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CANADA

MEDICAL & SURGICAL JOURNAL

DECEMBER, 1883.

Original Communications.

EXCISION OF PORTIONS OF THE INTESTINE.

By JAMES BELL, M.D.,

Medical Superintendent of the Montreal General Hospital.

(Read before the Canada Medical Association, at Kingston, September, 1883.)

The groundwork of my paper consists of the reports of 14 cases of experimental resections of the intestine in dogs. I was led to make this series of experiments by the observation during the past few years of a number of cases of intussusception, hernial and other strangulations, stricture, ulcer, and the various neoplasms which affect the intestinal canal, which were either subjected to equally severe, but less satisfactory, treatment, or abandoned to die as beyond the reach of surgical aid. When I say "equally severe, but less satisfactory treatment," I refer, of course, to the orthodox treatment of intussusception by inflation or even by abdominal section, and endeavoring to replace the inverted bowel; and the production of an artificial anus in hernia when the bowel had sloughed. Emboldened by the recent successes in the various branches of abdominal surgery, I reasoned that, under ordinary circumstances, almost any portion of the intestinal tract—certainly any portion of the small intestine—should be removable with the greatest ease, and if the ends could be kept in close apposition for a sufficient length of time, union should occur. I therefore proceeded to operate upon a number of dogs—although I was warned by veterinary surgeons that the dog was considered by them to be specially susceptible to peritonitis—and I consider the results most satisfactory. The follow-

ing are brief notes of the cases. I have divided them into two series of seven cases each—the difference being that in the first series catgut sutures only were used to unite the ends of the bowel, and in the second series silk sutures only were used. The operations were all done under carbolic spray:—

First Series.

CASE I.—A young mongrel terrier bitch, dirty, ill-nourished, and suffering from distemper, was operated on on the 21th of March last. An incision about three inches long was made in the median line of the abdomen. The omentum was drawn up out of the way with the finger, and a coil of the small intestine withdrawn through the wound. The several branches of the mesenteric artery leading to this portion of the bowel were ligatured by passing catgut ligatures around each with an aneurism needle. The portion of gut thus isolated, $3\frac{1}{2}$ inches long, was then cut off with the scissors, an assistant holding the ends beyond, between the finger and thumb of each hand, to prevent the escape of contents. I then tried to pare away the peritoneal surface of the upper portion of the bowel, intending to push it into the lower portion after having pared away the mucous surface of it to correspond, but I found this quite impossible, as the end of the bowel contracted slightly as soon as it was cut, and the mucous membrane became everted to the extent of nearly a quarter of an inch. I then united the ends by a continuous “over and over” suture of fine catgut, cleansed the bowel thoroughly, and returned it to the abdominal cavity. I closed the abdominal wound with three silver and several catgut sutures, and covered the wound with iodoform, packing it well into the spaces between the sutures. This and all the subsequent operations were done under ether, and as the details of the operation are essentially the same in all, except in the suturing of the ends of the bowel, it will be unnecessary to repeat them. This dog was given a hypodermic injection of ten minims of Liq. Opii Sed., and this was the only medicinal treatment given. None of the others had any medicinal treatment whatever. It spent the day quietly, and took milk greedily in the evening. Its pulse was rapid, and its temperature a little high throughout. The tem-

perature was carefully taken in all the first series of cases, and shows very little elevation—the normal temperature of the dog being about 102°F., and easily disturbed. A liquid stool occurred at the end of 48 hours, and the further progress of the case was uninterrupted. The “distemper” (as shown chiefly by purulent discharge from the nose) continued, and the animal grew thinner and weaker, and died on the 11th of April, 18 days after operation. At the autopsy, 90 hours after death, the abdominal wound was found to be perfectly united and all the organs healthy. There were a few adhesions of omentum and of one coil of small intestine at the site of operation. The union of the bowel was perfect, but had produced considerable narrowing. This I attribute to the puckering produced by the continuous suture. The specimen is labelled “1.”* The death in this case, I believe, was due to the “distemper,” as there was no other evident cause.

CASE II.—This dog was a healthy, well-nourished young mongrel, with some resemblance to the otter-hound species. When brought up for operation on the 28th of March, I found him gorged with meat. My rule in all the cases was to keep the dog on low diet for about two days before operation, and on a moderate milk diet afterwards. This dog had been fed about an hour before the operation by an over-zealous and too humane servant. I proceeded with the operation, however, and removed three inches of the small intestine in the same manner as in the last case. The ends of the gut were brought together by a double row of catgut sutures. The first row consisted of as many interrupted sutures as could conveniently be inserted, and the second row of a continuous “over-and-over” suture, catching the spaces between the former. The bowel was returned, and the abdomen closed and dressed as in the other case. Copious vomiting of undigested food occurred half an hour after the operation, and a solid stool was passed about 60 hours afterwards. The abdominal sutures were removed on the ninth day, and the dog continued in perfect health. On the 29th of June I ligated his right carotid artery with catgut. He recovered, without a bad symptom; and on the 26th of July, just 4 months

* Portions of bowel, showing the results of operation in each case, were exhibited in connection with the paper.

(less three days) after resection of the bowel, I killed him by pithing. The body was well nourished—in fact, quite fat—and there were no adhesions in the peritoneal cavity. The organs were all healthy and the bowel perfectly united.

CASE III.—A healthy, well-nourished mongrel bitch; 12½ inches of intestine were removed in the usual way on the 30th of March, and the ends of the bowel united as in Case II. A similar stool was passed on the third day. There was slight elevation of temperature for two or three days, but otherwise the dog was perfectly well after the first 24 hours. She took milk greedily, was playful and active, and never had a bad symptom throughout. On the 20th of April, I gave her ether and cut one of her costal cartilages subcutaneously to observe the process of repair in it. On the 29th of May, two months after the first operation, I gave her ether and bled her to death by cutting the femoral artery across. At the autopsy, the body was found to be well-nourished, all the organs healthy, no adhesions in the peritoneal cavity, and the union of the bowel perfect. There was no union of the costal cartilage.

CASE IV.—A bright, active, young fox-terrier; six inches of small intestine were removed on the 3rd of April. The ends of the bowel were united with twelve interrupted and a continuous catgut suture. The abdominal sutures were removed on the fifth day, when he was apparently perfectly well in every respect. He continued well, and grew fat, until the 22nd, when he had a chill, and became feverish. Symptoms of “distemper” came on, and he grew gradually weaker from day to day, and died on the 18th of May, 45 days after the operation. There was slight prolapse of the omentum after removing the abdominal sutures, but it required no treatment. At the autopsy, all the organs were found to be healthy, and the union of the bowel complete and without adhesions.

It will be observed that in this specimen there is at one place a deficiency, or rather an absence, of mucous membrane. This is due to the fact that in this case I tried to include in my sutures only the peritoneal and muscular coats when uniting the ends of the gut. I found it so difficult, however, that after doing a small

portion of the circumference in this way, I desisted, and did as in all the other cases, catching the whole thickness of the bowel, mucous membrane and all, in my sutures. The deficiency in the mucous membrane corresponds (in extent at least) to the portion of bowel sutured in this way.

CASE V.—A young, active, and well-nourished mongrel hound was operated on on the 3rd of April. Nine inches of bowel were removed, and the ends united by 22 interrupted catgut sutures. He did well, and on the 7th of April, four days after operation, I removed the abdominal sutures. A liquid stool occurred during the operation. In this and the last case I was unable to determine when the first stools were passed after operation, as I had a number of dogs on hand, and was obliged to keep these two in a room with two others. On the next day I found the abdominal wound open and a large omental protrusion. On the following day I gave him ether, re-opened the wound completely, and returned the omental hernia. He never was right after this operation, and sank gradually, dying on the 14th, eleven days after the resection, and four days after the operation for the return of the omentum. At the autopsy, there was gaping of the ends of the bowel, escape of contents, and general peritonitis. The bowel was partially united. The abdominal sutures were removed too early (on the fourth day), and I attribute the death of this animal to the violence employed in giving ether a second time and returning the omentum. This, I think, probably partially separated the recently united bowel, allowing escape of faecal matter into the peritoneal cavity.

CASE VI.—A toy Scotch terrier pup, weighing $3\frac{1}{2}$ lbs., was operated on on the 5th of April. Five inches of bowel were removed, and the ends united by interrupted catgut sutures. Very fine gut was used, as the bowel was very small. The dog did quite well for 48 hours, but was found dead a few hours later. At the autopsy, the ends of the bowel were found lying about three-quarters of an inch apart, the catgut having given way everywhere, and the intestinal contents in the peritoneal

cavity, which was intensely engorged throughout. The result of this case determined me to use silk sutures, though I did one more case with catgut.

CASE VII.—A mongrel black and tan, aged. Ten inches of gut were removed on the 8th of April, and the ends united by a double continuous suture. The first round was the ordinary post-mortem-room suture—every stitch inserted from within outwards. I did not like the appearance of this when done, and I put in a second round of “over-and-over” suture of catgut also. The bowels moved on the second day, and the dog made an uninterrupted recovery. On the 29th, I cut one of his costal cartilages subcutaneously, which produced no bad symptoms. On the 3rd of June, 56 days after the operation, I killed him by blowing air into the jugular vein. At the autopsy, the organs were all healthy. There was no trace of peritonitis, and the bowel was perfectly united.

Second Series.

CASE I.—An aged black terrier. Eight inches of bowel were removed on the 20th of April, and the ends sutured by twenty interrupted sutures of fine carbolized spun silk. The bowels were moved the same night, a solid stool passing, and the dog made an uninterrupted recovery. On the 10th of June, 51 days after operation, I killed him with prussic acid. All the organs were healthy, and the body well-nourished and fat. There was slight adhesion of two coils of intestine at the point of resection, and the bowel was united perfectly.

CASE II.—A young mongrel terrier. Five inches of bowel were removed, and the ends united by fine silk sutures. The dog never rallied, and died 68 hours after the operation. At the autopsy, all the organs were found to be healthy. There was general peritonitis, the peritoneal cavity containing about 3 ounces of grumous faecal matter. The ends of the bowel were found to be in perfect apposition and the silk sutures holding firmly, but at a point near the mesenteric attachment a segment of the gut had been overlooked and no suture applied, hence the escape of its contents and the bad symptoms from the

first. The sutures have been lost through slitting up the bowel—in fact, the deficiency was not noticed until the bowel had been opened up.

CASE III.—A young mongrel terrier. Seven inches of bowel were removed, and the ends united by 28 interrupted sutures, 15 of silk and 13 of catgut (my supply of silk having given out). Just after the abdominal wound had been closed, a violent fit of vomiting came on, and the abdomen was filled with air, which could be heard escaping through the wound in the bowel. The dog did badly from the first, and died at the end of the fourth day—about 101 hours after the operation—from peritonitis. At the autopsy, all the organs were found to be healthy, and the sutures in position, though slackened, and the ends of the bowel somewhat separated. This specimen was not preserved.

CASE IV.—A toy terrier bitch, weighing about 3 lbs., decrepit with old age, and blind from double senile cataract. Ten inches of bowel were removed and the ends united by 21 interrupted sutures on the 3rd of June. The bowels were moved on the second day, and there never was a bad symptom. She died on the 4th of August, 62 days after operation. She showed no signs of disease, and died, I believe, of senility. The bowel was found to be perfectly united, and there were no traces of peritonitis. This specimen was, unfortunately, neglected for a couple of days, and was destroyed by the great heat then prevailing (August 4th.)

CASE V.—A small and young smooth terrier. Ten inches of bowel, including the cæcum, were removed in the ordinary way and the ends united by 20 interrupted sutures of fine spun silk on the 24th of June. On the 27th, a solid stool was passed. There never was a bad symptom throughout. The abdominal sutures were removed on the 14th day, and the dog was killed by pithing on the 25th of July, 32 days after operation. At the autopsy, the organs were all found to be healthy, and the body well-nourished. There were a few adhesions around the wound in the bowel, but the union was perfect. This specimen shows the attachment of the small to the large gut.

CASE VI.—A young mongrel black-and-tan bitch. Four and a half inches of small intestine were removed and the ends united by 22 interrupted and a continuous suture of fine spun silk on the 1st of July. On the 3rd, a semi-solid stool was passed; and on the 8th, the abdominal sutures were removed. The dog was lively and well throughout. On the 25th, twenty-four days after operation, I killed him by pithing. All the organs were healthy, and the body well-nourished. There were some adhesions between the bowel and the abdominal wall, but the union was perfect. I may note here that although only twenty-eight days had elapsed from the operation, not a trace of the silk sutures could be discovered at the autopsy, and you will observe that the union of the bowel is as complete as in those which survived the operation for months.

CASE VII.—An aged mongrel terrier; 13 inches of duodenum, close to the stomach, were removed on the 8th of July, and the ends united by interrupted sutures of fine spun silk. He did not seem to suffer any inconvenience from the operation, and was well and lively, and took his milk greedily. At the end of the third day I left the city for a few days, and on my return, was disgusted to find that he had escaped. I never saw nor heard of him afterwards, but I have reason to believe that a tender-hearted domestic set him at liberty on the day after I left, not knowing that he had been operated upon.

Now, to summarize the results of these operations,—of the 14 dogs operated upon, 4 died from the effects of operation, but all from preventable causes. The first from the giving way of the catgut sutures too early; the second from meddling surgery; the third from careless surgery, and the fourth from an accident which could not have been foreseen. Of the remaining 10, one died of senility 62 days after operation, and two died of “distemper”—one on the 18th and one on the 45th day after operation. Six made perfect and complete recoveries, and did not suffer in nutrition or digestion, nor in any other way, and were killed at periods varying from one to three months after operation. Of the fourteenth we have no record. In the first case only, was there any constriction of the bowel, and in no case

was there the sign of any considerable peritonitis. In fact, in three cases there was absolutely not an adhesion in the peritoneal cavity, and the autopsy might have been made in good faith without discovering that the bowels had ever been interfered with.

I have never seen the operation done on the human subject, but I would submit here the following reports of three cases which have come under own observation during the past year and a half, and which were, I think, suitable cases for this operation. I could mention other cases as well, but prefer to give only these three as examples of some of the different conditions in which I believe the operation to be indicated. Moreover, in the first two cases, I am able to give the report of the post-mortem examination in corroboration of the diagnosis made at the bedside :—

CASE I.—M. W. was admitted to hospital on the 25th April, 1882, with a small and freely movable tumor below and to the right of the umbilicus. She complained of “constipation,” and stated that the first difficulty experienced was eight weeks before admission, and after taking a dose of castor oil. This failed to move her bowels satisfactorily, and caused severe pain and troublesome vomiting for two days. She then felt a tumor for the first time. She had suffered ever since from digestive disturbances of various kinds, and had attacks similar to the one described whenever a purgative was taken. After several days’ observation, during which there was no pain nor elevation of temperature, nor other sign of constitutional disturbance, a diagnosis of fæcal accumulation was made, and the patient ordered a black draught. This was followed by the most serious and alarming symptoms—pain, vomiting, distension of the bowel above the tumor, and a condition bordering on collapse. There was also complete inability to evacuate the bowels. This condition lasted two or three days, until she had had several small liquid stools, and then the symptoms passed off. Very little change occurred for two or three weeks, when inflammation took place around the tumor, and a circumscribed abscess formed and pointed in the abdominal wall. A minute exploratory opening

was made into this abscess, and some pus and fæcal matter escaped. A week later, June 9th, she died of exhaustion. At the autopsy was found a circular ulcer about three-quarters of an inch in width, and extending around the greater part of the circumference of the inner surface of the bowel, and almost completely occluding it. The portion of bowel involved was the hepatic flexure of the colon, and a small perforation had occurred just above the stricture, and produced the localized inflammation which ended in abscess.

CASE II.—The following case was reported at the Medico-Chirurgical Society of Montreal by Dr. F. W. Campbell at our last April meeting. The report is copied from the CANADA MEDICAL AND SURGICAL JOURNAL:

A. B., a stout woman, aged 64, had had an irreducible umbilical hernia for 15 years. She had a painful attack in the hernia four years ago, which subsided in a few days. She was seen by Dr. Campbell, on the 9th of April last, for great pain in the sac. The pad had slipped off, and without waiting to replace it, she jumped out of bed and was immediately seized with great pain. The hernia had been increasing in size lately, and the pad had become too small. The hernia was easily reduced to its ordinary size, and Liq. Opii Sed. given. An enema brought away a quantity of scybalous matter. In the afternoon vomiting set in. On the 10th and 11th she was easier, but vomiting was excessive. An injection brought away a large fæcal stool. She had a restless night on the 12th, and more pain, and was seen by Drs. Howard and Fenwick, with Dr. Campbell, with a view to operating, if considered advisable. It was decided not to operate, and during the 13th and 14th she improved a little, but died suddenly on the morning of the 15th. The autopsy showed a thin-walled umbilical sac, not inflamed. In it were two coils of intestine—one, about 13 inches in length, was dark-colored, deeply congested, and inflamed; the other, 9 or 10 inches long, was natural-looking, though a little swollen. There was no adhesion of the bowel to the sac. The inflamed portion of bowel presented two flat bands of slightly thickened peritoneal tissue, where it had probably been for years in contact with the

ring. The inflammation had extended along the adjacent coils in the abdomen for a few inches. When slit across, the mucosa was intensely inflamed, of a deep, livid red color, and covered with closely adherent flakes of croupous exudation. The heart was fatty. There were no other changes of note.

CASE III.—In October, 1882, a strong, healthy, and well-developed French-Canadian, aged 22, came to hospital to see what could be done for an inguinal hernia, which had become strangulated, and had undergone spontaneous cure by sloughing through the skin of the groin. He had been working in a lumber shanty in Michigan in the previous winter, and while lifting produced a right inguinal hernia. Symptoms of strangulation supervened immediately, and as he was quite out of the reach of medical aid, he laid up in his shanty. An "abscess" formed and burst of itself, and he has since discharged all his fæces through this opening in the groin. He consulted a doctor as soon as he was able, but there was then nothing to be done except to devise a truss to retain the bowel and collect the fæces. When I saw him I had considerable difficulty in getting him to remove the pad, for he assured me that I had no idea of the mess it would make. And I certainly had not. When he removed the pad, the everted bowel rolled out in spite of him for, at least, many inches, and poured out a quantity of thin, semi-feculent matter, and he was obliged to lie down upon his back to get it returned, and even then he had difficulty. I advised him then that nothing could be done for him. I would now, I believe, with the light of subsequent experience, lay the matter fully before him, and advise that the opened portion of bowel (which was, I have no doubt, small intestine) be excised, the ends united and returned to the abdomen, and the artificial anus in the groin closed. Now, although the operation can scarcely be said to be a recognized one, especially in this country, the journals of late years record numerous cases, chiefly in Germany, but also in England and in America, in which it has been performed with very great success. For example, Prof. Czerny, in the *Berliner Klinische Wochenschrift* (45, 1880), reports three cases of intestinal resection,—in two cases, the removal

of coils of gangrenous bowel in strangulated hernia ; and in the third, the removal of a malignant tumor of the colon. In one of the first mentioned cases, there was perfect recovery without fever or reaction of any sort. The second patient, who was pulseless at the time of operating, died soon after in a fit of fæcal vomiting. In the third case, the transverse colon and sigmoid flexure, which were bound together by cancerous infiltration, were resected, and the patient recovered perfectly, and was alive and well six months afterwards. He united the ends of the bowel by carbolized sutures half-an-inch apart, including the whole thickness of the gut, and a second row, one-fifth of an inch apart, including only the serous and muscular coats.

Dr. Koeberle of Strasburg, in the *Gazette Hebdomadaire*, reports a case of chronic and gradually developing intestinal obstruction. On performing abdominal section, he found four strictures involving six feet and a half of the small intestine, the whole of which he removed with perfect success.

Dr. Wm. Fuller of Grand Rapids, Michigan, and formerly of Montreal, reports in the *New York Medical Record* for October 14th, 1882, three cases of intestinal resection. In the first case, he removed $5\frac{1}{2}$ inches of sloughing bowel from a strangulated hernia, and the patient recovered perfectly. In the second case, also one of hernia, he excised a portion of omentum with sloughing bowel, and the patient recovered. In the third case, he removed 4 inches of bowel from a child 15 months old for irreducible intussusception, and with perfect success. He united the ends of the bowel with carbolized and waxed linen thread, leaving the ends hanging out of the wound and employing drainage.

In the *Edinburgh Medical Journal* for May, 1882, is a selection from the *Centralblatt für Chirurgie* by Kramer, in which he quotes Jaffe as giving a description of the operation from 16 cases, of which 9 died. He recommends rigid antiseptic precautions, prefers catgut to silk sutures, and recommends placing as many sutures as possible within the gut, preferring Gussenbaum's safety stitch, or, better still, Lembert and Czerny's double row suture. He also pares away the mucous membrane rather

than include it in the suture. From the great care taken by the German surgeons to avoid including the mucous membrane in their sutures, I infer that they hold it to be necessary to approximate freshly pared surfaces at all points. On theoretical grounds, this is precisely the conclusion which one must arrive at, but in the specimens before you, in which no such precautions were taken, the most perfect union has resulted. The only explanation which I can offer for this fact is the following: When each suture is drawn tight, and tied, it cuts through the more yielding mucous membrane, or displaces it, and actually does bring the more resisting muscular and serous coats into more or less accurate apposition. Now when sutures are inserted a 20th or a 30th of an inch apart, or even at less distances, the areas in which the mucous membranes remain in contact are really very narrow, and as the bowel is copiously supplied with blood, and is in all respects so situated as to be in the most favorable condition for healing rapidly, the inflammatory reaction and, probably, plastic exudation which occurs within the first few hours after the operation soon obliterates the mucous membrane at these points, and union occurs by cicatricial tissue just in the same way as between two inflamed pleural or pericardial surfaces.

The foregoing, with other isolated cases reported, to say nothing of the very many well-authenticated cases of sloughing of the bowel from obstruction, and its subsequent passage per rectum often in portions several feet long, show that the tendency to recovery after the loss of intestine is very great. No surgeon hesitates to open the abdominal cavity in these days, and of all abdominal operations, I believe resection of the intestine to be the simplest and easiest, and that it involves less peritoneal irritation than most others, while, under ordinary circumstances, there is no danger whatever of leaving blood or foreign matter in the peritoneal cavity. Gastrotomy is now an established operation, but is necessarily nearly always performed for malignant disease, so that, apart from the greater difficulties in the operation itself, the results are at best only palliative, and the ultimate prognosis most serious.

At the German Medical Congress in 1882, Prof. Billroth stated

as the result of his experience, that only one case in 60 was suitable for operation. Ovariectomy, Oophorectomy, and the various operations upon the uterus and its appendages, are always attended with considerable injury to the peritoneum, and much danger of escape into the cavity of irritating fluids and of blood, and yet they are surprisingly successful, and, now-a-days, always undertaken without hesitation. Abdominal section is now frequently performed as a *dernier resort* in cases of obstruction of the bowel from invagination, although, I believe, comparatively few surgeons have yet gone the length of excising the obstructed portion when it has been found impossible to reduce it, or where sloughing has occurred. Even when the invagination has been successfully reduced, difficulty is often experienced in returning the distended intestines to the abdominal cavity, and the common practice seems to be to puncture the bowel in several places to allow of the escape of gas. I would suggest that it would probably be safer to make a free cut across the front of the bowel, outside the abdomen, allow the gas to escape, and stitch it up carefully and return it. I believe it would be safer for two reasons. First, because such a wound could be more perfectly closed than several punctures; and, secondly, the gas would all escape at once and outside of the abdomen, whereas, when punctured, it would only escape gradually, and probably continue to escape after the gut had been returned to the abdomen. In hernia, where the bowel has sloughed, I believe resection would not only give an incomparably better result if successful, but would be a safer operation. In conclusion, therefore, I would submit the following propositions:—

1. That the intestinal canal, from the pylorus to the rectum, is subject to many local diseases which are not amenable to medicinal treatment. As examples, I might mention ulcer, stricture, impaction of contents, obliteration or sloughing from strangulation or inflammatory action, and the different neoplasms which affect the intestinal walls.

2. That the diagnosis and the approximate location of such lesions is usually easy and satisfactory.

3. That resection of any portion of this tract, especially of

the small intestine, is a simple and easy operation, and from what little experience we already have of it in the human subject, a safe and satisfactory one.

4. That in the operation itself, catgut is not to be relied upon as a suture; that silk sutures are readily absorbed in the peritoneal cavity, or, at least, that they disappear rapidly without producing any irritation; that several of the sutures, if not all, should be interrupted, to prevent puckering and narrowing at the point of union; and that perfect union occurs when the whole thickness of the bowel is included in the sutures. It is therefore unnecessary and inadvisable to pare away the everted mucous membrane.

5. That removal of intestine, even in considerable portions, does not seem to affect digestion or nutrition.

CASES IN PRACTICE.

BY DRs. MCLEAN AND DUNCAN, FERGUS FALLS, MINN.

CASE I.—*Maggots in the Ear*.—G. S., aged 24, Norwegian, came to our office on Sunday morning, Aug. 19th, complaining of very severe pain in left ear. Patient's appearance was that of a man suffering intense pain, face distorted and anxious looking, and he was groaning with agony. Had measles and scarlet fever when six years of age. Thinks that his left ear troubled him a little after measles, but he is not very sure. Says there has never been any discharge from the ear. Hearing has always been good. Has always been quite healthy till last Friday morning, Aug. 17th, when present trouble began. Says that when he awoke on Friday morning he felt a little pain in left ear; pain was of an aching character, and increased in severity very rapidly; says he could not sleep that night on account of the pain. On Saturday, Aug. 18th, pain was so severe that he went to a doctor, who gave him some Tr. Opii, telling him to put in a few drops several times a day. On Saturday night pain was much worse; says it was almost unbearable. The drops had no effect whatever; did not sleep that night on account of the pain, and says the pain has increased in severity ever since.

On examination, left ear is found to be alive with maggots.

The ear is almost full of them, so full that they can be seen without the aid of a speculum or mirror. We at once proceeded to remove them by syringing with warm water, but as they did not come away readily by this method, we had recourse to ear forceps, with which we picked out 21 living maggots, giving instantaneous relief. The membrana tympani was found to be entirely absent, and the whole middle ear and external auditory canal was denuded of mucous membrane and skin. Blood was oozing from the whole surface. The canal was now well syringed out with warm water, and dried with absorbent cotton, and when exposed to the air for a few minutes the bleeding ceased. Finely powdered iodoform was blown in, and a small piece of cotton wool placed in the orifice to keep the part clean. The maggots were each seven lines in length and about one line and a half in thickness, and were very active in their movements. They adhered so closely to the canal wall that they could not be removed by syringing, so that the forceps had to be used.

Aug. 20th.—Patient entered our office this morning with a beaming countenance. Slept well all night; has had no pain since the removal of the maggots. To-day there is a profuse muco-purulent discharge. Ear syringed out and a solution of Arg. Nit. gr. xl, ad ʒi, applied to the excoriated surface; some finely-powdered iodoform was also blown in, and to have a tonic of Ferri et Quin. Citras gr. v t.i.d.

Aug. 21st.—Patient returned this morning looking and feeling much better; discharge considerably less; denuded surface assuming a healthier appearance. Above treatment continued.

Aug. 26th.—The discharge from the ear has decreased every day, and to-day the whole denuded surface is entirely healed. Has had no pain since the maggots were removed, and says he hears quite as well as he ever did.

The probabilities are that these maggot's did not crawl into the man's ear, but that they were developed there; and if they were developed there, a fly must have had access to his ear and deposited its larvæ there. But the question is, what attracted the fly into his ear? And supposing that the man's ear was perfectly free from discharge, would these eggs develop into

maggots? Our patient gives an indefinite history of having a sore ear following measles, but he states positively that there has never been any discharge since then. It is a recognized fact that flies are attracted to the ear by an offensive otorrhœa, and that their larvæ, deposited in this discharge, will develop into maggots. We think that the membrana tympani has been absent since he had the measles, because he says that he hears quite as well now as he ever did, and his hearing is by no means perfect; and that there was some discharge from the ear at the time these larvæ were deposited.

CASE II.—*Pelvic Hæmatocele*.—Mrs. W., aged 28; has been married twelve years; has given birth to two premature children, both delivered at seven months. In both cases labor was severe and protracted, and forceps were used each time. Both children died a few hours after birth. The first labor was five years ago, the second one ten months after. Never pregnant since. Patient began to menstruate at the age of nine, and was always regular till one year ago, when she menstruated every two weeks, and sometimes oftener; this has continued till the present time. Says each period lasted five days, the flow being profuse. Health otherwise has been good. Patient is of slight build, but is healthy-looking; is not anæmic, but has good color, though not plethoric. Began to menstruate on the morning of August 9th, and on the following day she was out in the rain and got her feet wet; she had a slight chill that afternoon, lasting a few minutes. About four o'clock a messenger came in great haste. On entering the house, found the patient suffering intensely; countenance anxious; face very pale; brow covered with beads of sweat; extremities cold; respiration sighing; pulse rapid (116), and extremely small. Feels very faint, and complains of nausea. Says the pain came on very suddenly, and the menses stopped as soon as pain began.

On examination, left iliac region is found to be a little full, and exquisitely tender. Thinks the pain is slightly relieved by drawing up the legs. Ice was at once applied to the painful spot; heat to the extremities; and gave Acid. Gallic. gr. xx and gr. v, to be repeated every four hours; also gave Morph. Sulph.

gr. $\frac{1}{3}$ hypodermically. One hour after treatment commenced, the pulse was improved (90 per minute), and the feeling of faintness disappeared, but pain no less. Was given Morph. Sulph. gr. $\frac{1}{4}$ hypodermically. At 7 o'clock, three hours after first visit, patient felt better; pain less, but still severe; pulse better; temperature normal; color improved; no nausea; no faintness. Ice and gallic acid to be continued all night.

Aug. 11th.—Patient slept very little all night as the pain was severe; pulse 76, rather feeble; temperature normal; respirations 24, very shallow, as a deep inspiration increases the pain in the groin. This morning a tumor can be felt in the left iliac region, nearly as large as a foetal head, which is extremely tender. Vaginal examination shows the fundus of the uterus pushed slightly to the right, but not adherent, it being freely movable. Great tenderness about the left ovary and broad ligament. She was catheterized every eight hours, the ice being continued, and Pulv. Opii gr. i given every four hours. For four days the patient appeared to be doing well. There was always some pain present, and the tumor, which kept about the same size, was extremely tender, but there was no severe pain till the afternoon of the 15th, when the patient, contrary to orders, raised herself up in bed. She was at once seized with an attack more severe than the first one, all the symptoms being exaggerated. The same treatment was followed. Acid Gallic gr. xx was given at once. Morphia gr. $\frac{1}{3}$ given hypodermically; repeated in an hour. The severe pain continued until the patient was completely under the influence of morphia, which was not until gr. $1\frac{1}{2}$ had been given. On examination, the tumor in the left iliac region appeared larger than when previously examined, and was still extremely tender.

Aug. 16th.—Patient's condition much better, but still has constant pain in left iliac region, and tumor very tender. Ice applied constantly. Pil. Opii gr. i and Acid Gallic gr. γ every four hours, and an occasional hypodermic of morphia. Was kept perfectly at rest on her back, and given light diet.

Aug. 18th.—Patient feels comfortable, but has a little constant pain. Tumor still felt, and the tenderness as before.

Bowels moved to-day by a large oil enema, the first time for six days. After this the bowels moved naturally, and patient improved steadily. The pain disappeared, and the tenderness gradually grew less. The tumor also became less evident.

One week after the last severe attack, pain was entirely gone, and the patient could pass urine naturally. She was now given quinine sulph. gr. i three times a day, and allowed a little wine. On the 26th, the tumor could not be felt even by a bimanual examination; and as there was no tenderness, the patient was allowed up a short time. She improved rapidly, and never had any elevation of temperature or chills. On Sept. 1st she began to menstruate. She was at once put to bed and kept quiet. The flow lasted four days, being quite natural in every respect, and unaccompanied by pain. Appetite and strength now rapidly improving, and all functions of the body performed normally.

OUR LONDON LETTER.

(From our Special Correspondent.)

LONDON, Nov. 21, 1883.

Through the kindness and courtesy of Mr. J. Knowsley Thornton, I have had opportunity of witnessing three operations performed by him at the well-known Samaritan Hospital. Two were cases of ovariectomy proper; the third an operation for removal of the uterine appendages in a case of fibroid tumor, which caused at times alarming hemorrhage.

It is not my intention in this letter to give the histories of these cases, as there was nothing very peculiar about them, but merely to refer to a few details which struck me as worthy of note in connection with the operation of ovariectomy as performed at the "Samaritan."

Mr. Thornton is the most thorough *Listerite* I have met in London, not even excepting Lister himself. He uses the carbolic spray of the usual strength (1 to 40), and causes it to be thrown in a heavy cloud directly on the wound. The instruments and sponges (of which latter he uses a great variety in shape and size), are treated in the ordinary antiseptic fashion. The only ligature material, however, employed by this operator is

Chinese silk, of which he uses two sizes only, the large for ligaturing the pedicle, the smaller for securing bleeding points. No wax is used in the preparation of these ligatures, but they are simply soaked for a couple of hours previous to the operation in a 1 to 20 carbolic solution, and taken directly out of this when required. Mr. Thornton thinks that wax interferes with the process of encysting or absorption of the ligature, as the case may be, and is apt to induce suppuration and abscess. This silk, besides, has the advantage of being so strong, that a ligature of comparatively small size can usually be trusted to secure the largest pedicle. No serious objection is made to catgut, beyond, perhaps, its uncertain strength, and the fact that it cannot always be relied upon to hold those large masses of omentum that sometimes require ligation.

The ovarian sac being exposed, no attempt is made to separate adhesions or ascertain their presence by the introduction of the hand, for ever so short a distance, but the trocar is at once introduced in an oblique direction, and the liquid contents allowed to run off over a rubber sheet to a receptacle on the floor. The trocar used is similar to that devised by Sir Spencer Wells, but it is covered at the distal end, and there is no tube attached. The patient is never turned on the side to facilitate the evacuation of the sac-contents, the sac, as it empties, being slowly, but forcibly, withdrawn, when, if any adhesions be present, most of them will be found at the same time to give way. The firmer adhesions are usually ligatured at once, and then divided by scissors, so that often large portions of the omentum are left adhering to the tumor. This obviates, in great measure, the troublesome hemorrhage which often follows the forcible separation of adhesions. The solid perchloride of iron is preferred as a styptic in the case of the finer bleeding points, which cannot be so readily treated by ligation.

Mr. Thornton has not had occasion to drain in his last series of two hundred operations, but, as it happened, in one of the cases which I had the privilege of seeing, drainage was deemed necessary, for the reason that the cyst had supplicated, and some of the contents, it was thought, had escaped into the peri-

toneal cavity. The drain consists of a thick glass tube, from 4 to 6 inches in length, and having a slight flange-like projection round the outer end, so as to allow of its being secured at the lower angle of the wound. When the drain is used, the dressings should be changed every twelve hours for the first three or four days, at the end of which time usually it can be removed.

As to the wound, this is closed by silk sutures applied at very short intervals, and made to traverse the tissues not further than an eighth of an inch from the edge in any part. This is said to secure a firmer and more lasting cicatrix than when fewer, but deeper, sutures are employed. The wound is covered with protective and the ordinary carbolized gauze-dressing, but the latter is seldom made longer than about ten inches square, being supported and overlapped in every part by a pad of salicylic cotton. The whole is kept in position by a flannel binder. Mr. Thornton believes that much of the obstinate vomiting which often follows the removal of large ovarian tumors is due in some measure to the loss of support which the stomach sustains, and hence he is in the habit of placing a pad over the region of that viscus for a few days, or until it becomes accustomed to the new order of things.

With regard to the after-treatment, I find that the catheter is used, in the majority of cases, for the first forty-eight hours only, as, in the hands of the most careful nurse, a troublesome cystitis has been known to follow its long-continued employment. While I think it would be absurd to lay down any hard and fast rules in connection with this point, when so much depends on the case, still I am convinced, from my own limited experience, that the catheter is often had recourse to days after it is really required. The dressing is seldom touched till the sixth day, and then is usually removed without the spray, the wound being covered with boracic lint held in position by broad strips of ordinary adhesive plaster.

The Samaritan surgeons still prefer the bichloride of methylene as an anæsthetic, although I have been led to understand that ether has never been given a fair trial by them. Keith of Edinburgh, the celebrated ovariologist, on the other hand, has used

nothing but ether for many years. By the way, I find a strong prejudice existing in some hospitals against the latter anæsthetic, but I feel convinced that it has originated from the fact that the common commercial article has been employed, and we all know how uncertain and even dangerous that can be. Squibb's ether is almost unknown on this side the water, or I believe that anæsthetic would rapidly take the place of both chloroform and methylene, because I know many who are very much dissatisfied at any rate with the former.

The above are a few rambling notes which I took away with me from the Samaritan Hospital, and although many may deem them trivial and unworthy of notice, I doubt if any one of them is without its value. It is well known that the great success which has attended the operation of ovariectomy in the hands of certain surgeons is not attributable to any extraordinary skill which they possess as operators, but to an earnest attention to detail, so that apparently the most trifling matter often receives an amount of attention which, to the ordinary bystander, may appear unnecessary and even ridiculous.

T. G. R.

QUARTERLY RETROSPECT OF SURGERY.

PREPARED BY FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S., ENG.

Surgeon to the Montreal General Hospital; Professor of Anatomy and Lecturer on Operative and Minor Surgery, McGill University.

Excision of Knee Joint.—Mr. Richard Davy, F.R.C.S., of the Westminster Hospital, London, has lately advocated (*Brit. Med. Jour.*, October 20th, 1883,) a new method of resection of the knee joint, which he calls *Tibio-femoral Impaction*. The method consists in removing the end of the femur so as to leave it wedge shape, the wedge sloping from before, downwards and forward, a mortise is then cut in the head of the tibia and into this is pushed the tenon-shaped end of the femur. The leg is placed in a splint specially designed by Mr. Davy, and pressure is kept up on the foot until "impaction results in fixity of tenure." Mr. Davy claims that the advantages of his operation are, "that osseous ankylosis is established (so to speak) before the patient leaves the operating table and many surgical

contentions are removed, such as the misplacement of bones by startings, jerks, or inefficient bandging." Mr. Davy admits that considerable shortening results from this procedure, but he does not think this an objection. Like many of Mr. Davy's operative novelties, we fear this new method of excision will not be enthusiastically adopted by the surgical world, the operation is certainly a new one and should be placed under the head of mechanical surgery. Mr. Davy has performed excision now twenty-one times, in every case without special antiseptic precautions. He has never lost a case and has only been compelled to amputate once. Dr. Fenwick, Prof. of Surgery in McGill University, has lately published a work on excision of the knee joint, in which he reports twenty-eight cases of excision with one death (this occurred before the introduction of antiseptic surgery), and two where amputation had to be afterwards performed. Dr. Fenwick's method of operation, which is original with him, is to round off the end of the femur by removing a thin slice with a Butcher's saw, and then sawing out a concavity in the head of the tibia, fits the convexity of the femur into it. By this means osseous ankylosis is secured, and also early fixity of the parts, thus he accomplishes in a much more conservative way, and without the sacrifice of the epiphysal ends of the bones, all that Mr. Davy claims for his wedge and mortise operation. Dr. Fenwick performs all his excisions with the strictest Listerian precautions. His results have been good, as I can testify, many of the cases recovering with less than one inch of shortening, and the majority with less than two inches, besides the growth of the limbs is not interfered with, as Dr. Fenwick proves by reports of cases of excision performed on children whose limbs were measured several years after the operation. The splint used after the operation is that of Dr. P. Heron Watson, of Edinburgh.

'*White Swelling, Treated by Scott's Dressing.*—Dr. Perrier (Thèse de Paris, 1882,) says that this method of treatment has fallen into unmerited oblivion. M. Suchard recalled attention to Scott's dressing in 1879 and trials were made at the Children's Hospital which gave important results. M. Suchard's method

is to first cleanse the skin by rubbing it with a sponge or coarse cloth steeped in camphorated spirit; afterwards to cover the whole region with a piece of lint spread with a thick layer of the ointment, composed of equal parts of camphorated *unguentum Hydrargyri* and soap cerate. This is kept in position by straps of sticking plaster, and over these straps he places valves of flexible leather spread with soap cerate, this extends above and below the other dressing; a linen bandage is placed over all. The dressing is removed every two or three weeks. Dr. Cazin, chief physician of the Hospital at Berck-sur-Mer, has also modified the preceding apparatus. He replaces the mercurial ointment with vaseline and covers it with cotton wool, over this he applies the strapping of sticking plaster and then another layer of cotton wool is put on and this is covered with a silicated bandage, when this apparatus is applied the children are allowed to play about the hospital and beach. The dressing is renewed every fortnight. Sometimes the application causes intense erythema which is removed by washing and powdering the skin and wrapping it in a linen bandage for two or three days.—(*London Medical Record*, Nov. 15, 1883.)

On the Immediate Treatment of Fractures by plaster-of-Paris.—At the recent meeting of the British Medical Association held in Liverpool, Messrs. Christopher Heath and John Croft read papers on the above method of treating fractures. (*British Med. Jour.*, September 22nd, 1883.) Mr. Heath's paper pointed out that many other fractures besides those of the leg might be satisfactorily and easily treated by plaster-of-Paris bandages or splints, such for instance as fractured thighs in children, Pott's fracture, fractures of the humerus, clavicle, &c. Mr. Heath thinks that unless the fracture be near a joint, the joint should not be included in the plaster, and that to enclose joints unnecessarily with plaster-of-Paris, is to provide cases for the bone setter, so he never includes the knee or hip joints in any ordinary case of fractured shaft of the tibia or femur. Fractures of the forearm are the only ones which Mr. Heath thinks unsuited for this method of treatment for the obvious reason that there would be great danger of drawing the

bones together. Fractures of the olecranon he treats by flexing the arm to a right angle and allowing the patient to wear it in a sling. Mr. John Croft reported that he had treated over nine hundred cases of fractures of various bones by the immediate application of the plaster-of-paris splints with the best results. Each splint is constructed of two layers of flannel, the outer layer carries the plaster and the inner layer protects the skin. The splints are kept in place by muslin bandages. The flannel or old blanket for the splint should be cut to the shape of limb; for instance, in applying a leg splint measure circumference at knee, calf, above the ankle, from the front of the ankle just round the heel to the front again, and at the middle of the metatarsus. Then cut the flannel half an inch less in breadth than half the circumference at those points. The four pieces of flannel then make two splints; the outside pieces are soaked in plaster of the consistence of thin cream and then laid on their respective inside pieces, whilst traction is kept up and the ends of the broken bones are maintained in apposition the splints are to be applied and smoothed and then the muslin bandage put on. Traction is to be maintained during the hardening of the plaster; this takes place in about three minutes. The bandage should not be too tight and should be evenly applied. The splints should not meet by half an inch down the front or back, as the swelling subsides the splints should be tightened by means of the bandages, and at the end of ten days if the patient be convalescing the outside bandage may be gummed, and at the end of a fortnight or three weeks the patient may leave for his own home.

In the discussion which followed the reading of these papers Dr. Gay, of Boston, U.S., said that this method of treating fractures had been in use in the Boston City Hospital for some years with very satisfactory results. Gauze was used instead of flannel and the limb was first wrapped in cotton wadding. The gauze was dipped in the plaster and applied to the limb and secured with an ordinary bandage. The layer of gauze did not meet in front by about an inch and the case could be sprung open at any time, removed and re-applied.

Dr. McColl (Michigan) used the plaster bandages with excellent results. He applied the plaster as soon after the fracture as possible, and enveloped the limb first in cotton wadding or flannel, making extension for 10 to 15 minutes, whilst the plaster was hardening. He allowed his patient up on crutches as soon as possible and did not remove the bandage for three or four weeks.

The immediate application of the plaster splint has not been the rule here in Montreal, but in the cases I have seen this method practised, the result has been good. I had one case this summer of a bar-tender who broke his leg and soon exhibited signs of delirium tremens. The leg could not be kept in splint, so plaster-of-Paris was applied. The delirium lasted for some time and the man was tossing about continually, and sometimes threw himself out of bed. At the end of a month the plaster was taken off and the result was perfect, no deformity or shortening.

Diagnosis of Fracture of the Neck of the Femur.—Prof. Bezzi, after showing in the *Spallanzoni* the difficulties and uncertainties which often attend the diagnosis of this accident, observes that at the Milan Hospital a traditional practice exists of exploring (whenever fracture of the neck of the femur is suspected), the short space between the trochanter and crest of the ilium. In place of considerable resistance which is then produced in the sound limb through the tension of the tensor fasciæ latæ, there is found, when injury has occurred, a deep depression, due evidently to the diminution of the tension of this muscle owing to the approximation of its points of attachment. (*Presse Med. Belge*, July, 1883, quoted in *London Practitioner*, Nov., 1883.)

Treatment of Fracture of the Patella.—The surgical world has lately been much interested in the discussion which has taken place at the London Medical and Clinical Societies consequent on the reading of an address by Prof. Lister before the Medical Society on the *Treatment of Fracture of the Patella by Incision and tying of the fragments together*. The proper mode of treatment of this troublesome fracture has always been a serious ques-

tion with surgeons, and very various are the means recommended to obtain union of the separated fragments. Some think the quadriceps muscle is altogether to blame for the separation of the fragments, and so treat the fracture by methods calculated to pull down the upper fragment; others say that separation is due to effusion of blood and serum, and advocate the withdrawal of this by aspiration. Others, as Prof. Hamilton of New York, say that bony union is not to be desired, as it can rarely be complete, and leaves a weak bone, so they endeavor to get as close a fibrous union as possible by the application of bandages and splints.

Prof. Lister (*Lancet*, Nov. 3, 1883), in his address, relates seven cases of recent and old fractures of the patella treated by incision, and wiring together of the fragments. In all the cases, good bony union and free movement of the joint was the result. He strongly advocates this method of treatment, as the one best calculated to give the patient a useful limb. Six of these cases were shown to the Society, and in all the patella was perfectly natural in appearance and moved freely. Prof. Lister, as early as 1873, treated successfully ununited fracture of the olecranon process of the ulna by wiring the fragments together, and in 1877 first treated fracture of the patella in the same way. He first exposes the separated fragments by a longitudinal incision two inches long, then with a common brad-awl perforates each fragment obliquely, so as to bring out the holes upon the broken surface a little distance from the cartilage. Stout silver wire is then passed through the holes, and the fragments are brought accurately into position. Before he brings them together, he provides for the drainage of the joint. A pair of dressing forceps, with the blades closed, are passed through the wound to the most dependent part of the joint at its outer aspect; the instrument is then forcibly thrust through the synovial membrane, the fibrous capsule, and the fascia, until the point of the forceps is felt under the skin; then an incision is next made through the skin, upon the end of the forceps, to allow it to protrude; the blades of the forceps are then opened, and a drainage-tube drawn into the joint. The ends of the wires he twists, and, in

his early operations, left protruding through the wound ; but, latterly, he has found it much better to cut the end short and hammer the twist down on the bone and completely close the wound, except at the lower end, where he places a small drainage-tube. The silver wire in these cases has given no trouble.

Prof. Lister said it was very desirable that the lower surface of the patella should be left quite smooth, and the drill-hole should not perforate the cartilage ; if it does, then the hole should be chipped up so that the wire would come out on the broken surface. Mr. Lister said also that he considered no man justified in performing this operation unless he could say with a clear conscience that he considered himself morally certain of avoiding the entrance of any septic mischief into the wound, and that if he could say so, he conceived that he was not only justified, but bound to give his patient the advantages derived from this method of treatment. In recent cases, Prof. Lister does not operate till the distinct inflammatory appearances that exist as the immediate result of the accident, pass off. In old cases, he always pares the fragments and removes any intervening fibrous tissue before wiring them together. The conclusion of the address is taken up with a few very timely and earnest remarks on antiseptic treatment of wounds : " As regards antiseptic treatment, I should like to make this remark, that now-a-days it is not a very complicated business, either in theory or practice. First as to theory : We do not require any scientific theory in order to believe in antiseptic treatment. You need not believe in the germ theory at all ; if you are not convinced of the truth of the germ theory of putrefaction and of septic agencies generally, no matter whatsoever, with reference to antiseptic practice, all you have to believe is that there are such things as putrefaction and of septic agencies, that our wounds are liable to these, that they are very pernicious, that these things come from without, and that we have the means of preventing them by various chemical agencies. And then as to practice. It is not a very difficult thing to wash your hands in a carbolic solution, and have your instruments in this carbolic solution for a quarter of an hour before you operate.

It is not very difficult to wrap round the limb a suitable envelope of antiseptic material. What I believe to be one of the most important things of all, is strictly to maintain this rule inviolate, which I insist upon with my dressers, and which, I confess, I have insisted upon more of late years than I used, and that is, *always when we change a dressing invariably first to cover the wound with something pure*,—not to wash the surrounding parts with antiseptic solution, and then, after this has been done, put a dressing on the wound, but dress the wound first and wash the surrounding parts afterwards. . . . The edges of the wound are septic; the wound, if it is as it ought to be, is aseptic.”

At the adjourned meeting of the Medical Society held Nov. 5th, Prof Lister's paper was discussed. The majority of the surgeons who took part in the discussion, including Bryant, Morris, S. Jones, Gant and M. Baker, held that with all caution ankylosis resulted sometimes from this mode of treatment, that if this occurred in the hands of the most careful and skilled surgeons, what would be the result if this operation were performed by men not trained in the many proceedings necessary to practice antiseptic surgery and without the necessary surgical experience. For the present, therefore, they argued that the simpler and less hazardous measures were the best in the majority of cases, and only when these measures failed were the new rigorous measures of Prof. Lister justifiable. Prof. Lister in his reply said it gave him great satisfaction to learn how universally the antiseptic principle had been recognized so long as the grand principle of antisepticism remained it mattered not what the antiseptic used was. After replying to the objections raised by the various surgeons, he concluded by saying that he had brought the cases of suture of the patella before the Society principally with the object of illustrating what could be done by antiseptic surgery, more than to advocate its employment under all circumstances.

At a meeting of the Clinical Society of London, held Nov. 9th, Mr. Turner read particulars of a case of *Ununited Fracture of the Patella* treated by suture of the fragments,

with strict Listerian precautions. Mr. Turner's case recovered with an ankylosed joint after a long period of suppuration. Mr. Turner also gave a summary of fifty cases treated by various surgeons with a fatal result in two instances, whilst suppuration and ankylosis of the joint frequently supervened. Mr. Lister, who was at the meeting, said that no surgeon should perform so serious an operation unless either prepared himself to dress the patient's wound as required or convinced of the ability of the assistant in charge to do so. He was convinced that, by and by, fracture of the patella would be generally treated on the plan he described, in order to secure a perfect joint, without risk, under antiseptic precautions.

Mr. Holmes insisted that the operation could only be justified in some old cases, and not in new ones.

Mr. Heath thought that Mr. Lister's paper before the Medical Society might cause the loss of many knees if not of many lives, because it would stimulate country surgeons to repeat his operation under circumstances which rendered antiseptic treatment impossible. In recent cases, Mr. Heath insisted that the operation was both unnecessary and unjustifiable. (Mr. Heath's new method of treating recent fractures of the patella by aspiration is noticed in the *Retrospect* of June, 1882.)

Mr. Bryant read notes of thirty-two cases of fracture of the patella treated in the ordinary manner and collected at random from the Guy's Hospital register by Mr. Poland. The table showed that injured limbs treated in this way after intervals of 15 or 20 years remained perfectly useful as a result of treatment. With such an experience, he thought the risk to life incurred by Mr. Lister's operation could not be justified.

The general opinion then among English surgeons seems to be that the operation is not suitable in recent fractures, and that though Mr. Lister may be very successful, it does not seem that his most ardent disciples are capable of the same success. The operation is only justifiable in cases of old ununited fracture causing a useless limb and then should only be performed with the strictest antiseptic precautions.

Mr. John Wood, of King's College, has lately (*Lancet*, Nov. 17th, 1883,) had a death from septicæmia following the operation for non-union of fractured patella by the Listerian method. Now, when such a careful and skilled surgeon and so able an anatomist as Mr. John Wood has a failure with Listerism, what will happen to surgeons of ordinary ability and much less experience. It seems to me that this case is sufficient to condemn the operation, in recent cases, at all events. Mr. Wood found that he could not closely approximate the fragments, and if union had taken place it would have been fibrous. The wound was never at any time foetid.

Dr. McEwan of Glasgow, in the same number of the *Lancet*, reports several successful cases of this method of treating fractured patella, he insists on operating early in every recent case. Fracture of the patella is much rarer here than in England. Why, I am unable to say. In the Montreal General Hospital only some two or three cases have been treated in the last 7 or 8 years.

Prof. Cooper of San Francisco, more than 20 years ago, successfully treated fracture of the patella by wiring the fragments together, and this was done before antisepticism was thought of. He always allowed the wound to heal by granulation.

Lateral Closure of Wounds of Veins.—Dr. Pilcher, in the August number of the *Annals of Anat. and Surgery*, has a very interesting paper on *Lateral Closure of Wounds of Veins*. He has made a number of experiments on the deligation of veins with aseptic catgut ligatures. When lateral ligature was performed, in only one case did a thrombus form. There is, as a rule, union by first intention, and this preserves intact the function of the vessel. Dr. Pilcher recommends this method of ligature for wounds of veins whenever the antiseptic ligature (catgut) can be used and the wound treated antiseptically; otherwise he advises a double ligature of vein and division between.

I lately, in operating on the neck for a large tumor, wounded the internal jugular, and performed lateral ligature with complete success. There was no secondary hemorrhage, and the case progressed favorably to the end. Still, in wounds of veins

of ordinary size—as, for instance, the external jugular—I should be inclined to trust more to complete ligature, with division between, as no one can positively say that the wound will ever, with the greatest care, remain thoroughly aseptic.

Apthous Vulvitis in Children.—Apthous vulvitis is a well-characterized disease. It is peculiar to little girls from 3 to 5 years of age; it is rare in private practice, and is observed especially in hospitals. Measles is the principal cause of this affection; it furnishes two-thirds of the cases. Prognosis is good since the introduction of iodoform. The parts should be sprinkled with iodoform powder, and kept apart with pledgets of lint. The internal administration of tonics is a useful adjuvant to the local treatment.—(Arsène Sazaim, *Th. de Paris*, July, 1883; quoted in *October Journal of Cutaneous & Venereal Diseases*.)

Dr. Eugene F. Cordell (*Maryland Med. Journal*, Sept. 1st, 1883) strongly recommends the use of a solution of carbolic acid as a *local anæsthetic* in minor surgery. He recommends, before opening an abscess, whitlow, cutting a tendon, or performing other minor operations, that the part be bathed for a few minutes in a five per cent. solution of carbolic acid. This, in some cases, deprives the part entirely of feeling, so that the patient does not feel the knife, and in other other cases considerably lessens the pain.

Alopecia prematura.—O. Lassar has continued his observations on the nature of premature baldness, and has further convinced himself of the communicability of at least the form associated with dandruff. . . . He considers the disease is spread by hair-dressers, who apply combs and brushes to their customers, one after another, without any regular cleansing of these articles after each time they are used. . . . Females, he thinks, are less often affected with this form of baldness, because the hair-dresser more frequently attends to them at their own homes, and uses *their* combs and brushes. In order to prevent, as far as possible, the commencement of alopecia prematura, the hair should be cut and dressed at home with one's own implements, and these thoroughly clean. The following treatment of this form of baldness is recommended: The scalp is to

be daily well soaked with tar or fluid glycerine potash soap, which is to be rubbed in firmly for 15 minutes. The head is to be drenched first with warm water, and then gradually colder water; a 2 per cent. corrosive sublimate lotion is afterwards freely applied. The head is then to be dried, and the roots of the hair are to have one-half per cent. of naphthol in spirit rubbed into them. Finally, a pomade of $1\frac{1}{2}$ to 2 per cent. of carbolic or salicylic oil is to be used on the head. This treatment has now, in many cases, brought the disease not only to a stand, but the hair has been to a considerable extent restored. (*Berlin. Klin. Woch.*, No. 16, 1883, quoted in *Edinburgh Medical Journal*, Sept., 1883.)

In ordinary dandruff, I have found useful the washing of the head with common or soft soap every other day, and, after drying the head, applying an ointment of equal parts of oleate of mercury (Shoemaker's) and prepared lard.

Carbolized Sawdust as a Dressing.—Mr. H. P. Symonds (*Lancet*, September 22nd, 1883,) recommends the use of coarse sawdust soaked in (1 to 10) solution of absolute phenol and spirit of wine, then allowed to dry that the spirit may evaporate, leaving sawdust charged with carbolic acid. When used it is enclosed in a bag made of several layers of gauze, and applied outside the deep dressing, the usual external dressing being placed over it. The sawdust takes the place of the usual padding of loose gauze which is generally used. Its absorbent powers are very great, and it has the additional advantages of keeping up an even pressure on the divided tissues. Mr. Symonds finds that 14 oz. of sawdust will readily absorb about a pint of fluid. Wood shavings have been used extensively in Germany in the same way with good results.

Sugar as a Dressing for Wounds.—It appears that now there are very few substances that are not used in dressing wounds. Every week something new is used and praised highly for its antiseptic qualities and its cheapness. Bismuth, glycerine, earth, wood shavings, and now we have sugar. Dr. F. Fischer, assistant to Prof. Lücke, in Strasburg Hospital, has used powdered cane sugar extensively as an antiseptic dressing

to wounds. In cases of wounds united by sutures, the sugar mixed with iodoform and naphthalin, is put up in gauze and applied to the part. When the skin is lost it is put directly to the part. The sugar dressing may remain on from 8 to 14 days without the sugar dissolving.

Dr. Windelschmidt, of Cologne, says he has used sugar alone as a dressing with good results and considers it quite as good as iodoform for small wounds. He also says that powdered sugar is a very old popular remedy for fungous granulations, ichorous eczema and erysipelas of the face. Dr. W. has of late discarded the use of sugar in healing wounds, partly because when the patients found out the nature of the powder they ceased to have faith in it, and partly because when they had they treated themselves and so passed from observation. Sugar is aseptic if not antiseptic, and is as good as glycerine when used as a preservative by injecting it into the arteries of the dead animal we wish to keep from decomposing, but it is generally when used for this purpose combined with arsenic and nitrate of potash.

Reviews and Notices of Books.

A Text-Book of General Pathological Anatomy and Pathogenesis.—By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited for English students by DONALD MCALISTER, M.A., M.B., M.R.C.P., Fellow and Medical Lecturer of St. John's College, Cambridge. New York: Wm. Wood & Co.

The text-book of Prof. Ziegler, now added by Wood & Co. to their library of standard authors, is recognized as one of the best modern works on the subject. It is systematically arranged, written with uncommon clearness, and includes all the most recent researches into the pathology and causation of disease. We know of no similar book which would better convey to the mind of the student the great principles and important facts connected with this most necessary branch of medical learning. It is claimed that on some subjects, such as Malformations, Inflammation, Etiology of Tumors, and Bacteria, it gives a fuller

account of modern teachings and discoveries than has yet appeared in any English manual. We are satisfied, from an examination of these several chapters, that the claim is well founded. It is very well illustrated with numerous original woodcuts. Such books as this do much to popularize the series to which it belongs.

What to do first in Accidents and Emergencies.

A Manual explaining the Treatment of Surgical and other Injuries in the absence of the Physician. —By CHARLES W. DULLES, M.D., Surgical Registrar to the University of Pennsylvania, &c. Second edition, revised and enlarged. With new illustrations. Philadelphia: P. Blakiston, Son & Co.

The nature of the contents of this little book will be inferred from its title. It tries to point out with much good sense what can be done in these emergencies by one not possessing the special skill and knowledge of the physician. It is the right kind of book to put into the hands of heads of households, of persons at a distance from skilled assistance, of those in charge of men engaged in manufactures, lumbering operations, &c., to all of whom it may prove of great assistance. The author takes special pains to warn amateurs against the danger they may run of doing too much when they are possessed of a little knowledge—so notoriously a dangerous thing. “The true principle,” he says, “is, when the urgency is pressing, to do what is known to be helpful, and when one is not sure, to do nothing.”

The Treatment of Wounds as based on Evolutionary Laws.—By PITFIELD MITCHELL, M.R.C.S., &c. New York: J. H. Vail & Co.

Explanation of everything on evolutionary principles is now the fashion. Evolution has been made use of to explain the origin of beings and worlds, as well as social laws and customs, and now it is employed as a basis for the scientific treatment of wounds. The author of this essay, which might be entitled the “Healing of wounds according to the gospel of St. Spencer,” after devoting some twenty or more pages out of twenty-seven

to an exposition of his theory, wrapped in the obscurity of the latest evolutionary phraseology, comes to the practical object of his essay, viz., the *treatment of wounds*. He first explicitly sets forth "that the repair of wounds is due to the unfolding of physiological powers bequeathed by ancestral organisms, and that, in common with all physiological powers, these in their particular development in the individual, are conditioned by agencies of the same kind as those that were present in the circumstances of ancestral life." He is opposed to Listerism, and, in fact, the use of any form of antiseptic, because it is foreign to the *environment* of the organism. In amputation, he advises the wiping away of the blood with well-washed old linen rags; the wound should be left exposed to the air till the surface has become glazed with dried plasma, then the edges brought together with metallic stitches and covered with a pad of absorbent cotton enveloped in several layers of fine washed linen. The dressing should not be removed for a week. There is nothing new in this treatment of wounds, except the elaborate explanation with which it is accompanied, and which is rather difficult to understand, in fact the ground of which is hardly worth the trouble it takes to find it. It does not appear that the author has had any practical experience of the treatment he advocates, or, in fact, that he is anything more than a mere theorist. He draws on Lawson Tait and Mr. Borland for his facts, and on Herbert Spencer for his philosophy. This book would satisfy those who are fond of surgery *in the abstract*.

The Elements of Histology.—By E. KLEIN, M.D., F.R.S.
Philadelphia: Henry C. Lea's Son & Co.

This is one of a series of student's manuals. Dr. Klein has such an enviable reputation as an histologist and successful teacher that it is almost superfluous to say that a student's manual from his pen is everything which could be desired. This little work is concise, clear, admirably illustrated, and there is nothing of the kind so completely suited to the wants of the student, or of the practitioner who wishes to know the present condition of the progressive science of histology.

The Roller Bandage.—By WM. BARTON HOPKINS, M.D., Surgeon to the Out-Departments of Pennsylvania Episcopal and University Hospitals, Asst. Demonstrator of Surgery in the University of Pennsylvania &c., With 73 illustrations. Philadelphia: J. P. Lippincott & Co.

An excellent manual on this important branch of Minor Surgery. It is a small and handy volume of pocket size which contains directions for the application of every imaginable form of roller-bandage. The illustrations are numerous and very good. We recommend it to the notice of all surgeons, hospital residents, and dressers.

Hand-Book of Electro-Therapeutics.—By Dr. Wilhelm Erb, Professor in the University of Leipzig. Translated by L. Putzel, M.D., Neurologist to Randall's Island Hospital, and physician to the clinic for nervous diseases, Bellevue Out-Door Department, &c. With thirty-five wood cuts. New York: Wm. Wood & Co.

Another number of the Library series. It is a complete hand-book, containing descriptions of the proper apparatus for the various applications of electricity, of the principles which are to guide the physician in the use of this agency, and of the different special affections in which electrical treatment has proved of service. The name of the author is specially familiar to American readers, from the fact of his having contributed a large proportion of the section on nervous diseases in Ziemssen's *Cyclopedia of Medicine*. His special knowledge of this branch is well recognized, and this treatise from his pen will no doubt be fully appreciated and widely circulated.

Books and Pamphlets Received.

A MANUAL OF PRACTICAL HYGIENE. By Edmund A. Parkes, M.D., F.R.S. Edited by F. S. B. Francois de Chaumont, M.D., F.R.S. Sixth edition, with an Appendix giving the American practice in matters relating to hygiene, prepared by Fred. N. Owen. Vol. I. New York: Wm. Wood & Co.

THE OPERATIVE TREATMENT OF INTRA-THORACIC EFFUSION. By Norman Porritt, L.R.C.P. London: J. & A. Churchill.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Oct. 26th, 1883.

T. RODGER, M.D., PRESIDENT, IN THE CHAIR.

Maggots in the Ear.—Dr. Osler exhibited for Drs. McLean and Duncan, of Fergus Falls, Minn., five larvæ of *Musca lucilia* which were removed, with sixteen others (all alive) from the ear of a man aged 24. (See page 271.)

DR. OSLER remarked that many such cases were on record, but the large number of larvæ in this one was remarkable. They are invariably in connection with suppurative disease of the ear.

Aneurism of Abdominal Artery and Superior Mesenteric Artery.—This patient, aged 49, a printer by trade, had been brought before the clinical class in the summer session on two occasions. He presented a large aneurism in epigastric region, which projected as a prominent tumor and had considerable mobility. The only symptoms were pain in the back and loins and distress after eating. Had noticed the pulsation for a year, the tumor for only two months. Palpation revealed a curious sausage-like projection from the main tumor, freely movable, and feeling like a dilated vessel. Death took place suddenly from rupture of the sac into the peritoneum.

Dr. Trenholme also exhibited a pair of ovaries and tubes removed about ten days ago from a patient in St. Catharines. This being his sixth successful case in succession since May last. The ovaries appear to be healthy, but both tubes have been the seat of salpingitis, and are considerably diseased. The patient, æt. 28, has always had more or less suffering at menstruation. About five years ago sufferings increased, and were accompanied by general nervous depression and weakness, suffering especially in her head. About three years ago was under treatment for anteflexion and stenosis, which were relieved, but the treatment greatly intensified her head troubles and general nervous exhaustion. Since that period has been constantly an invalid, often not being able to see her friends, or hear any conversation, remaining in her room alone; sleeps

badly, and often has what she describes as "wave after wave of nervousness," and feels as though she was going mad. The operation was undertaken more with a view to relieve the nerve symptoms than for any pelvic suffering, and so far the patient has made a rapid recovery from the operation, and declares she feels better than before. Dr. Osler took the specimen to report upon at the next meeting.

Dr. Trenholme exhibited a small body, sausage-shaped, about 3 inches long and 1 inch in diameter, somewhat dense structure, and apparently having a capsule, which had been passed by a patient with the following history:—A man, æt. 50, hard drinker, was taken ill with severe vomiting and pains in the stomach and abdomen. Pulse quick, but no elevation of temperature. Bowels constipated, urine very high-colored and scanty. External and internal treatment failed to give entire relief, and though the bowels were freely opened by purgatives, and the pain alleviated by sedatives, yet the vomiting continued for several days, copious and of a decidedly grumous character. These severe symptoms abated, but still there was occasional vomiting, accompanied by severe colicky pains and great distension of the abdomen. About ten days from the onset of his illness, while defecating, he passed the body now exhibited. The nature of this growth or body is not very apparent to the eye or touch, possibly an organized blood clot or an enlarged gland. Perhaps Dr. Osler, who has it in charge, will give more definite information as to its nature at the next meeting.

DR. HENRY HOWARD read a paper on "*Division of Labor and the Etiology of Disease.*" He said that, in division of labor, nine out of every ten of our medical men took up some particular specialty, and upon this specialty the profession and the public looked upon them as authorities. This accounted for the rapid strides made in medical knowledge during the last quarter of a century; and not only had this division of labor been confined to the medical profession, but its necessity had been recognized by the agricultural, the mechanical, the commercial, and the travelling classes. After dwelling at some length on this subject

and on the physiology of matter, he said that in diagnosing diseases of the human frame, we find certain physical symptoms or phenomena, and in looking for physical cause, we look for abnormal physiology of parts, or pathological defects, to account for the physical symptoms or phenomena that present themselves. In conclusion, Dr. Howard said: "You may say to me, suppose we know the physiology of all matter, and the pathology of all diseases, what then? Would we be the better able to cure disease or find a remedy for the removal of these diseases? Well, whatever chance we may have when we come to obtain this knowledge, we can do but very little without it. When that time comes, however, I believe the pharmacologist will find the remedy for the disease. I agree with that eminent physicist, Mr. Huxley, when he says, 'It will, in short, become possible to introduce into the economy a molecular mechanism which, like a very cunningly contrived torpedo, shall find its way to some particular group of living elements and cause an explosion among them, leaving the rest untouched.' No wonder that such a man would come to such a conclusion when he so ably and truly describes man. His words are: 'The body is a machinery of the nature of an army; each cell is a soldier; an organ a brigade; the central nervous system, head-quarters and field telegraph; the alimentary and circulating system, the commissariat.'"

Several members spoke approvingly of the new Anatomy Act, and it was suggested that our Society should let the Government know that we would support them against the threatened serious opposition to this Act, which is now being agitated chiefly by political persons. Others of the members thought the less done the better, as the opposition would die a natural death.

DR. RODGER read the following notes of a remarkable case which occurred in his obstetric practice:—

On the morning of the 10th of October last I was requested to visit a Mrs. L., aged 32, whom it was said had been ill all night with great difficulty of breathing. Found the patient in bed, half sitting, half reclining on her side, and propped up with

pillows. Her countenance was somewhat anxious, face slightly livid, eyes staring, breathing very hurried and short, and complaining of great tightness over the chest and abdomen, with a sense of suffocation. This being my first visit to her at this time, and not knowing that she was pregnant, I at once examined her chest; found heart and lungs normal, but was struck with the size of the abdomen. Her feet and legs were slightly œdematous, but no great amount of swelling of vulva. There had been slight pains at long intervals all night, but the patient said not like labor pains, though she thought she ought to have been confined some time during the month of September, having, as far as she could recollect, menstruated for the last time about the beginning of the year. The size of the abdomen being so much out of proportion to anything I had ever witnessed before, I began questioning as to her condition for some time back. She told me nothing out of the way was noticeable in the size of the abdomen until between the sixth and seventh months; that never at any time could she say she felt any distinct movements of the child, such as she experienced with her other children; that she had suffered considerably at different times from irritation of the stomach—in fact, had often great difficulty in retaining food. A vaginal examination revealed the os to be high up, dilated about an inch, edges tense, but thin; membranes entire, but no presentation could now be felt. Examination of the abdomen gave dulness on percussion throughout; no movement nor outline of the fœtus made out. Could not hear either the heart sounds or placental bruit. With the assistance of the friends present, I changed her position to one which I thought more favorable, and which might assist me in detecting a presentation, but all without any effect whatever. The distress of the patient being so great, I felt that some measures would require to be adopted at once for relief; so I gently dilated the os until I succeeded in passing the greater portion of my four fingers within the uterus, taking care, at this point, not to tear the membranes. Still no fœtus could be felt. Satisfying myself as to the toughness of the membranes, I passed my whole hand between the latter and the walls of the uterus, and endeavored to rupture the membranes with

my finger, but failed. Without withdrawing my hand, I passed with the left a knitting needle, when the rush of waters was tremendous. Continuing my search for the child, my arm acting as a plug in the vagina, I could find nothing in the uterus proper, having passed my hand all around the walls, but, at the upper end or fundus, a circular opening about the size of a silver dollar, edges somewhat thick, and unyielding to ordinary force by the fingers. Passing my forefinger through this new opening, I touched the mouth, nose and eyes of the child, then gradually succeeded in getting in a second finger, when no forehead could be felt—in fact, no head. With the gradual escape of some portion of the amniotic fluid, I found that I could use more force with my fingers in dilating, due to this second uterus, if I may so call it, being brought nearer to my hand. Owing to the alarming condition of the patient at this point, and fearing delay might not serve any good purpose, especially if the escape of the amniotic fluid was permitted, there being a possibility of collapse, I determined at once upon version, and set to work to force my hand into the interior. After considerable resistance had been overcome, both feet of the fœtus were grasped, completing the delivery of a still-born acephalic male child, weighing about six pounds. Fluid Ext. Ergot was given to ensure uterine contraction, and after the delay of a short time, the placenta came away by gentle traction with the hand, followed by slight hemorrhage. The woman was not in a condition to warrant further interference, otherwise I should have liked to have passed my hand and further investigated the interior of the uterus, but feared that possibly such procedure might be attended with bad results.

This is now the sixteenth day since the patient was confined, and I may state that she is doing well, no bad symptoms having appeared so far in the case. I confined the woman three times before, her labors being perfectly natural.

Dr. Rodger had a sketch on the blackboard shewing the relation of the parts before delivery.

DR. TRENHOLME remarked with regard to Dr. Rodger's most interesting case, that the position of the opening being at the

“upper part of the fundus,” the possibility of tubal or utero-tubal gestation in any of its forms, was excluded. Had it been tubal or tubo-uterine, the opening would have at least not more than 4-5 of the distance from the os to the fundus. It was also impossible that the opening leading from the large cavity containing the waters to that in which the foetus and placenta were could be a pathological opening, as it was readily dilated, turning easily effected, the foetus and placenta removed and “good contraction” secured. Hence it must be simply an hour-glass contraction of a uterus containing a foetus dead for over three months and accompanied by this immense quantity of amniotic fluid. This view is still further strengthened by the fact that the uterine decidua and that of the cavity containing the child *were continuous and one* throughout, there being no membranes to puncture over the aperture where the face of the child presented. The case is a most interesting one and happily conducted to a successful issue.

DR. SHEPHERD was of the opinion that it was a case of tubal pregnancy.

DR. RODGER thought it was a case of hour-glass contraction, but thought there was nothing to preclude its being tubal pregnancy.

DR. CAMPBELL mentioned a case where serious symptoms followed the taking of a three-drop dose of a 1 per cent. solution of nitroglycerine by a patient suffering from angina and advanced mitral disease. Three drops were taken instead of one, as prescribed, in the hope that more benefit would be gained. Shortly after swallowing the three drops a rash like that of scarlet fever came out, particularly on the chest. This disappeared in five or six hours. The tongue was dry, and in twenty-four hours he passed five times his usual amount of urine. The heart beat quickly, but there was no rise of temperature.

DR. H. HOWARD said this agreed with his theory that the blood had nothing to do with rise or fall of temperature, which was alone influenced by the nervous system.

DR. CAMPBELL also spoke of the continued success he is having with nitroglycerine in epilepsy.

DR. OSLER mentioned that he had three cases of *petit mal* where he was using it, so far with decided benefit in only one case.

DR. REED brought up the matter of "Collective Investigation of Diseases," and urged the Society to follow out a plan similar to that adopted by the British Medical Association.

Several members spoke in favor of Dr. Reed's proposal, after which Dr. Hingston proposed that Drs. Reed, Osler and Cameron be named a committee to draw up the necessary questions, etc., with reference to the investigation of Enteric fever. Carried unanimously.

Stated Meeting, Nov. 9th, 1883.

DR. RODGER, PRESIDENT, IN THE CHAIR.

Division of Femoral Artery.—A specimen illustrating a somewhat novel source of injury was sent to the Society by Dr. A. Henderson, of Calgary, N. W. Territories. The deceased from whom the specimen was taken was a cow-boy in the employ of the Stewart Rancho Company and was employed in killing cattle for the C. P. R. construction twenty miles west of Calgary. He was in the habit of carrying his knife unsheathed, hanging to the horn of the saddle, and while taking aim at a steer with his rifle, his horse becoming restive he raised his leg to steady himself when the point of the knife pierced his left thigh about its middle and to the inner side. Profuse hemorrhage followed which proved fatal within an hour. A dissection of the part shewed that the femoral artery had been divided a short distance above where it pierced the adductor magnus muscle. As seen by the specimen, the artery was completely divided by a clean cut, while the vein lying alongside failed to give evidence of the slightest scratch.

Dr. Osler exhibited the following pathological specimens:—

Cancer of Liver, with much-enlarged Glands.—Dr. Phelps, of Chateauguay, N. Y., sent this specimen to Dr. Osler with the following history: "Three years ago the patient, a woman aged 27, noticed a bunch protruding at ensiform cartilage which enlarged slowly. Was treated with blisters and

escharotics. As it still grew she consulted me last spring. I found a nodulated tumor extending from the ensiform cartilage midway to umbilicus and about eight inches wide. It pressed firmly against the margins of the ribs and was but slightly moveable. It seemed to be covered by skin only. Percussion gave a tympanitic note over its whole extent. It could be grasped at lower margin and moved freely but seemed to be attached at the ribs. Up to this date she enjoyed good health, had no pain, only a sense of fullness. Was at a loss for a diagnosis, so sent her to Dr. —, of Montreal, who said it was an enchondroma of the ensiform cartilage which extended between the sheaths of the rectus muscles. He advised extirpation if it continued to enlarge. In June I was sent for to perform the operation, the messenger stated that another enlargement had appeared further to the right. Drs. Bates, Gay and Furniss, of Malone, accompanied me to her residence where we proceeded to administer ether in order to carefully examine, so as if possible, to determine whether the disease was extra or intraperitoneal. We discovered not only the large right side of the liver but the large mass which proved to be the enlarged mesenteric glands. It is not necessary to say that the operation was deferred till after the patient had climbed the "golden stairs," which took place October 25th, 1883. Dr. Furniss and myself performed the *post mortem*. Skin was cachectic, limbs bloated and abdomen enormously distended. We removed about 40 lbs. of serum from the abdominal cavity. Over the tumor the abdominal walls had been all absorbed excepting the skin and peritoneum. The growth was not adherent in front. The stomach and transverse colon were both underneath of, and attached to, the left lobe of the liver. The pancreas was healthy, the kidneys, ovaries and uterus normal. The thorax was not opened. The disease began as a cancer in the left lobe of the liver, pressing forward and downwards absorbing the abdominal walls and making its appearance at the ensiform cartilage as a nodule. Its overlapping the stomach and colon accounts for the tympanitic note on percussion. The enlarged mesenteric glands and right lobe of liver

made up the second tumor felt by the patient. Death evidently took place from suffocation caused by over-distension with fluid.

Fibroid Disease of the Stomach.—This specimen was sent to Dr. Howard by Dr. Powell, of Ottawa. It was removed from a man aged about 60, not intemperate, but a good liver. He had consulted several doctors who all inclined to a diagnosis of scirrhus of the stomach, as the symptoms pointed that way. The stomach was contracted and much thickened owing to fibroid deposit in the mucous membrane and muscularis.

Laceration of Brain.—This specimen was removed from an hospital patient, a lumberman, suffering from an enlarged spleen and leukæmia for over a year. While in hospital he appeared to be doing well, when one night he suddenly became comatose and died in a few minutes. The *post mortem* revealed extensive laceration of the brain substance from hæmorrhage.

Ovarian Cysts in an Infant.—Taken from a child of ten weeks shewing cystic disease of both ovaries.

Dr Alloway exhibited a "Jannison's Uterine Irrigator" which he had been using for some time past, and which had given him more satisfaction than any other instrument devised for the same purpose. It consisted of a flexible metal tube, so bent that it formed a third arc of a circle, the diameter of which latter was twelve inches. On the outside of this tube ran another of much larger calibre, but not so long, the space between the tubes answering the purpose of providing for an immediate return-stream from the uterus. He related the history of a patient who, having expelled a 2½ month's decidual mass into vagina received an intrauterine injection of warm carbolized water from a fountain syringe, armed with an ordinary hard rubber tube, which did not admit of the immediate return of the fluid. About ¾ of an hour after injection, the patient was seized with pain over the region of the left broad ligament, chill and faint feeling, followed by elevation of temperature (102°F.) and pulse 110 and severe paroxysmal attacks of dyspnoea. After the administration of a hypodermic of Battley she recovered from pain and symptoms. Dr. Alloway attributed the condition of his patient to the entrance of the solution for a short

distance of the left Fallopian tube, that slight hyperæmia of the delicate lining of the tube would follow the irritant, and in this way account for the pain and other reflex nervous symptoms manifested. He did not think the symptoms due solely to distension of the uterine cavity by the fluid, as there was no expression from the patient of even discomfort, at time of injection. He thought it of little importance what term would be used to designate the condition; it was the cause of the apparently alarming symptoms which were of interest to him, and which he thought resulted from the use of a tube which did not provide for an immediate return-stream from the uterus. He had injected the uterus under the same circumstances, many times before with the same kind of imperfect tube, but had never witnessed such a condition. He thought probably it would be well to limit injection in such cases, to those in which the discharge were foetid; and this was one reason why he brought his experience in the matter before the notice of the society, with Jannison's tube however, he would feel perfectly safe under all circumstances.

Axis Traction Hook.—Dr. Alloway also exhibited an 'Axis Traction Hook' of his own device. He claimed that the hook answered all the purposes of Tarnier's instrument when passed into the lock of any ordinary forceps and traction made by the hook alone. Traction could be made in any direction pleasing to the operator, and the hook could be used in this way whether the head was arrested at the brim or low down in the cavity of the pelvis. Dr. A. used the hook almost solely with Simpson's short forceps, and found that the handles of the forceps and those of the hook came when applied into such convenient relationship, that more power, if necessary, could be exerted, than with Simpson's long forceps, without the hook. Dr. A. related the history of a very interesting case where he first used the Traction Hook. The patient had been, some eighteen months before, operated on by Dr. Roddick for the removal of a large ovarian cyst (40 pounds). The walls of the abdomen, so far as the muscular structures were concerned, did not unite, or the line of union had become absorbed, and

allowed an enormous ventral hernia to take place. When seen at three months' gestation the whole of the intestines and loose adnexa came down in a horn-like pouch between her legs. They had to be replaced and sustained by a suitable truss. During labor almost complete anteversion of the uterus would take place at every pain, and the condition was quite uncontrollable. The axis of the pelvis and that of the uterus were almost at right angles to each other, so that the patient could never have delivered herself unaided. Dr. A., though a firm believer in Tarnier's principle, alluded to the great cost, complex nature, difficult application, and trouble of keeping clean, of Tarnier's forceps, which would tend greatly to prevent the instrument coming into anything like general use. That his simple inexpensive instrument would in many instances prove serviceable when Tarnier's instrument was not at hand.

DR. TRENHOLME quite agreed with Dr. Alloway as to the uselessness of the first tube he spoke of, and that he had done well to cast it aside. Dr. Trenholme, however, would go further, and maintained that to inject the uterus, using any manner of tube after the contents had escaped into the vagina and been removed, was an unwarrantable proceeding, and fraught with danger, as the case related shewed. Uterine irrigation was seldom called for, and ought not to be resorted to, save when the decomposing contents, as revealed by the offensiveness of the discharges, shewed that there was danger of putrid absorption. Dr. Trenholme's experience in abortions enabled him to speak decidedly on this subject.

DR. TRENHOLME said that the instrument exhibited by Dr. Alloway did not afford one single advantage possessed by Tarnier's forceps. In the first place traction by Dr. Alloway's hook was made at the lock, far from the points or blades, and then the shortness of the handles gave no power to engage the head in the axis of the brim as could so easily be done by Tarnier's. For his part he had used the Hodge modification of the long French forceps in all high operations with ease and success in cases where delivery by the forceps was warrantable; for we must not forget that there is a limit to the force

which cannot be expressed. With the patient on her back and these long forceps, we can with perfect ease engage the head in the brim. The left hand sustains the handles, while the right hand over the lock brings down the head with all the force we would be warranted in using. When this fails, turning should be resorted to so as to open the shortest diameter of the child's head to the antero-posterior diameter of the mother's pelvis.

DR. CAMPBELL said that the uterus after abortion very seldom needed washing out. Has known colic to follow an injection into the vagina for leucorrhœa. Once saw serious symptoms and death follow an injection in a woman who had recently been confined.

In reply to Dr. Trenholme, DR. ALLOWAY felt from his experience in the case recited, that if there was no foetor to be detected in the discharge, and if a uterine tube similar in design to Jannison's was not at hand, it would be better not to inject at all. But if there was evidence of decomposition within the uterus, he would recommend the use of such a tube as the one he used, or better, a common elastic catheter. The solution he was using at present was $\frac{1}{1000}$ parts of corrosive sublimate.

Obstetrics.—DR. TRENHOLME related the following case:— Was sent for last Monday by a *confrère* to a woman in labor with her third child. Two physicians had failed to deliver with the forceps. He found the os fully dilated; antero-posterior diameter at brim was $3\frac{1}{4}$ inches. Had had a natural labor with her first child; the second had to be delivered with forceps. Dr. T. found the child was lying diagonal to the abdomen. He proceeded to turn, his hand first feeling the promontory of the sacrum bulging out; there was also hour-glass contraction a little above the os, and again near the fundus, which caused great difficulty in moving the child. However, after some time he succeeded in delivering all but the head, which Dr. Armstrong opened, as by no safe efforts could it be loosened.

Dr. T. said the trouble was caused, not so much by the deformity, as by the two spasmodic contractions. He had seen a similar case before, where, from repeated powerful attempts to

deliver with the forceps, the uterus around the os was bruised into a pulpy mass, causing the death of the woman.

DR. CAMERON had seen a case something similar, requiring evisceration, owing to ergot having been wrongly used to hasten a tedious labor from early escape of liquor amnii. No amount of traction was of any avail.

DR. ALLOWAY thought that cases where the waters broke early and caused spasmodic contraction on the child were not very unusual.

DR. ROSS thought the cause in Dr. Trenholme's case was obscure. He did not believe that spasm alone could resist strong efforts at traction, especially as the head was found very large. He thought it should hardly be called hour-glass contraction. Had only seen two cases of hour-glass contraction, and in both it was after the birth of the child, and where the placenta was retained above.

DR. TRENHOLME replied by saying that he thought it not unreasonable to put the difficulty down to spasm, as in his previous case the woman had plenty of room, yet was unable to deliver with forceps on account of spasm gripping the child.

DR. RODGER agreed with Dr. Ross that other causes appeared to be present to account for the difficulty.

The following resolution of condolence was passed by the Society, to be sent to the family of the late Dr. Trudel:—

"That this Society desires to express its sense of the great loss sustained by the profession and society generally in the death of Dr. E. H. Trudel, whose long and honorable career as a man and physician secured to him the consideration and esteem of the citizens generally, and whose high scientific attainments and facile mode of expression enabled him for many years to fill the chair of Obstetrics in the Montreal School of Medicine with distinction to himself and advantage to the students."

—A remarkable case of skin-grafting is reported by Dr. H. H. Gardner, of San Francisco, in the *Lancet* of that city for October. A man received an extensive burn on the legs, the ulcers remaining represented 287 square inches. In the month of March 118 grafts were planted, in April 169, in May 80, June 127, July 95, and in August 15. The healing in June was at the rate of $2\frac{1}{2}$ inches per diem, and the average daily amount for the six months was $1\frac{1}{2}$ square inches. When shown at the Society there were but 10 inches left to heal.

Extracts from British and Foreign Journals.

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

Early and Late Operations in Morbid Growths.—Let me instance, as an illustration of my meaning, carcinoma of the female breast. This disease, as is well known generally begins in the substance of the mamma as a small nodule or tumor, hard on pressure, and the seat of occasional pain of a shooting or darting nature. The woman is 45 years of age. As the morbid action advances, the growth enlarges, the pain increases in severity and constancy, and, by and by, retraction of the nipple is noticed. Gradually the growth becomes more and more fixed in its situation, and if now the glands in the axilla—naturally so diminutive as to be scarcely distinguishable—be examined, they will be found more or less enlarged and indurated. The diagnosis is not difficult. The case is one of scirrhus, nothing else. A careful examination of the breast, and a careful consideration of the history of the case, leave no doubt as to its true character. If the patient is under 40 years of age, or from 25 to 40, with a hard, movable nodule, the seat of occasional darting pain, especially annoying during the menstrual period, unaccompanied by change in the nipple, in the surface of the breast, and in the axillary glands, we assume that the neoplasm is a fibroma or adenoma, and unhesitatingly assure the patient that excision of the growth will eventuate in a complete cure.

In carcinoma of the breast, the honest and enlightened surgeon does not wait for involvement of the axillary glands or serious structural disease. He knows that the patient's safety, present and prospective, lies in the early use of the knife and in thorough excision. He urges the importance of prompt interference, and assures the patient that, if the operation be properly done, it will probably eventuate in a permanent cure, or, if relapse occur, that there will be a comparatively long exemption from suffering. Everybody knows what the result of excision of the mammary gland in ordinary cases of cancer is; how rarely the disease is completely removed, and how few women

live beyond eight, ten, or twelve months after such interference. In all such cases, cancer-cells have invaded the neighboring structures beyond the reach of the knife, especially as ordinarily employed, and serve as foci of new neoplasms. It makes one's very soul ache to see so many young women doomed to endure the most frightful suffering in carcinoma of the breast for the want of a correct early diagnosis and the thorough ablation of the diseased structures. Of all the agony I have ever witnessed, there is none at all comparable to that arising from this form of malignant disease of the mammary gland in its more advanced stages.—*Abstract of paper read by Prof. S. D. Gross.*

Dr. A. T. Cabot on the Treatment of Empyema.—A Lister dressing properly applied fulfils the required conditions more thoroughly than any other which I have seen in use. The method of application which I have found best is as follows:—The tubes, of which I generally use two, side by side, are arranged so that they barely project within the chest wall, and the outer ends, after being securely fastened with safety pins and adhesive plaster, are cut off as close to the skin as possible. A handful of loose gauze wrung out in an antiseptic solution is placed around and over them, and over this a piece of mackintosh large enough to project in every direction beyond the gauze beneath it. Over this again are placed many (12 to 15) layers of dry gauze, and, lastly, a sheet of cotton batting to provide for equal pressure. This whole dressing is held in place by a gauze or flannel bandage, some of the turns of which should go over the shoulder to prevent its slipping down. The loose gauze next the tube catches and holds the discharge, which, in a favorable case, is reduced to almost nothing after the third or fourth dressing, and soon becomes serous. This rapid diminution of the discharge under antiseptic treatment, and the fact that it speedily becomes serous in character, was pointed out some years since by Professor Lister; but he did not mention, and I have never seen elsewhere described, the great advantage of this form of dressing in favoring the expansion of the lung and obliteration of the cavity. This latter action of the dressing is due to the method in which the mackintosh is applied. This

rubber layer, impervious to air, overlaps the gauze beneath it so that its edges are held closely applied to the skin by the elastic pressure outside. How closely it clings to the skin can only be appreciated by one who has frequently removed these dressings. When, now, air is forcibly driven out of the chest by a cough, it lifts the edge of the mackintosh somewhat and escapes; but as the elastic outside dressings immediately press the mackintosh again to the side, the air which could lift it from within cannot get beneath it from without. It acts, in short, as a valve, allowing air to escape from under it, but not to get back again.—*Boston Med. and Surg. Journal.*

A New Dressing for Wounds.—From Prof. Bruns, of Tübingen, we receive a fresh addition to our means for carrying out the after-treatment of wounds, in the form of a preparation which he calls “wood-wool,” and which he recommends to surgeons (*Berl. Klin. Woch.*, No. 20). Fine-grained wood in the form of splinters and shavings, such as are largely employed in paper factories, according to Bruns, is the kind of material to be used in preparing the dressing which is called wood-wool. Pine wood is preferred, and especially the *Pinus pieca*, which is poorer in resin and of coarser grain as compared with the wood of other pines and firs. The further preparation of the wood shavings and splinters consists in their reduction to a state of finer division by being rubbed through a wire sieve, then dyed, and finally impregnated with various antiseptic substances. That considered best is a half per cent of corrosive sublimate and 10 per cent. of glycerine (the percentage apparently referring to the ratio between these substances and the wood-wool). The advantages of such a dressing are believed to be manifold. Compared with ashes and turf, it is absolutely clean, fresh, and of white color, and is soft and pliable like ordinary wool, and, withal, of extraordinary cheapness. It possesses, in virtue of its contained resin and ethereal oils, certain antiseptic properties, and is so easily adapted to the wounded parts and of such elasticity that a uniform and equable pressure is easily obtained. Its principal property, however, is its extraordinary power of taking up fluid: in this it excels all other

forms of dressings; it absorbs twelve times its own weight of fluid, so that ten grammes of dried "wood-wool," after complete saturation, weigh 130 grammes. Simple sawdust absorbs only three to four times and a half its weight of water; ashes only nine-tenths. This dressing has been in use by Bruns for half a year, and he has every reason to be greatly satisfied therewith. With the exception of one case of erysipelas, no secondary accidental wound-diseases were met with.—*Med. Times & Gazette.*

A New Operation for Spina Bifida.—

Dr. A. W. Mayo Robson thus describes his operation in the *Brit. Med. Journal*:—

"I made a vertical incision on each side of the tumor, about half an inch from its base, through the skin, and then very carefully dissected the integuments from the meninges until I reached the laminæ of the vertebræ; this required very careful dissection, as the membranes left were so thin as to be perfectly translucent; the fluid was let out out by puncturing with fine scissors, which were also used to cut away the redundant membranes. The cauda equina was fully exposed, lying on the floor of the spinal canal. I now had two folds each side, each fold being of a different width, the two inner meningeal folds three-fourths and half an inch respectively, and the two skin flaps of the same width; but whilst the wider meningeal flap was on the right, the wider skin-flap was on the left. Thus, when sutures were applied, the lines of union were not opposite. Acting on the same principle as is carried out in uniting the peritoneum, I brought together the serous surfaces of the arachnoid by several sutures, so as to completely shut off the spinal canal. Mr. Mayo had, in the meantime, been kindly dissecting (under the antiseptic spray) the periosteum from the femur and frontal bone of a rabbit which he had just killed. This periosteum I now placed, with its osteogenic layer undermost, over the closed meninges, and carefully sutured it to the periosteum of the laminæ on each side, and to the bony margins above and below. After this the skin was sutured, a layer of protective applied, and a pad of salicylic wool placed over the wound. The whole operation, which occupied more than an hour, was performed under the

eucalyptus air. Catgut ligatures were employed, and the instruments and sponges were well carbolized. On the second day, the nurse, in applying the napkins, displaced the dressing; but although the skin wound was slightly opened, there was no formation of pus, and no slough came away; in fact, through the small opening, I could see that granulations had sprung up from the superficial surface of the interposed periosteum. The child has thriven, and has not had a single bad symptom. As yet I cannot feel any bony crackling, but the skin is level with the surface, and the case is practically cured; if bone form, however, the covering will be all the firmer, and the spinal canal will be physiologically perfect.

Modern Circumcision.—The official circular of instructions, Jan. 10, '83, says the *Med. Press and Circular*, issued to the Israelitish communities of Baden, sets forth that the only persons who are to be permitted for the future to perform the rite of circumcision shall be such as shall be authorized by the Jewish Supreme Council. 1. The knife must be freshly polished and the forceps properly purified. 2. The quadrangular pillow employed, as well as the sausage-shaped ring, must be frequently renewed, and, before every circumcision, covered with new gutta-percha tissue or new sarsanet. 3. The operator, immediately before the operation, must carefully wash his hands with soap, and cleanse the nails with a good hair brush, taking peculiar care that no dirt be allowed to remain under the nails, more especially under those of the thumbs. The hands must, in addition, be washed in a 5 per cent. solution of carbolic acid. The operator is no longer to suck the wound, nor irrigate it with wine ejected out of the mouth. Instead of this, the blood is to be removed by gently wiping the wound with pledgets of purified boracic lint dipped in wine. The wound is to be closed by being enveloped in a strip of 10 per cent. boracic lint. The further removal of fluids and blood-clots is only to be effected by means of a new sponge previously soaked in a 5 per cent. carbolized solution or by salicylized lint. A medical man must be immediately called in if hæmorrhage be considerable, and cannot be at once stopped, or if it be from an artery. Such authorized persons are forbidden to perform the rite, if suffering from any infectious disease, and until complete recovery has taken place.

CANADA

Medical and Surgical Journal.

MONTREAL, DECEMBER, 1883.

DOCTORS' SIGNS.

A doctor must have a sign. What shall it be? A door-plate, brass or silvered, painted wood or painted glass, or shall it be a fan-light transparency, or a pestle and mortar with his name on it, or shall it be a solid monumental stone? We recognize three groups—the necessary, the accessory and the superfluous signs. In England and, as a rule here, a door-plate 10×4 inches, brass or silver-plated, is thought sufficient. Occasionally it reaches mammoth dimensions; we know of two 2×2 feet with five inch letters. In the Atlantic cities neat silvered plates are in vogue. In the West it is more common to see the name painted on a wooden or metal slip and placed on the house wall. Narrow glass transparencies in the front window catch the eye frequently in Boston and New York. Beyond the simple door-plate, signs are accessory or superfluous. Some of these are harmless, even necessary, others indicate more or less accurately the professional standing of the possessor. Where a house stands back from the street, an accessory sign may be needed—placed on the gate, or on an upright, or on a tree, as is common in Western cities, or on a fan-light above the door, or even on a lantern as in Winnipeg. There is no special objection to any of these, but in large towns they are scarcely needed. Fan-lights are often very loud and vulgar. We heard a significant remark by a well-known American physician when passing a door in this city over which was a large transparency with the name and number Doctors — 1710, (Surgeons) ‘irregulars, eh’? There is one accessory sign the use of which in this city we should like to

see discontinued. We refer to the narrow printed posters pasted upon the side of the house wall. They are commonly used after change of residence ; it does not look well, and professional visitors to the city have been not a little scandalized at the practice. Superfluous signs are not often employed by men in good standing, but young physicians and new comers are tempted to use them. Any special designation on the sign, as oculist, aurist, or gynecologist is, to say the least, bad form, and often indicates the quack or irregular. In many of the associations of the United States the use of such designation in the press or on the door-plate precludes from membership. Special qualifications on the door-plate or sign are unpardonable, such as the following from a neighbouring city : Dr. —, M.D., Edinburgh (Honours) M.R.C.S., Eng., L.A.H., Dublin (!) A pestle and mortar over the door is a frequent sight in the French quarter of this city and is not inappropriate where the doctor dispenses his own medicine. The latest novelty we know of in the way of signs is what may be called the monumental, introduced lately into a Canadian city. A fine block of granite is chosen, such as would be suitable for the base of a tombstone, and the doctor's name cut in large letters on either side. During the lifetime of the doctor, the block is used as a carriage step in front of the pavement.

Happy the man whose reputation is such or whose local habitation is so well known that he needs no sign ! This is sometimes the case in country places and small towns, not often in cities. We know of one such in a prosperous Canadian city. Grandfather, father and son have been in 'the old stand' so long that to the inhabitants of the locality the doctor's house is amongst the things which have always been. The patients' entrance is in a side street and a small porch protects the visitor. The steps are well worn and the native grain is everywhere visible in the wooden surroundings. There is neither bell nor knocker and the door presents interesting, and so far as we know, unique evidences that votaries to this Æsculapian shrine have not been lacking. On the panels at different heights are three well-worn places where the knuckles of suc-

cessive generations of callers have rapped and rapped and rapped. The lowest of the three, about three feet from the floor, represents the work of 'tiny Tim' and 'little Nell,' so often the messengers in poorer families. Higher up and of less extent is a second depression where 'Bub' and 'Sis' have pounded, and highest of all, in the upper panel a wider area, where the firmer fists of the fathers and brothers have, as the years rolled on, worn away the wood to nearly half its thickness. Such a testimony to the esteem and faithfulness of successive generations of patients is worthy of preservation.

MOTOR CEREBRAL LOCALIZATION.

An important contribution to this subject has been made by MM. Charcot and Pitres in the May, June, August and October numbers of the *Révue de Médecine*. The articles are based on an analysis of nearly 200 cases of cerebral cortical disease reported since 1878. The review is divided into four sections. In the first, the lesions outside the motor zone are considered; in the second, the affections of this region; in the third, irritative lesions, with partial (Jacksonian) epilepsy; and in the fourth, the contradictory observations are studied and criticised. The cases have been analyzed with great care, and in many instances illustrative figures are given. It would occupy too much space to give even a brief summary of the work under the different sections, but the conclusions, as summarized at the end, may be given as follows;—1. All lesions of the cortex cerebri in man do not give rise to motor troubles. The surface of the brain may be divided into two distinct parts,—the *non-motor* regions, affections of which are never followed by paralysis; and the *motor* region, destructive lesions of which always produce permanent paralysis of the opposite side of the body. 2. The non-motor zone embraces (a) all the pre-frontal region—orbital lobe and the 1st, 2nd and 3rd frontal convolutions; (b) the occipito-parietal region; (c) the temporo-sphenoidal lobe. 3. The motor zone embraces only the ascending frontal and ascending parietal convolutions, and their extension on the median surface, known to French writers as the para-central lobule. 4. Total

hemiplegias of cortical origin are produced by extensive lesions of the ascending convolutions; partial paralyses (of cortical origin) are produced by limited lesions of the same convolutions. Of the latter may be distinguished: (*a*) the brachio-facial monoplegias which coincide with lesions of the lower half of the ascending convolutions; (*b*) the brachio-crural monoplegias, which coincide with lesions of the upper half of these gyri; (*c*) the facial and lingual monoplegias, depending on very limited lesions in the lower part of the motor zone, particularly of the ascending frontal; (*d*) the brachial monoplegias which depend on lesions limited to the mid-region of the motor convolutions, particularly the ascending frontal; (*e*) the crural monoplegias, depending on limited lesions in para-central lobule. 5. Whether general or partial, the paralyses produced by destructive lesions of the cortex are permanent, and, after a certain time, are followed by descending degeneration of the pyramidal fasciculi and permanent contracture of the paralysed muscles. 6. Irritative lesions of the surface may give rise to epileptiform convulsions (cortical or Jacksonian epilepsy), clearly distinguished from ordinary epilepsy, beginning with a motor aura and confined to a group of muscles or one-half of the body, or the convulsions may become general. 7. As a rule, the lesions which induce epileptiform convulsions are in the cortex, and are in, or close to, those centres which, if destroyed, would cause paralysis of the muscles convulsed. The lesions, however, may be either in the motor or non-motor areas.

The authors conclude by stating that the doctrine of cortical localization in man is based on an analyses of many hundred observations, and that it is perfectly satisfactory. There is not a single demonstrative contradictory observation. Those which are given as such certainly do not stand the criticism of MM. Charcot and Pitres. They make the strong statement that there is not a single strict observation on record of a destructive lesion outside the motor area which has produced phenomenal paralysis, and, on the other hand, there is not a strict observation of a destructive lesion of the motor regions which has not caused a permanent paralysis on the opposite side of the body.

UNDERGRADUATES' DINNER, MEDICAL FACULTY, MCGILL COLLEGE.

Last year the medical students decided to change somewhat the character of the annual festivity which had been known in the school for years—tradition does not say how long—as the “Footing Dinner.” The professors and graduates were asked to co-operate and the experiment was in every way successful. This year it was even a more brilliant affair and not a little was added to the enjoyment of the evening by the presence of student representatives from other colleges. We object to the committee calling this the *second annual* dinner of the Undergraduates. It is more properly the 32nd, or for ought we know the 42nd, and last year did not see a new custom inaugurated, but a very old one, modified and improved. Moreover, at many of the old dinners the junior members of Faculty and Graduates were present, and the only difference now is that the affair is somewhat more elaborate, the toasts more formal—and aquatic, not vinous.

The affair was held at the Windsor on the 7th, Mr. R. F. Ruttan, B.A., in the chair. After some excellent introductory remarks and the loyal toasts, the chairman gave the University, Governors, Professors and Graduates.

Hon. Justice Mackay replied for the Governors, and referred to the warm interest which they took in their oldest and most prosperous Faculty.

Dr. Johnson, Dean of the Faculty of Arts, replied for the Professors, and Dr. Grant, of Ottawa, in a stirring and able speech, for the Graduates.

“Our Benefactors.” a new toast at medical school dinners in Canada—to be a routine one we hope ere long in all—was proposed by Dr. Howard, the Dean, who spoke of the great benefits conferred on the school and indirectly on the entire profession by the munificent gifts of the Hon. D. A. Smith and others. It was extremely gratifying to think that these gifts were tributes to the memory of their late Dean, Dr. Campbell, whose name would ever be associated with the first endowment of the school and with the new wing to be erected to his memory at the Hospital.

Mr. Thos. Workman, in replying to the toast, bore testimony to the good behavior of the students who passed his house early and late on their way to the school. He rejoiced at the success of Faculty, and in speaking for the benefactors he hoped that what had been done was a trifle in comparison with what might be expected in the future. McGill College might rest satisfied that money would be forthcoming, and as regards the medical school he trusted that many whom he addressed would live to see the endowment just ten times the present amount.

The General Hospital was given by one of the vice-chairmen, Mr. Guy F. Palmer, and responded to by Mr. Andrew Robertson, the President, who spoke in hopeful terms of the prospects in the near future of a new hospital worthy of the city.

"Sister Colleges," proposed in a neat speech by Mr. John Elder, B.A., was replied to by the student representatives of the different colleges.

Mr. Spence, from the Toronto school, spoke well, but the burden of reform in the course of study oppressed his soul, and his remarks on the subject, though sound enough in the main, were rather out of place. Mr. Fierheller, of Trinity, made a capital speech, and elicited considerable merriment by humorous remarks about the Women's College, Toronto, and the difficulty the students would have experienced in electing a representative if one had been invited (an oversight by the way which the committee should see to next year). We hope his picture represents harmless after dinner exaggeration. Messrs. Cumberland, Blackmer and Valin replied for Kingston, Bishop's and Laval. The Class '84 was proposed by Mr. Henri Lafleur, B.A., in some well chosen remarks, and replied to by Mr. J. P. McInerney in a speech which gave promise of considerable ability as a speaker.

Dr. Osler proposed the "Freshmen," which was responded to by Mr. Wilkinson, B.A., in a very pleasing and telling speech. His hits at the eccentricities of genius in the senior students as experienced by freshmen were exceedingly good. He bore testimony to the kindly way in which the older students treated the inexperienced who came among them for the first time.

The "Ladies," proposed by the Chairman, was replied to by Mr Wyatt Johnston. The health of the Chairman was proposed by Dr. Rodger and enthusiastically drunk, after which the company dispersed.

The *menu* was exceedingly well arranged—many of the quotations were admirable—as, for example, under Benefactors, one from O. W. Holmes—

" God bless you, gentlemen, learn to give
Money to colleges while you live."

In addition to numerous graduates residing in the city, we were greatly pleased to see Dr. Grant of Ottawa, Dr. Brigham of Philipsburg, and Dr. Hill of Ottawa.

THE SCHOOL DINNERS.—The tenth annual dinner of the Toronto School took place at the "Queen's" on the 13th Nov. and was a most successful affair. A liberal complexion was given by the presence of the Hon. Edward Blake and Hon. Alex. Mackenzie. Mr. McInerney replied for the undergraduates in Medicine of McGill. The Trinity dinner took place on the 22nd. Mr. Graham, a fourth year student, was present as a representative from McGill. Bishop's College dinner was held at the Windsor on the 12th.

THE GENERAL HOSPITAL.—A building is in course of erection for the nurses, and when completed, the brick annex, now used by them, will be devoted to scarlet fever, diphtheria, and erysipelas.

The division of the clinics into a junior and senior class this session is giving great satisfaction; the amount and variety of teaching material is above the average.

Dr. Bell, the Superintendent, has sent in his resignation, to take effect May 1st. He will resume practice in the city.

LONDON (ONT) SANITARY CONVENTION.—By no means the least valuable part of the work done by the Ontario Board of Health consists in the diffusion among the people of a knowledge of sanitary laws, by the publication and distribution of suitable pamphlets and the holding of conventions in different parts of

the country. One of the most successful of these meetings was held in London, on the 16th and 17th ult., under the presidency of Dr. Rae. Dr. Hunt of New Jersey and several other prominent Americans came over from the Detroit meeting, and added not a little to the general interest. Many valuable papers were presented, among which we may mention "On Disinfectants," by Wm. Saunders, Esq.; "On the Hygiene of Rural Schools," by Inspector Dearness; "On the effect of Mill Dams on Public Health," by Dr. Arnott of London, Ont.; "Sewerage," by Prof. Galbraith of Toronto University and Dr. Oldright.

Obituary.

—The death of Dr. Hilton Fagge at the early age of 45 is a serious loss to the profession in London and particularly to Guy's Hospital, at which he was one of the hardest workers and most successful teachers. For a year or more it was known to himself and intimate friends that he was the subject of aneurism, but he continued to attend to his duties quietly, and died suddenly on the night of the 20th November. For twenty years he had been connected with Guy's, and after holding junior appointments became full physician in 1880. In the school he was Lecturer on Pathology and Demonstrator of Morbid Anatomy. He was a prolific writer on medical and pathological subjects, and the past 18 or 20 volumes of the Hospital Reports contain many able articles from his pen.

—It is not often, fortunately, that we are called upon to record the death of a student during term. Indeed, considering that there are over 400 medical students in the four schools of the city, many of them exposed in a special manner to contagion, the mortality among them has been, in the past 10 years, very slight. Mr. John L. Howey, of Eden, Ont., died of typhoid fever in the General Hospital on the 30th ult., after an illness of six weeks. He was in his second year in McGill College and one of the ablest men of his class, having taken a high position in the first year examinations. His sad death at the early age of 20 is deeply deplored by his fellow students, with whom he was a great favorite, and by his teachers who had recognized in him a man of more than ordinary promise.

Personal.

Dr. Playter, of Toronto, has removed to Ottawa.

Dr. W. H. Burland has removed from Montreal to Florida.

Dr. Dowling, M.P.P. for North Renfrew, has been unseated.

W. A. Shufelt, M.D. (McGill, '81), passed the R.C.S., Edin.

G. Carruthers and J. C. Bowser (Class '83, McGill), have passed the R.C.P., Lond.

Dr. Burnham, of Toronto, was married on the 14th ult. to a daughter of the Hon. Sidney Smith, of Cobourg, Ont.

Medical Items.

—Dr. Depaul, Professor of Obstetrics in Paris, died on October 22nd, aged 73.

—Mrs. Scott, wife of the late Prof. Scott, died on the 22nd ult., scarcely six months after the death of her husband.

—We regret to see that a death from chloroform in the dentist's chair took place a week or two ago in Berlin, Ont.

—The Homewood Retreat for insane persons opened at Guelph on the 15th. With Dr. Lett and such a staff of directors we predict for the institution a prosperous career.

—In the three by-elections at present progressing in Ontario, doctors are among the candidates. In West Simcoe, Dr. Wylie; in West Middlesex, Dr. Roome; and in Cardwell, Dr. Robertson.

—Mr. James Shuter, one of the assistant surgeons at St. Bartholomew's, died from the effects of an overdose of morphia accidentally taken by mistake for a saline mixture.

—Dr. Ruhdorfer reports an unusually obstinate case of hiccough, lasting three months and resisting all remedies, finally cured by the injection of three centigrammes of hydrochlorate of pilocarpin.

BRANTFORD CITY HOSPITAL.—Mr. John H. Stratford has offered the City Council to build an hospital at a cost of \$12,000, to be called by his name. He further offers to give \$400 a year for maintenance.

COMMUNICABILITY OF PHTHISIS.—The Collective Investigation Committee of the B. M. A. received 1,078 replies to this question. Of these, 673 were negatives and 261 affirmatives. Of these a large proportion (192) refer to husbands and wives or near relatives, and it is worthy of note that in 130 of these it is stated that "no family history of phthisis existed in the partner to whom the disease was supposed to be transmitted."