

dull heavy aching in the back. She was very restless and sleepless. The pains were described as shooting or darting up and down the limb; the feet were especially painful and there was a feeling as though hot sand were applied to the soles. On examination, there was no special atrophy though there was perhaps some loss of power in the legs. She was able to stand with the eyes open but with them closed she would immediately pitch forward. The knee reflexes were completely abolished. There was impaired tactile and temperature sense in the lower extremities. At this examination I detected a diffuse macular and papular eruption pretty generally distributed over the entire body and which up to that time had not attracted the attention of the attending physician. The eruption also was present upon the palms of the hands. Suspecting the specific nature of the eruption I immediately questioned the husband who admitted that about ten months before he had been infected, but after six months treatment his physician had advised him to marry and he had done so.

"To my mind, there was no question that the specific infection was directly responsible for the acute ataxia in which I found the patient. An examination of the genital organs did not reveal any primary sore. I saw the patient on one or two occasions after this visit and learned subsequently from her physician that under free use of the iodids with mercurial inunction, the pains rapidly disappeared and the patient made a quick recovery. Within three or four weeks she was going about attending to her ordinary household duties. It would be interesting if at this time I could see and examine the patient, but unfortunately I do not know where she is. It is the earliest case that has ever come under my observation."

I greatly regret the lack of accurate data in Dr. Moyer's exceedingly interesting case. The absence of subsequent history is especially to be regretted. Such incompleteness of detail is so frequently unavoidable that many of our most valuable clinical experiences are sadly marred. Despite the lack of certain details, however, there is no doubt as to the accuracy of the diagnosis of Dr. Moyer's case.

It has not been my fortune to observe cases of early brain syphilis with mental symptoms as the predominant element. A number of such cases are on record. Most of these cases have been collected by an eminent Fellow of this Academy, Dr. J. G. Kiernan's paper being a brief yet comprehensive survey of the literature of the subject of early syphilitic psychoses. I take the liberty of quoting his references and cases in full.⁴

(To be continued.)

NEW INSTRUMENTS.

AN IMPROVED INSTRUMENT FOR DRAINING THE ABDOMINAL CAVITY AFTER LAVAGE IN ABDOMINAL SECTION.

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Every ovariologist who has had any considerable degree of experience has some time felt the need of an efficient means by which the abdominal cavity could be conveniently and completely drained of fluid after washing out, so as to avoid the necessity of inserting a drainage tube for this purpose in completing an operation. "Always drain when you wash out," has long been an accepted maxim with many ovariologists, and the fact that those conditions which require washing out are very generally such as render the drainage tube an absolute necessity, or at any rate a wise precaution against the extension of septic processes or a comforting assurance in relation to

internal hemorrhage, will enable the drainage tube to hold its place in abdominal surgery, notwithstanding the cry raised against it by those who happen to have the good fortune to score a long succession of recoveries without its use. Now and then, however, a case is encountered in which one hesitates to incur the risks of the drainage tube, balancing on the one hand the danger which may be incurred if the drainage tube is omitted and, on the other hand, the possible danger of hernia from difficulty to secure immediate union when a drainage tube has been *in situ* for twenty-four or forty-eight hours; of wound infection through the difficulty of maintaining absolute asepsis in the care of the drainage tube; of possible intestinal fistula from pressure of the inner end of the tube against some portion of the intestinal canal, the nutritive supply of which has been weakened by the breaking up of long existing adhesions. The fact that in cases in which washing out is required, more or less unusual risk is necessarily involved by reason of the grave character of the case, renders important the employment of every possible means of lessening the risk of any unfortunate complications which can possibly arise subsequent to the operation. There are, certainly, several classes of cases in which if the surgeon could feel absolutely sure that every drop of fluid had been removed from the abdominal cavity, he would feel much happier to leave the case with the abdomen completely closed than with the most approved form of aseptic drainage tube in position. There are three classes of these cases:

1. Those in which the abdominal cavity has been washed out in consequence of a sudden rupture during the operation, of a thin-walled cyst, allowing the escape of colloid matter, which in itself is not toxic but is capable of furnishing a favorable nidus for the development of air germs, more or less of which must always find entrance to the abdominal cavity during the operation in spite of the most careful aseptic precautions, and which are sure to develop and form their characteristic toxins if fluid remains behind in the abdominal cavity. It is true that often in such cases nature ultimately triumphs by absorbing the fluid, ptomaines and all, thus starving out the mischievous microbes, but the lowered vital resistance of the patient who has undergone a complicated and prolonged surgical operation sometimes prevents this happy conclusion of the matter.

2. Cases of ascites due to fibroids of the uterus, papillomata of the uterus or appendages, or peritoneum, tuberculosis of the peritoneum or fibroid of the ovary. This ascitic fluid, while innocuous so far as toxemia is concerned, before the opening of the abdominal cavity, after air germs have been admitted, so encourages the growth of microbes that local or general peritonitis may easily result, so that washing out is frequently justifiable, especially where there has been any escape of blood into the peritoneal cavity, resulting in general soiling of the intestines.

3. In cases in which through the rupture of a pus sac, or some similar source of infection, deep portions of the peritoneal cavity have been soiled, notwithstanding the walling off of the intestines and greater portion of the intestinal cavity by sponges or napkins. Every operator knows how readily such soiling may occur through the rupture of a firmly adherent pus tube, or a suppurating ovary, notwithstanding the most careful and dextrous manipulation in freeing the diseased parts from the surrounding tissues.

⁴ Medical Standard.

There are, perhaps, still other cases in which if the operator could feel that the peritoneal cavity had been thoroughly cleansed and was entirely free from fluid, he would leave his operating room or surgical ward in a much more contented state of mind than after introducing a drainage tube, with the knowledge which the experienced surgeon appreciates much better than the tyro, that eternal vigilance in watching the drainage tube is the price of even a moderate safety from the dangers which its use involves.

After this perhaps somewhat lengthy introduction, I desire to present a new device, by which, in cer-



tain cases at least, it is believed that the necessity for the use of the drainage tube may be obviated. The device illustrated in the accompanying engraving consists of a metal tube about one centimeter in diameter, the lower end of which is inclosed in a cage, which not only guards the tube laterally, but by extending a little beyond the lower end of the tube also protects its lower extremity. The advantage of this construction will be readily appreciated. The diameter of the cage is about one inch. It thus creates a sort of well about the tube, in which the fluid may collect. The circumference of the well is seven centimeters, as compared with three and one-half centimeters for the tube. The length of the tube is eight centimeters. We thus have a drainage area of fifty-six centimeters, whereas in the use of an ordinary wash-out tube there is often no drainage area at all created in consequence of the intestine, omentum, or other loose tissue being drawn up against the end of the tube by the suction of the siphon or the evacuating syringe. At best, the whole drainage surface of the tube without the cage can scarcely be reckoned as more than three-fourths of a square centimeter. The protection of the lower end of the tube by the cage prevents obstruction, so that the fluid accumulates about the end of the tube, from the surrounding tissues. By introducing the instrument to the various parts of the abdominal cavity, and especially to the most dependent places, the whole peritoneal cavity may be quickly and perfectly drained.

I have tested this instrument in a number of cases and find it admirably suited for the purpose for which it was designed. In a recent case it proved very useful, indeed, serving a new purpose by which it became more useful than I had anticipated. The case was one in which I had removed a very large malignant kidney by the lumbar method. I found it necessary to extend the opening anteriorly to enable me to get the mass out. The tissues were so friable that just at the last moment, notwithstanding careful manipulation, a portion of the malignant growth gave way under pressure of the fingers, and a sudden gush of blood occurred which left present a great number of clots packed away in each of the little pockets which had been formed by the numerous nodules of the tumor. The weakness of the patient rendered necessary the completion of the case at the earliest possible moment. Recalling my caged

tube, I thrust it into the cavity at once, and while the stream of water was flowing, carried it around to every part of the wound, and was surprised at the facility with which I was able to do this which was due, I am sure, to the large surface presented by the cage, which prevents its entanglement with surrounding tissue. I was also able to pass it freely everywhere without fear that the end would be thrust through the thin septum which intervened between the cavity from which the kidney was removed and the peritoneal and pleural cavities. After the wound had been sufficiently washed, I simply separated the tube from the fountain and dropped the end into a vessel upon the floor when the powerful suction of the siphon thus produced quickly emptied the whole cavity, drawing out through the tube such small clots as had not been previously lifted out by the force of the inflowing stream, and when I removed the tube I was pleased to find that the enormous cavity, which was nearly large enough to receive a man's head, had been completely obliterated, its walls being drawn up around the cage, in following the water as it receded. Examination showed that the cavity was entirely free from clots, and it was only necessary to tuck in a strip of iodoform gauze, close the wound, and rapidly introduce a few sutures to complete the operation.

In conclusion, it is but just that I should state that the idea of this instrument was suggested to me by Dr. Eastman's well, which accomplishes much the same thing, although somewhat less convenient in use. I must also thank Wm. H. Armstrong & Co., of Indianapolis, for the pains they have taken to construct the instrument according to the plans I have given them.

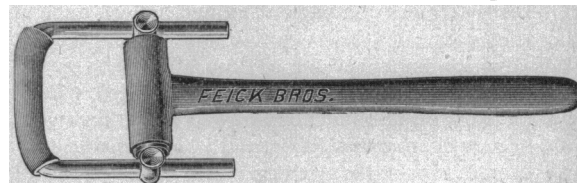
A NEW CLUB FOOT WRENCH.

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In the treatment of the various forms of talipes even after tenotomy of the tendo-Achilles, or the plantar fascia of other muscles and ligaments, or as individual case may require, great force is required to break up the adhesion between the tarsal bones.

The bones which have been in abnormal position for years are bound together by dense adhesions, and have new articulating facets in abnormal position.



These distorted relationships must be disturbed. The hand of the average surgeon is not sufficiently powerful to bring the foot to a normal position. It may be necessary to even fracture the bones to overcome the deformity and when it is found necessary to do so it should be done, for by the time treatment is completed the fracture will have had ample time to unite.

The "T. T." or "Thomas Twister" as introduced in this country by Dr. Ridlon is not entirely satisfactory as a club foot wrench. Phelps machine is all powerful but it is quite complicated; expensive and cum-