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Original Communications.

INTERNAL OBSTRUCTION OF THE BOWELS.

BY A. B. ATHERTON, M.D., L.R.C.P. & S. ED., TORONTO.

(Formerly of Fredericton, N.B.)

CASE I.—August 12th, 1883. G. L., male, æt. 25. Always healthy. Never laid up by illness in his life. Ate some green peas at yesterday noon, and a quantity of ham in the evening. Was seized with violent pain in the abdomen at 1 a.m. A free movement of the bowels took place at 3 a.m. Pain continued and vomiting then also began. 30 drops of laudanum were administered by a friend, but with little relief. Was visited by me at 8 a.m., when I gave $\frac{1}{3}$ gr. of morphine hypodermically. This kept the patient pretty easy till noon, when half an ounce of castor oil with 30 drops of laudanum were taken. At 5 p.m. the pain became so severe again that I repeated the morphine as before.

Aug. 13, 8.30 a.m.—Pain returned early this morning. Vomiting is frequent and copious, and no motion of the bowels has occurred since yesterday morning; morphine repeated, also half a drachm of spirits of turpentine in warm soap and water administered in the form of an enema; to be followed in half an hour, if no action of the bowels, by a quart of warm water. Turpentine stupes externally.

8 p.m.—Free vomiting during the day, though only 2 or 3 cups of tea have been swallowed. Vomited matters are of a sour taste and smell, and also very bitter. No flatus has passed per anum since the attack began; neither has any of the enemata come away. Pulse, 104; temp. in mouth, 99.8°. Little or no abdominal distension. Pain and tenderness are greatest in the epigastric region. Morphine repeated in the arm. Also

ordered a pill of $\frac{1}{3}$ gr. morphine and $\frac{1}{2}$ gr. of ext. belladonna, to be given pro re nata. To have only iced milk and lime water in small quantities.

Aug. 14, 10 a.m.—Rested pretty fairly till 3 a.m., when the pain and vomiting returned. Has taken 6 of the pills since that hour, but probably several of them were vomited. The amount of greenish sour fluid ejected is still large, though little ingesta is taken. The urine has been very scanty from the first. Pulse, 96; temp. 99.2°. Face looks somewhat pinched. Hypodermic injection of morphine repeated. To suck bits of ice and swallow little else.

12.30 p.m.—Comfortable since morning, and not much vomiting. About 3 quarts of warm water administered very slowly as an enema through a long tube. No great amount of force was required to inject it, but the patient complained of a good deal of pain at the last, and I then desisted. He then got up and passed about two quarts in gushes. Little or nothing came away in the water. Ordered a suppository containing $\frac{3}{4}$ gr. of morphine and 1 gr. of ext. of belladonna pro re nata to relieve pain.

8.30 p.m.—Vomiting continues. Used one suppository about half an hour ago. No further motion from the bowels. Abdomen seems to be growing flatter, especially from umbilicus downwards. Pulse, 108; temp. 99.5°.

Aug. 15, 9 a.m.—Rested fairly well without any more opiate. Vomiting not quite so frequent, but the fluid thrown up has an intestinal odor. Had some hiccough during the night. Feels less pain; no improvement in facial expression. Pulse 96, small and compressible; temp. in mouth, 97.5°; in rectum, 99°.

11 a.m.—Dr. Coburn, of Fredericton, saw the patient with me, and agreed in the opinion that there must be some intestinal obstruction. As, however, he had been rather freer from pain and vomiting, and some flatus had passed per anum. for the first time this morning, it was deemed advisable to wait a few hours before operating. Pulse, 120; temp. in mouth, 99.8°; in rectum, 101°. Extremities rather cool.

8 p.m.—Vomiting of intestinal—smelling matter continues. Pulse 128, feeble; temp. as before. Mind has wandered at times during the day.

Operation (by lamplight).—Chloroform, followed by ether. Assisted by Dr. Coburn, and Messrs.

Owens and Sury, my medical students. The anæsthetics were taken badly. The catheter was passed but no urine found. A longitudinal incision was made, commencing to the left of the umbilicus and extending down about four inches. On cutting through the peritoneum, congested small intestine presented itself. On examination two loops were found connected closely together by a very short band of adhesion, which dragged upon one part so as to constrict very considerably the gut. I could scarcely insert the tip of the finger beneath this band and adjoining loops of bowel. A catgut ligature was thrown around the adhesion and tied. There was no room for a second one, and I therefore divided the band with the scissors. No bleeding followed. As only a few inches of the intestine seen was much distended, there was no protrusion; and I readily brought the abdominal wound together with deep silver sutures and superficial catgut ones. Carbolic spray and other antiseptic precautions were used throughout.

10.30 p.m.—The patient has been very restless and pugnacious since coming out of the ether, and it was with difficulty he could be kept in bed. Has swallowed a few teaspoonfuls of iced milk, and has had an ounce of brandy in a cup of warm milk and water by enema. No vomiting since the operation, and flatus has passed several times per anum. Extremities are pretty cold. Pulse 132, very feeble. Hot irons put to feet. $\frac{1}{4}$ gr. morphine subcutaneously, to help keep the patient quiet.

Aug. 16, 8.30 a.m.—Slept 4 or 5 hours altogether during the night. Took some brandy and milk by the mouth, and had an enema of the same at 3 a.m. No vomiting; no motion of the bowels. Wildly delirious at times. Extremities cold. Little or no pulsation at wrists. He died at 10.30 a.m.

Autopsy 11 a.m.—The point at which the ligature was applied was found to be only 4 feet from the pyloric end of the stomach. A considerable thickening of the peritoneal coat ran in a somewhat band-like form around the gut from the ligatured adhesion. Along this line the bowel presented somewhat of a wet leather appearance, but there was no ulceration of the mucous coat at the part, and the calibre of the intestine was not very greatly diminished either here or elsewhere. Stomach and upper 4 feet of bowel dilated; be-

low this the latter was empty and contracted. Two of the mesenteric glands were calcareous.

CASE II.—Oct. 19, 1883.—A. J.'s child, æt. 11 months, female. A few weeks ago the child had measles, which was followed by a serious attack of bronchitis. Two or three days since the patient began to suffer from vomiting and diarrhœa, but was not ill enough for a physician to be sent for. At 2.30 a.m. the patient awoke with pain and vomiting, and the passage of a thin, bloody fluid from the bowels. Was visited by me at 5 a.m. I gave at once 6 or 7 drops of tinct. opii in a little warm water as an enema, and ordered her to have 2 drops of the same by the mouth pro re nata, also to take only one teaspoonful of barley water every half hour. The distress seemed very great when the patient vomited, and the fluid ejected resembled very much the rice water which she had been drinking during the night.

11 a.m.—Has required one or two doses of the laudanum, and has been much easier. No further vomiting, though there has been a little retching. Two bloody discharges. Continue opiate as before, and two teaspoonfuls of barley water at a time.

8 p.m.—Vomiting has come on again, and the bloody dejections have been more frequent. Pulse, 160; temp. beneath arm, 101°. Rather pale and collapsed-looking. On examination per rectum, no tumor felt, though anus seemed more patulous than usual. No great abdominal distension, and no marked tenderness on palpation. On deep pressure a cylindrical tumor was found lying just to the left of the median line, and extending from the pubes upwards to the side of the umbilicus, being about $3\frac{1}{2}$ inches in length and $1\frac{3}{4}$ inches broad. Resonance not quite so good over the swelling, but no marked dulness present. I now wrapped a piece of rag about the base of the nozzle of a Davidson's syringe, so as to form a plug for the anus; and, holding the instrument tightly against the fundament, I injected slowly a pint or more of warm water, while at the same time I manipulated the tumor through the abdominal walls. During this procedure the swelling appeared to move somewhat towards the right and disappear. I now allowed the water to escape, and examined the abdomen again. No swelling felt above pubes, but as I imagined there was an abnormal fulness and hardness in the right hypo-

chondriac and epigastric regions, I repeated the enema with the head and shoulders lowered. During the administration of the last of the enema, about six ounces of greenish fluid burst from the mouth, and I then allowed the water to escape per anum. No fæcal matter, mucus, nor blood came away with either enema.

10 p.m.—Has rested well since enemata. No vomiting, and no movement of the bowels since visit. No tumor felt. Pulse, 145.

Oct. 20, 9 a.m.—Doing well; pulse, 136. Countenance improved. 9 p.m.—No vomiting since the disappearance of the tumor. Has had two or three greenish motions to-day. No blood.

Oct. 21.—Appears almost well. Takes the breast and vomits nothing.

REMARKS.—That a distended abdomen is not necessarily present in all cases of internal obstruction is quite evident from the first case reported above. The belly was really *retracted* in that instance, which was of course due to the seat of trouble being so close to the stomach, thereby leaving only a few feet of intestine above to be dilated, the portion below becoming empty and contracted as is usual. It would undoubtedly have afforded this patient a much better chance for life if laparotomy had been done earlier; but one is apt to hesitate and delay about resorting to so serious an operation, that the latter is often not undertaken until symptoms of collapse, or general peritonitis, or gangrene supervene, and then the patient succumbs. I intended to have performed the operation on the morning of January 15th. had there not occurred a passage of flatus downwards for the first time, which led me to hope that the obstruction was about to yield. Besides, it will be observed that the abdominal section was made before the end of the 4th day, and as I had previously operated on two cases* of internal strangulation at the end of the 5th and 6th day respectively—the former of which recovered, and the latter lived till the 7th day after the operation—I thought I could afford to wait a little. But it is quite clear that the *length of time* that has elapsed cannot be relied upon entirely as a guide to the condition of the bowel, and consequent urgency for surgical interference, any more in cases of internal obstruction than in those of strangulated hernia, and one

must evidently be largely governed as to the advisability of immediate operation by the degree of the acuteness as well as the severity of the symptoms attending the attack.

As to the character of the second case reported, I think there can be little room for doubt. The acuteness of the symptoms, the vomiting, the passage of the thin, bloody serous discharges, the presence of the sausage-like tumor, and the speedy and complete relief obtained by the use of the large enemata, all combine to prove the existence of an intussusception. The patulous condition of the anus, I think, is also mentioned by some as likely to be found in such cases. I did not give an anæsthetic before administering the enemata, because I did not suppose there would be much muscular resistance offered to prevent the reduction of the bowel in a subject so young, and in one who was so much prostrated by the disease. The readiness with which that object was attained is sufficient evidence that the assistance of such was not required.

THORACO-PLASTIC OPERATION OF ESTLANDER.*

BY J. FULTON, M.D., M.R.C.S., ENG., L.R.C.P., LON.
Prof. of Surgery and Clinical Surgery, in Trinity Medical College, Toronto; Surgery to the Toronto General Hospital; Author of Text-Book of Physiology.

GENTLEMEN,—It is not possible for me, within the time assigned, to discuss satisfactorily the pathology, or even the clinical history of empyema, although the disease is one of the most interesting which the surgeon is called upon to treat. I shall, therefore, confine myself entirely to the treatment of the chronic form of the disease by what is known as Estlander's operation. I also desire to draw the attention of the profession to this operation which, so far as I know, has rarely been performed in America the first reported case being given by Dr. Fenger, of Chicago, in the *Medical News* for Sept. 1882.

The resection of a portion of a rib for the more thorough evacuation of pus, and for the application of remedies to the cavity of the pleura, has long been practiced; but the object which Estlander had in view in his operation, was the obliteration of the suppurating cavity and occlusion of the per-

* Reported in *Boston Med. and Surg. Journal* of June, 1883.

*Read before the Canada Med. Association, August, 1884.

manent pleural fistulæ which are consecutive to the incision in empyema. I need scarcely say that nearly all intelligent surgeons of the present day treat cases of empyema, especially in the adult, by free incision and drainage, together with thorough washing out and disinfection of the cavity. The results of this method of treatment are, upon the whole, satisfactory. Dr. Homen, in an interesting paper in (*Archiv fur Klin, Chirurg, Langenbeck's Journal*), gives the statistics of 52 cases of empyema, treated by free incision, drainage and disinfection. Of these fifty per cent. recovered, thirty-three per cent. died, and in seventeen per cent. permanent fistulæ remained. This may be considered a fair statement of the average results obtained in general practice. The pleural fistula is in most cases, the result of the formation or existence of a cavity between the thorax and the lung, lined by soft pus-secreting tissue. This is much more likely to occur where the opening for the evacuation of pus has been made late in the disease, and where the expansive power of the lung has been impaired by the long continued pressure. The size of such a cavity, and the amount of pus discharged from the opening may vary very much, but even a moderate amount of discharge is not only a great inconvenience to the patient, but also a source of danger, by so depleting the system as to lay the foundation of amyloid degeneration of the kidney, spleen and liver, or tuberculosis. In view of these facts, it is clearly the duty of the surgeon to adopt every possible means in order to effect the closure of the cavity. In such cases Estlander's operation seems well calculated to secure the end desired. It consists in the removal of a portion of the chest wall, in order to produce a certain degree of sinking in, and allow the parietal and visceral layers of the pleura (or chest-walls and lung) to come into contact. Before proceeding to discuss the operation, its indications and contra-indications, and the after-treatment, I will report the following case occurring in my practice in the Toronto General Hospital:—

Mary B—æt 28 years, was admitted into the Hospital on the 6th of November, 1883. Parents living, family history good; has had no illness since childhood, except the present, which took place on the 28th of April, 1882, from an attack of pleurisy. She was treated by Dr. Smith, of Walkerton, who discovered fluid in the pleural cavity of

the right side on the 30th. He aspirated the chest twice during the months of May and June, removing large quantities of serous fluid. On the 8th of July, 1882, when the aspirator was again used, pus was discovered. The chest was then opened by incision and washed out daily from that time until July, 1883, when a second operation was performed in order to enlarge the opening in the chest which had nearly closed. In the latter part of August, 1883, she came under the care of Dr. Stalker, of Walkerton. He continued the treatment by washing out the cavity with a solution of salicylic acid, as carbolic acid had, on a previous occasion, produced symptoms of poisoning. From the time the first incision was made, July 1882, until the date of her admission into the Hospital, there was no appreciable change in her condition or the amount of the discharge. On admission the patient was spare and anæmic, but not extremely emaciated; appetite poor; slight hectic. The right side of the chest was sunken and flattened, causing a certain amount of lateral curvature of the spine and lowering of the right shoulder. In the axillary line, and between the sixth and seventh ribs was the opening in which a rubber tube was inserted. The amount of discharge was from two to four tablespoonfuls daily. In the upper part of the right side the percussion note was clear, but dull in the lower portion. Vesicular respiration was weak throughout, and almost indistinct in the lower part. The left lung was normal, pulse 90, temperature from 99 to 100; bowels regular, urine healthy. In the meantime the cavity was washed out daily with carbolic lotion 1 to 60, to which tincture of iodine was added. But as no improvement followed, on the 30th of November, in the presence of the members of the Hospital staff and medical students, I performed Estlander's operation. Ether was administered and the patient placed upon her left side. An incision about five inches in length was made between, and parallel to, the sixth and seventh ribs. The lower margin of the incision was drawn downwards by means of retractors, so as to expose the seventh rib. The periosteum was divided longitudinally in the median line of the rib, raised on each side, and a portion of the rib three inches long removed by means of a bone cutting forceps. The upper margin of the wound was then drawn upwards and a corresponding portion of the sixth rib removed in the same way. The pleura costalis which was much thickened, was not disturbed

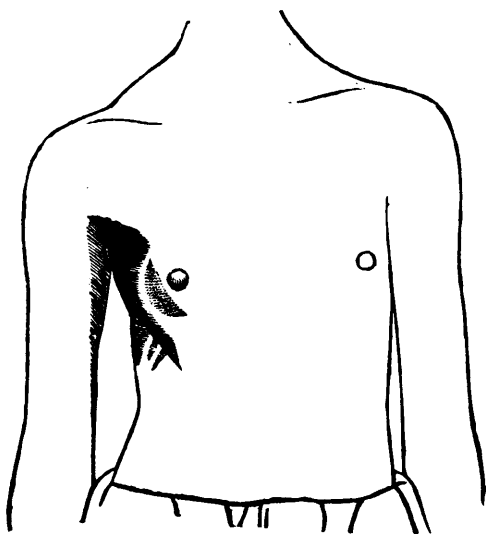
except to make a larger opening by the introduction of the finger, for the insertion of a large-sized drainage tube. There was very slight hemorrhage during the operation, which was arrested by torsion no ligatures being required. The cavity was then thoroughly washed out with carbolic acid solution, a large drainage tube inserted, the wound sutured and dressed with marine tow. There was very little shock. At 6 p. m. pulse, 120; temperature, $99\frac{1}{2}$; the patient felt comfortable with the exception of pain in the wound which was relieved by opiates. Without detaining you by recounting the daily history, I may say that her progress was quite satisfactory, with the exception of a rise in pulse and temperature on the third day which was readily controlled by five grain doses of quinine every four hours. The cavity was washed out daily with solution of carbolic acid, to which tincture of iodine was added; the discharge gradually diminished, and the patient's general health rapidly improved, so that she was able to leave the Hospital early in March, 1884. I have just received a letter from her former medical attendant, Dr. Stalker, in which he says, that she is greatly improved in her general health. He did not enquire as to her increase in weight since her return from Toronto, but it must

opposite the sixth and seventh ribs, as shown in the diagram.

The ends of the resected ribs could be distinctly felt, but the tissue between had become more or less firm, showing an attempt at reformation of bone. The patient's general condition was much improved; her appetite was better, and her anæmia had almost entirely disappeared. The report above referred to shows that this improvement has continued, and that she is now almost entirely well.

With regard to the indications for the operation it may be stated in general terms, that in all chronic cases of empyema which have resisted ordinary treatment for a lengthened period, the operation should be resorted to. It is, of course, impossible to fix a stated period, that will apply to all cases; but when a fistula has existed from six to eight months without any sign of improvement, such as diminution in the size of the cavity, or the amount of the discharge, disappearance of hectic, or improvement in the patient's general condition, this procedure should be put in practice, provided there are no contra-indications, such as advanced tuberculosis, albuminuria, or extreme emaciation. The size of the cavity may be easily determined by passing a long probe or catheter through the fistula. Estlander has shown that "even in cases of extreme debility, patients being so weak as to be scarcely able to turn in bed, the operation caused very slight derangement of the system, and was followed immediately by marked improvement. It is scarcely necessary to say that if albuminuria be present from amyloid kidney, the patient is liable to succumb to very slight shock. The operation is by no means a trying one, and may be safely resorted to in very delicate subjects."

With reference to the operation itself, the position, size and direction of the incision will depend upon the situation of the cavity and the fistulous opening. The most favorable position is upon the lateral portion of the thorax in the axillary line, the intercostal spaces being there covered by the serrations of the serratus magnus. The length of the incision and portions of ribs to be removed will depend upon the size of the cavity in the horizontal direction. For the excision of portions of two or three ribs, one single incision parallel to, and either between the two or over the middle rib of the three to be removed, will be quite sufficient. If a greater number are to be excised, parallel



be considerable. The cavity is gradually becoming closed up, and he says he feels satisfied that in the course of a month the drainage tube now in use may be discarded, and the wound allowed to heal." Before she left the Hospital there was considerable sinking in of the chest, most marked

incisions may be made above or below as required. The number of ribs to be removed will be determined by the dimensions of the cavity in the vertical direction. The surgeon need not hesitate to remove portions of three, four, five, or even six ribs. For obvious reasons the first and second, and the eleventh and twelfth are never interfered with. The periosteum should first be divided longitudinally along the middle of the rib, and raised from the latter before removing it. The pleura should not be interfered with, except so far as necessary to enlarge the fistulous opening, or to make a new one in the most dependent position to secure proper drainage. There is usually very little hemorrhage. After the operation the cavity should be thoroughly irrigated so as to remove any blood which may have entered during the operation. The wound should be united, drained and dressing applied. In the after-treatment in addition to the constitutional remedies which may be indicated, such as quinine, iron, codliver oil, etc., the cavity should be regularly washed out with disinfectant solutions, and the healing process may be further facilitated by the occasional use of stimulating lotions containing tincture of iodine, sulphate of zinc, etc. A favorite plan in my own practice, is to add two or three drachms of tincture of iodine to the carbolic lotion to be used for washing out the cavity. When it is found the progress of the case comes to a stand-still, which may be determined by the repeated use of the probe or by frequent measurement of the quantity of fluid injected the operation may be repeated. Occasionally great assistance in closing the cavity may be derived by the application of an elastic bandage around the chest. In conclusion I would say that Estlander's operation may be regarded as a valuable procedure in the treatment of chronic empyema, and that useful lives may be saved by the operation.

ANGULAR CURVATURE OF THE SPINE OF OVER TWO YEARS' STANDING.— RECOVERY.*

BY J. CAMPBELL, M.D., L.R.C.P., E., SEAFORTH, ONT.

Mrs. B., æt. 33, a native of England, married, mother of one child, consulted me and gave me the following history.* Over two years ago she felt

pain and weakness in the back while washing. "Went to a medical man and told him my trouble, and drew his attention to a small lump on my back. He did not strip my body nor examine it, but told me I would never get better. Took medicine for two years from him and during this time the lump was becoming larger and the pain more severe. Had to lie in bed the greater part of the day and could do no work." Before coming to my office she had pains shooting down the legs and was harrassed by an irritative fever. On Sept. 2nd, 1883, she came to my office and appeared to be wretched enough. From her walk I suspected Potts' curvature at once. She had a pulse of 120, with a temperature of $101\frac{1}{2}^{\circ}$, with a careworn anxious countenance, indicative of pain. She told me that the shaking of the buggy gave her pain and that her husband had to make the horse walk the most of the way, a distance of 18 miles. Her tongue was furred and appetite gone, hence she felt pretty weak. Stripped the body and examined the spine particularly, and found displacement three inches in length and one in depth, involving the last dorsal and first and second lumbar vertebræ. I told her that the only hope of cure was in the application of Sayre's plaster of Paris jacket, or otherwise in lying still in bed day and night, and in supporting treatment, cod liver oil, hypophosphites, etc. She chose the jacket, and accordingly on the same day, with the assistance of Dr. Scott, of Seaforth, we put on Sayre's jacket, suspending her in the usual way. She said she felt complete relief from pain, and that she could jump off the doorstep of the house immediately. After the plaster hardened I put her upon syru of fer. iod. with cod liver oil and hypophosphites, advised good unstimulating nourishment and abundance of fresh air. The first jacket was kept on six weeks. She was free from pain until the jacket began to get loose, then pain returned again. Had the second jacket put on and felt relieved as before. Kept it on six weeks also; improving steadily. She took the medicine as before. During all this time she was able to ride around in a buggy, what she had not been able to do before, as every jar gave her pain. At the end of the six weeks we put on another jacket. She did not get the same relief from this one; whether it was our fault or not, could not say. She came back at the end of one week and had another put on, which proved more suc-

* Read before the Huron Med. Association, 8th July, 1884.

cessful, as she had complete relief from this one, and kept it on four months. During all this time she was getting stronger and was free from pain. The displacement never increased after the first jacket was put on. She came back at the end of four months and we put on the fifth jacket, which was on over three months with good results. She began working and felt pretty well. We now put on the sixth jacket, and did not see her again for ten months, but had a note from her husband stating that she was doing well. After wearing this jacket two and a half months she slit it up as we had previously directed, and laced it up in front like corsets. This enabled her to wash her body and keep herself clean. She continued taking the medicine and cod-liver oil, as previously mentioned, and improved all the time. She has gained fifteen pounds in weight, is cheerful, has no pain, and does all her own work. She came back on the fifth of June last for the purpose of getting us to put on the seventh jacket which we did. After a particular examination we arrived at the conclusion that consolidation had taken place. There was no pain nor tenderness on pressure or percussion over the displaced vertebræ, nor any other bad symptoms. She wished to have the jacket put on, she said, because she felt more comfortable with it than without it. It looked to her like an old friend, and she did not wish to part with it. The cure may be considered complete, and it is not likely that another jacket will be required or asked for even for friendship's sake. In fact we did not think the last was required, but put it on at her own request as we knew it could do no harm, and it is always better to err on the safe side at any rate.

Remarks.—My reasons for reporting this case are the following :—1st. I had a conversation with an old pupil of Dr. Stewart, of Brucefield (who introduced Sayre's jacket into this county, and who probably put on more jackets than all the doctors in it), and this gentleman said that he never yet knew of a cure from it, and he only knew of one case that was benefited by it. Now, I thought, if that be true, I must report my case, which is undoubtedly a complete cure. 2nd. When we consider the age of my patient, namely, 33 years, the cure is the more remarkable, as I believe it is conceded that the older the patient the less chance there is of receiving benefit, and that after twenty

years of age the prognosis is rather grave. 3rd. My patient was over two years ailing before I saw her. The disease was very pronounced, as this report shows, and the woman in a miserable condition, all of which things were against us, for all will agree that the sooner a case of this kind is diagnosed and treated the better. 4th. The relief was instant, which in itself was worth a great deal, even if she had not recovered, and the improvement, though gradual, continuous, until the consummation so devoutly to be wished was finally arrived at.

CARBOLIC ACID IN PURULENT AFFECTIONS OF THE CONJUNCTIVA AND CORNEA.*

BY G. HERBERT BURNHAM, M. B., F. R. C. S. EDIN.,
M. R. C. S., ENG., TORONTO.

Late Resident Surgeon to Moorfield's Eye Hospital, London.

A few years ago when Resident Surgeon to the Moorfield's Eye Hospital, London, I introduced into ocular practice the use of the 5 per cent. lotion of carbolic acid in gonorrhœal ophthalmia. Previous to this I had tried every variety of treatment then recommended with a success not very encouraging.

The deep transparent excavations of the cornea so frequent in this affection, so often followed by perforation and prolapse of the iris, or deeply infiltrated ulcers which, through leaking in their floor, give rise to falling forwards and adhesion of the iris to the posterior surface of the cornea not again to be loosened; or other cases in which the ulceration rapidly involved the whole cornea, causing destruction of vision, and at times of the eye itself—all these terminations have I at different times witnessed and seemed powerless to prevent. If the changes did not go so far, still I have been kept on the wings of expectation, not knowing, with the arsenal of remedies then at my command, what the outcome might be. These are a few of the considerations which made me anxious to get a better and more reliable remedy. Now, after a considerable lapse of time, I feel that I have secured the desired remedial measure in carbolic acid. I have tested its merits in all the various forms of gonorrhœal ophthalmia, for instance, in

* Read before the Ontario Medical Association, June, '84.

that with much serous chemosis and swelling of the ocular and palpebral conjunctivæ; in that where the œdema is as great, but harder and denser; in that where the conjunctivæ of eyeball and eyelids and the sub-conjunctival tissue, are so fully loaded with exudation as to give the brawny, mottled look of diphtheritic ophthalmia. In fact, quite lately, I had a case, that of a young man, in whom the inflammation was the most violent I ever witnessed. The partly everted lids had the mottled, white and red look with inability to remove any of the infiltrations so characteristic of diphtheritic ophthalmia. When the tissues began to unload themselves, quite large pieces came away leaving excavated and bleeding surfaces. I value the treatment by carbolic acid so much above all the other varieties that I have ever employed, that I now use no other. Under its influence, the transparent excavations quickly heal, and, moreover, have never, since I began its use, progressed to perforation, as formerly so often the case. The same may be said with respect to the other forms of corneal ulceration brought to our notice in gonorrhœal ophthalmia.

I, however, met with one form of corneal mischief, which I do dread, and against which I am not as well provided, as I could wish. This form is the deep, circumscribed infiltration of the cornea with the external surface unabraded. Here the morbid process goes on extending inwards till hypopyon comes. After this the external surface ulcerates, and then the part is so weak, that at once perforation of the cornea and entanglement of the iris, more or less complete, take place. The powerlessness of carbolic acid in this variety is due to its inability to reach the seat of mischief. The consequences of these cases being such as I have mentioned, have determined me to do *Saemisch's* operation when the opportunity is given me, and by so doing bring the abscess under the benign influence of this acid. This action I shall take though well aware of the great danger of incising the cornea in the midst of such a fierce purulent discharge. As is well-known in the worst forms of gonorrhœal ophthalmia the lids are so swollen and stiff, that only very partial or no eversion can be made. This prevents the proper application of other forms of treatment, such as strong solutions of nitrate of silver, the mitigated and pure stick. The carbolic acid lotion travels with great ease

beneath the lids, and hunts out as it were all the obscure places. The way in which to make such a thorough application can, after a short time, be taught any moderately skilful nurse. These last truths I consider of great moment, and factors telling much in its favor.

The course pursued in the treatment of a case of gonorrhœal ophthalmia is as follows: The patient is ordered to bed; then there is placed at his bedside a large basin of cold water in which there is always kept a big piece of ice. The eye is to be bathed by the patient, or by the nurse, very frequently so as well to cleanse the eye. In the intervals cloths wet in the iced water are constantly to lie upon the closed eyelids. The lotion of a strength 1 in 20, is to be thoroughly applied *every hour*, the lids being as well everted as possible. I always apply the lotion very freely, and at the same time tell the patient to move the eyeball about, so as to give the lotion as free access as possible. These applications are to be made day and night. In consequence of this a nurse must be in constant attendance. The pain and smarting, which ensues after using the carbolic acid, last but a few seconds, and are succeeded by a feeling of comfort and relief. This is another point in its favor, and in direct contrast with the effects of the powerful caustics heretofore employed. As the discharge becomes thinner and more laudable, the 5 per cent. lotion is to be used every second hour, and during the intervening hour, the 2½ per cent., or 1 in 40, is to be applied. As the virulence of the affection goes on diminishing, the 1 in 40 may be used altogether. I do not employ the watch glass protector, the ingenious contrivance of Dr. Buller, of Montreal, for the sound eye. I tell the patient to lie on the side on which the affected eye is, and warn him of the danger of inoculation. I consider these measures to be sufficient precautions when using so frequently an application of such strong antiseptic properties. I look upon this lotion as the most effective and reliable remedy we have at our command in gonorrhœal ophthalmia; and the more I make use of it, the greater becomes my faith in its power for good. The great *antiseptic* and *astringent* properties of carbolic acid place it, in my opinion, without a rival in the treatment of this inflammation.

This is its history in my hands with regard to the foregoing affection. I shall now mention it

with respect to other purulent affections, especially where the cornea is markedly implicated. One of the most dreaded sequels to a cataract extraction is purulent infiltration of the corneal wound. When this infiltration of the cornea has made its way to *Descemet's* membrane, and is also spreading in other directions in the corneal substance, and is associated with free purulent discharge, there is a feeling in the mind of the operator that the eye is as good as lost. It is in just such cases that I have more than once been completely successful, and have secured an unimpaired eye. I well recollect one case, that of an old and feeble man, an inmate of Moorfield's Eye Hospital, in whose eye on the third day after the operation, when union had taken place, infiltration of the wound set in. This, under the usual mode of treatment in such cases, got worse and worse. The infiltration alarmingly increased in depth and width, and the discharge became markedly purulent and copious. It was quite evident that improvement must quickly take place, or the eye would be lost. I now vigorously applied the 5 per cent. carbolic acid lotion. The result was that in two days the eye was out of all danger. Then, on examining the wound, there was to be seen a deep, broad excavation reaching to *Descemet's* membrane, with a ragged but healthy surface. The surrounding cornea was bright and clear. This excavation gradually filled up, and the patient went out with a good, serviceable eye. In those cases of kerato-iritis, where the corneal ulceration is extensive, this lotion has been used with most beneficial results. Here it is combined with the usual treatment of atropine, warm bathing and constitutional remedies. I have based all my remarks upon those cases in which the corneal inflammation was extensive, and associated with more or less purulent discharge, and where a new departure in treatment would show its usefulness, and enable a just conclusion to be drawn, in other words in test cases. If I think a weaker lotion than the 5 per cent. will answer the purpose, I may not at any time use the 5 per cent. I feel that I am fully justified in strongly recommending the carbolic acid lotion in the various and kindred affections laid before you; for it has so often come out victorious in real test cases, and where previously non-success had too often been my lot. It is very necessary to use the *pure* carbolic acid, as any impurities give rise to such irritation and sometimes pain, as not only seriously to interfere with its full and proper application, but also materially to lessen its curative properties.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—Since reading an article in the December No. of the LANCET under the caption of "Professional Advertising," anent "our confreres down by the sea," I felt constrained to bring the following case of unprofessional conduct under the notice of the profession. Dr. A. is attending Mrs. S.; Dr. B., passing by, interviews Mr. S., and gains admission to the patient by the consent of the husband and without the knowledge of Dr. A. Dr. B. (by force of habit perhaps) finds fault with the diagnosis and treatment of Dr. A., and by fair promises gains the confidence of the patient, and takes the case. Dr. A. visits his patient next day, is astonished at the conduct of Dr. B., and leaves in disgust.

This individual is also in the constant habit of visiting the patients of other medical men in their absence and without their knowledge, and attempts to justify himself in some cases on the flimsy pretext that he was requested to do so by the friends of the patient. He also habitually volunteers his advice and opinions concerning the patients of other physicians solely upon "hearsay" evidence. When called in consultation it is his custom, when opportunity presents, to remain behind and converse with the relatives of the patient after the attending physician has retired, and by innuendoes and insinuations infer that the case has not been properly treated, though no such inference was made in the presence of the attending physician. This conduct is of frequent occurrence in the practice of an old established physician here, who, to keep the vituperations and slanders against other medical men fresh before the public, is generally accompanied by his helpmeet.

Your, etc.,

A RESIDENT PHYSICIAN.

Cornwallis, N.S.

Reports of Societies.

SAUGEEN AND BROCK MEDICAL ASSOCIATION.

A meeting of the Territorial Association of the Saugeen and Brock Division was held in the town of Harriston, on the 8th day of January, 1885. The following resolutions were carried:

That all the proposed amendments to the Medical

Act, except clause 4, meet with our approval, and that instead of appointing a taxing officer, this meeting recommends the adoption of a uniform tariff for the whole Province, legalized by the Medical Council, signified by the Seal of the College, and the signature of the President, as provided in Section XVI. of the Ontario Medical Act.

That all Medical Students, after the year 1887, shall be required to matriculate and attend a course of at least two full sessions in the Arts department of some University recognized by the Medical Council.

That the members of this Divisional Association, now assembled, desire to express their approval of the course pursued by the Medical Council, and also of their present representative, Dr. Douglas, during the past five years.

Referring to the tariff lately issued by the Grand Trunk Railway, as regards medical attendance upon their employees and passengers: That the medical tariff rates issued by the Grand Trunk Railway be disapproved of, and that we recommend that no medical practitioner in this Division do sign it.

(Signed)

R. DOUGLAS,
Chairman.

LLEWELLYN BROCK,
Secy. Treas.

Selected Articles.

THE METHOD OF EXAMINING ABDOMINAL GROWTHS.

The following clinic by J. Ewing Mears, M. D., Jefferson Medical College, reported in the *Med. News*, will be read with interest:

The presence of this patient to-day affords me the opportunity of speaking to you with regard to the methods to be pursued in the examination of patients suffering from abdominal growths. Having the patient prepared in this way and placed on her back on the table, the first step in the examination is inspection.

Inspection: The surface of the abdomen is inspected in order to ascertain whether it is uniform in shape. Its contour is observed and any enlargements or projections are to be noted. In practising inspection we should note not only any irregularities of the surface, but also the condition of the integument and any marks which may be found in the integument. For instance, your at-

ention is called to a line which frequently exists between the umbilicus and the pubes. Formerly this line, which has a brownish color, was regarded as diagnostic of pregnancy, it being usually found, or almost as a rule, in women who are pregnant. This line is also observed in the patient before you and I have seen it in a number of cases of abdominal tumors. It is, therefore, not pathognomonic of pregnancy, but it also exists in other cases of enlargement of the abdomen. This line is due to a pigmentary deposit, and, so far as I can recollect, I have never seen any satisfactory explanation why it should exist. In a recent case of ovariectomy not only did this line exist prominently between the umbilicus and the pubes, but brownish spots were also found on different parts of the body, face, chest, and right side of the surface of the abdomen and on the lower extremities. In this case the patient stated that the brown line and spots appeared after the development of the growth. Further, after pregnancy to full term has occurred, the surface of the abdomen may be marked by cicatrices, which indicate undue stretching of the integument. I call attention to this point, since it has happened in cases which have been presented at the clinic, that pregnancy has occurred in unmarried females and the history of the case has been entirely opposed to any such condition.

Having learned all that we can from inspection, the next step in the examination is palpation.

Palpation: By palpation we mean pressure with one, two, or three fingers upon the abdomen, carrying this, if necessary, to some depth. In order to facilitate this manipulation, it is desirable that the patient should be directed to inspire and then make a forcible expiration. By this means the diaphragm is drawn up and the walls of the abdomen are relaxed and deep palpation can then be made. By means of palpation we ascertain whether the cavity of the abdomen or the cavity of the pelvis is occupied by a growth, and, further, whether the growth is hard, soft, or elastic.

Percussion: The next step is to percuss the abdomen. Percussion is familiar to you all as one of the methods employed in the examination of the thoracic cavity. Beginning in the median line, we percuss downward from the ensiform cartilage to the umbilicus and pubes. The patient is then turned on her left side and percussion made over the right lumbar region. She is afterwards turned on the right side and the left side percussed in a similar way. Percussion gives us an idea in regard to the character of any growth in the cavity of the abdomen. The percussion note obtained over the intestine is resonant, or even more than resonant, tympanitic in character. Over a solid tumor the percussion note would be dull or flat. Over a cyst containing fluid it would also be dull or flat. By percussion, therefore, we determine whether the abdominal cavity contains anything more than the

intestines, which emit a resonant or tympanic sound on percussion, and the extent to which the growth occupies the cavity.

Auscultation: Auscultation is also to be employed in the examination of abdominal growths. In carrying out this procedure it is necessary to apply the ear to different parts of the surface of the abdomen. If there is any reason to suspect pregnancy, the ear should be first applied over the left side of the abdomen, midway between the umbilicus and the middle of Poupart's ligament. At this point the foetal heart sounds can usually be heard, if the embryo occupies what is considered its normal position, that is, with the vertex to the left. Auscultation also enables us to determine whether or not the swelling which is present is due to aneurism, for by this means the presence of the aneurismal bruit can be determined.

The effort to determine *fluctuation* is the next step in the examination. By this is meant the production of a wave through the mass of fluid when the walls of the abdomen are struck or percussed. If one hand is placed on one side of the abdomen, and the other side is percussed with one or two fingers of the other hand, the movement of the fluid is felt distinctly. This wave differs much in amplitude according to the density of the fluid and also according to the character of the cyst in which it may be contained. If the fluid is thin and limpid, the wave is long; if the fluid is very dense and viscid, the wave is short. The ability to determine these differences is acquired largely by experience. I simply give you here general statements in regard to the differences in the fluctuation wave in fluids of different density. Fluctuation also enables us to a certain extent to determine whether the fluid is contained within a cyst or in the general peritoneal cavity. This also requires some experience in order to insure accuracy. Fluid in the general peritoneal cavity gives in fluctuation a wave which pervades the entire cavity, and this can be felt by placing the hand on different parts of the surface. When, on the other hand, there is even a thin cyst wall it is sometimes possible to distinguish the limit of the wave movement. Fluctuation can also be developed by introducing a finger into the vagina, and if the cyst occupies the pelvic cavity, fluctuation can be obtained by percussing the abdominal wall and feeling the wave with the finger in the cavity of the vagina.

I desire also to call your attention to a wave-like movement which is sometimes obtained on percussing the abdomen, and which is known as the fat wave. This wave is found in patients with very fat abdominal walls, this fat being loosely held in the meshes of the fascia. It is important that this be borne in mind, for errors in diagnosis have been made by the confusion of this wave with that of fluctuation.

We have so far examined the abdominal surface. It has been examined with the eye so as to determine its contour and outline. It has also been examined by palpation and percussion. The ear has been placed on the surface and auscultation has been performed. The effort has also been made to determine whether the fluid is contained within the peritoneal cavity or in a cyst in the cavity. This has been done by eliciting the fluctuation wave.

I might say, in addition, that it is desirable to employ mensuration — that is, measuring the enlargement. This can be done by a tape-measure passed around the abdomen at the level of the umbilicus. Then, at the point of the ensiform cartilage, also at the point of greatest enlargement, which is usually below the umbilicus, and a measurement may also be taken just above the pubes. In this way the circumference at these various points can be ascertained and recorded. It is also important to note the distance from the ensiform cartilage to the umbilicus and from the umbilicus to the pubes. If it is necessary to examine the patient from time to time, these measurements can be repeated in order to determine the variation in size.

Having completed the external examination, we are now prepared to make a vaginal examination. I take the opportunity of saying at this point that no one would be justified in undertaking abdominal incision without completing any examination which has been made by a vaginal examination. I can recall at this moment one case in which this step was neglected and the abdominal cavity was opened and a pregnant uterus found. A vaginal examination in this case would undoubtedly have revealed the existence of pregnancy, and the patient would have been saved the rather dangerous operation of abdominal incision. For the purpose of a vaginal examination the patient should lie on her back and should afterwards be changed to the side. The finger, well anointed, should be passed into the vagina and at once seek the cervix. Having examined the cervix, the finger should be swept around the neck, and as it is withdrawn palpation should be made anteriorly, laterally, and posteriorly. Then bimanual examination should be practiced, with the finger of the right hand in the vagina, pressure being made over the surface of the abdomen with the left hand. In this way information can be obtained in regard to the connection of the growth with the uterus. Other points of information which can be obtained in this way are the following: A cystic tumor occupying the pelvic cavity can be felt through the vaginal wall. A solid tumor can be felt in the same way. So with the finger introduced into the vagina, the occupation of the pelvic cavity can be determined through the vaginal walls. As I have already stated, fluctuation can be obtained with the finger

in the vagina, percussion being made on the surface of the abdomen with the other hand.

It is also necessary to introduce the sound into the uterine cavity in order to determine the condition of the uterine canal. It is desirable that beginners in performing this operation should use the speculum. After years of experience, one may be enabled readily to introduce the sound without danger into the cavity of the womb without a speculum, the finger of one hand being introduced into the vagina and placed on the cervix and the sound being carried along this as a guide. There are so many dangers, however, which present themselves in the introduction of the sound in cases of uterine tumors, that it is desirable to use the greatest care in the introduction of the sound into the canal. It should not be forced, but the way should be felt. It frequently happens that there are displacements of the uterus by reason of the pressure of the growth, whether this be solid or cystic in character. With regard to the presence of cystic growths, the information obtained by passing the sound into the uterus relates rather to the mobility of the uterus and to the fact of its being drawn up from the cavity of the pelvis or forced down into the cavity. On the one hand, we may assert with reasonable accuracy that adhesions exist if the uterus is found to be drawn up into the cavity of the pelvis and held in a fixed position; and on the other hand, we may infer that the cyst is impacted in the cavity of the pelvis, if the uterus is in a state of flexion, either antero or retro, and is immovable in its position. In fibroid growths, especially of the submucous and mural varieties the sound will give valuable information as to the seat of the fibroid tumor.

With the speculum we can ascertain the color of the mucous membrane of the vagina and the color of that covering the cervix. This is regarded as a matter of importance, as in the pregnant female the color is of a purplish hue, which is thought to be diagnostic. Another point to be ascertained with the finger in the vagina is the condition of the cervix, as to softness or hardness.

In addition to the examination by the vagina, it is sometimes desirable to make an examination by the rectum. By this means the existence of growths which cannot be readily reached in the vagina can be determined. An enema should be administered beforehand in order to unload the lower bowel.

It is also well to complete the examination by the introduction of the sound into the cavity of the bladder. With this instrument in the bladder, and the finger in the rectum, bimanual manipulation can be made which will assist in the detection of tumors occupying the pelvic cavity.

In order to illustrate the points to which I have alluded, I shall next examine the patient now upon the table. She has been prepared by the removal of all unnecessary clothing and of all constrictions

around the waist. The abdomen is exposed, and on inspection we observe that it is irregular. In the median line there is a projection, and on the right side there is another. The observance of two irregular points upon the surface gives us certain information in regard to the nature of the growth which occupies the cavity of the abdomen. It excludes certain conditions. For instance, pregnancy. In pregnancy there is a uniform enlargement of the abdomen, and the surface is not irregular as in the present instance. Inspection does not enable us to say whether these irregularities are due to pedunculated fibroid tumors or to exogenous cysts forming part of an ovarian cyst, but it does enable us to say that this is not a case of pregnancy and not a case of simple cyst.

Palpation is the next method to be employed. By making pressure with two or three of the fingers over different parts of the swelling, I can easily feel beneath the abdominal wall a hard, resisting mass which is not elastic. This would seem to indicate that the growth is solid and not cystic. Palpation elicits the same sensation over all parts of the growth. We cannot say positively from this examination that this is not a very dense multilocular cyst. You may be able, after much experience, to determine very slight shades of difference in the elasticity, which can be obtained even in cases of dense multilocular cysts. So far as I can ascertain from palpation, I am inclined to believe that we are dealing with a solid tumor and not a cyst. Not only do the fingers determine the presence of a hard, unyielding mass, but those projections which were noticed on inspection can be further outlined. Slightly to the right of the median line is a large mass which appears to be attached to the uterus by a broad pedicle. On the left is another mass, and below the tumor on the right there is a small mass which seems to be somewhat moveable. This would seem to indicate that these growths are fibroid tumors which are attached to the body of the uterus by either broad and short or narrow longer pedicles. In the former case being called sessile and in the latter pedunculated or pediculated growths.

You will observe that the brownish line reaching from the umbilicus to the pubes, which has been referred to, is present in this case.

Next, I shall practice percussion. Beginning at the ensiform cartilage, and percussing in the median line, there is, as you observe, resonance down to this point, about two and a half inches above the umbilicus. Here the sound suddenly changes into that of dulness or flatness. As I pass downward in the median line, the same flat sound is elicited below the umbilicus. As I pass on either side of the median line from the point before mentioned, the dulness is found to exist there also. The patient is next turned on the left side, and percussion performed over the right lumbar region and

lateral side of the abdominal cavity. At this point we find the dulness which belongs to the liver, and as we pass downwards we reach the resonance belonging to the ascending colon. Turning the patient now upon the right side and percussing over the left side, we find in the posterior part of the lumbar region, the resonance depending on the presence of the descending colon. As we come to the median line, the sound becomes dull or flat, showing that this mass projects more into the left side than into the right side of the abdominal cavity.

Testing for fluctuating, I find it impossible to obtain any wave. We can therefore say that there is no fluid, either in the abdominal cavity proper or in any cyst contained in the abdominal cavity.

Continuing the examination, I place my ear over the abdomen at the point which I have before mentioned. I am, however, unable to hear any sound which may be regarded as indicating the presence of a foetus in the uterus or any aneurismal bruit which would be found in dilatation of the aorta. Auscultation, therefore, gives altogether negative signs in this case.

Examination per vaginam shows that the uterus is small. The cervix is slightly elongated and that of a woman who has not been pregnant. The uterus is fixed and immovable in a position of marked retroflexion. Palpation through the vaginal walls reveals the presence of hard, unyielding masses. These, so far as can be ascertained, are attached to the body of the uterus. Owing to the displacement of the uterus, it is impossible to introduce the sound completely. It simply passes into the cervix, but not beyond the internal os.

Rectal examination has not been made, nor has any examination by the bladder been made, as the symptoms were sufficiently prominent and characteristic to enable us to arrive at a conclusion without employing this manipulation. In any case of doubt, however, it is necessary that examination by the rectum and bladder should be made as before stated.

Having passed in a systematic manner through the different steps of the examination, we are enabled to arrive at a conclusion in regard to the nature of this growth. In other words, we are prepared to make the diagnosis. From what I have seen, and from what I have felt, I am prepared to say that we have here fibroid tumors which are of the subperitoneal form. Whether the uterus itself is involved to any great extent cannot be positively determined, owing to the impossibility of introducing the sound. It is, however, quite possible that in addition to the subperitoneal form of fibroid tumors there is also the mural form or that in which the body of the uterus is affected.

Before passing to the question of treatment, I would say that there are three varieties of fibroid growths, or if you choose to call them so, of fibro-

myoma or fibro-myomatous growths. These varieties are the subperitoneal, in which the tumors lie beneath the peritoneum; the interstitial or mural, in which the tumors are located in the substance of the uterus itself, and the submucous, in which the tumors are situated beneath the mucous membrane of the uterine canal. In the subperitoneal variety the tumors project from the surface of the uterus, being covered with a layer of peritoneum and sometimes attached to the body of the organ by a broad and short pedicle, in which case, as I have said, they are called sessile growths, or by narrow and long pedicles, in which case they are called pedunculated growths. In those cases in which the pedicle is small and long, the mass can readily be moved about the cavity of the abdomen. Not only so, but it falls about if no adhesions exist, as the patient changes her position from side to side or rises from the recumbent to the erect position. In the case of mural tumors, which, as already stated, occupy the substance of the uterus, the organ is uniformly enlarged. Where they exist without the presence of subperitoneal or submucous tumors, the uterus is uniformly enlarged, as is found in pregnancy. In the submucous variety the growths form beneath the mucous membrane and project into the cavity of the uterus. Sometimes they get into the canal, and the contraction of the muscular fibres forces them on down until they escape from the cervix, forming what are known as polypi, the pedicle being in these cases elongated so as to permit the growth to pass into the cavity of the vagina. Frequently these submucous fibroid tumors are very large, and they do not pass into the canal and become pediculated, but distend the cavity of the uterus and change the direction of the canal.

The symptoms in the submucous and mural varieties of fibroid tumors are largely connected with the menstrual flow, and they relate to an increase of the flow. I have had some patients who have lost enormous amounts of blood at these periods. This is a prominent symptom and should always lead to a suspicion of this form of growth. Hemorrhage at the menstrual period is not so marked in the mural as in the submucous variety. This symptom may be entirely absent in the subperitoneal variety of fibroid tumors.

I next come to the question of treatment. At the present day, various methods of treatment are practised. In the first place with regard to medication. Mural and submucous growths are amenable to treatment by means of such remedies as ergot, which, by contracting the bloodvessels of the organ, diminish the nutrition, and in that way limit the growth of the tumor. There has been sufficient experience obtained in the use of ergot and its preparations to warrant the conclusion that these forms of growth can be positively limited. Whether or not they can be ultimately removed, is still a question, but their growth can be checked. Ergot

is not of as much value in the subperitoneal variety, especially in the pedunculated form, where the pedicle is long and narrow. It may be of some service where the pedicle is broad, as in the sessile growths, and where the effect of the remedy can reach the bloodvessels of the attached mass. The muriate of ammonium was employed by the late Dr. W. Atlee, who regarded it of value in the treatment of fibroid growths of the uterus.

After these remedies, operative interference may be employed, but there are two very important questions or conditions to be considered before any operation is to be decided upon. In the case of fibroid growths in which the menstrual flow is so great as to drain away the life of the patient, it may be justifiable to interfere with the knife. There is also another condition which would warrant operative measures, and that is the enormous size of the mass, making it a burden to the patient too great to bear.

In regard to operative interferences, the menopause can be anticipated by the removal of the ovaries. If any operation is to be performed, the removal of the ovaries, which is much less dangerous than extirpation of the uterus, is the one to be adopted. There are to my mind very grave objections to the performance of operations for the removal of fibroid masses which involve the body of the uterus or which are attached by very broad pedicles to it, and which are adherent to the viscera or abdominal wall.

A patient with a uterine fibroid can enjoy life and the growth can exist indefinitely without interfering with health. I have at this time under my care a number of patients suffering from fibroid tumors in whom I have practised the hypodermic injection of ergotine, or the aqueous extract of ergot, for a number of years. In one of these cases, I have used ergotine for the past eight years. Measurement of the abdominal enlargement in this case shows that the growth has not increased. It has, on the other hand, not markedly decreased. The patient does not lose much blood during her menstrual period, and is not rendered uncomfortable by the presence of the tumor. She is able to take part in all the enjoyments of her home, to ride out in her carriage, and to enjoy the company of her friends. I am quite sure that if I were to interfere in this case with a surgical procedure, I should terminate the life of my patient. In another case, in which I used ergot for three years, a most desirable result was obtained. In this instance, the growth was of the submucous variety. After the lapse of nearly three years, I observed that the mass was softening; and on palpation and percussion, fluctuation could be distinctly obtained. I also examined the mass from the cavity of the uterus, and found that there, too, it was softened, and fluctuation could be obtained. I therefore determined to incise the wall of the canal, which I

did, and a mass of offensive fluid escaped, containing broken down debris of muscular and fibrous tissues. My patient suffered greatly from pyæmic symptoms, and was very ill for a number of days; but by the vigorous use of antiseptic methods, washing out the cavity with antiseptic agents, as the solution of carbolic acid, surrounding her with the best hygienic conditions, and by the employment of tonics and stimulants, I was able to carry her through this critical period occupied by the evacuation of this large cavity formed by the breaking down of the tumor. Other instances of this kind have been recorded in which the effect of ergot was markedly seen. I can only explain this transformation of the solid growth to the fluid or semi-fluid condition by the cutting off of the nutrition of the growth, and the production of positive gangrene.

There are instances on record in which incision of the lining membrane of the canal has been made and ergot afterward given. In this way submucous fibroid tumors have been delivered. When the delivery has not been complete, the surgeon has interfered, and has removed the mass by cutting away portions of it at different times. This operation is attended with many dangers. Some of these dangers result from septic infection and shock. There is also the danger of the occurrence of hemorrhage.

From the examination of the case before you, the treatment which I should adopt, would be the long continued use of hypodermic injections of ergotine, and this failing, the performance of oöphorectomy. I may say, in regard to the hypodermic injection of this remedy, that the injections should be made in the abdominal wall; and in order to avoid the occurrence of abscess, it has been my practice to carry the needle of the syringe deeply into the tissues, not stopping until the muscular structures have been reached. In none of the cases in which I have used ergotine in this way have I met with abscess. As a precaution I have frequently painted tincture of iodine around the puncture made by the needle. The form of ergot used is that known as Squibb's aqueous extract, made in a solution, the strength of which is one grain to the minim. Of this solution, I have given 25, 30, and 35 minims without producing any undesirable symptoms.

THE TREATMENT OF HYPERPYREXIA BY COLD APPLICATIONS TO THE ABDOMEN.

In a recent clinic in the *Pennsylvania Hospital* reported in the *Col. and Clin. Record* Dr. Da Costa gave the following interesting cases:

The case now before you is one of typhoid fever, only remarkable for a sustained high temperature

persisting in spite of various remedies. The temperature in the morning was 103° F., and occasionally 102 , in the axilla, but for nearly a week the temperature remained at 104.8° . As there had been no marked exacerbations in the temperature, we looked upon it as a case of grave character, on account of the sustained fever. With reference to the intestinal lesions, as manifested at least by the occurrence of symptoms of bowel disorder, they were not severe: he had only three or four stools a day. The eruption was well defined, but there is nothing in the case to which I wish to call your attention besides the temperature record.

Let us see his present condition. His temperature this morning is $100\frac{1}{2}^{\circ}$; last night it was $101\frac{1}{2}^{\circ}$. I, therefore, think that the disease is yielding. The bowels have not been opened for thirty-six hours, and tend to constipation. He is very deaf, but obeys intelligently when I can make him hear. His tongue is moderately dry and slightly fissured; it is tremulously protruded. I want you to observe this cracked, dry condition, with the yellowish coating upon it; though it is not very dry, it still impresses you as a dry tongue. His abdomen is rather prominent and tender; a few spots of eruption are still visible upon the surface. There has been some atony of the bladder, so that the urine has had to be frequently drawn with the catheter. Examining his heart, I notice that there is almost complete extinction of the first sound; it can just barely be heard. The pulse beats only one hundred in the minute, even with the excitement of coming before you; but, as I see upon the record, it has never been a rapid pulse. It is compressible, but has decidedly more volume than it had a few days since. His general condition is improving with the reduction in the temperature. He has been taking dilute muriatic acid (gtt. v) and turpentine (ʒ x) every two hours. He also takes twelve grains of quinine daily; and six ounces of wine and six of whiskey: therefore he is freely stimulated. His food consists of milk and beef tea, two pints of each in the twenty-four hours.

Now I have given you a statement of his treatment, with a single exception, and that is what I wish to develop in our discussion, viz.: the treatment of the high temperature. When I found that this man had, a week ago, an evening temperature remaining persistently at 104° , I tried to reduce it by large doses of quinine, sixteen grains daily; and on one day he took ten grains morning and evening. He was also frequently sponged with cold water. The effect was but slight; the temperature remained high. I then directed that cloths wrung out of ice water should be laid upon the abdomen until the desired result was obtained. It was found that this was more efficient, and the temperature was at once reduced to 100° , so that by this means we were enabled to keep the temperature within bounds, and thus to gain time. We discussed the

expediency of putting him in a bath, but, as he was very weak, and the bath room is some distance from his bed, rather than subject him to the risks of so much handling, we yielded the point, though, if the bath had been more convenient, I would have preferred it. I wish to call your attention especially to the use of ice water applications to reduce temperature, as a substitute for the large doses of quinine, and cold baths, which are not always convenient. It is a most instructive case. Indeed, I consider that the man's life has been saved by this means. Taking into consideration the rising temperature and the failing circulation, as shown by the impaired heart sounds, it did seem likely that the case would not get well. I would call your attention to the fact that in this case the quinine failed to reduce the temperature. It does not often fail, but it did here.

Another point is this deafness which you have observed. I almost had to shout to him before he put his tongue out. The resident physician tells me that he has been so since he came in; therefore it was not the effect of the quinine. Deafness in typhoid fever is not uncommon, and I may state that it does not contradict the use of quinine; by no means. It is due to the state of the blood and the impaired nervous system. We also note here that he has a constant tendency to stupor, is rather drowsy and heavy; he sleeps well at night without opium; he has not been delirious, and has not suffered with headache. The deafness, therefore, is the only symptom referable to the nervous system. There is very little if any, jerking of the tendons, or tremor.

Now, gentlemen, with regard to the treatment I shall make a slight modification. Quinine need only be given in tonic doses. We will order him to take eight grains daily. The dry tongue indicates that the turpentine is still useful; the amount of acid is so small that it does not make much difference whether it be continued or not, but, as it is grateful to the stomach and aids digestion, we will continue it also. Sponging of the general surface with water will be done several times a day, as heretofore; and if the temperature again rises we will return to the ice water applications. With regard to the amount of stimulant, although it seems large, yet I will not reduce it, on account of his dry tongue and weak heart. I think that just now it would be dangerous to make any change.

PILOCARPINE IN ACUTE ERYSIPELAS.

I have here a case to show you which I think will interest you, as it brings out rather a novel treatment of erysipelas. I intended to exhibit this to you this morning as a case of erysipelas, but I find that the erysipelas has gone. I, therefore, can only speak of the treatment, which has proved more quickly efficacious than I supposed it would.

This man B. K., 32 years of age, a fireman, was

admitted only yesterday. This is the record upon admission: "He says that he was quite well yesterday (November 12), but he did not go to work, as he was celebrating the election. In the evening, according to his statement, he was not drunk, though he had been drinking a little, and became engaged in a very earnest political discussion, when some one, equally earnest, struck him in the right eye, making a bruise on the cheek and a small lacerated wound on the eyebrow," the evidence of which you may see for yourselves. The man at that time was quite well, although under the influence of liquor. "During the night he had much pain in his eye, and in the morning the eyelids were œdematous and the cheek likewise swollen, red and burning." When he applied for admission the inflammation was confined to the right side of the face, but it spread rapidly, and the same afternoon both eyes were closed. It is worth adding this to his history that he had slept out all Wednesday night after receiving the injury. He was admitted on Thursday morning, with erysipelas of the upper part of the face, which was rapidly spreading over the brow. His pulse was 80; temperature, 102.8°; respiration 22. The urine was examined, with a negative result. He was ordered tincture of the chloride of iron, twenty drops every three hours, but only received one dose; as the disease was rapidly spreading, and something was needed to make a prompt impression, I used another and more active agent. This was not the first case in which I had used this remedy, but it was the first in which I obtained such rapid relief. He received, hypodermically, one-sixth of a grain of the muriate of pilocarpine. The result was remarkable. Here is the temperature record: the temperature fell from 102° to 99¼°. He sweat profusely for an hour and a half, and there was no further development of the erysipelas; not only did it not spread further, but what did exist quickly subsided. No local treatment was employed, not even cold applications; therefore, whatever success was obtained was from the pilocarpine.

I call your attention to this treatment of erysipelas. I said that it had not been my first case, although it was the most striking case I have seen. As long as five years ago I used jaborandi in the treatment of erysipelas until sweating was produced, and, I thought, with the result of checking further development. In one case, with high temperature the disease had already made some headway, and did not subside so quickly. Under the use of iron the disease had not been controlled, but the fluid extract of jaborandi, given every two hours, checked it. I have since used the jaborandi in connection with the iron at times, with good results. This is, therefore, not a new treatment with me, as I have used for some time. Jaborandi and pilocarpine, its active principle, are, of course, similar in their effects.

I have called your attention to this treatment, not because I believe that it will be followed by the same result in every case, but because it is worthy of a trial. If you get a case of erysipelas in its beginning, use pilocarpine. It has saved this man a long and dangerous illness, and, as he had been drinking, as he said he had, the results might have been serious. In the use of this treatment it should be borne in mind that, in order to be fully effective, profuse sweating must be produced.

MALARIAL SYMPTOMS FOLLOWING SURGICAL OPERATIONS.

M. Verneuil has already called attention to this subject, which is one that should be of special interest to New York surgeons, seeing that it is the fashion in this city to ascribe to "malaria" a number of obscure symptoms which can not be conveniently assigned to any other cause. Dr. Baruch has alluded to the fact that much of the "malarial disease" of New York is wrongly so called, since the most striking phenomenon of this affection, its periodicity, is frequently absent. But, while he insists upon the desirability of making a positive diagnosis to that effect only in cases of frank intermittent fever, perhaps he does not lay enough stress upon the peculiar masked forms of the disease which undoubtedly abound among us.

It is a common experience with our surgeons to meet with sudden and unaccountable elevations of temperature after operations, elevations which can not be attributed to the condition of the wound, or to the occurrence of inflammatory complications. This phenomenon is apt to cause no little uneasiness, especially in peritoneal surgery, in which a sudden rise of the index at an early period is well known to presage the invasion of peritonitis. But this occurrence is not confined to major operations, since trifling manipulations of the uterus, such as trachelorrhaphy and curetting, may be followed by fever, which is equally alarming, being suggestive of parametric inflammation. Now, a peculiarity of this rise of temperature (which is often accompanied by a rapid pulse and a good deal of constitutional disturbance) is that it observes a sort of periodicity. In the morning the thermometer will register as usual in uncomplicated surgical cases, while toward evening, on visiting his patient, the attendant will be surprised, and often alarmed, to find a reading of 103° or 104° F. The wound is examined, the patient is interrogated, but, aside from a confession of restlessness and nervousness, nothing can be elicited to explain the fever. There may or may not have been a preceding chill; generally it will not have been recognized. As the patient convalesces, these mysterious symptoms will disappear. With the administration of full doses of quinine, according to the ordinary rules observed

in using this drug for the cure of intermitent fever, the attacks will generally be cut short in two or three days. In most of the cases which have fallen under our observation, either a history of malarial exposure could be obtained, or subsequent observation of the patient after complete recovery from the operation showed that the disease was present.

The interesting point in this question is, what peculiar condition of the system is induced by a surgical operation whereby latent, or masked, malarial disease becomes actively developed? This we do not pretend to answer. It is akin to the sudden appearance of delirium tremens after injuries. The practical interest of the subject lies in the inference that the surgeon should not allow a rise of temperature *per se* to disquiet him—indeed this is only another phase of the question which Nothnagel has lately brought into prominence.—*N. Y. Med. Four.*

EXCISION OF THE KNEE IN PREFERENCE TO AMPUTATION IN CERTAIN DEFORMITIES OF THE LEG.—Dr. Stephen Smith, of New York, read a paper with this title, at the New York State Medical Society meeting, December, 1884. There was a certain class of cases in which the question of excision at the knee, or amputation at or below that point, was to be determined. They were those cases in which the leg was rendered useless for locomotion, closely allied to those cases of deformity and displacement in which there was chronic inflammation, and the weight of the body could not be borne on the limb. The solution of the question would depend upon two points: the comparative safety of the two operations and the comparative usefulness of a stump after an amputation at the knee-joint, and at a point immediately above or below that point. Out of fourteen cases of partial excision, but two patients died, which was a mortality of only two per cent., showing a difference of eight per cent. in favor of excision. In a large collection of cases, amputation below the knee gave a mortality of thirty-four per cent., and amputation above the knee gave a mortality of sixty-three per cent. Although these figures showed that excision was by far the less dangerous, for purposes of comparison he would place them on the same footing. Perhaps the greatest weight of authority on the question had been furnished by the late Dr. Hudson, of this city, who was employed by the Government for several years. Much as he favored artificial limbs, he always regarded an ankylosed knee as more serviceable than a stump to which an artificial limb might be adjusted. In the light of these facts, we might formulate conclusions in regard to these operations as follows: That excision at the knee-joint was quite as safe as amputation above or below that joint; that excision of the knee-joint was to be preferred to amputation, by which the leg was rendered useless.

Dr. S. W. Gross, of Philadelphia, took it that excision of the knee-joint was not the proper operation in all cases of deformity of the knee; for instance, in cases of ossification or synostosis of the joint he saw no necessity of resorting to excision at all. In such cases it had been his practice, and that of his father, the late Professor Samuel D. Gross, to make an incision across the knee, and break up the osseous union with a chisel. Then the patella could be separated from its adhesion to the femur by force applied to it through a towel interposed. Then, on account of the danger of rupturing the popliteal artery, it was not safe to attempt to straighten the limb entirely at once, but it was best to bring the foot down only so far as was necessary to make the toes touch the floor—the heel, he thought, should swing about an inch above the floor. Even this it was safer to accomplish gradually, at several operations, the patient being anaesthetized each time. This operation, he thought, should be more widely practiced in preference to excision, as had been taught by the late Professor Gross, in his "Surgery." In regard to the statistics brought forward by the reader of the paper, he would say that they had been materially changed within the last five or six years, and no surgeon who resorted to antiseptic precautions would expect to have a mortality of more than three or four per cent. after amputation of the leg.—*Medical Record.*

TREPHINING IN MASTOID AND TYMPANIC DISEASE.—Dr. W. J. Wheeler, of Dublin, at the conclusion of an article on this subject, says:

Of the 35 cases in which the trephine was used, 4 terminated fatally, while the result in the other cases has not been reported; in the total number of cases, the results of which are differently specified, 17 per cent. were fatal, and 21 per cent. successful. Buck has collected 37 cases of suppurative inflammation in which the cases were left to nature (expectant treatment); 34 were fatal. It will be readily seen from the foregoing that the operation of trephining for mastoid disease is a fairly successful one, and, on the other hand, that, from the expectant treatment in suppurative inflammation there is little to look forward to but a fatal result. That the operation should be practiced early is a self-evident fact; it is useless when pyæmia, meningitis, or phlebitis of the sinuses has appeared, although the first cerebral manifestations should not intimidate the surgeon from operating, and I doubt not but that good service will be done toward the patient by his attendant who advises operation even where no bone disease existed, but when the discharge from the tympanum has lasted for a *lengthened period*, and has not yielded to other treatment, such as syringing and enlarging the opening of the membrana tympani if necessary. Setons and issues I believe to be of little use, for

although only the mucous membrane may be engaged, yet we know that a blow on the mastoid process, a severe cold, a depressing illness, may cause disease to advance to the bone, pyæmia may ensue, or death by general cerebral irritation, without the formation of abscess. A well-accomplished operation will always give free vent to pus when existing, and prevent it passing to the brain through some of the numerous channels I have recorded, and will thus save the patient. I must deprecate the operation recommended by Dr. Bagroff—namely, the use of the gouge and galvano-cautery over the mastoid process; such procedure, as it appears to me, would be likely to set up irritation and inflammation. Unless, indeed, the suppuration is comparatively superficial, or discharging through a fistulous opening, I would not select to operate over the mastoid process; there one cannot remove the entire portion of the bone, on account of the proximity of the lateral sinus, and so cannot expose the dura mater, to do which I hold is very essential.

The site I would always select for operation, with the exceptions as above named, would be such as to place the lower border of the trephine on a level with the external auditory meatus, and anterior to a line dividing vertically the mastoid process. By adopting this course there will be no danger of wounding the lateral sinus, the tympanum and mastoid cells will be opened, giving full exit for discharge, the dura mater will be exposed, and should pus exist between it and the cranium, there will be ample freedom for its escape.—*Dublin Journal of Med. Sc.*, October, 1884.

DISINFECTANTS.—At the close of a paper on this subject, Dr. W. J. Miller, of Dundee, draws the following conclusions:

"1. It is very doubtful that any efficient disinfection of a room can be practised while it is occupied. Nevertheless, it is possible that the presence of a disinfectant, though not in sufficient concentration to kill contagium, may, by long continuance of operation, weaken it, and, if microzymes be the contagium, may so lower their vitality as to impair their power to reproduce their kind. A certain degree of probability is given to this by Prof. Tyndal's observation of the effect of continuous heating in sterilizing putrescent liquids, which led him to conclude that there is a period in the life-history of these minute organisms when they are especially vulnerable. It is therefore, in the direction of good to employ some disinfectant during the progress of the case, and there is none equal, either in efficiency or in simplicity of application, to sulphur. It is exceedingly convenient in practice to use sulphur pastiles, as introduced by Dr. Littlejohn, each of which contains twenty-five grains of sulphur, one or two being used at a time, according to the size of the room. This should be done several times a day.

"2. The skin of the patient should be sponged several times a day with diluted acetic acid, by preference with the aromatic. This is especially applicable in scarlet fever, effectively disinfecting the desquamating skin. I only mention the method of inunction to condemn it emphatically. The strength of the solution must be regulated by what is found agreeable to the patient; a 1 to 20 solution of the aromatic acid, which has been referred to, is generally too strong.

"3. For the final disinfection of the sick room nothing equals sulphur. But it must be thoroughly applied. The Dundee sanitary authority uses about three pounds of sulphur to a room about ten feet square, carefully closing all apertures by which the fumes can escape, and leaving the room shut up for about four hours.

"4. For disinfection of clothing, etc., the method followed here is exposure to a temperature of about 250° for three hours in a specially constructed chamber, the air being also charged with the fumes of about six pounds of sulphur. It is scarcely possible that any contagium can live through such an ordeal.

"5. Excreta of patients are best dealt with by Dr. Dougal's method—namely, mixture with hydrochloric acid diluted to 1 to 20. He has proved that this solution does not injure the metal fittings with which it comes for so short a time in contact. Clothes may also be thoroughly disinfected by this agent, and without injury.

"6. For hand disinfection, carbolic solutions 1 in 20, acetic acid, and sulphurous acid, are almost certainly thoroughly effective.

"7. The question of disinfectant inhalations for lung disease, especially phthisis, demands a longer consideration than can here be given to it, but, when we consider that vaccine which has been exposed for three hours to air saturated with creosote vapor, and similarly for four hours to the vapor of eucalyptus, retained its infectivity unimpaired, that the germs to be acted on are far in the recesses of the air-vesicles, and that the inhaled disinfectant can only reach them in very weak dilution, if indeed it reaches them at all, it appears to me, although it is very disappointing to arrive at such a conclusion, difficult to place much confidence in this therapeutical expedient."—*Practitioner*, Oct '84.

THE PAINLESS EXTINCTION OF LIFE.—The *Med. Press and Circular* states that: Dr. Richardson's lecture on "The Painless Extinction of Life in the Lower Animals," at the Society of Arts last week attracted a very large audience, among whom we noticed many members of the profession. The lecturer prefaced his subject by stating that he had, at the request of the Committee of the Dog's Home, Battersea, constructed a lethal chamber for the painless extinction of the life of dogs which nobody owns, which must of necessity be destroyed.

He put the process into operation in May last by subjecting thirty-eight dogs to the fatal vapor, and all passed rapidly into sleep and from sleep into death. Since then from 200 to 250 dogs per week have been painlessly killed in the chamber. The number struck us as unusually large, and we were almost tempted to ask what the anti-vivisectionists were about, and why they so cruelly abandoned so many of their pets—7,000 in a few months—to starvation or to the tender mercies of the police and the uncertainty of prussic acid. The numbers, however, Dr. Richardson said, had been exceptionally large and the experimental results so entirely practical and successful that he felt the time had come for him to place them fully before the public. The process at first was not unaccompanied with difficulties—first, in determining the anæsthetic to be employed, and next as to the most efficient form of chamber in which the animals should be exposed to the lethal gas or vapor. Out of a list of twenty-two anæsthetics he had selected four of the best known among them, which he subjected to a careful series of trials, and of these he finally selected carbonic oxide as the easiest to deal with and the least expensive. The lethal chamber is filled with gas by an ingeniously constructed Clarke's stove.

As to the painlessness of the death of the dogs, there can be no doubt whatever, and Dr. Richardson firmly believes that the same method might be used for the destruction of those animals which supply us with food. Indeed, he has already tried it with sheep, which are put down to sleep with the greatest rapidity before being slaughtered, and it has been found that the carbonic oxide exercised no prejudicial influence over the flesh of the animals, nor did it unfit it in any way for the market as food.

The same process is found equally applicable to swine, calves and fowls, so that steps have been taken to carry out the lethal process on a large scale. The objection even to retention of blood so strongly felt by the Jewish people do not obtain by the process, as the animals in the sleep of death are found to yield up blood just as freely as in the ordinary way, or when no anæsthetic is used.

Upon the issue of these experiments Dr. Richardson deserves the gratitude of the entire community. Looked at from whatever point, his efforts were praiseworthy, and the results constitute a triumph to science and a boon to the lower creation. If—as he eloquently concluded his lecture—Science sometimes, for the sake of man, inflicts pain on the lower creation, here she relents, and does for the lower creation what she dare not do for man.

CREDE'S METHOD OF DELIVERY OF THE PLACENTA.—Dr. W. H. Taylor, in the *Cincinnati Lancet and Clinic*, says: The vigorous controversy over "Crede's method," which has recently involved so many obstetricians, has led Crede to re-

state in detail the manipulation he advises. As many American practitioners habitually adopt what they believe is his practice, I think it will be of interest to know exactly what that method is, I therefore have translated his own description, giving the italics as found in the original, in the *Archiv. für Gynakologie*, xxiii, 2, 213:

... "The natural detachment of the placenta occurs within a few minutes after the birth of the child, and is recognized by a discharge of blood and by marked diminution of the size of the uterus, which may now be felt as a firm ball, the size of a child's head, between the umbilicus and pubes. As soon as any after-pains have occurred the midwife grasps the entire uterus through the abdominal walls with both hands and presses it toward the concavity of the sacrum, she repeats this *several times*, if necessary, *but only during a pain*, until the placenta is found at the vulva or is entirely expelled. If, from imperfect contraction of the uterus, or from tenderness of the abdominal walls, sufficient pressure to expel the placenta can not be made, the attendant, guided by the umbilical cord, feels carefully in the vagina for the placenta; if a portion is felt, then, with one hand, *gentle* traction is made on the umbilical cord, while with the other pressure is made over the uterus. If the point of insertion of the cord in the placenta can not be reached, or if on *gentle* traction of the cord resistance is felt, no further effort to deliver the placenta in this way may be made until after *several uterine contractions* have occurred, which may be increased by *gentle* rubbing and pressure. If the placenta is found low in the vagina, and readily reached by the finger, then the attendant shall pass the index and middle fingers as far upon the placenta as possible and press it gently downward and backward, while with the left hand the cord is made tense. When the placenta appears at the vulva the attendant shall grasp it with the fingers of one hand, and draw it gently upward and slowly turn it upon itself several times in order that the membranes may form a cord and not be torn away. When delivered the entire after-birth and any coagula are removed under the flexed leg of the woman and placed in an empty basin.

"*All strong traction* on the umbilical cord, or attempts to extract the placenta when high up by introducing a part or the whole hand, or to aid the efforts at extraction by straining, coughing, blowing in the hands, etc., are *very dangerous* and therefore are *forbidden*."

HIP-JOINT AMPUTATION.—DAVY'S LEVER.—The following important cases under the care of Mr. Haward, of St. George's Hospital, London, are reported in the *Lancet* for January 3, 1885:

John D—, aged twenty-four, received in May last a blow on the right buttock from the buffer of

a locomotive. When admitted soon afterwards into St. George's Hospital, the buttock presented near its most prominent part a contused and lacerated wound large enough to admit a finger. Out of the wound dark blood oozed very freely. The soft parts were very extensively undermined, and beneath them was a large and increasing collection of blood. This blood collection did not pulsate and no bruit was audible. A pad was firmly bandaged over the buttock for three hours. In this interval the collection of blood had greatly increased, and when the pad was removed large quantities escaped. Ether was then administered and the right iliac artery compressed with Davy's lever. When once introduced far enough, this instrument acted perfectly. Mr. Haward enlarged the wound to a length of some six inches. The gluteal muscles were found to be torn across, and beneath them existed a large cavity full of blood. This was quickly turned out, bringing into view the sciatic notch and the open mouth of the gluteal artery. This and a great many other muscular vessels were secured with catgut ligatures. No blood was lost during the operation and the man's recovery was uninterrupted.

The case shows well the value of the lever, and in connection with this subject of compression of the large vessels of the abdomen it seems well to mention a case of amputation at the hip-joint for sarcomatous disease, which also occurred in Mr. Haward's practice. Here the abdominal aorta was very effectually controlled by a contrivance more or less like that suggested by Sir Joseph Lister. The blunted apex of a pyramidal piece of wood was fixed over the abdominal aorta by an elastic bandage. The apex of the pyramid was about one inch square and covered with felt. The base measured about three inches square and presented instead of a plane surface a broad and shallow groove. The elastic bandage passed round the pelvis and along this groove. When fixed it was placed in the charge of an assistant, who, grasping the wood with both hands, could very easily and nicely direct and regulate the pressure. This contrivance caused no dyspnoea and completely checked all bleeding.

THE ENGLISH CHOLERA COMMISSION.—Drs. Klein and Gibbes have sent the following report to the Surgeon-General and Sanitary Commissioner of the Government of India. Dated Calcutta. Nov. 27th, 1884.—(*Lancet*, *Fan.* 3.)

We have the honor to report that the investigations which we have hitherto carried on in Bombay and Calcutta have yielded the following results:

1. The statement of Koch that "comma bacilli" are present only in the intestines of persons suffering from or dead of cholera is not in accordance with the facts, since "comma bacilli" occur also in other diseases of the intestines—e. g., epidemic

diarrhoea, dysentery, and intestinal catarrh associated with phthisis.

2. The "comma bacilli" in acute typical cases of cholera are by no means present in such numbers and with such frequency as to justify Koch's statement that "the ileum contains almost a pure cultivation of comma bacilli."

3. The "comma bacilli" are not present in the tissue of the intestines or elsewhere.

4. The "comma bacilli" in artificial cultivations, carried out by one of us (E. K.), do not behave in any way differently from other putrefactive organisms.

5. Mucous flakes of the ileum, taken out soon after death from typical acute cholera, contain numerous mucous corpuscles, many of them filled with peculiar minute straight bacilli. The same bacilli occur also outside the mucous corpuscles. They are never missed even when the "comma bacilli" are.

6. These small bacilli have been cultivated by one of us (E. K.), and they do not behave differently from putrefactive organisms. They are not present in the tissues of the intestine or any other tissue.

7. No bacteria of any kind, and no organisms of known form and character, occur in the blood or any other tissue.

8. A good many experiments have been carried out by one of us (E. K.), with the following results: (a) Mice, rats, cats, and monkeys were fed with rice-water stools, with vomit, with mucous flakes of the ileum, fresh and after having been kept for twenty-four to forty-eight hours. The animals remained normal. (b) Inoculations with recent and old cultivations of "comma bacilli" and the small straight bacilli, as well as with mucous flakes, were made into the subcutaneous tissue, into the peritoneal cavity, into the jugular vein, and into the cavity of the small and large intestine of rabbits, cats, and monkeys; but the animal remained perfectly well and normal.

9. The material which we have had hitherto at our disposal has been very good and abundant, and, as far as the microscopic work goes, we do not think we shall require any more material. We therefore propose concluding our inquiry by the beginning of December, and hope soon after to return to England.

PATHOLOGY OF CYSTITIS.—According to M. Hache (*Revue de Chir.*, No. 4, 1884) lesions of the bladder and irritation applied directly to its wall and mucous membrane do not constitute a necessary and sufficient cause of cystitis, except in case of vesical tuberculosis, or of the presence of a rough and irregular shaped foreign body. The causes capable by themselves of constantly determining inflammation of the bladder are very rare. Beyond tubercular cystitis, and other forms of cystitis due to some general morbid condition—as.

for instance, those of rheumatic, gouty, and interictive nature, which are not of frequent occurrence—there cannot be included in the above category scarcely any save severe accidental or surgical traumatism of the bladder, and too sudden and complete evacuation of this organ after over-distension. Gonorrhœal urethritis does not often give rise to cystitis, except under the influence of some occasional cause or in a predisposed subject. Most of the predisposing causes act quite simply by determining a more or less persistent congestion of the bladder; others have a more or less obscure mode of action, although their influence is very decided. Chief amongst these predisposing causes are the tubercular, rheumatic, and gouty diatheses. These predisposing causes may sometimes become exciting causes by increase, extension, or repetition of their action, or through association with that of other causes of the same group. These latter causes are congestion and slight inflammation of neighboring organs, especially in the female; tumors, calculi, and foreign bodies in the bladder; incomplete retention of urine, with or without distension; habitual resistance to the needs of micturating, and all the causes of dysuria and functional over-activity of the bladder; stricture and foreign bodies in the urethra, hypertrophy of the prostate, etc. Finally, the part of exciting cause is more especially played by sudden and complete retention, by cold, by catheterism or exploration of the bladder. The latter cause can act only on a bladder predisposed by the presence of a tumor or calculus; the other two causes are more active, and may even by themselves suffice to excite an attack of cystitis. M. Hache's study of the pathogeny of cystitis has led him to insist on the importance of congestion and diathetic influences, especially the tubercular diathesis, and on the relatively limited part played by lesions of the urethra and prostate.—*London Med. Record.*

TREATMENT OF ABSCESS OF THE LIVER.—A few years ago M. Jules Rochard reported to the Académie de Médecine a method of healing abscesses of the liver by large and direct opening, combined with the Listerian antiseptic method. This operation consists, when the abscess is only suspected, without being diagnosed, in using the needle of an aspirator. Then if pus be found, the needle is used as a director along which a bistoury is carried, and the abscess is opened. The cavity is then injected with antiseptic solutions, and drained. About the same time, Surgeon-Major Oberlin, of the French Army, had occasion to treat several cases of abscess of the liver. He gives the history of three cases. The first case was aspirated with Potain's aspirator, a large amount of chocolate-colored pus drawn off, and the patient recovered.

The second case was that of a woman, thirty-six

years of age, about 13xviiij of chocolate-colored pus were drawn off with Potain's aspirator. The patient then had an attack of intermittent fever, and the abscess partially refilled. A little more than f3vj of pus were removed. About six weeks afterwards a third aspiration removed about f3viiij of pus. The fever continued, however, the patient got no better, and the abscess refilled. One week after the third aspiration the abscess was opened with a large trocar, the pus removed, and a caoutchouc tube introduced. A 1 to 40 solution of carbolic acid was then thrown into the cavity, and a Lister dressing applied after the injection had ceased to return clouded. The dressings were repeated daily for five days, when the first tube was replaced by a short one. The wound was completely cicatrized in a month.

M. Oberlin believes that in using the aspirator it is well to make several punctures at intervals. He also states, what is not new, but worthy of further attention, that abscesses of the convexity of the liver cause pain in the right shoulder; but this is absent in cases of abscess of the left lobe or base.—*Archive. de Méd. et Pharm. Mil.*, Oct. 1, 1884.

VOLUMINOUS ENEMATA OF NITRATE OF SILVER IN CHRONIC DYSENTERY.—Dr. Stephen Mackenzie read a paper on this subject before the Clinical Society of London (*Med. Times*). The mode of procedure he adopted was as follows: The quantity of nitrate of silver to be used was dissolved in three pints of tepid water in a Leiter's irrigating funnel, which was connected by India-rubber tubing with an œsophageal tube with lateral openings. The patient was brought to the edge of the bed and made to lie on his left side, with his hips well raised by a hard pillow. The terminal tube, well oiled, was passed about eight or ten inches into the rectum, and the fluid allowed to force its way into the bowel by gravitation. The injection rarely caused much pain, and often none. It usually promptly returned, but when long retained it was advisable to inject chloride of sodium, to prevent absorption of the silver salt. Various strengths had been used, from thirty to ninety grains to three pints of water, but usually one drachm of nitrate of silver was employed. The treatment was based on the view that, whatever the nature of dysentery, whether constitutional or local, in the first instance, the later effects were due to inflammation or ulceration of the colon, which was most effectually treated, as similar conditions elsewhere, by topical measures. Sometimes one, sometimes two injections were required, and in some cases numerous injections were necessary; but in all cases thus treated, many of which had been unsuccessfully treated in other ways previously, the disease had been cured. The cases narrated were: 1. In which the disease had lasted several years on and off; two injections were used and the case was cured in six weeks.

2. Second attack, duration uncertain; four injections used; cured in five weeks. 3. Duration two months; two injections used; cured in three and a half weeks. 4. Duration five years; one injection used; cured in three weeks. 5. Duration eighteen months; two injections used; cured of dysenteric symptoms, but remaining under treatment for diabetes. 6. Duration fourteen months; one injection used; cured in seven weeks.

Dr. Carrington said that this treatment had been tried in the hospital at Greenwich without any remarkable effect, but the injections had not been so voluminous as those used by Dr. Mackenzie, which might, perhaps, explain the fact. The colon was usually capable of holding six pints of fluid, and the three pints used in some of the cases might possibly have failed to reach the affected parts.

REMOVAL OF GALL STONES.—The *Dublin Medical Press and Circular* of October 1, 1884, says:—The current number of the *Independence Belge* mentions a surgical operation which has just been performed in Brussels by Dr. Langenbusch of Berlin, who must not, however be confounded with his eminent fellow-citizen Langenbeck. The subject of this daring and successful proceeding was M. Eugene Anspach, the Deputy Governor of the National Bank of Belgium, who has been for many years suffering from a collection of gall stones, which have kept him in a state of aggravated suffering (*doleur atroche*) and have latterly defied all measures of relief. M. Langenbusch, summoned specially from Berlin, proposed to lay open the gall bladder, with antiseptic precautions, admitting, however, that he had only performed this operation four times, and that but one of these cases had recovered. M. Anspach's family and friends were much dismayed at this announcement, and begged that the operation should not be performed. M. Anspach was firm, and reflecting that without it he would not live long, and that in the meantime his life would be worse than death, decided on the operation. Even in this supreme moment the banking mind asserted itself, and M. Anspach remarked "after all, one in four is 25 per cent., and that is a fine dividend." "You have had one recovery already, doctor," he remarked, "and I will be the second," an element of confidence which no doubt had something to say in the result. The operation was performed on the 9th September, and 125 calculi were extracted from the gall bladder. M. Anspach suffered a good deal after the proceedings, but is now out of danger and in complete comfort. We trust he will long live to enjoy the reward of his own pluck and the skill of his surgeon. It is a curious circumstance that this operation has to a certain extent been anticipated here. The late Sir Timothy O'Brien suffered from gall stones, and the late Sir Dominic Corrigan worked down into the gall bladder by means of a

potash issue, and removed them. Sir T. O'Brien's recovery was complete.

TREATMENT OF CHRONIC HYDROCEPHALUS BY TAPPING.—Dr. J. G. Palmer M.D., of Oakbowery, Ala. reports in the *N. Y. Med. Record* a case of successful treatment of congenital hydrocephalus. The patient was a negro baby, seven months old. He was called to see the child in July last. He diagnosed the case as one of congenital hydrocephalus, and told the parents that the only hope for cure was in tapping. To this they would not consent. The accumulation continued until the head reached the enormous size of twenty-six inches in circumference—the bones of the head having become very thin by reason of the pressure within. There was a space of two inches between the bones. The eyes were turned up under the upper lids from pressure upon the brain. In consultation with Drs. Garison and Spratling the importance of tapping was urged and the parents consented. A small hydrocele trocar was inserted at the posterior portion of the anterior fontanelle, the head having first been shaved at the place of insertion of the trocar. The fluid flowed freely. About eight ounces were drawn off, the trocar withdrawn, and a piece of absorbent cotton placed over the place of puncture, and held in place by a piece of adhesive plaster. The bones of the head were pressed into position, and held in place by a tightly fitting bandage. Next day bandage, plaster and cotton were removed, and more fluid was allowed to drain off, though much had done so during the night by the plaster coming off and the cotton being moved out of position. The fluid was allowed to drain off at intervals until all was removed. The child was then put upon iodide of potash, which was kept up for several weeks. The eyes soon regained their normal position. The child nursed well and fattened rapidly. There were some febrile symptoms for several days after the operation, but they soon subsided. The head is yet big from the large size of the bones, as they were very thin. The bones seem to be rapidly uniting, and the child is still fattening and growing.

INCONTINENCE OF URINE IN CHILDREN.—In his recent work on diseases of children, Dr. Eustace Smith gives the following:

Of medicines which diminish irritability, belladonna takes the first place; but it is important to be aware that this remedy, to be effectual, must be given in full doses. Children have a very remarkable tolerance for belladonna, and will often take it in surprising quantities before any of the physiological effects of the drug can be produced. In obstinate cases of enuresis the medicine should be pushed so as to produce dilatation of the pupils with slight dryness of the throat. In children of four or five years of age, it is best to begin

with twenty-five or thirty drops of the tincture of belladonna, given three times in the day, and to increase the dose by five drops every second or third day, of course watching the effect. Ergot is another remedy which is often very successful. For a child of the same age twenty drops of the fluid extract may be given several times in the day.

Bromide of potassium, benzoic acid (dose, five to ten grains) and benzoate of ammonia, digitalis, borax, cantharides, camphor, and chloral have all been recommended as specifics in this complaint. Sometimes a combination of several drugs seems to be more effectual than one given alone. I have lately cured a little girl, aged four years, who had resisted all other treatment, with the following draught given three times in the day :

R. Tinct. Belladon. ℥ j,
 Potass. brom. grs. x,
 Infus. digitalis. ℥ ij,
 Aquam ad. ℥ ss. M.
 Ft. haustus.

When the incontinence continues in the day as well as at night, strychnia should be combined with the sedative so as to give tone to the feeble sphincter. In these cases, too, cauterization of the neck of the bladder, with a strong solution of the nitrate of silver (℞ j. ℥ j. to the ounce of water), has been found successful.

APPARATUS FOR CHRONIC JOINT DISEASE.—BARWELL—Mr. B. in a clinical lecture now gives the preference over Taylor's, Sayre's, and Thomas', to the following apparatus for chronic joint diseases, the apparatus being modified for different joints. The method is one to which his attention was called by Dr. Von Wahl, Dorpat, but invented by Dr. Dumbrowski of that University. The knee-joint is taken as an example. To the knee above and below the joint poroplastic felt or leather is moulded by the hand or by bandage; while these are hardening the sound limb is placed with its posterior aspect on a piece of paper and a tracing is made of its inner and outer aspects. The circumference of the top of the thigh is taken in an oblique direction, *i. e.*, from the perineum to a point a little above the great trochanter. The splint-like moulds being removed, the instrument-maker bends two flat bars of steel or of iron, about three-fourths of an inch broad, to the shape of the tracings, only with a larger divergence at the knee and two to two and a half inches longer than the limb. These bars are to be rivited to the poroplastic felt or leather, which is provided with straps. The upper ends of the bars are made fast to a well padded ischio-iliac ring, provided in front with a hinge and flap. The lower ends are fastened by a pivot joint to a plate that underlies the sole. To put the appliance on, the leather or felt is to be

softened, the ischio-iliac ring opened; the limb being put in, the straps are buckled and the patient left at rest until the leather or felt has hardened. A high-heeled shoe is made for the sound foot and the patient allowed to go about; at first on crutches, afterwards without them. Motion can not take place at the joint, nor can the weight of the body fall upon it. The joint is at perfect rest and can be examined.—*Lancet*.

THE TREATMENT OF GASTRODYNIA.—The following instructive case is reported by Dr. John W. Martin, in the *Medical Press*.

Miss R., æt. 30, came under my care, October 3, 1884, suffering from pain in the stomach after meals, and the consequent dread of and loss of desire for food. When seen she looked quite worn and thin; complexion sallow; lips and gums anæmic; tongue whitish and lightly furred; bowels constipated. She felt a daily-increasing sense of weakness and inability to attend to her duties. Physical examination yielded negative results as regards the condition of the various organs. The case seemed one of dyspepsia consequent upon anæmia. The uterine functions were, with the exception of paleness of the menstrual discharge, normal.

I at first ordered bismuth, soda, and tr. nux vom. mixture with chloroform water; and calomel, colocynth, hyoscyamus pills to regulate the bowels. This giving no relief, I changed to pills of reduced iron and extract of nux vomica with meals, and as a laxative a mixture of sulph. mag. and mag carb., with peppermint water. Again no relief being experienced, I placed her upon the following prescription:

R. Sodæ bicarb., ℥ iss.
 Tr. nucis vom., ℥ xl.
 Liq. morph., ℥ j.
 Sp. am. aromat., ℥ iss.
 Syrupi zingib., ℥ j.
 Aquæ menth. pip. ad., ℥ viij.
 M. ℥ j. to be taken four times a day.

The relief was immediate, and so far has proved permanent. Pain is now rarely felt, and only after indiscretions as to food. Relish for her meals has returned. She is now taking the reduced iron and extract of nux vomica pills with meals, and finds decided benefit from them. The bowels are regular, the tongue clean, and her complexion and general appearance much improved.

I am inclined to think the small dose of opiate was just the one thing wanting in my previous treatment, to help the lame dog over the stile.

THE TREATMENT OF RINGWORM.—Dr. Smith, F.R.C.S., London, *Brit. Med. Journal*, says:—I have been trying for some time to find out what vehicle penetrates most deeply into the hair-follicles, and think it is chloroform. Chrysophanic

acid is a very good parasiticide; and, though it is insoluble in spirit and ether, yet it is soluble in chloroform. Chloroform also dissolves the fatty matter out of the hair-follicles, and thus allows the parasiticide dissolved in it to penetrate deeply. During the last year I have used a solution of seven grains of the acid to the ounce of chloroform to all cases of recent ringworm, and believe it is the most efficient treatment I have yet tried.

The small patches should be carefully marked out by cutting the hair very closely on them, and the chloroform solution should be well pressed and dabbed into the places with a minute sponge mop for five minutes, two or three times a day, according to the amount of irritation produced. The aim of the treatment is not to produce scabs, but to get the solution to penetrate deeply. The sponge-mop should not be much larger than a big pea, and should be continually dipped into the chloroform-bottle, as the solution soon evaporates while it is pressed into the diseased spot, and leaves the yellow acid dry on the place. Great care must be taken that the solution does not run on to the forehead or into the eyes, and that the person using it does not inhale the vapor. I always give full directions about the care necessary in using such a potent remedy, and only apply it to small places of the disease. It is well for the nurse to keep her face away from the sponge, and to use the chloroform in a current of air, and not in a small room. The places should be well washed every morning with hot water and soap, to remove any sebaceous matter or crusts, and the hair should be kept closely cut on them till new hair appears, which is generally in about two or three months; but the remedy should be continued till all diseased stumps have come out.

STRICT ANTISEPTIC SURGERY.—An interesting account as to how our German colleagues follow out the antiseptic treatment in operations and the dressing of wounds is found in the *Medical Press and Circular*. Before every operation the steam spray of corrosive sublimate is worked for some time to disinfect the atmosphere of the room. The floor of the operating-room is flooded with water, so that the assistants are compelled to wear rubber boots. During the operation a continuous stream of a solution of sublimate, 1-1000, is directed on the wound. In the dressing of the wound after the edges have been united, a layer of glass wool saturated with a ten-per-cent solution of sublimate is placed over it, over this small pillows of peat dipped in sublimate solution are placed, and over all this sublimated gauze. The dressings are never removed until the wound heals or some discharge shows through the dressings. The results gained by Schede, of Hamburg, in this manner are astonishing. Out of an immense number of operations performed in 1883, among which were nine

cases of resection of the hip-joint, there were only two or three cases that showed any sign whatever of suppuration.—*Louisville Med. News*.

CHARCOT'S JOINT DISEASE.—A very important discussion of this subject has recently occurred at the London Clinical Society. The names of the prominent men who participated in the debate are a sufficient assurance that the question was illuminated with the light of the best minds of the profession. The general tendency of the meeting was to consider the affection not as a distinct disease, but rather as a form of chronic rheumatic arthritis occurring in patients with locomotor ataxia. There was a disposition on the part of the surgeons present to regard the nervous theory of its production as rather an imaginative way of explaining a gross surgical condition. Professor Charcot was invited to be present at the discussion but was unable to attend.—*N. Y. Med. Journal*.

NITRO-GLYCERINE IN MITRAL LESIONS.—At the clinic, (*Col. and Clin. Record*) Prof. Bartholow gave nitro-glycerine to a patient with a mitral lesion causing pulmonic and renal congestion, albumenuria and general œdema. He thinks it the best thing we have for congestion of the kidneys, and valuable to take work off the heart, by lowering the tension. It does not interfere with nutrition, like digitalis. One drop of a one per cent. solution, slowly increased to flushing of the face, is the dose.

OBSTINATE CONSTIPATION.—The *Col. and Clin. Record* states that a woman presented herself at the clinic complaining of constipation consequent upon atony of the lower bowel. Often she had been six weeks without a passage, and at no time during the last year had she an evacuation under two weeks. Prof. DaCosta placed her upon the following treatment:

R	Magnes. sulph.,	ʒj
	Acid. sulph. dil.,	fʒij
	Ferri sulph.,	ʒj
	Aquæ,	Oij. M.

SIG.—A wineglassful ter die.

She was also given strychninæ sulph., gr. $\frac{1}{60}$, at meal times.

PASTE FOR COMEDONES.—Dr. A. Van Harlingen recommended at the last meeting of the American Dermatological Association the following formula for a paste for the removal of comedones (acne); it was first suggested by Unna: Glycerine, 3 parts; vinegar, 2 parts; kaolin, 4 parts.

The partnership heretofore existing under the firm name of Henry C. Lea's Son and Co., Publishers, has dissolved by limitation, and the business will be continued by Charles M. Lea, Christian C. Fenger, Arthur H. Lea and H. M. Barnes, under the name of Lea Brothers & Co.

THE CANADA LANCET.

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The LANCET has the largest circulation of any Medical Journal in Canada, comprising four-fifths of the entire Medical Profession.

THE TREATMENT OF WOUNDS.

When we consider how slight a wound may cause death, the importance of the subject which heads this article becomes at once apparent. If to this be added the great frequency of wounds, we have another cogent reason for regarding the subject as one of the first importance to every surgeon. Even in this Dominion it may safely be asserted that not a minute passes but some surgeon is at work on a wound, either accidental or surgical. It cannot therefore be wondered at that much has been said and written on the treatment of wounds, or that the subject has engaged the earnest attention of the best minds in the profession all along the line of surgical progress. Since the advent of the use of antiseptics, union by first intention has to such an extent become the rule, that any surgeon valuing his reputation is expected to offer some apology in case of failure. This certainly is a wonderful advance, and implies more, in the saving of time, pain and life, than we can have any conception of. Yet there is too much reason for the belief that, outside the great centres of population, the methods by which these humane ends are reached are comparatively neglected, and that still the old method of ligature, adhesive straps, and water dressing is in vogue. True, carbolic acid is used, and more attention is paid to cleanliness; still, in the main, modern improvements do not prevail to the extent that many imagine. The chief cause of this is not far to

seek. The antiseptic treatment of wounds, as practised by Lister and his followers, is too elaborate and complicated to commend itself to those who are but seldom called upon to treat any but trivial wounds, which, as a rule, do very well under a more simple treatment. This fact without doubt has been a source of discouragement, and has engendered a spirit of apathy, not to say antipathy, towards antiseptic treatment, as well as other improvements. Now, however, that Listerism in its entirety has been shown to be very little, if any, superior to a modification of it, so simple and inexpensive as to be within the reach and capacity of all, there can be no longer any excuse for holding to practices long since condemned by those best qualified to speak.

Comparatively few surgeons operate under the carbolic spray. Most of them deem it sufficient to observe the most scrupulous cleanliness, combined with careful disinfection of hands, instruments, etc., with carbolic acid or corrosive sublimate in solution. All wounds should be thoroughly sponged with a disinfectant before being closed. Mr. Bryant, the celebrated operator at Guys' Hospital, recommends sponging the raw surfaces with hot water, impregnated with sufficient tinc. iodine to give it the color of sherry. This is the antiseptic used by Mr. Garrard of Sheffield, and other well-known surgeons. This method is considered by many superior to the spray, since the heat has the power of sealing up the minute vessels by coagulation. This solution is also a valuable styptic in all operations where there is oozing from a great number of small vessels. The introduction of the cat-gut ligature, which is cut short and eventually absorbed, is a great advance in surgery, and should be employed wherever it can be relied upon. This is Lister's method of securing arteries. Bryant, on the other hand, uses torsion only, even in the case of large arteries. In writing to the *Lancet*, as far back as 1874, after six years' experience of twisting, he tells that in a case of amputation of the forearm where all bleeding was arrested by torsion, except the interosseous artery, which he ligatured with gut, secondary hemorrhage occurred on the sixth day; the flaps were opened, when the bleeding was seen to come from the vessel that had been tied. He adds: "This is the only case of secondary hemorrhage from a stump which has occurred to me since I began

the practice of torsion in 1868, and it is interesting to know that it came from an artery that had been ligatured, and that the ligature was carbolized gut. . . . We have now had at Guy's Hospital 200 cases of thigh, leg, arm and forearm amputations, in which all arteries have been twisted, 110 of these have been of the femoral artery, and no case of secondary hemorrhage." It is important to add that torsion still holds out at Guy's for all vessels up to the femoral. The vessel to be secured should be separated from its sheath, and "twisted till resistance is no longer felt." It is needless to add that torsion is practised by other eminent surgeons in all countries to the exclusion of the ligature.

The next important point is accurate coaptation of the edges of the wound. Without this, healing by first intention is impossible, no matter how well other details have been carried out. In amputations, especially, it is necessary to exercise deliberation in constructing the flaps, otherwise proper coaptation may be impossible. The wound being closed, it is covered with an elastic pad of absorbent cotton, which has been impregnated with some disinfectant, and secured by the light pressure of a bandage. A drainage tube should be inserted at the lowest angle, if suppuration is deemed inevitable from the nature of the case. A wound thus treated is almost certain to do well. The main points to be careful about are: cleanliness, disinfection, arrest of hemorrhage, accurate coaptation, and, finally, a light, *dry* dressing. All surgeons insist on the wound being kept dry, for the evident reason that moisture and heat are essential elements in decomposition. A wound properly dressed should not be disturbed for four days, unless absolutely necessary. Needless and meddling interference only serves to retard the healing process.

The admirable results obtained by this mode of treatment, or some modification of it, have in no small degree stimulated and emboldened the surgeons of the present day, and led them to exercise a freedom with joints, the abdomen, and the different organs, never before ventured, and that, too, with the most surprising success. While it belongs to the few to go to these astounding depths and heights, it is the duty and privilege of all who use the scalpel at all to avail themselves of approved methods, even if it be but to close a wound already made or amputate a finger.

POPULAR GULLIBILITY.

It would be natural to suppose that in this age of what is called the universal spread of knowledge, the public generally would be comparatively free from the possibility of being taken in by the ignorant charlatan. Such is, however, unfortunately by no means the case. On the contrary, this very spread of knowledge, by giving rise to new and sensational theories, seems to have a peculiar tendency to mystify and mislead.

We have been lately particularly impressed with this by recent popular expositions of the so-called science of phrenology. Phrenology, every intelligent person knows very well, if it step beyond its legitimate sphere, viz., the observation of the general configuration of the skull, and attempts to dogmatize from supposed protuberances—popularly known as bumps—is simply an absurd hoax. Yet we find persons who go about the country and earn a magnificent livelihood by publicly giving utterance to the most palpable falsehoods concerning these said bumps, and actually asserting that they are able, from them, to read character. For ourselves we see no difference between such men and the common fortune-telling gypsy. Nevertheless, it is impossible to take them to task; if the public are willing to pay their fifty cents to hear how "manhood is analysed and restored;" and five dollars to hear what line of life they should adopt, and what sort of wives and husbands they should marry, we are powerless to blame those who cater to such deplorable ignorance.

Yet there is a remedy. To us, as medical men, this is of no little import. Phrenology, as taught by the class of men to whom we have alluded, is closely allied to branches of learning which come under our special protection. It is our duty to discover means by which to eradicate, or even to make impossible, the spread of these erroneous opinions. There are various ways of doing this. But we must follow the example of these persons to this extent: our exposition of these degraded sciences must be made fully as interesting as theirs. And it is quite possible to do so—indeed, in the hands of a skilful lecturer the charlatan could be held up to merciless and ludicrous criticism. We are glad to see that the press has treated this subject properly. Let us not be behindhand in doing our best to trample down scientific falsehoods of every description.

TREATMENT OF SYPHILITIC LESIONS.

Dr. Seguin published an article in the October number of the "Archives of Medicine," on the use of iodide of potassium in large doses for the relief of the later lesions of syphilis, particularly of the nervous system. He dwells at length on the authorities regarding the dosage of the iodides. Dr. Seguin states—and states correctly, too—that text-books are generally silent on the use of iodides in extremely large doses. He also claims that the practice originated in America. Dr. William H. Van Buren was the first to give potassium iodide in very large doses, and as the results of experience showed its advantage it has been used by others in the same way. Drs. William H. Draper, R. W. Taylor, W. A. Hammond, and others have taught the use of iodide of potassium in large doses for many years, but as a rule it has not been so used until within a short time. All cases of syphilis do not require very heroic treatment. When there is no immediate danger, doses of from twenty to thirty grains three times a day may be given to commence with. In the meantime the effects can be watched, as a few individuals cannot tolerate large doses. In syphilitic manifestations of the nervous system, such as convulsions, hemiplegia, coma, etc., it should be given in the very largest doses at once. Dr. Seguin recommends it in such cases in doses varying from two-and-a-half to ten drachms in twenty-four hours; he gives it before meals, largely diluted. We are pleased with the forcible manner in which Dr. Seguin has drawn attention to this important matter of treating syphilis in the tertiary stage. We have had considerable experience with iodide of potassium in the treatment of syphilis, and have given large doses of the iodides, but have never pushed the remedy to the extent that Dr. Seguin advises. We have usually administered it after meals and not before, as advised by Dr. Seguin. We have never produced iodism to any extent, nor have we observed any gastro-intestinal irritation. In some cases the addition of small doses of mercury may be made with advantage in the treatment.

AN ENQUIRY COLUMN.

It may not be generally known that there is published in England a magazine called *Notes and*

Queries, a very large portion of which is devoted to questions sent in letter-form from subscribers and others on literary, historical, archæological, and other subjects, which are answered in the same form by other readers.

The London *Lancet* has for many years devoted several pages of small print to notes, short comments, and answers to correspondents. This space has been well patronized, which is the best evidence we could have of its value to the profession. Medicine above all other sciences is benefited by the free communication and interchange of ideas among its votaries, and the medical press could thus greatly advance the interests and increase the sum total of knowledge amongst the large body of medical practitioners and students. Apart from the questions discussed by medical societies, and apart from the subjects treated of in papers contributed to medical journals, there are continually cropping up isolated problems which, although in reality often of vast importance, yet cannot be brought within the scope of either of the methods above mentioned. These could be laid open for the consideration and judgment of the profession at large by such a plan as we have referred to, and which it is our intention to adopt. To the student of medicine and junior practitioner it would be a great boon. The junior members of the profession are constantly meeting with difficulties which they cannot solve. Yet many of these difficulties could be tersely discussed through the press by such members of the profession as have the time and the opportunities to devote themselves to lending their aid in increasing the knowledge of medicine besides attending to their regular professional duties. Diagnosis and treatment are not the sole end of the life of a medical practitioner, and this system of notes and queries would tend to extricate many of our medical men from the monotonous groove into which too many of them have fallen.

We invite readers to send us for our March issue a few queries, worded as briefly as possible, on which we shall hope to obtain comments and answers for the succeeding number.

PROFFSSIONAL ADVERTISING.

Those of our readers who are not in the habit of perusing English papers will be startled to hear

that the supposedly immaculate British physician has betaken himself to advertising. How hath the mighty fallen! Yet so it is. In the London *Times* of December 19th an "F.R.S." sets the ball rolling by describing how "Dr. Hughes Bennett, under whose care the patient was, guided by Ferrier's experiments, skilfully interpreted the palsies and convulsive movements which the man exhibited, and deduced from them that a small tumor was lodged at one particular point in his 'dome of thought,' and was silently and relentlessly eating its way into surrounding tissues, . . . Very brilliant diagnosis this." He goes on to tell in the same graphic and dramatic way how "Dr. Godlee, surgeon to University College Hospital," excised the said tumor.

This sets the whole profession agog apparently, for in a few days the editor of the *Times* is inundated with letters. Dr. "Charles Egerton Jennings, M.S., M.B., F.R.C.S., Eng.," tells how the Vivisection Act "has delayed his own experiments on two subjects, both of considerable importance as tending to save human life when in urgent peril," and proceeds to inform the public that "in 1883 he devised a plan" by which transfusion of blood could be performed without danger. "John H. Clarke, M.D.," also rushes into a criticism of "F.R.S." And so it goes on; and all this hung on the slender peg of a revival of the agitation against the obstacles to vivisection.

We on this side of the Atlantic cannot pretend to be without sin, in view of the highly sensational *items* that appear in our local papers from time to time, an even quite recently, yet if this goes much further we may feel sufficiently stainless to cast a stone or two.

MEDICAL STUDENTS ANNUAL DINNER.—The medical students of McGill Medical College, Montreal, held their annual dinner on the 4th of December. The members of the Faculty, University officials and a large number of distinguished guests were present. Delegates were also present from the medical schools of Toronto, Kingston, and Montreal. The speeches were appropriate and eloquent, the programme excellent, and the entertainment most successful.

The annual dinner of the medical students of the Kingston Medical College was held on the

11th of December, and was a most successful gathering. Representatives were present from the medical schools in Toronto and Montreal, besides a large number of graduates and friends of the college.

The second annual dinner of the students of the Medical College in Winnipeg, Man., was held on the 19th of December, and was a great success. Speech, song and sentiment were the order of the evening, and a very pleasant time was spent by all.

TREATMENT OF TUBERCULOSIS.—Our foreign exchanges have had a good deal to say recently regarding the treatment of phthisis. R. Shingleton Smith, M.D., London (*Brit. Med. Journal*), read a paper at the meeting of the International Medical Congress at Copenhagen, in which he strongly advocated the use of iodoform in tuberculosis. He commences with small doses—one to two grains every four or five hours—and gradually increases the quantity till four to six grains and even more are given.

PELLETIERINE IN TAPE WORM.—Dr. Wilfert of Cincinnati, has been experimenting with pelletierine in the treatment of tape worm, and reports the result in the *Lancet and Clinic*, Dec. 27th. This remedy is an alkaloid obtained from pomegranate. The dose is from four to fifteen grains, and should be combined with an ounce of tincture of jalap, or the latter administered a short time afterwards. The results in Dr. Wilfert's practice have been most encouraging.

GASTROTOMY FOR EXTRA-UTERINE PREGNANCY.—In the *LANCET* for January 3rd, 1885, will be found a report of two cases of gastrotomy for extra-uterine pregnancy by Dr. James Braithwaite, of Leeds. Both patients recovered. In each case the placenta was apparently attached to the abdominal walls, and was left to slough off and escape through the lower part of the abdominal incision. This was accomplished in about three weeks.

MALTINE LABORATORY BURNED DOWN.—The laboratory of the well known firm of Reed & Carnrick was recently completely destroyed by fire, involving a heavy loss to the owners. New buildings have been secured, and the machinery for the manufacture of maltine is being rapidly put up, so that they will soon be able to fill orders for their specialties as usual. Peptonized cod-liver oil and

milk, one of their later specialties, though not long before the profession, already occupies a prominent place among preparations of its kind. It contains 52 per cent. pure oil, and being peptonized in combination with the milk is easily assimilated. It is very palatable; the taste of the oil is well disguised, and it agrees, as a rule, with the most delicate stomach.

COCAINE IN LITHOTRITY AND RECTAL SUGERY.

—An operation for rapid lithotripsy was recently performed at St. Peter's Hospital, London, (*Lancet*) under muriate of cocaine, with perfect success, and entirely free from pain. The bladder was injected with half an ounce of a 4 per cent. solution of cocaine. Bettelheim, of Vienna, reports a case of enlargement of the prostate in a patient 74 years of age who complained much of rectal and vesical tenesmus. A suppository of cocoa butter containing half a grain of cocaine was introduced into the rectum at bed-time, and relief was obtained during the night and the following day. This was repeated when required and always afforded relief. This remedy is also used in the London Hospitals in the treatment of piles, fissure and fistula with excellent results.

ONTARIO MEDICAL COUNCIL.—We observe that some anonymous scribbler has written two or three letters to the Toronto press advocating the doing away with the Medical Council. It is not our custom to notice the effusions of anonymous contributors, and we shall not depart from a well established rule in this case, further than to say that we trust no member of the profession in Ontario will allow himself to be influenced by such erratic nonsense as appeared over the signature of M.C.P.S.O. The profession of Ontario will be very foolish if it ever allow the management of its own affairs to be handed over to the senate of any University however powerful or popular it may be for the time being. There is no prospect of more than a *quasi* or partial federation of the colleges at best, and even if it were an accomplished fact in the fullest sense, that is no reason why the profession of Ontario should, of its own action, yield up any of its privileges or delegate its most important functions to a non-professional body. We will never consent to that.

NEW REMEDY FOR CANCER.—Another new re-

medy for cancer has been recently investigated. It is a Brazilian plant named *alvexoz* belonging to the euphorbiacæ. It has been used in the hospitals in Brazil, it is said, with success in several cases. From the reports which so far have reached us, however, it appears to be of value only in the treatment of epithelioma.

MONTREAL CARNIVAL.—One of the most noticeable features of the Montreal Winter Carnival is the magnificent special "Carnival Numbers," issued by Montreal publishers. Messrs. Dougall & Son, of the Montreal *Witness*, have issued an excellent number, teeming with illustrations, and having a gigantic four-page picture—"Storming of the Ice Castle by Night"—designed by Mr. R. Harris, A.R.C.A. Besides this there are full page pictures by Messrs. Bird, Raphael, Walker, and other Canadian artists, and the number also contains the Carnival Poem, appropriately illustrated, for which a prize of \$100 has been paid, and a special Supplement representing the various athletic clubs and their leading men. The letterpress pages have been tastefully prepared, and contain a very large number of engravings, representing various phases of our Canadian winter sports. The price is ten cents per copy, postpaid.

EXCISION OF A TUMOR OF THE BRAIN.—The sequel of the case of excision of brain tumor reported in our last number has unfortunately terminated in the death of the patient. Hernia cerebri supervened, but the cause of death was meningitis which extended to the base of the brain. The brain was otherwise practically normal.

APPOINTMENTS.—Dr. H. V. Ogden (McGill), has been appointed Prof. of Materia Medica in the Milwaukee Medical College, Wisconsin.

The following gentlemen have been appointed commissioners under the Liquor License Act: Drs. J. S. Sprague, of Stirling, and J. S. Loomis, of Madoc, Ont., for the Co. Hastings; Dr. A. Rockwell, for Hastings, W., and Dr. A. McLean, for Lambton, W.,

ARSENIC IN TUBERCULOUS DISEASE OF JOINTS.—Arsenic in the form of Fowler's solution is highly recommended for tuberculous disease of the joints, especially when the disease is of long standing and the patient debilitated by suppuration. It is given in combination with cod-liver oil.

REMOVAL.—S. F. Wilson, M. A., M. D., C. M. (McGill), has removed from Berwick to Sussex, where he has become associated in partnership with Hon. Dr. Vail. Dr. Wilson leaves a host of friends at Berwick to regret his departure from their midst.

Dr. Darling, Prof. of Anatomy in the University of New York, died on the 25th of December, '84, at the advanced age of 82 years.

The death of Dr. Mahomed, at the early age of 35 years, is announced in our British exchanges.

Prof. Jaeger, of Vienna, the celebrated oculist died recently at the age of 77 years.

We regret to notice the sudden death of Mrs. G. O'Reilly, relict of the late Dr. O'Reilly, Hamilton. Three of her sons are members of the medical profession, Dr. Charles O'Reilly, Medical Supt. Toronto General Hospital, Dr. Gerald O'Reilly, Fergus, Ont., and Dr. Ed. O'Reilly, *S.S. Peruvian*.

BROMIDE OF ARSENIC IN PIMPLES.—It is stated on the authority of Dr. Piffard of New York, that bromide of arsenic is a cure for pimples. The dose is one to two minims of a one per cent. solution three times a day.

BRANTFORD HOSPITAL.—The "Stratford" Hospital, Brantford, will be formally opened by the Lieut.-Governor on the 10th inst. The Governors for 1885 are J. H. Stratford, Dr. Digby, Mayor Scarfe, Dr. Harris and Ald. Heyd.

BRITISH DIPLOMAS.—It affords us much pleasure to state that Dr. R. J. B. Howard, son of Dr. R. P. Howard, of Montreal, has recently obtained the F.R.C.S., Eng.

CHANGE OF ADDRESS.—The manufacturers of the Tucker Truss have removed from 123 Church Street to 274 Yonge, E. A. Smith's late address. See advt.

The Queen has appointed Prescott Hewitt, Bart., F.R.S., Sergeant-Surgeon in ordinary in place of the late Mr. Hawkins.

Dr. Sullivan, of Kingston, has been made a life senator of the Dominion of Canada. We congratulate our worthy confrère upon his appointment.

CORONER.—Dr. J. O. McGregor, of Waterdown, has been appointed Coroner for the Co. Wentworth.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY FOR JANUARY, 1885. New York: D. Appleton & Company. Fifty cents a number, \$5 a year.

The January number of "The Popular Science Monthly" teems with thoughtful and practical articles. The first is "A Glance at the Jury System," by C. H. Stephens, who makes the defects of the system very evident, and shows that it was not established as a bulwark of popular liberty. In "Agnostic Metaphysics," by Frederic Harrison, "Last Words about Agnosticism," by Herbert Spencer, the religious discussion by these able thinkers may be said to be closed, for Mr. Spencer states that he shall say no more. "Influences determining Sex" by Prof. W. K. Brooks gives the results of a curious scientific research. The story of Tyndal's student-life, told by himself, under the title "My Schools and Schoomasters," will be eagerly read. "Studying Germany," by Horace M. Kennedy, contains valuable information for American students. J. H. Pooley, M.D., describes that curious affection, "Bloody Sweat"; W. M. Williams writes on "Condiments" and "The Cookery of Wine"; and "Protective Mimicry in Marine Life," by Dr. W. Breitenbach; "The Advantages of Limited Museums," O. W. Collet; "The Architecture of Town-Houses," by R. W. Edis F.S.A.; and "Mountain Observatories," are all valuable articles. The subject of the portrait and sketch is that eminent chemist Sir Henry Roscoe.

DISEASES OF WOMEN, by H. MacNaughton Jones, M. D., F. R. C. S. I. & E. New York: W. Wood & Co. Toronto: Williamson & Co.

Those who desire to obtain, at a minimum cost of time and money, a better acquaintance than the present educational facilities of this country present to the aspirants for gynæcological celebrity, will find in this work of Dr. Jones, conveyed in clear and plain terms, if not all that the modern infinitude of female diseases may seem to demand, yet perhaps sufficient to serve their more pressing needs, not only in the line of positive instruction, but also in that which is not less useful to the ambitious neophyte,—salutary admonition. To the admirers of the gynæcological *armamentarium* the 180 well executed plates contained in the book, must give it an attractive prestige, whilst to the

budding specialist they may prove profitably deterrent, until his finances may enable him to procure a more complete gynæcological equipment.

HENKE'S ATLAS OF SURGICAL ANATOMY—A SERIES OF PLATES ILLUSTRATING THE APPLICATION OF ANATOMY TO MEDICINE AND SURGERY— Translated by H. A. Rochester, M.D., Lecturer on Pathological Anatomy, Miami Medical College, Cincinnati: A. E. Welde & Co., 1884.

This fine volume reflects credit on the enterprise of the publishers. It contains eighty-one plates, which have been executed with rare skill. These plates may be regarded as a supplement to any text-book of anatomy or any atlas of descriptive anatomy, filling the niche which they have left vacant. They will be valuable to students and practitioners. To the former as a means of fixing in their minds the lessons learned in dissection: to the latter accurate pictures are presented of the connections and relations of the viscera, as well as of the appearance of parts, just as they are exposed by the surgeon during operations. The price at which it is offered is very low (\$10). This work ought to command a large sale.

ADAMS' HISTORICAL CHART; with Maps of the World's Great Empires. New York:—Colby & Co., 5 Union Square.

The object of Adams' Chart is to picture history, and to so arrange and tabulate the subjects of history that men, events, and nations, may be located in time by being seen in their positions on the charts as the school atlas locates places. To accomplish this, the chart is divided by perpendicular lines into the 59 centuries and their decades, and colored lines passing from left to right represent different nations, change of rulership being indicated by change of color. The rise, progress, and fall of nations are prominent features in the chart. The plan is so simple that children can readily understand it, and so comprehensive that it is in itself an historical cyclopædia for the mature scholar. An explanatory key accompanies the chart. It is published in three forms, on rollers, portfolio, and book form. Price from \$10 to \$15.

THE MONTREAL DAILY STAR.—Carnival number, 1885. Montreal: Graham & Co. Price, 15cts.

This is a highly creditable production, and is in great demand. It contains besides choice reading matter, beautiful colored plates of the variou

carnival scenes both real and imaginary; the allegorical representation of the carnival; the skating carnival representing the various costumes worn; the "Tandem Club" turn out; the ice lion, and the ice condora; representative ancient and modern houses in Montreal; tobogganing slides; the ice palace; the politicians at the carnival; storming the ice palace; snow shoe club, etc. etc. It is one of the best productions of its kind ever printed in Canada, and reflects no small credit upon the publishers.

THE LONDON MEDICAL STUDENT, AND OTHER COMICALITIES, selected and compiled by Hugo Erichsen, M.D., author of *Medical Rhymes*. Published by Dr. H. Erichsen, 11 Farmer St., Detroit, Mich. Price, \$2.00.

This interesting compilation is admirably adapted to instruct and amuse the busy practitioner in his leisure moments, or while waiting on the sometimes slow process of nature in the lying-in room. The *London Student* was originally published in *Punch* half a century ago, and the authorship was variously assigned to Hood, Dickens, Thackeray, Mark Lemon and Douglas Jerrold. It is a very amusing satire on medical student life in those days. A number of amusing anecdotes chiefly of a medical character complete the volume.

MANUAL OF ORGANIC MATERIA MEDICA, for the use of Students, Druggists, Pharmacists, and Physicians, by J. M. Maisch, Phar. and Prof. of *Materia Medica* in the Philadelphia College of Pharmacy. Second edition, with 240 illustrations. Philadelphia: Lea, Bros. & Co. Toronto: Williamson & Co.

The author is well known as the joint author of the *National Dispensatory*, and the work may be regarded as a companion to the *Dispensatory*. It is adapted for the use of students as an aid in systematic instruction, filling a position which could not be done by the larger work. The author gives in a concise form the *essential* physical, histological, and chemical characters of organic drugs. The classification, which is according to the origin of the drug, is the author's, and while he is "conscious of its imperfections believes it to be convenient and capable of practical application."

MICRO-ORGANISMS AND DISEASES, by E. Klein, M.D., F.R.S., New York: McMillan & Co. Toronto: Williamson & Co.

This is a valuable little work which must prove

very useful to those who desire to acquire an introductory knowledge of the important subjects treated of in it. The work is a small octavo of 191 pages, in small but neat type. It contains no less than 108 illustrative plates, which must materially aid the reader in his study of this interesting and useful department of modern medicine.

THE BASIC PATHOLOGY AND SPECIFIC TREATMENT OF DIPHTHERIA, TYPHOID, ZYMOTIC, SEPTIC, SCORBUTIC AND PUTRESCENT DISEASES generally, by George I. Ziegler, M.D. Philadelphia, G. I. Ziegler. Toronto: Williamson & Co. Price, \$2.00.

This work contains a general summary of the basic pathology and specific treatment of the above diseases from the author's point of view, viz: the pathogenic factor, ammonia engendered from within or introduced from without the economy. The work is very interesting and will well repay a careful perusal.

ELEMENTS OF PRACTICAL MEDICINE by Alfred H. Carter, M.D. New York: D. Appleton & Co. Toronto: Williamson & Co.

It is only necessary to mention in evidence of the high appreciation of this work by students preparing for final examination that within a comparatively short time a third edition has been called for. The work is compact and comprehensive, and will be useful as an aid, and convenient for reference, to students in attendance on lectures or clinics.

HOLDEN'S ANATOMY.—A Manual of Dissection of the Human Body, by Luther Holden, late President of the Royal College of Surgeons, England, etc. Fifth edition. Edited by John Langdon, Lecturer on Anatomy at St. Bartholomew's Hospital, etc. With over two hundred illustrations. Philadelphia: P. Blakiston, Son & Co. 1885. Toronto: Willing & Co.

This excellent work on practical Anatomy has many points of special merit to commend it as a manual of dissection. The descriptive part is concise and accurate, the relative situation of parts is made clear, and many valuable practical suggestions are thrown out here and there as to diseases and injuries which are liable to occur in the part under consideration. A number of new diagrams and illustrations are introduced in the present edition, and more space is given to the consideration of the anatomy of the nervous system.

THE PHYSICIAN'S POCKET DAY-BOOK, by C. Henri Leonard, M.A., M.D., Detroit, Mich., 1885.

This will be found a most admirably arranged companion to the practitioner. It differs from most of its kind in having no other matter except the daily record of business, obstetrical memoranda and miscellaneous accounts.

DRUGS AND MEDICINES OF NORTH AMERICA. A Quarterly Journal devoted to the botany, pharmacy, and therapeutics of the medical plants of this Continent. Cincinnati: J. & C. Lloyd.

We have received the first and second numbers of this interesting and practical Quarterly. The work is an entirely new venture, and has a wide field of usefulness before it.

TEXT-BOOK ON HYGIENE by Dr. George H. Rohé, Professor of Hygiene, College of Physicians and Surgeons, Baltimore. Toronto: Hart & Co.

The above work is an admirable compendium of Sanitary Science and well adapted for students.

MANUAL OF BANDAGING by C. Henri Leonard. Second Edition. Revised and Enlarged. Published by Illustrated Medical Journal Co., Detroit.

RELATION OF ANIMAL DISEASES TO THE PUBLIC HEALTH, and their Prevention, by Frank S. Billings, D.V.S. New York: D. Appleton & Co. Toronto: Hart & Co.

CONSUMPTION, its Nature, Causes, Prevention and Cure, by J. M. W. Kitchen, M.D., Assistant Physician to the Bellevue Hospital. New York: G. P. Putnam's Sons. Toronto: Hart & Co.

Births, Marriages and Deaths.

On the 23rd of December, 1874, Dr. J. W. Sparrow, of Teeterville, Ont., aged 45 years.

On the 20th December, 1884, Dr. J. McDowell, of Shawville, Que., aged 35 years.

On the 4th ult., at Port Arthur, Dr. Lorne C. Campbell, aged 35 years.

On the 13th ult., Dr. O. T. Heartwell, of Dunnville, Ont., aged 36 years.

**** The charge for Notices of Births, Deaths and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*