intestines.

Epithelial exfoliation of the intestinal villi.

Enfeeblement and death of the voluntary muscles.

Enfeeblement and death of the involuntary muscles, cessation of discharges, secretion still continuing.

6. That the different grades of severity with which the foregoing symptoms present themselves in different cases accurately correspond to and express the different grades of hyperæmia of the spinal cord and sympathetic ganglia which obtain in different cases.

7. That as the comparative strength of the cerebro spinal and of the sympathetic nervous system in relation to each other differs aboriginally in different constitutions, so in cases of diarrhœa and cholera, each of the two groups of morbid phenomena produced by each of those systems will relatively to each other present different degrees of development in different patients. Hence it is that sometimes the copiousness and frequency of the discharges, and sometimes the algid symptoms constitute the predominant features of the malady.

8. That any agent capable of producing general hyperæmia of the spinal cord, and of the sympathetic ganglia, is capable, by doing so, of becoming a cause of both diarrhœa and cholera.

9. That some agents increase the circulation in, and therefore the energy of the whole nervous system simultaneously, and consequently engender diarrhœa and cholera without the operation of

any apparent exciting cause. Such agents are solar heat and atmospheric electricity. Hence it is that while diarrhœa and cholera are only epidemic in temperate climates, and, exceptions apart, are only epidemic in such climates during the summer months, they are more or less endemic in tropical climates throughout the year.

10. That though great and continuous solar heat is pre-eminently powerful as a cause of diarrhœa and cholera, even the great potency of solar heat as a cause of these diseases is immensely augmented, if, while the days are hot the nights are cold. Wide ranges of temperature, when the average temperature remains high, cause the amount of blood in the surface of the body to vary extremely within each 24 hours, and thus by means of the ebb and flow of the blood-currents, as well as by means of the nervous ramifications throughout the surface of the body, exert an oscillating influence on the circulation within the nervous centres themselves, which rendered permanently hyperæmic by the high average temperature, become still more so in the night, owing partly to the influence of sleep, and partly to the fall of the external temperature, which causes the body to become cool, and the surface arteries, therefore, to become contracted. Careful and exact observations, both in India and in England, have demonstrated that when in connexion with a high temperature there is a great range between the degrees of greatest heat and greatest cold within each 24 hours, diarrhœa and cholera are likely to prevail most extensively; and hence it is that in England, as a general rule, September, which is especially notable for its hot days and cold nights, is the month in which those diseases are most prevalent and most fatal.

11. That when a high temperature, with or without great alterations, produces excessive hyperæmia of the nervous centres, the extent of such hyperæmia, and therefore proclivity to diarrhœa or cholera, differs in different persons at the same time, and in the same person at different times, because the constitutional variability of the circulation in the nervous system differs in different persons, and in the same person at different times.

12. That when the spinal cord and sympathetic ganglia have become hyperæmic by the influence of great solar heat, but not sufficiently so to enable them to become self-originate of diarrhœa or cholera, various agents, which, without the co-operation of such hyperæmia of solar origin, would be powerless to produce either of those disorders, are capable, with that co-operation, of becoming exciting causes of both of them.

In India *prolonged marches* of soldiers, *pilgrimages*, and *ordinary*

travelling on foot, by bringing into continuous and energetic action the lower segments of the already hyperæmic spinal cord, are notoriously prolific exciting causes of cholera.

Noxious effluvia coming in contact with the great expanse of sensory nerve filaments, spread over the nasal and pulmonary mucous membranes, excite the already hyperæsthetic brain and spinal cord of persons exposed to great solar heat, to an extent which would not be possible at other times, and thus become exciting causes of both diarrhœa and cholera. "In spite of exceptions," says Dr. Goedeve, "the places in which the air is most vitiated from privies, cesspools, drains, decaying animal and vegetable refuse, or overcrowding and concentration of human evacuations, are those in which cholera has generally been most fatal and most widely spread."

Impure water, which in England may be drunk during winter with comparative immunity from bowel complaints, quickly induces diarrhœa and even cholera in summer, when, by the action of solar heat, the nervous system is already predisposed to those diseases. Moreover, impure water taken from the same source all the year round is more impure in summer than in winter, because whereas water at 32° Fahr. dissolves scarcely any organic matter, water at temperatures ranging from 60° to 90° Fahr. dissolves it freely.

Bad food and eating to excess are very common exciting causes of cholera in India, where the temperature is always high; generally in temperate climates their morbid influence extends only to the production of diarrhœa; but when, in England, for example, a predisposition to cholera is already established by great heat, they very often become the agents of its development.

Alcoholic fluids are notoriously stimulants of the nervous system, and, assuming the truths of the doctrines above propounded, my readers will expect that persons who drink these fluids freely in a region where cholera is epidemic, will incur special risks of losing their lives by doing so, and such is the fact. It was found by Dr. Farr* that, "on Saturday, Monday, Tuesday, and Wednesday, the deaths from cholera were above, and on Thursday, Friday, and Sunday, below the average. In the whole country Tuesday was the most, Friday the least fatal day of the week." The remarkable increase of deaths on Tuesday is an instructive consequence of the fact that Monday (*Saint Monday*, as it is called by the working classes) is the day especially devoted to idleness and drinking.

Dental Irritation.—Of all the exciting causes of cholera, or if

* Report on the Mortality of Cholera in England. 1848-49.

the phrase be preferred, of fatal diarrhœa, in temperate climates at least, the process of teething is at once the most extensively operative, the most insidious, and the most deadly. Comparatively few English children are destroyed during each winter by diarrhœa, but the number which it kills every summer is deplorably great, while in those summers which are remarkable for their great heat the number is enormous; and I often marvel how little professional enquiry and reflection are excited by this great infant mortality. How does it come to pass? The answer seems to me easily given: in ordinary summers solar heat acting alone or even in combination with any of the exciting causes already mentioned, does not suffice to induce cholera or fatal diarrhœa; and in English winters the nervous irritation incident to the process of teething rarely induces diarrhœa, and when it does so the disease is rarely fatal; but when the two exciting forces—solar heat and the nervous irritation caused by teething—are combined, their conjoint force produces that excessive hyperemia of the already extremely vascular nervous centres of children, which originates the great majority of the very numerous cases called in England “infantile diarrhœa,” and in America, where the solar heat is greater, and where, consequently, the symptoms of the disease are more pronounced, “cholera infantum.”

Purgative Medicines.—Besides the several agents already mentioned, which easily become transformed into exciting causes of diarrhœa and cholera, when heat has already rendered the nervous centres hyperemic, there are many others which ought to be referred to, but all of which except purgative medicines I must, for the sake of brevity, pass over in silence. That purgative medicines are capable of inducing cholera when the disease is epidemic is proved by an amount of evidence, from the most impartial and authoritative observers, placing the fact wholly beyond question. Testimony to this effect is given by Sir Ronald Martin, Dr. Macpherson, Dr. Laycock, Dr. Mackintosh, Dr. Goodere, Dr. Twining, Dr. Morehead, and, in short, we find, as Dr. Macpherson says, “the great majority of writers in all countries pronouncing their opinion that when cholera is prevalent, it is not safe to take aperients.” The results of the several plans of treatment tabulated by the “Treatment Committee of the Medical Council of the Royal College of Physicians,” so as to show the *percentage* of deaths following each plan, proved that the *percentage* following the use of eliminants was greatest of all—viz., 71.7, and that the *percentage* of deaths following the treatment by castor oil, was even greater than that which followed the use of eliminants in general: it was 77.6 per cent.—*Medical Press and Circular.*

Midwifery.

THE TREATMENT OF PROLAPSE OF THE UMBILICAL CORD.

BY DR. MASSMANN.

Dr. MASSMANN has collected the histories of no less than four hundred cases, of which upwards of forty came under his own observation, either in private practice or as assistant physician to the hospital at Breslau. It appears that, from the statistics of SCANZONI, the proportion of cases in which prolapse of the umbilical cord occurs is as 1 to 254 births. The author, however, gives a much higher figure, estimating it at 1 to 123. It is absolutely most frequent in head presentations, but only because these are far more common than breech or cross presentations: the frequency of prolapse is *relatively* very much greater in the latter. It is especially liable to occur whenever the lower segment of the uterus is not fully occupied by the presenting portion of the child. Hence it is met with in cases where the head is high in the pelvis, or is directed more or less to one side. It is not the pelvis, but that contraction of the lower segment of the uterus which occurs in normal delivery, that keeps the umbilical cord from prolapse. The statement made by FRIED and SCHMIDT, that a pelvis of great width predisposes to its occurrence, is incorrect, since it is precisely in these cases that the head rarely sinks into the pelvis. According to MICHAELIS and HILDEBRANDT, the chief circumstances favoring prolapse are irregularities in the position of the child or head, and all circumstances occasioning great dilatation of the uterus, as hydramnios, twins, &c.; but besides these may be mentioned low attachment of the placenta, great length of the cord, previous prolapse of a small portion, premature birth. The death of the child, which occurs in 54 per cent. of the cases, according to SCANZONI, and in 45 per cent. according to Dr. MASSMANN, is not the result of cooling of the cord, but of the pressure upon it preventing the passage of the current of the aerated blood from the placenta: the child consequently dies asphyxiated. The accident is most dangerous at the symphysis, on account of the pressure being immediate, severe, and persistent. The treatment of prolapse of the umbilical cord of course consists essentially in protecting or removing it from pressure as quickly as possible. The former indication is fulfilled by the replacement of the cord, the latter by speedy delivery. Formerly the latter mode was always adopted; the former was first recommended to be adopted as a general rule by MICHAELIS. Inasmuch as the

replacement of the cord involves the introduction of the whole hand, it is necessary that the os should be sufficiently dilated. If this be not the case, and the liquor amnii have not escaped, we must wait, and endeavor by slightly altering the position of the head to bring about spontaneous reposition. Hohl's recommendation is, whilst the head is descending during a pain, to keep two fingers pressed against the loop of the cord. But if it be found that even with unruptured membranes the cord is exposed to dangerous pressure, HÜTER proposes that, providing the mouth of the uterus will admit the hand, to replace the cord, then to rupture the membranes and place the head in position. Pursuing this plan in ten cases, the author was fortunate enough to deliver ten living children. In cases, however, where the waters have been discharged, and the cord is prolapsed into the vagina whilst the head is low, the forceps must be at once applied and delivery effected. If, however, the head be still high and moveable on the brim of the pelvis, whilst the os is sufficiently dilated to admit the hand, replacement is indicated, the statistics here being that 73 children out of every 100 survive. If, on the contrary, the expectative treatment be adopted, and the attendant waits till the head is sufficiently low to admit of the application of the forceps, only 49 per cent. of the children are saved. When replacement of the cord is determined upon, it should be accomplished with the whole hand; the right being used when the loop is on the left side, and *vice versa*. Small loops may be pushed back with the tips of the four fingers, but larger ones cannot be replaced in this way. In such cases the author thinks it is most advisable to collect the whole loop into a mass, supported on the tips of the fingers and hollow of the hand. The hand is then to be slowly passed into the uterus, firmly pressing all the time on the head, and care must be taken to introduce the cord completely over and beyond the head. Before being withdrawn, the hand should be twisted about one-fourth of a circle, so as to extract it through the opposite side of the pelvis. The normal position of the head and the complete occlusion of the lower segment of the uterus are the only means of retaining the replaced cord. Hence the head should, if deplaced, be put into the normal position, and the hand should be retained in the uterus till it is felt that the lower segment of the uterus has firmly contracted, and the occurrence of this may be hastened by friction. If an arm present, this must be replaced either by itself or simultaneously with the cord. If a foot and arm present, the foot must be brought down. When the replacement is effected, the case must be left to nature, cramping pains being removed with dose or two of Dover's powder. Often after reposition of the

could the uterus relaxes, and labor is stopped for several hours; and this is usually without danger to the child. The mere want of pulse in the cord is not a proof of the death of the child, and should not lead to neglect of its replacement.—*Practitioner*.

DIET OF PARTURIENT WOMEN.

Dr. Hugh Miller calls attention to the very vague instructions given by obstetric writers on this subject. Particulars of a case were given, in which careful nourishing diet given during utero-gestation enabled the patient in her last confinement to escape suffering from uterine inertia. From an examination into the physiology of the changes in the uterus and breast, Dr. Miller believed that the fat-cells existing in abundance in the milk during the first few weeks were due to the changes in the womb after parturition; that the disintegrating uterus was broken up into fat-cells, which were absorbed by the blood, and through the circulation were secreted by the mammary glands. Hence, a heat-forming diet was neither necessary nor was indicated, and at times might be positively injurious; whereas a flesh-forming diet, by maintaining the strength, enabled the woman to make up for the waste of tissue during labor, gave her support, and maintained the vigor of her body while the further changes were going on. The author had found great benefit through selecting the parturient woman's diet from as nearly as possible the kind of food which she was in the daily habit of taking, giving it in a liquid form and in diminished quantity. The advantages in adopting a nourishing diet to the mother he believed to be: 1. Maintaining her muscular strength. 2. Avoiding irritation to the mammary glands and enabling her to suckle sooner. 3. Securing a quicker and better recovery.

Dr. Robert Barnes says that he has noticed great mischief brought about by giving nutritious diet too soon after parturition. He did not say that such diet was not necessary; but there was a prevalent tendency to go too far, and to load the stomach before the patient was able to bear it. The system after parturition required repose, and that in consequence of the changes that took place little food was at first required. It was not desirable to give stimulants at all, and certainly not solid food.—*British Medical Journal*, Oct. 1, 1870.

TREATMENT OF UTERINE CATARRH BY INTERNAL APPLICATION OF CARBOLIC ACID.

Dr. W. Playfair, Physician to King's College Hospital (*Lancet*), says: "In a large proportion of old standing cases of uterine catarrh, it is hopeless to expect a permanent cure by any means which do not act directly on the seat of the disease, which is the lining membrane of the cavity of the uterus and cervical canal beyond the external os; accompanied, of course, with secondary morbid states of the body of the uterus and cervix, such as hypertrophy, congestion, etc. Rest, applications to the exterior of the cervix, and general treatment will unquestionably cause a temporary improvement, but on a recurrence to the old habits of life, all the old symptoms return.

"There are serious objections to intra-uterine injections, unless the os is first dilated with laminaria tents, as they are apt to bring on severe uterine colics. By means of fine probes of whalebone or flexible metal, round which a thin film of fine cotton-wool is wrapped, alterative applications can readily be made to the interior of the uterus, without pain or danger. In the very numerous cases in which this plan of treatment has been carried out, in no single instance has anything but the greatest benefit accrued. It is no doubt advisable to select the cases judiciously, and where there is much uterine tenderness, intra-uterine treatment should be postponed until this has been diminished by rest, leeching, etc.; but with proper precautions the treatment is perfectly safe. A concentrated solution of carbolic acid, eighty parts to twenty of water, is used; and it acts so well, that for a long time nothing else has been employed. After the first application the discharge is sometimes increased, but after the second or third, it is generally greatly diminished, and a single application is often sufficient to cure superficial erosions of the cervix. As a rule, there is no difficulty in passing the probe, as in true uterine catarrh the os is invariably patulous. As the case improves, the patulous state of the os diminishes, and this is found to be one of the most certain signs of improvement."

The members of the Paris Academy of Medicine have been ordered to erase the names of their German colleagues of eminence, but nobly refused to do so.

Canada Medical Journal.

MONTREAL, SEPTEMBER, 1871.

THE MEDICINE BOXES FURNISHED TO THE VOLUNTEERS.

We notice in the *Globe*, which is known to be the most unscrupulous sheet published in the Dominion, that an attack is made on the Militia Department, in respect to the medical comforts furnished to the volunteers while in camp—and we determine to publish the list of articles furnished, so that the profession may judge for themselves, as to the correctness of the statements made by the *Globe's* correspondent. Under date Camp Sarnia, September the 21st, 1871, he says:—

“The medical arrangements of the camp are one of the worst features of its organization, and have led to a protest from nearly all the medical men here, and endorsed by the remainder. The stores furnished turn out to contain the worst nostrums heard of in the profession, and lack in almost every requisite for treating diseases of most general occurrence under canvas. Yesterday one surgeon brought his medicine chest on parade in charge of an orderly, to exhibit its defects, and did this effectively by substituting a bottle of stimulating liquors for the whole of the trash furnished him. The substitution was a success.”

This bears on the face of it such an amount of ignorance and untruthfulness, that it is scarcely worth noticing. We have ourselves been attached to the Volunteer force of Canada since its first inception in 1853. We are fully alive to the importance of the movement, and also of the importance of medical officers becoming thoroughly up to their work, which does not consist alone in prescribing for the sick of their camp.

It would be vastly more to their credit if, instead of condemning what is a fair beginning, they would endeavour to strengthen the hands of the Militia authorities. The instruction given to medical officers is specific; a careful medical inspection of the men should be made before going into camp, with a view of not permitting any to join the force except those in robust health.

Medical officers should be consulted in the selection of camping ground, and the general sanitary arrangements of the camp should be jealously watched over by the medical staff, as greater credit will be due to those who take medical charge of a camp,

and whose sanitary arrangements are such, that a minimum of disease will be present, than to those who by neglect of such sanitary measures, are troubled by a large number of cases of disease. It is the experience of the British Army while under canvas, that the amount of disease is almost nil, but this is due to the great care adopted by the military medical authorities; who are specially trained at the Army Medical School, Royal Victoria Hospital, Netley, being obliged to attend a course of practical instruction in the duties they will be expected to perform in the public service; and furthermore, to pass an examination on military medicine, military surgery, and sanitary science, before receiving the appointment of assistant surgeon.

We must conclude that the *Globe's* special correspondent is slandering the whole medical staff of the Sarnia Camp, and more especially the surgeon who appeared on parade with his medicine chest in charge of an orderly, and who substituted a "bottle of stimulating liquors (was it Old Rye?) for the whole of the trash furnished him." We say this must be a downright falsehood, or the officer in command on the occasion was very lax in his duty, as the special to the *Globe* does not state that the surgeon was placed under arrest and sent to the guard-room, for appearing drunk on parade, we should imagine no man in his senses could render himself so supremely ridiculous. The Adjutant-General would do well to ascertain whether so gross a breach of military discipline has been committed, and at once signify his dissent of such conduct, by striking the delinquent off the list of officers of the Volunteer force of Canada.

To return to the subject of the medicines furnished, we consider that the box contains nearly all that is required for the service expected of the Volunteers. If any additions are considered necessary, the medical staff will individually have an opportunity of expressing their views on that point, as the Government have issued a Militia General Order, whereby "Medical officers are requested to state what in their opinion are the deficiencies of of the 'Medicine Boxes,' and in what particulars they may be improved." The Government are apparently anxious to give satisfaction to all the parties concerned, and we have no doubt would even concede the point of furnishing a bottle of "stimulating liquors" if deemed necessary, at the risk perhaps of being again misrepresented by the *Globe* or any other sheet desirous of throwing dirt.

We regret that any member of the profession, if the above statements are true, should follow this line of conduct, as it is more likely to injure the Volunteer cause and create distrust, when

there should be harmony and unity of action. It ill becomes members of the medical profession to offer frivolous objections, always supposing that the statements made by the *Globe* are reliable.

List of contents of the Medicine Boxes furnished the Canadian Militia :—

7. Calomel; Chloroform; Diarrhœa mixture; Ether Sulph; Fuller's earth; Morph. Acet; Pil Cathartic Co.; Pil Coloc Co.; Pil Opii—1 gr.; Pil Opii— $\frac{1}{2}$ gr.; Plumbi Acet; Potass Chlor.; Potass Nit.; Pulv. Acacia; Pulv. Cretæ Co. C. Opio; Pulv. Ipecac Co.; Pulv. Jalap Co.; Spts Ammon. Aromat.; Tinct. Opii.; Tinct. Zingib; Zinci Sulph.; Calico Bandages; Flannel Bandages; Suspensory Bandages; linen sheeting; Calico; Lint; Gutta-Percha tissue; Oiled Silk: cotton wool; adhesive Plaster; Sponges; Needles; Thread; Tourniquet; Tape; Scissors; minim measure; scales and weights; Spatula; Enema syringe; surgeon's tow; Pins.

Contents of the Medical Field Companion used by the British Army :—

MEDICINES.—Mixture for Diarrhœa and Cholera, 2 oz. Chloroform, 2 oz. Tinct. Opii, 2 oz. Spirit. Ammonia Aromat., 2 oz. PILLS.—(Tins.) No. 7. Calomel gr. i. Pulv. Opii gr. i. in each. No. 8. Plumbi Acet. gr. iii. Pulv. Opii gr. i. in each. No. 9. Calomel gr. ii. Pil. Rhei Co. et. Pil. Coloc Co. aa gr. ii. in each. No. 10. Camphor gr. iii. Pulv. Opii gr. ii. et Pulv. Cayenne gr. $\frac{1}{2}$ in each. 4 dozen of each kind. POWDERS.—No. 1. Morph. Acet. gr. $\frac{1}{2}$. Plumbi Acet. gr. iv. et Pulv. Acacia gr. ii. in each.—24. No. 2. Antim. Tart. gr. i. Pulv. Acacia gr. iii. in each. No. 3. Calomel gr. iii. Pulv. Jacobi gr. v. et Pulv. Ipecac. Co. gr. xv. in each. 12 of each kind. No. 4. Pulv. Kino Co. \mathfrak{D} i. in each.—24. No. 5. Pulv. Cretæ Co. c Opio \mathfrak{D} ii. in each.—12. No. 6. Pulv. Jalapæ Co. \mathfrak{D} ii. in each.—12. APPLIANCES.—Calico rollers—2. Suspensory Bandages—2. Clavical bandages—2. Strong calico— $\frac{1}{2}$ yard. Linen sheeting— $\frac{1}{2}$ yard. Lint— $\frac{1}{4}$ lb. Gutta percha tissue— $\frac{1}{4}$ yard. Cotton wool— $\frac{1}{4}$ lb. Isinglass plaster—1 yard. Adhesive plaster, $\frac{1}{2}$ yard. Sponges, surgeons—2. Needles, surgeons—25. Whited brown thread— $\frac{1}{2}$ oz. Razor in case. Shaving soap—1 roll. Screw field tourniquet. Candle and wax matches. Pins— $\frac{1}{2}$ paper; tape—1 piece. Scissors—1 pair. Minim measure—1. Graduated horn cup—1.

We must admit that the Canadian box is the more complete of the two.

FAILURE OF CONDURANGO.—This remedy for Cancer has been tried at the Middlesex and St. Bartholomew's Hospitals, and has utterly failed in giving relief in this disease. A detailed account of its therapeutic action is being prepared by Mr. Hulke, and a careful examination of its physiological action will be reported on by Dr. Brunton. These reports will be looked for with interest, as they will tend to set at rest the excitement produced by the very scandalous claims which have been set up in its favour. Condurango, like all other cancer cures, has lived out its little day, but we doubt not will be used by the unscrupulous quack to cruelly deceive the unwary.

CYANO-PANCREATINE.—This is a new preparation of animal fats and pancreatine, prepared by the Sisters of the Grey Nunnery in Montreal. It appears to be a pleasant preparation, and we believe will agree well with the stomach. We have not had an opportunity of trying its efficacy with any very decided results, but purpose doing so in the course of the next month or two, when we will again refer to its usefulness.

Sir Thomas Watson is revising his Lectures on the Practice of Physic. It is stated by the *British Medical Journal* that the last pages are in the hands of the printer. So that the work may be looked for almost immediately.

Professor Lister of Edinburgh, was recently summoned to Balmoral, to open a small abscess near the arm of Her Majesty the Queen.

Medical News.

HOMŒOPATHIC SURGERY—WHAT IS IT?—Can any one tell what is meant by homœopathic surgery?—how the law [?] of "similia similibus" can apply to the use of the scalpel, the ecraseur, the ligature? If a man is stabbed, can he be cured by a little more stabbing, in a small way? If he have a ball fired into his corpus, can he be saved by shooting him with diminutive bullets, dynamic or potentized, or what not? If one be bleeding to death from a wounded artery, can similia similibus save his life by cutting another artery? The expression, "homœopathic surgery," is absurd in itself. You may as well talk of homœopathic farming,

or homœopathic mining. A homœopathist may practice surgery, but in doing so he must tread in the footsteps of the regular schools. He can strike out no new course. He cannot apply his favorite "lap" to surgical art. On the contrary it comes in to baulk him at every step; to shake his confidence in himself, and to make his hand tremble. In attempting to practice surgery he enters the camp of his enemies, whom he has always denounced as murderers, and accepts their guidance and employs their weapons. His puny straw of *like to like*, he has left outside.

A "homœopathic surgeon" is a fabulous animal, having no real existence. "Homœopathic blacksmith," "homœopathic cobbler," "homœopathic shoe-black," would be just as appropriate—the last indeed more so, because shoe-blacks do apply the law of similia similibus. Hahnemann had no knowledge of surgery. He ignored it. He scarcely ever mentioned the word; nor did his early followers. They were ashamed to follow the teachings and the practice of the men whom they denounced. They have had half a century of existence, with much increase and success, say they. But not a man among them has ever done anything for surgery. Not a single homœopathist in Europe or America has ever identified himself with it. Not a single name have they given to the history of surgery, in a period effulgent with the splendid achievements of the regular schools.—*Pacific Medical and Surgical Journal*.

At a recent meeting of the Gynæcological Society of Boston, it was stated in speaking of the comparative merits of Ether and Chloroform, that the latter was almost universally employed as an anæsthetic in the South. In Memphis, Ether is never employed, and no accident is known to have ever occurred there from the use of Chloroform.

At the annual meeting of the Maine Medical Association, Dr. Tewksbury reported a case of vesico-vaginal lithotomy in a little girl 7 years old. The stone was the size of an English walnut, and was removed by incision in the vesico-vaginal septum one and one-fourth inches in length. It was immediately closed by six silver sutures, and the patient fully recovered in fifteen days. Dr. Tewksbury made some remarks on the history of the operation, and in closing, said: "That after a careful search in medical literature, this was, as far as he could discover, the first case of vesico-vaginal lithotomy in a girl of this age, followed by immediate closure of the wound.—*Boston Medical and Surgical Journal*."