tion, placing the patient as if for an examination by the speculum.

Second. Charge the battery, arrange the galvanometer and put in proper position the abdominal clay muff, and arrange the current wires.

Third. Introduce into the uterine cavity slowly and progressively the electrode previously singed and disinfected. Isolate entirely the vagina and vulva.

Fourth. Cauterize the uterine cavity thoroughly and positively in all hæmorrhagic cases, and less thoroughly in other cases.

The predominating principle in all movements is never to surprise the uterus or to make a too painful application, for it is well understood that there are irritable uteri, though of a very limited number (say from three to five per cent.) as for instance in hysterical persons, who can scarcely bear any current, however weak it may be. Such patients can receive treatment only in a very mild form. Use the current at first very slowly. Pause before extreme sensibility has been reached, in order to accustom the patient to it, and to overcome all physical and moral resistance.

After two or three applications the intensity must be increased, in most cases reaching from 100 to 150, and, if required, even 200 milliamperes. The intensity must at first be proportioned and regulated according to the patient's power of endurance; afterwards by the extent and gravity of the lesion and the time it has existed. The duration of the application, which varies from five to ten minutes must, like the intensity, be graduated according to what is expected to be accomplished. Applications should be made every week, and every second day if required; and the physician should regulate their number and frequency by the urgency of the case. A rest of at least several hours should be required of all patients who have been operated upon. This rest is necessary for the safety as well as the efficacy of the method.

Vaginal antiseptic injections of carbolic acid should be prescribed which the patient should use morning and evening. This simple and harmless treatment, truly hysterometric, is only a galvano-chemical scraping, acid or basic, according to cases; it induces a formation of new mucous membrane, and forms a kind of intra-uterine exudation, the action of which can be prolonged and varied at will. Its beneficial effect, which I have verified in a great number of instances, does not fail to make itself felt from the first, increasing rapidly and soon restoring the patient to health. It does not condemn the woman to a forced repose, and calls for no additional treatment.

LAPAROTOMY FOR HYDROSALPINX.¹

BY F. B. HARRINGTON, M.D.

MRS. A. B., thirty-six years of age. Married about one year, had never been pregnant. She had always been well except for slight dysmenorrhœa until she was thirty years old, when she first noticed a watery discharge coming from the vagina. This discharge, the patient thought, was connected with the menstrual flow, either immediately preceding, following or accompanying it. The amount of watery discharge was at first small, but gradually increased until on one

occasion during a period of three weeks she was obliged to use one hundred and sixty-five napkins. These napkins were used until the water began to drip from them. The amount discharged was large, although it was impossible to measure it. The amount of blood lost during menstruation, was usually small, the period not lasting more than three or four days. The watery discharges never disappeared for a longer interval than five weeks. The discharges had no odor and did not stain nor stiffen the clothing on drying. It frequently came unexpectedly, with a rush, drenching the patient. Toward the close of the discharge, it sometimes became slightly urinous in odor.

The patient was nervous, worn-out and anæmic; with a systolic hæmic murmur at the base of the heart. The urine was normal. She had, of late, severe pelvic pains on the left side, which were augmented during the discharge.

The uterus showed left lateral displacement with slight anteversion. The cervix was soft, short and thick. The body of the uterus was slightly enlarged and the cavity measured three and one-quarter inches. At the right of the uterus could be felt a fluctuating tumor, somewhat movable, filling the right side of the pelvis and pushing the uterus into the left side. Between the tumor and the abdominal wall could be felt an elongated tumor, irregular in outline, extending transversely across the pelvis toward the body of the uterus. On the left side a somewhat similar mass could be felt. The diagnosis was hydros tubæ with a cyst probably connecting with the right tube and discharging into the uterus.

The prognosis was not favorable to recovery from the disease unless the tumors were removed. The patient gladly took the risk of an operation, for she preferred to die to the misery of her condition. On opening the abdominal cavity the right Fallopian tube was found distended to a circumference of two and three-fourths inches, connecting the uterus with an ovoid cyst three and one-half inches in the longest diameter. At the side of the cyst was another somewhat larger. Both of these cysts were covered by peritoneum. No ovary could be seen on this side.

The Fallopian tube on the left side was also dilated and at its outer extremity was the left ovary, so closely attached that they could not be separated. On this side were adhesions, old and new, to the sigmoid flexure of the colon. These masses were removed.

Examination of the tumors after removal showed those on the right of the uterus to have been made up of a cyst of the broad ligament, about three inches in diameter, and a cyst somewhat smaller resulting from the dilatation of the fimbriated extremity of the right tube. This latter cyst was connected with the remainder of the tube by a small circular opening with thickened edges. The uterine end of the tube was much less dilated than the middle portion, but the walls were greatly hypertrophied. Below the middle of the tube was a small red mass which was probably the remains of the right ovary. The left ovary and tube were intimately adherent. The former contained a number of small cysts.

Dr. Whitney, in a report of the specimens said: "The Fallopian tubes left with me show the result of chronic inflammation with retention of the secretion. The fluid which came from the left tube contained fatty degenerated epithelial cells. As to the relation of the larger cyst to the right tube, I am inclined to think

¹ Read before the Obstetrical Society of Boston, February 12, 1887.

that it is wholly tubal, the valve-like opening being merely a connection between the dilated and twisted tube; at any rate the lining is identical in both parts. The thin-walled cyst is probably one of the broad ligament, since the peritoneum covers it."

The patient soon after coming under the ether had a collapse, stopped breathing, and did not rally until she had been inverted.

The operation was completed and the patient was put to bed in fair condition, although the pulse was weak. She took nourishment and stimulants well, and there was no vomiting or pain. The temperature, however, remained slightly subnormal until the third day, when it rose to 100°. The pulse rose to 120. She was given and retained large quantities of stimulants, but she gradually became weaker and died on the third day. The loss of blood had been small, and there were no signs of septicæmia. The cause of death was collapse.

The normal secretion of the Fallopian tubes is slight and finds its way not into the uterus but into the abdominal cavity, where, being innocuous, it is absorbed and does no harm. [Schroeder.]

Closure of the uterine end, therefore, does not produce hydrops tubæ. When the peritoneal end of the tubes is closed, it allows a collection to take place and a hydrop results. Usually both ends of the tube are closed. When the uterine end of the tube is open and the distension of the tube is great, there may be periodical discharges of the fluid into the uterus; this has been called Hydrops Tubæ Profluens. The amount of distension of the tubes which is possible, is very great. Peaslee tapped one case and withdrew twenty pounds of fluid. Usually the greatest distension occurs at the peritoneal end of the tube.

The cause of the closure of the fimbriated extremity is either cicatricial ulceration or inflammation from within or from without the tube. The growth of a tumor may also be the cause of the closure. Often the extremity becomes attached to an ovarian tumor, and later on, this tumor may connect with the cavity of the tube.

The inflammatory causes are usually a general or local peritonitis or endometritis which extends into tubes.

Beside the above, there are certain cases of congenital closure of the tubes. Occlusion may take place anywhere along the tube or at several places, and a number of individual cysts may result.

In the majority of cases hydrops is a bilateral disease. It seems to the reader not unreasonable to suppose that some of the cases of hydrorrhœa gravidarum and also of hydrorrhœa non-gravidarum may be due to distended Fallopian tubes which force their contents into the uterus and vagina.

Concerning the diagnosis of hydrops tubæ, it may be said that the dilated tube has usually a sausage shape with irregular outlines, extending transversely across the pelvis. The tumor usually moves freely and distinctly from the uterus. If the distension is very great it may be impossible to distinguish it from other cystic tumors of that region. The contents may vary from a thin clear albuminous serum to a thick whitish fluid. To distinguish from a pyosalpinx the clinical history of the patient must be considered.

Pyosalpinx is usually accompanied by signs of sup-puration; pain, tenderness, fever and exhaustion.

Many, it might be said most, cases of hydrosalpinx

do not call for interference. They exist and are unknown to the patient, and their existence is not a source of great danger. They sometimes cause troublesome displacement of the uterus. Local treatment is of little use. Tapping frequently fails and is not without danger. The feeling of the writer is that, where interference is necessary, extirpation is called for both in pyo- and in hydrosalpinx.

RECENT PROGRESS IN CARE OF THE INSANE.¹

BY WALTER CHANNING, M.D.

EXPERIENCE WITH PATIENTS IN DETACHED BUILDINGS.

UNDER this heading Dr. Dewey gives some results of the Kankakee experiment. He says they have had three detached wards with one hundred patients, in use for six years; six such wards with two hundred patients, in use for four years; and for eighteen months eighteen buildings in use with an average of over eleven hundred patients in them, though not full until June, 1886.

The expenses have not been any greater "than those of similar institutions on the 'linear' plan, nor the care of the patients presenting any greater complications. . . . And as far as the welfare of the patients occupying these buildings is concerned, their condition has been in some buildings peculiarly happy and comfortable, and in none of them have any greater discomforts and inconveniences been noticeable, than the same class of patients would encounter under any circumstances. The amount of help required averages relatively about the same as in an average congregate asylum."

One very interesting feature of these detached buildings, is a large dining-room for four hundred male patients. These patients are the able-bodied and inoffensive class, and a large number of demented, more or less destructive and untidy, and all of them have to travel two hundred and fifty feet in the open air in all weathers to reach the dining-room. The latter arrangement is almost, or quite unique in insane hospitals.

The disadvantage of this plan is the difficulty of supervision of such a large number, especially when the weather is bad, and when the days are short and breakfast and supper are gone to in darkness.

The advantages, however, outweigh the disadvantages. The patients show a gain in health, and the attendants are obliged to look more carefully after their clothing, than would otherwise be the case. The food is also received in much better order than in ordinary ward dining-rooms.

The per capita cost of the Kankakee institution has been much less than that of most of the linear hospitals.

As a further example of the widespread tendency to provide separate buildings for different classes of the insane, the Michigan Asylum for the Insane may be mentioned.² The trustees, in their last report, state that the main asylum building is crowded, and they clearly show that simple, inexpensive buildings can be erected for a large number of the patients, in which, under proper medical supervision, they can be made comfortable, beside receiving such treatment medically as may be necessary.

¹ Concluded from page 354.

² Biennial Report, 1885-86. Trustees' Report.