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THE NEW FIELD IN ABDOMINAL HYS-
TERECTOMY FOR FIBROIDS.*

BY JAMES F. W. ROSS,

Lecturer on Abdominal Surgery, University of Toronto; Gynecologist Toronto General Hospital and St. John's Hospital for Women; Fellow American Association of Obstetricians and Gynecologists.

In the September number of the *American Journal of Obstetrics* I gave some of my views regarding the old and unsurgical operation of supra-vaginal amputation of the uterus for fibroids. From that I will quote:

"The great difficulty before us in the abdominal hysterectomy of to-day is the separation of the extra-abdominal pedicle. After many years the extra-peritoneal pedicle of ovariectomy was replaced by the intraperitoneal pedicle, the one now generally adopted. But two facts preclude the possibility of such a treatment for myomata, namely, the impossibility of controlling hemorrhage by ligating the stump, and the danger of necrosis of the pedicle on the proximal side of the ligature when the pedicle is formed of myomatous tissue. This hemorrhage occurs with the extra-peritoneal wire clamp; this necrosis also occurs with the extra-peritoneal wire clamp. We must, therefore, give up all ideas of any new treatment in this direction; one line alone remains: A return to and an improvement of the old ' Freund ' operation."

These were my words at the meeting of the Huron Medical Association in July, 1891. I then demonstrated, on a model made of an inflated and covered rubber bag, my ideas in the direction of a new operation. Convinced that in suitable cases the vaginal wall shutting off abdomen from vagina could be readily and safely tied with little danger of hemorrhage, I began to think out the best method. To experiment on the cadaver would be unsatisfactory for two reasons: First, the loss of natural elasticity and pliability of the parts; and secondly, the want of a tumor. The operation then outlined read as follows:

"The operator begins by personally disinfecting the vagina with a $\frac{1}{3000}$ solution of bichloride of mercury, so strong that it coagulates the albumen of the superficial epithelial cells. He provides himself with a long thread of strong and tried silk, well boiled, threaded in the eye of a sharp-pointed, blunt-edged perineum needle. This needle must be very firm and stiff, and only slightly curved, and should have a longer handle than usual. He should have practised the stitch on a piece of chamois leather previously, so that he can, without hesitation and without bungling, run a chain suture.

"The operation is now performed in the usual way by tying off the broad ligaments, putting on the temporary rope clamp, removing the tumor, placing a pedicle pin in situ, and adjusting the wire clamp. The rope clamp is then removed and the pedicle rapidly trimmed down to the limit of safety. The assistant can now

*Read in abstract before the Southern Surgical and Gynecological Association at Richmond, Va., Nov. 11th, 1891.

readily control what is left of the uterus, and can draw upon it and bring the cul de sac of Douglas well in view, or hold it upward and backward and bring the utero-vesical pouch well in view, or draw it to either side to enable the operator to outline the ureters on the opposite side. Now, there is tissue lying close around the cervix, separating the vaginal cavity from the abdominal cavity, that can be readily compressed by hand-tied ligatures, tissue that is not œdematous, and therefore not likely to shrink. The perineum needle can now be accurately carried up from the vagina along and close to the clamp steadied pedicle, to emerge just below the wire of the clamp into the abdomen. One end, the short one, of the thread is now drawn out far enough to leave a good tying end, and the needle, still on the thread, is withdrawn and again lost sight of in the vagina, to reappear one-half inch further to the right. The thread in the groove (whether the front groove or back groove of the needle) occupied by the short end at the last puncture, and now corresponding to the short end, is withdrawn in a loop long enough to leave two good tying ends of equal length, when the loop is cut and the needle is again sunk into the vagina, only to reappear as before. In this manner the whole cervix is surrounded by a chain suture exactly similar to the one I applied to the broad ligament in case 1. This chain suture cannot wound the ureters if made to hug closely the uterine tissue until it emerges just below the wire clamp. The tying loops are now all in the abdomen, the compressing loops in the vagina. These can be interlocked and tied rapidly. With a scalpel inserted close to the wire of the clamp, the cervix can readily be removed. This incision should follow the track of the clamp, and should slope downward and inward toward the known position of the vaginal and cervical junction. During this procedure, the bowels must be kept either up in the abdomen or on the abdomen by large flat warm sponges. . . . The peritoneal edges from between which the cervix has just been cut should be held together with two or three stitches, the vagina packed with iodoform gauze, the abdomen closed, and the wound dressed in the usual way."

After publishing this article my attention was drawn to a very interesting paper by Eastman,

of Indianapolis, on this subject. Eastman's operation was performed by using a vaginal staff, on which he cut as one cuts on a staff in lithotomy. The operation described by him I will relate.

He placed on a temporary rubber ligature and cut away the tumor. "Having been careful to apply the elastic ligature, the bulk of the tumor above the ligatures was then cut away so as to leave sufficient peritoneum to cover the enormous wound. I then opened the capsule of the tumor. Applying the forceps to arrest hemorrhage, I enucleated the nodular masses from beneath the ligature, which, contracting as I removed each mass, unpuckered the outer layers (mostly composed of hypertrophied uterine fibre) like a purse string. My staff was then passed into the vagina to a position behind the cervix uteri and below the elastic ligature. Then cutting upon the groove of the staff I began ligating and cutting; as the staff had located the cervix I was enabled to extirpate it without interference with the ureters. A considerable portion of the anterior wall of the body of the uterus was left as it was, in such close contact with the bladder that its removal was deemed inadvisable. As the ovaries and tubes were much diseased, I tied them off. The ligatures, twenty-five in number, were left eight inches in length and twisted into one cord. A pair of forceps was then passed into the vagina, and ligatures grasped and drawn out of the vulva. A glass drainage tube was then inserted per vaginam into the wound, and for three days frequently washed out, to secure a perfect outflow of blood and serum. Abdominal wound closed at once."

He had four recoveries.

Abstract of remarks made by invitation of the Chairman after the reading of the paper of Dr. Stone:

I must thank you for the great honor you have done me, and, as time presses, I will be brief. If I fail to make myself understood, it will be because time presses. I am one of those who care not whether an operation be that of Smith or Jones, or any one else. I do not claim the credit for this operation. Others have been independently thinking along the same line. They have come to the conclusion that a new method is called for, and that to popular-

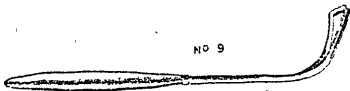
ize hysterectomy and save suffering women we must bring the mortality down. Electricity and other useless fads have had their day. Tait's operation is, in some cases, a failure. I recorded my method, as given above, and then found that Eastman had already carried out a method very similar.

Having determined to carry out a combination of my own and Eastman's ideas, I had a staff made similar to his, and as nearly like it



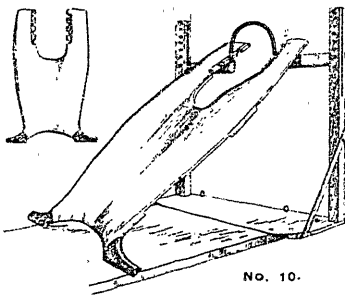
Proposed Needle.

as I could, taking my ideas from a cut of the instrument. I modified its end curve and made it as you see it, straight across the top. I provided myself with stout ligature silk, and plenty of it; and with two differently curved Hagedorn needles (owing to their large eyes), and with a very stout, well-curved needle.



Eastman's Staff, modified.

On November 3rd, 1891, I performed the operation. Having heard the benefits of Trendelenburg's position, I asked my friend, Dr. O'Reilly, the mechanical genius and medical superintendent of our Toronto General Hospital, if he could devise some aseptic, readily-applied apparatus to accomplish the purpose. I have



O'Reilly's device for Trendelenburg's position.

much pleasure in showing you drawings I have had prepared of this readily-made apparatus. It is not necessary for me to describe it—the drawings speak for themselves. We can readily modify it by making it of hardwood and with hinges for purposes of ready transportation.

We require three improvements on modern abdominal hysterectomy :

1. A position like that of Trendelenburg's, to keep the bowels up and out of the way.
2. An absence of the dirty pedicle, held up like a torch over a powder magazine.
3. A method by which œdematous tissue will not be tied and left covered up in the abdomen to bleed one, two, five, or six days after operation.

With Trendelenburg's position and the abdomino-vaginal hysterectomy about to be described, these indications are all met. I have carried out the procedure with success, and intend to follow up this success. I have done a number of the unsurgical hysterectomies of the past, but never had less anxiety or such a rapid convalescence as in this case.

The girl, though suffering from heart disease and bronchial catarrh for the first few days, had none of that typhoid appearance so common in the second week, *the sloughing week*, after the extra-abdominal pedicle method. One hears such glowing accounts of the extra-abdominal methods that one wonders if his patients are sicker than those of operator A. or B. With all the antiseptic powders, lotions, gauzes, and salves that the chemist can produce, an œdematous pedicle will slough; and a sloughing pocket will be left between the recti muscles to granulate by a slow process, and all the time it is a menace to the dirt-abhorring peritoneum.

The patient had been previously operated upon; but after one ovary had been removed and it was found to be impossible to remove the other, the abdomen was closed. She came under my care, suffering very great pain from the imprisoned ovary, and was incapacitated from work. She had also an obscure heart murmur, and on this account ether was the anæsthetic used. For twenty-four hours previous to the operation the vagina was packed with iodoform gauze, after having been well douched with $\frac{1}{1000}$ solution of bichloride of mercury. The bowels were well emptied by a purgative and an enema on the morning of the operation. The abdomen was prepared and the external genitals well scrubbed with soap and water.

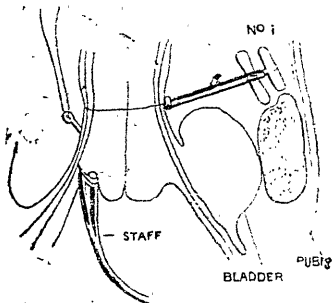
After anæsthesia the patient was placed in Trendelenburg's position; without, however, using all of the apparatus described above.

Such high elevation was not required. A good free incision was made, large enough to permit of the removal of a tumor of the size of a man's head.

I made these sketches on board the train. They are poor, but will no doubt give you some idea of the steps of the operation.

Her tumor has increased more rapidly since the former operation, and she has had spasmodic pains, like labor pains. On opening the abdomen, adhesions to the descending colon and small intestine on the left side were present. They were extremely dense, and could not be peeled off without tearing the bowel. I ligated with fine silk, and cut away in pieces the outermost layer of the capsule, thus avoiding any injury to the bowel. This separation of adhesions occupied much time. The omentum was tied off in three sections where adherent to the tumor.

During this proceeding the tumor was out of the abdomen, having been raised out by the corkscrew. The broad ligaments were tied up close to the tumor, and forceps put on the tumor side and the ligaments cut between ligatures and forceps. When cutting the third broad ligament section, on the right side, a large vein was wounded and flooded the field of operation in an instant. I hurriedly slipped on the rope clamp and soon controlled the refractory vessel. The tumor was rapidly amputated, and the hysterectomy pins passed through the pedicle in the usual way and the wire clamp of Koeberle adjusted. The rope clamp was then taken out

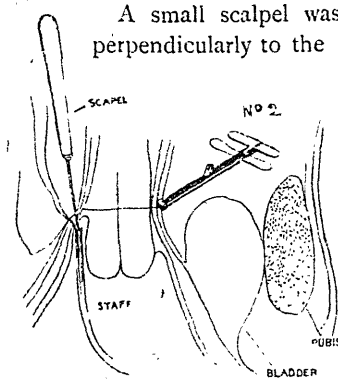


Staff in Vagina; first stitch being passed.

of the way, as it was too clumsy and bulky. The hysterectomy pins were also in the way and were removed, and the pedicle was left simply constricted by the wire clamp. It could now be readily controlled, raised from the abdomen and lowered again at will.

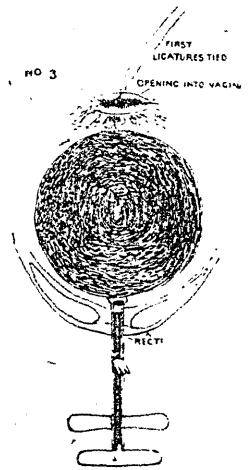
The staff was now introduced into the tho-

roughly disinfected vagina and held up well behind the cervix. The curved Hagedorn needle was now carried down on to the staff and brought up again into the abdomen so that its thread encircled the tissues of the posterior cul de sac or the pouch of Douglas, lying between vagina and abdomen. This ligature was a stout one, and was very firmly tied.

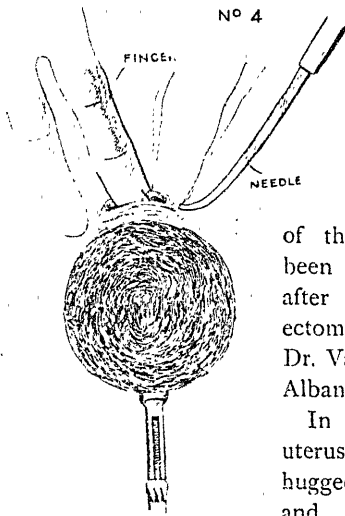


Stitch tied and scalpel inserted on the staff.

A small scalpel was now inserted perpendicularly to the staff, and a cut made equal in extent to the tissue tied, and the index finger of the left hand was immediately thrust through the opening into the vagina. A firm perineum needle, threaded with stout silk, was now entered about one-half inch away from the left angle of the wound, and, guided by the finger tip above mentioned, was made to emerge from the wound in the posterior cul de sac into the abdominal cavity, when the thread was grasped and the needle withdrawn. This was tied, and a further incision made in the *inter abdomino-vaginal* tissues. The needle was again inserted one-half inch further away from the outer angle of the abdomino-vaginal incision and passed out through the incision as before. The ligature was again tightly tied, and another incision made with the small scalpel to correspond to the amount of tissue ligated. The needle was passed close below the wire of the clamp, which thus acted as a guide, and the knife was inclined downwards and inwards, so as to shave off a little of the outer vaginal surface of the portio vaginalis. This, I believe, to be of value for æsthetic



Opening now left into Vagina from above.



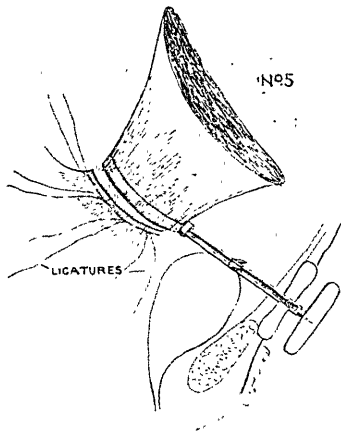
Needle being passed on finger in Vagina with second Ligature.

purposes—so as to leave an almost complete vagina for copulation.

Contraction of the vagina has been complained of after vaginal hysterectomy, so my friend, Dr. Vander Veer, of Albany, tells me.

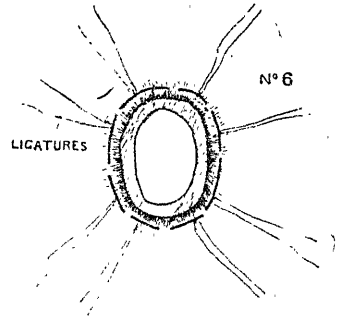
In this way, the uterus was closely hugged; the ureters and bladder were left unharmed. Two nodules were enucleated below the clamp on the right side. The cervix was thus encircled by about seven or eight ligatures; and when the last one was

ated below the clamp on the right side. The cervix was thus encircled by about seven or eight ligatures; and when the last one was



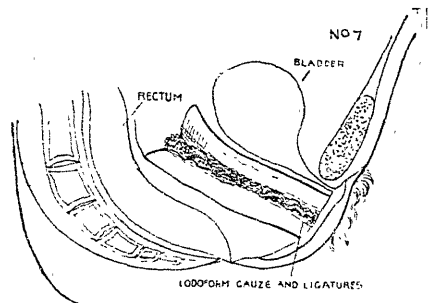
tied, the circle around the cervix at the apex of the vagina was completed. The opening into the vagina would barely admit the tip of my left index finger. The staff was of course removed after the first incision into the cul de sac of Douglas. A pair of vaginal hysterectomy forceps was now passed up from below the ligatures, were grasped at their single long ends (the other having been cut close to the knot), and with a piece of twisted rope made of iodoform gauze were drawn down into the vagina. The gauze was drawn down further

until firmly imbedded with the stitches, and the surplus was cut off on the abdominal side close to the opening into the vaginal fundus. The vagina was packed with another piece of gauze, and in it the suture ends were hurriedly wrapped. An iodoform gauze pad was applied over the external genitals. Owing to the persistence of hemorrhage from pelvic adhesions, I packed the abdomen with iodoform gauze; and after tying



Looking down after removal of Uterus.

up the abdominal sutures, I put on a compress of several folded towels over the wound dressing of Gamgee's pads, and drew the abdominal roller tightly over these.



After Ligatures have been drawn into Vagina.

Pulse and temperature record :

9.30 a.m.,	before operation,	temp.	98½	pulse	80	resp.	20
1.30 p.m.,	after	"	97½	"	80	"	24
4.30	" (feels chilly)	"	100½	"	88	"	32
6.40	"	"	102½	"	100	"	34
9.00	" (pain in back)	"	101½	"	104	"	32

The respirations were increased owing to the bronchial inflammation due to that horrible ether. Her cough became troublesome, but I would not allow the administration of any opiate. Inhalations of tinc. benzoin co., with belladonna and chloroform, were ordered. The

temperature ran such a course as one would have with a severe bronchial catarrh, $100\frac{2}{3}^{\circ}$ to 101° for five days—morning and evening being about the same. She expectorated large quantities of phlegm. Stitches were removed on the sixth day. The iodoform gauze was taken from the abdominal cavity in twenty-four hours, and the untied stitch was tied. The rope of gauze going from the vaginal apex was left until bowel adhesions could form over the abdomino-vaginal hole and become firm enough to prevent a hernial protrusion. This was taken out on the eighth day.

The ligatures hanging in the vagina were re-encircled with fresh iodoform gauze every five or six days until about the third week. All have come away by a little gentle traction. No vaginal douche was allowed. The abdominal wound healed by first intention without a drop of pus, and nothing came from the vagina but a little whitish discharge that looked like leucorrhœal mucus.

This girl was very anæmic and suffers from a heart lesion, and yet she has made a good recovery. Bad adhesions prolonged an operation never before carried out by the operator, and the patient thus sustained greater shock. The operation lasted about one and one-half hours. One-half of the time was consumed in ligating and controlling intestinal, omental, and pelvic adhesions. The right ovary was jammed down in the pelvis, and its removal without complete removal of the tumor would have been impossible.

I would like shortly to summarize the steps of the operation:

1. Abdominal incision.
2. Extra-abdominal delivery of tumor.
3. Tying of broad ligaments.
4. Application of rope or wire clamp.
5. Removal of tumor supra-vaginally.
6. Substitution of wire for rope clamp.
7. Passage of staff.
8. Ligation of posterior cul de sac.
9. Incision of posterior cul de sac on staff.
10. Insertion of finger in abdomino-vaginal wound from abdominal side.
11. Removal of staff.
12. Passage of ligatures.
13. Invagination of ligatures with gauze.
14. Cutting off gauze level on abdominal side.

15. Packing vagina with gauze and applying external genital pad.

16. Closure of abdomen.

My thanks are heartily given to my friend, Dr. Temple, who ably assisted me; to Dr. O'Reilly, who supervised matters; and to Dr. Third, who took subsequent charge of the patient. My friend, Dr. Baines, and the house staff, as well as a number of students, were present.

This operation will fill a want. Cases come under our notice in which ovaries and tubes have been removed, and yet they do badly. I received a letter, December 2, 1891, from the husband of a patient whose ovaries and tubes I removed for fibroid tumor in April, 1890.

He writes: "I am sorry to tell you, doctor, she has been very ill indeed; she is sick every two weeks now, and it is something fearful the way she suffers. I write to ask if you can do anything for her. She is willing to go through an operation or anything to get short of her pain. I am afraid she will be dropping off in some of those attacks."

I intend to remove her uterus. It is too large to remove per vaginam, and has not grown large enough to allow of the formation of an extra-abdominal pedicle; but I am sure that I can readily take it away by the method just described, and with much greater rapidity.

I once heard a New York surgeon say that he was sure the removal of the uterine fundus was the bugbear to be avoided—that it was the great producer of the shock of hysterectomies. I heard another surgeon say that the removal of the vaginal portion of the cervix increased the shock. What nonsense! It is the want of rapid aseptic surgery that produces the shock.

The operation is only recommended to those thoroughly familiar with the subject of hysterectomy; and deaths occurring in the hands of others have no right to a place among statistics of the operation.

DR. GEORGE A. B. ADY, of St. John, N.B., has been appointed superintendent of the St. John General Hospital, in the place of Dr. F. G. Esson, who has resigned in order to take the position of Resident Interne in the Eye and Ear Infirmary of New York.

A CASE OF BRONCHO-PNEUMONIA IN AN INFANT TREATED BY COLD BATHS.*

BY DR. A. F. M'KENZIE.

In broncho-pneumonia high fever is generally marked, and most authorities are agreed as to the necessity of reducing it when excessively high. Fever can be reduced with certainty, and in infants with very little trouble, by the cold bath. Popular prejudice, however, is so great that they are not so frequently employed as they should be.

In the following case cold baths were used with great apparent benefit and no perceptible injury: On Oct. 3rd I was hurriedly called to see Eva H., aged sixteen months, of German parentage. The mother did not speak very intelligible English, but from what she told me I judged that the child had had a convulsion. She was lying in a semi-unconscious condition, temperature 103.5°, respiration 50 to 60. On auscultation mucous rales could be heard. These symptoms, together with a history of a previous cough, led me to believe that the child was about to have catarrhal pneumonia, and the subsequent history confirmed my diagnosis. Although the child recovered from the unconscious condition, the other symptoms did not improve, and in a few days well-marked consolidation could be detected in the posterior part of the right lung, and subsequently in the lower part of the left lung. The chest was enveloped with hot linseed poultices, and an alkaline febrifuge mixture given, together with as much nourishing food as could be retained. As frequently happens in these cases, vomiting and diarrhoea were troublesome and demanded special treatment.

The child's condition gradually grew worse, and on the morning of the tenth day the case appeared hopeless. The respirations were sixty to the minute, and accompanied at each inspiration by recession of the soft parts of the chest. Consolidation in the right lung appeared to be limited to a patch at the angle of the scapula, the size of an orange, and at least the lower half of the left lung was solidified. Constant spasmodic twitchings of the

extremities, particularly on the left side, were present, and there seemed to be some motor paralysis on this side. The child appeared unconscious, allowing itself to be handled and examined with the peculiar indifference generally present in severe catarrhal pneumonia. A well-marked tache cérébrale could be developed. The head was slightly retracted, and the eyes appeared to be blind to light and the motion of objects in front of them; the pupils were equal, and responded slowly to the light; no squint; rectal temp. 105.8°. These nervous symptoms, together with the fact that consumption had occurred in the family of the father, led me to fear that I was dealing with a case of acute tuberculosis affecting the meninges of the brain as well as the lungs, and had the child died I would have concluded that such was the case. To me the only hope for the child's recovery, and that a slight one, was energetic lowering of the temperature.

The child was stripped, given a teaspoonful of brandy, which it had been taking in smaller doses, and put into a small bath-tub full of water, about 80° F. The water appeared to give the child some shock at first, but the spasmodic twitchings speedily grew less and the respirations fell from 60 to 40. When the rectal temperature had dropped a couple of degrees, the child was removed, dried, given another dose of brandy, and dressed, its chest being enveloped in cotton wadding. About five minutes after removal from the bath, the rectal temperature dropped still further; in all, four degrees. The child then fell into a natural sleep and rested very well for about three hours, when the muscular twitchings and other symptoms appeared to get as bad as before. On my return in the evening the rectal temperature was 105.5°. The bath was repeated, the water used being 80°, as tested by an ordinary household thermometer. The temperature was again reduced some 3.5°, and with the same apparently good effects. These baths were repeated morning and evening for four days—seven baths in all being given. After the thirteenth day of the illness the baths were not repeated, as the temperature did not rise over 103°. Occasionally, however, if the twitchings appeared to get worse, the parents placed a cloth, wrung out of cold water, over the lower part of the chest and abdomen. This was done at the sugges-

*Reported at Toronto Medical Society.

tion of the father of the child and with my approval, and appeared to have a soothing effect. From the commencement of the cold baths the child gradually improved; the muscular twitchings became less severe and finally subsided; respirations less frequent, consciousness returned, and the consolidation slowly disappeared. At this date, Nov. 25th, the child is quite well.

Although other means of treatment were not neglected, such as careful attention to feeding, stimulants, and such drugs as quinine, ammon. carb., bismuth, etc., yet the immediate effects of the cold baths were so beneficial, as shown by the lowering of the temperature and the mitigation of the nervous and other symptoms, that I cannot but believe that they were the main factor in turning the balance in favor of recovery.

In the use of the cold bath, it is well to remember that the rectal temperature continues to fall for a short time after the child is removed from it. If this is not borne in mind, there is danger of reducing the temperature too much and causing collapse.

Some writers recommend that the temperature of the baths be 70° F. In the above case the baths used were 80°. A few times the baths were 90° to commence with, and gradually lowered to 80°. The duration of the baths was from ten to fifteen minutes. Stimulants were given before and after, and friction of the limbs was used while the child remained in the water.

DEER PARK SANATORIUM, TORONTO.—This institution has been opened recently as a private retreat for the subjects of inebriety or narcomania. The building for the purpose has a beautiful situation in Deer Park, North Toronto, and is surrounded by a lovely bit of park ground. The rooms are bright, cheerful, and well furnished. The number of unfortunates who are afflicted with such forms of mania are large, and can certainly be best treated in institutions of this sort. This sanatorium has been built and equipped by a number of charitable men, nearly all laymen, who are prompted more by a desire to assist this class of sufferers than any hope of great pecuniary profit.

IRRIGATING TUBE.

The glass tube I am about to describe was made for me by Mr. J. Stevens, Toronto. It is specially designed for use in the puerperal period in any condition which requires the uterine cavity to be washed out.

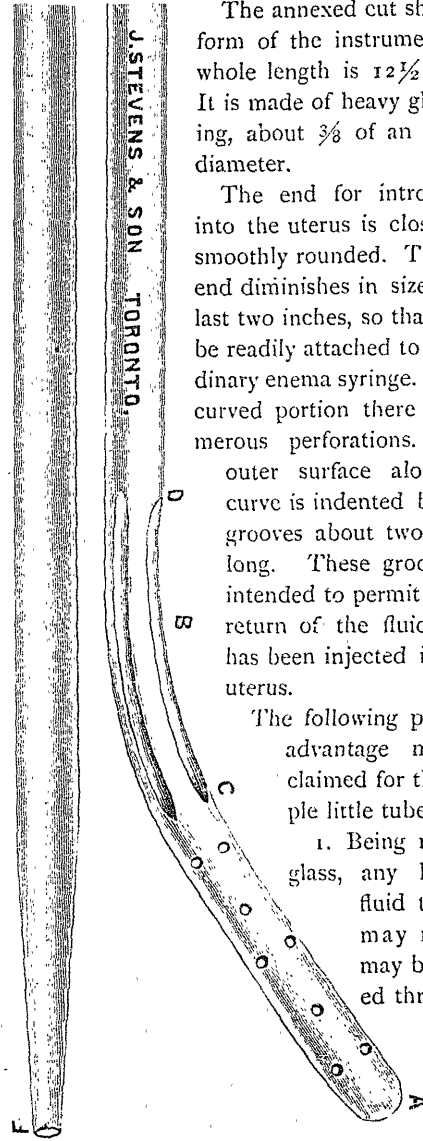
The annexed cut shows the form of the instrument. Its whole length is 12½ inches. It is made of heavy glass tubing, about ⅜ of an inch in diameter.

The end for introduction into the uterus is closed and smoothly rounded. The other end diminishes in size in the last two inches, so that it can be readily attached to any ordinary enema syringe. In the curved portion there are numerous perforations. The outer surface along the curve is indented by three grooves about two inches long. These grooves are intended to permit the free return of the fluid which has been injected into the uterus.

The following points of advantage may be claimed for this simple little tube:

1. Being made of glass, any kind of fluid the case may require may be injected through it.
2. After use it can easily be made perfectly aseptic.
3. Its form makes it easy to introduce.
4. Being perfectly smooth and somewhat large, it cannot inflict any injury on the uterine mucous membrane.

It has one disadvantage. It is very easily broken in carriage, but it can be replaced at a



small cost. It ought not to break during use in the hands of any physician who is competent to administer an intra-uterine douche.

ANGUS MACKINNON.

Guelph, Dec. 1st, 1891.

Selections.

THE GYNECOLOGICAL USES OF ARISTOL, ICHTHYOL, IODIZED PHENOL, RESORCIN, CREOLIN, AND CHLORIDE OF ZINC.—C. D. Palmer (*Cincinnati Lancet-Clinic*, October 3, 1891) has found *aristol* superior to iodol and iodoform. It is unirritating, non-absorbable, and has no toxic effect. It possesses stimulating, alterative, and anaesthetic properties. He uses it in pure form as a powder, applied by insufflation. In narrow passages it may be used by suppositories. It becomes an admirable dry dressing for some cases of chronic vaginitis, vulvar pruritus, cervical endometritis, cervical erosions and fissures, mammary fissures, and syphilis, primary and secondary. *Aristol* gauze can be made by impregnating plain gauze with an ethereal solution of *aristol*, containing from one to two grammes of *aristol* per yard. Crayons for the urethra or uterus can be prepared by using at least one gramme mixed with a sufficient quantity of gelatine or gum acacia. *Ichthyol* appears to favor the healing processes, mitigating pain and favoring the absorption of inflammatory exudates. Palmer has utilized *ichthyol* in three ways—giving it internally, applying it externally and topically to diseased structures. His experience has so far been rather favorable, but not sufficient to justify an enthusiastic expression. At present there is no topical medicament within the whole range of medical preparations, excepting Churchill's tincture, which he finds himself employing more frequently for chronic morbid conditions of the endometrium, with or without special functional disorders, than *iodized phenol*. He employs it by ingestion and injection, without or following curetting. The drug is antiseptic, alterative, astringent, mildly caustic, and hemostatic. *Resorcin* has proved to be an admirable remedy, combined with boracic acid and white vaseline, or incorporated with the ointment of the oxide of zinc as a salve, to be applied to certain skin

diseases of the external generative organs, and to foul-smelling, indolent ulcerations in the puerperal as well as gynecological conditions. *Creolin* is an efficient germicide, and in some respects more powerful than carbolic acid, more destructive to the micro-organisms of various diseases, and of suppuration. It is less toxic than carbolic acid, but it is not entirely devoid of toxicity. *Chloride of zinc* is valuable for vaginal and endometrial morbid conditions. All malignant diseases of the uterus, for any cause, rendering partial or complete hysterectomy unjustifiable, are signally improved in general health, given a prolonged life, and materially bettered in all local symptoms by a thorough application of the zinc chloride, after sharp curetting. He has employed intra-uterine tampons, saturated with a solution (from 25 to 50 per cent. strong), or crayons, equally strong, a protection of the vaginal mucous membrane being maintained at the same time.—*University Medical Magazine*.

THREE CASES OF RUPTURE OF THE UTERUS, ONE OF WHICH WAS SUCCESSFULLY TREATED BY LAPAROTOMY.—Underhill (*Edin. Med. Jour.*) reports three cases of rupture of the uterus, in two of which the child was delivered through the rent, death following in both cases. In the third case laparotomy was done and the patient recovered. The following is a short abstract of the third of these cases: G. P.—, æt. 28, was admitted into the Maternity for her third confinement. The cord was found to be prolapsed, and a hand was felt lying by the side of the head. Both the cord and hand were pushed up, but the former came down again about an hour later, and was found to be no longer pulsating. Stronger pains came on about six hours later, and during one of these she said she felt something give way inside her. When seen by Underhill, no presenting part could be felt. No pain was complained of, and she was not markedly collapsed. On introducing the hand into the vagina, a large tear in the body and cervix of the uterus was made out. The body of the uterus was firmly contracted and lying in the right iliac fossa, and the foetus and placenta were among the intestines. An incision was made in the middle line of the abdomen, reaching from the umbilicus to one inch above the

pubes. The placenta was removed first, and then the fœtus was seized by the feet and taken out. A quantity of blood was found in the peritoneal cavity. The uterus was drawn out and removed according to the method recommended by Lawson Tait. As the India rubber tube could not be fixed low enough to include the whole of the tear, the edges of the lower part were brought together by four catgut sutures. The peritoneal cavity was carefully cleaned by douching with hot water and thorough sponging. The abdominal wound was sewed up with silk sutures, and the stump dressed with sulphate of iron. The patient made a good recovery. The stump came away on the ninth day, leaving a deep hole, which subsequently filled up.—*Med. Chronicle.*

BLOOD-LETTING IN URÆMIC CONVULSIONS.—

Dr. Samuel Wilks, veteran physician at Guy's Hospital, is reminiscent, in a recent *Lancet*, of the good old days of blood-letting. He remembers seeing too many interesting persons snatched by this agency from the brink of the grave to be unmindful of its claims, and he attempts to find excuses for the present day and generation in its neglect of phlebotomy. Of his success with the lancet he writes the following: "A young woman was brought into the hospital in a dying state, gasping for breath, and livid; there was a mitral bruit, engorgement of the lung with hæmoptysis, albuminous scanty urine, and dropsy. We bled her from the arm and the effect was immediate, the breathing became tranquil, lividity passed from the face, and improvement continued from that time. In cases of *uræmic convulsions* the effects of bleeding are very striking; the right heart is relieved, and poisoned blood is removed from the system. One case of this kind, indelibly fixed in my memory, is that of a dressmaker, who, I believe, is still alive. I was asked a few years ago to see this patient, who had been in convulsions all night. I found a middle-aged woman in constant convulsive movements, froth issuing from her mouth, quite comatose, and almost pulseless. The whole body was livid and the extremities cold. The doctor said she was dying, and allowed me therefore to bleed her. I took away a small wash hand basin of blood, and, while yet flowing, the lividity passed

off, the convulsions ceased, the body gradually became warmer. Her life was as clearly saved by the bleeding *as if I had dragged her drowning out of the water*, and this is more than I can say of drugs." With this are other instances of the same tenor.—*Jour. Amer. Med. Association.*

THE Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS
OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, DECEMBER 16, 1891.

TORONTO GENERAL HOSPITAL. TRAINING SCHOOL FOR NURSES.

This admirable training school has now been in existence two years, and we are glad to know its valuable work has been and is now very highly appreciated. In the first year there were sixteen, and during the last year there were sixty-two nurses receiving instruction. At the recent examination the nurses are said to have acquitted themselves admirably, and the distribution of the medals and certificates to the successful candidates took place in the theatre of the hospital under favorable auspices, November 7th, when a large number were present, including citizens, hospital authorities, and members of staff.

Miss Snively, the capable lady superintendent, in her report thus spoke of the aims and objects of the school :

"The training-school system has a threefold object in view. Its primary and greatest aim is the improvement of the nursing service in the hospital, so that the poor of our community, who would otherwise find it beyond their means, may have every advantage which skilled nursing can provide. Secondly, it aims to be a school of instruction where women who are fitted by nature and education can obtain a thorough theoretical and practical knowledge of the art of nursing, with a view to making this their calling or profession; and thirdly, it seems to give the medical profession intelligent and skilful co-operation in the noble work of alleviating human suffering."

In speaking of the requirements and methods of training and teaching, she said :

" At present nurses are required to pass an entrance examination, consisting of ordinary English and practical work, a written examination at the end of the first year set by the superintendent of the school, and at the end of the second year a written and an oral before an examining board."

Several addresses were delivered by gentlemen present, including the Chairman of the Hospital Trust, Drs. Temple, Sheard, and O'Reilly. Dr. O'Reilly, after speaking on general terms respecting the duties of trained nurses, referred to the National Pension Fund for Nurses in the following words :

" Since we had the pleasure of hearing Mr. Burdett in this theatre a few weeks ago regarding the benefits given to those who join the National Pension Fund for Nurses, I have received from London a number of pamphlets explaining very fully the scheme of insurance offered, and giving in a few pages the advantages to be gained by providing for the future when old age or sickness may render you unfit for active duty. I shall be pleased to hand one of these little books to any nurses wishing to look into and examine this means of providing for old age. As some of you know, after years of hard work in laying the lines for this great Pension Fund for Nurses, Mr. Burdett, the founder, and his friends began to feel that they were standing on sure ground, that they were then justified, not only in explaining their well-matured scheme to the nurses of England, but also in asking for countenance and help in the highest quarters. So they took steps to place the facts before their Royal Highnesses the Prince and Princess of Wales, and the result was that the Prince became patron, and the Princess accepted the office of president. The acceptance of these offices by their Royal Highnesses was a definite assurance to the world that the National Pension Fund for Nurses is now an accomplished fact, and a firmly established and sound institution, as we all know that the Prince and Princess of Wales do not lend or give their names and influence to any experimental projects. The interest taken by royalty at the first still continues, as I see by a late English paper that the Princess of Wales' birthday, Dec. 1st, is to be marked this year by the presentation at Sandringham of a screen for her Norfolk Home containing the photographs of the first thousand nurses connected with the National Fund, and I hope very soon that we shall have the pleasure of knowing that a group of our Canadian-born and Canadian-trained nurses may receive a similar honor."

COUNCIL EXAMINATIONS.

The examinations of the Ontario Medical Council have not always been eminently satisfactory from a student's point of view. The latest grievance is the change of date, as decided at the last meeting of the Council, from April to September. In 1892 the examinations will be held at the usual time, the second Tuesday in April; but in 1893 it is announced that they will commence on the second Tuesday of September. It is contended that this regulation is to a certain extent retroactive, because it affects students who registered in the Council before such a rule appeared in the curriculum. It certainly seems rather hard for those who are in the third year. During their first and second years they were led to believe that a spring examination was a fixture, and that the only doubt that existed had reference to a fall supplemental. They now learn that there is only to be one examination in the year, and such examination will be held in September. It is thought by many that the time is unsuitable, because it comes on after the hot months of July and August, which form the most unsuitable portion of the year for close application to studies.

While there may be much or little in such arguments, we think there can be little doubt that the system in vogue for many years has been very unsatisfactory in certain respects. The sessions, already too short, have been much abbreviated by crowding too many examinations on the students before they had properly digested their work. For many years the examinations of the Council commenced on the first Tuesday in April, and the various school and university examinations were generally finished before that date, some of them commencing as early as the middle of March. Under the circumstances even the second Tuesday of April is too early, and we hope such a date will never be named again. We think, however, it would be well to have all the examinations completed before the "dog days."

RELATION OF SEROUS PLEURITIC EFFUSIONS TO TUBERCULOSIS.

The latest contribution to the literature of this important subject is that of Dr. Garland, of Boston, whose experience has probably been

DR. WYLIE, M.P.P., formerly of Stayner, has removed to Toronto.

exceptional. He says that fifty per cent. of the cases of sero-fibrinous pleurisy seen by him, in private practice and in consultation, during the past fifteen years, are to-day dead or dying of tuberculosis. Eighty per cent. of these cases of subsequent tuberculosis required tapping before the effusion disappeared. None were old and neglected pleurisies, and all were tapped and relieved of the effusion within a reasonable time. Some of them enjoyed apparently good health after the pleurisy, and before the fatal tubercular development.

Barrs records that of seventy-four hospital cases of pleurisy with effusion, under treatment from 1880-1884, thirty-two died. In twenty-eight of these the average duration of life was two and a half years, the maximum being five years, the minimum six months. Of these thirty-two, there died of phthisis or other tubercular manifestation twenty-one.

Opposed to such experience is that of Bowditch and of Coriveaud. The latter has followed up twenty-seven cases of sero-fibrinous pleurisy for periods of twenty-five, twenty, sixteen, eleven, ten, and eight years, and none of them became tubercular.

Examination of the pleuritic fluid does not definitely decide the question; for while in some cases the germs are absent, in others they are present. In these, the pleurisy may be the first manifestation of tuberculosis to attract attention.

In the face of the many cases of serous pleurisy which never present any signs of tuberculosis, and of the cases of tubercle which have never caused serous effusion, it is difficult to believe in such a close relation between the two diseases.

It may be well, however, in forming an ultimate prognosis for any case of pleurisy, to closely examine the lung for evidences of tubercle.

THE STUDENTS' DINNERS.

The medical students' dinner has become very popular in Canada. It appears to have become a regular annual event, and generally creates great enthusiasm among the students. The members of the various faculties are somewhat divided in their opinions on the subject, and are far from indulging in the enthusiasm which is so evident among the undergraduates.

The principal objection is the considerable waste of time which is involved, which happens to be far more than one would consider necessary. For instance, a whole hour is sometimes occupied in selecting and electing a representative for a dinner to one of the sister colleges. The hours that are taken up by the students for the whole work of organizing and preparing for the banquets are too many when we consider the amount of work that has to be crowded into sessions that are already too short. However, no one objects very strongly or openly, and all appear to enjoy them. Indeed, he would be a queer sort of an ascetic who could remain cold and unsympathetic at the recent dinners held in Toronto by the two schools. They were exceedingly successful in all respects, and the students acquitted themselves admirably. We are glad they are appreciating the fact that, in assuming the responsible position of hosts, they owe duties to their guests which have not always been kept in view in the past. The cat-calls and unseemly howls of the past are becoming infrequent, and students seem now to appreciate that they can have "a jolly good time" without imitating the practices and customs of wild Indians.

THE DANGERS OF ATROPINE.

The *Medical Press* states that a "lady" was arrested as drunk and incapable, when in reality she was suffering from the toxic effects of some atropine drops rashly introduced into the eyes for cosmetic purposes. The boundless possibilities of these atropine drops we would commend to the serious consideration of gentlemen from Scott Act counties. "Nervous prostration" is a dead issue.

DR. P. H. BRYCE, secretary of the Provincial Board of Health, delivered a lecture on "The Student in Relation to Physical Exercise," before the Knox College Literary and Theological Society, Tuesday evening, December 2nd.

DR. W. E. B. DAVIS, of Birmingham, Alabama, was elected president of the Tri-States Medical Association at the recent meeting, Chattanooga, Tennessee.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

October 31st, 1891.

The society met in the Biological Department, the President, Dr. J. E. Graham, in the chair.

Dr. John Caven presented the following specimens :

(1) EPITHELIOMA AT CARDIAC ORIFICE OF STOMACH, WITH SECONDARY GROWTHS IN THE LIVER.

The specimen presented a clearly excavated ulcer about $1\frac{3}{4}$ inches across and circular in shape, close to the œsophageal opening into the stomach. The border of the ulcer was much thickened and indurated with a very sharp outline. A slight puckering of the coats of the stomach is noticeable from the outside. The ulcer is situated in the lesser curvature of the stomach, and so close to the œsophagus as to raise the question of place of origin. The cardiac orifice was not in the least contracted, and apparently the lower border of the œsophageal mucous coat can be distinctly differentiated from that of the stomach and is not implicated in the ulcer. Microscopic specimens tend to confirm the idea of the stomach origin of the growth. Secondaries in great numbers were present in the liver; these showed an attempt at gland formation with columnar epithelium. Clinically, this case was peculiar in that no symptoms pointing to the stomach or liver had ever been observed, a hemorrhage from the bowel being referred to the lower part of the intestine.

Dr. Peters thought the evidence was not clear that it did not originate in the œsophagus, as its edge apparently reached the lower end of the œsophagus, and it may have spread from that point along the lesser curvature.

(2) CANCER OF STOMACH.

This specimen showed a large sac or pouch rising from the upper posterior part of the stomach, closer to the pylorus than cardia, and with its base firmly adherent to the under side of the liver. The opening from the stomach into the pouch is about three inches across, and

presents a very sharp, definite edge. The floor of the sac presented a number of wart-like protuberances. An opening from the pouch into the duodenum was found, circular in shape, and about one inch across. The serous coats of the sac and duodenum were glued together over a considerable area. Microscopic examination of the tissue forming the floor of the sac showed the structure of cancer. Exhibitor was of the opinion that the primary lesion in this case was a chronic form of cancer of the stomach with gradual pouching of the wall, adhesion to liver and duodenum, with ulceration into duodenum.

Dr. Graham asked if the absence of free hydrochloric acid was fully diagnostic of gastric cancer. He has several cases under observation of supposed gastric cancer in which there is no free hydrochloric acid in the contents of the stomach.

Dr. A. B. Macallum thought that where the cancer is diffuse the secretion of hydrochloric acid must be interfered with; but when it is circumscribed, free hydrochloric acid should be secreted.

BILIARY CALCULI.

Dr. J. E. Graham presented specimens of gall stones and read the following history :

Mrs. R., æt. 76. Has been very healthy during her life. Has frequently complained of what she called bilious attacks. Has always been fleshy; weighed when in health about 200 pounds. She had on the upper lids of both eyes three or four patches of flattened xanthelasma. In the summer of 1890 she was afflicted by an eczematous eruption, which disappeared in the autumn, after three months' treatment. The eczema reappeared in the early part of the winter, and became almost universal. The eruption was of an erythematous character, with slight scaling. - The irritability of the skin was very great, so much so at times as to prevent her from sleeping. The urine was normal in quality, sp. gr. 1027; contained sugar in small quantities. Patient suffered most of the time from fever. The temperature would rise over 100° each evening. For days at a time, however, the temperature was normal. In the spring the eruption gradually disappeared, so that in May she was almost free from it. She did not, however, recover her strength, but,

without apparent cause, continued to lose flesh and became weaker. She took a fair amount of liquid nourishment, but could not swallow solid food owing to a swelling and soreness of the mucous membrane of the pharynx.

While in this weak condition, unable to leave her bed, during the afternoon of one day in June, hemorrhage from the bowels began. This continued in spite of all remedies to check it, and patient died during the night. Upon *post mortem* examination we found the whole of the mucous membrane of the large bowels stained with blood. The vessels were also intensely congested over the same surface. We did not find any open vessel; nor did we find any obstruction to the venous circulation. The liver was very fatty, and the gall bladder was completely filled with gall stones. Patient had never suffered from jaundice during life, but was for many years a martyr to what she called bilious headache. It is probable that an obstruction existed in the venous system supplying the large intestines which produced the excessive distension of the veins, and that a vein had given way, resulting in the hemorrhage. Sufficient opportunity was not given to verify these suppositions in this *post mortem*. There are three or four interesting points in connection with this case:

(1) The presence of such an obstinate eczema, which may have resulted from the retention in the blood of products of assimilation which should have been elaborated in the liver. The peculiar greasy skin mentioned by some authors as occurring in fatty liver was not present in this case.

(2) The presence of glycosuria, which might also be ascribed to defective liver function, but not necessarily the result of fatty degeneration.

(3) The presence of xanthelasma, which Hutchinson says occur so frequently in patients who suffer from sick headache.

(4) The patient was fond of such articles of diet as potatoes, sweet cake, preserves, etc., and ate large quantities of bread. Such a diet would tend to produce fatty liver, and the condition was no doubt increased during the last year of her life when she was unable to take any exercise.

Dr. Peters presented the following specimens:

(1) BIMUCOUS FISTULA BETWEEN STOMACH AND DUODENUM.

This operation was performed on a dog on Sept. 10th. The animal died on the eighth day from obstruction of the gall duct and consequent cholæmia. In the operation the pylorus was removed, together with an inch and a half of the duodenum; and as the bile duct enters the duodenum about an inch and a half from the pylorus, it was doubtless either divided or included in the ligature by which the vessels were secured. The union between the stomach and duodenum is perfect, air injected into one passing freely into the other, but no escape taking place. The gall bladder and bile ducts were fully distended, but, so far as could be judged, no rupture had occurred.

(2) BIMUCOUS FISTULA BETWEEN TWO COILS OF ILEUM.

The operation for intestinal anastomosis was performed on a dog on Aug. 22nd, and the animal was destroyed on Sept. 17th. Dabarn's potato-plates were used. A row of superficial stitches was placed between the coils near the mesentery, the peritoneal surfaces having been first scraped to induce adhesions. Longitudinal slits was then made in the side of the gut near the row of sutures and the potato-plates inserted; another row of sutures was then applied. Recovery was uninterrupted.

Post mortem examination showed the anastomosis perfect, with no dilatation of the gut above. There were adhesions to the omentum and to adjacent coils, but no constriction or obstruction. The length of the opening was one and one-half times the diameter of the gut. Although the result was satisfactory, potato-plates are not to be recommended.

Dr. Peters has in a number of other cases used turnip and carrot-plates and finds them very satisfactory, but likes decalcified bone-plates best of all.

(3) CANCER OF RECTUM.

Patient æt. 73. History of trouble for fifteen years; was diagnosed stricture, and dilatation used. Had long history of diarrhœa and dysentery. No doubt there was ulceration of large bowel. Had been hemorrhages and passages of mucus, with some pain, and frequency of defæcation for about three months.

On examination there was found to be a hard mass in left anterior quadrant of anus. The surface was slightly ulcerated. The remainder of the annulus seemed smooth and soft, except that there was a thickened band leading towards coccyx. Operation, same as Whitehead's for piles. Recovery complete in a week.

The society then adjourned.

TRANSACTIONS OF THE FOURTH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

Held in New York City, September 17th, 18th, and 19th, 1891, at the Academy of Medicine.

(Abstract; continued from page 557.)

Dr. W. H. Wathen, of Louisville, read a paper on

ASEPSIS IN INTRAPERITONEAL SURGERY.

If the proper precautions as regards cleanliness in every detail before and during an operation are observed, we need no antiseptic germicides in intraperitoneal surgery. If solutions of sublimate, carbolic acid, etc., are brought in contact with healthy peritoneum, their action is harmful. I will not condemn the use of chemical solutions for the purpose of sterilizing the operator, assistants, nurses, or patients, or the room, instruments, sutures, dressings, sponges, etc., if used before the operation is begun; but the chemical germicide should be removed from everything that is brought in contact with the peritoneum. Unless everything is made practically clean independent of the germicide, that will not make it aseptic. It is too often true that operators who are loudest in advocacy of germicide solutions are the least cleanly, and I have known a few of them to forget to wash their hands before beginning an operation or before examining a woman in labor.

There are relatively few men who know how to be surgically clean in every detail connected with intraperitoneal surgery, and if the time and labor that have been devoted to teaching the medical profession how to use antiseptic germicides had been directed to teaching the value of, and means of accomplishing, surgical cleanliness, septic peritonitis following laparotomy would be comparatively infrequent. Of course the above does not apply to all men who use chemical antiseptics, for some of them are the most cleanly men I have seen operate, but I believe they would get as good or better results if they omitted the antiseptics. The peritoneum is usually infected by contact, and the danger of atmospheric infection is practically nil, as has been shown by the excellent results in laparotomies done in large and crowded amphitheatres.

He explained in detail the latest and most improved methods of asepsis. He advocated drainage with a small glass tube open at both ends, with fine holes on sides extending within two inches of the mouth. He opposed the practice of

introducing the wick or gauze in the tube, and preferred to remove the blood and secretions by suction with a long nozzle syringe or a syringe with a gum tube attached.

Dr. Henry O. Marcy, of Boston, read an essay entitled

FEMORAL AND VENTRAL HERNIA IN WOMAN.

The methods by which the author obtains a radical cure are original, and are followed by most exceptional results. He advocates the dissection of the sac to its very base, which is sutured across and removed. The internal ring is carefully closed by a line of deep, double, continuous tendon sutures. The canal is narrowed and closed in a similar manner, and the wound is sealed with iodoform-collodion, without drainage. The operation is conducted with the strictest antiseptic care; and since Dr. Marcy was the first to use and publish the advantages to be derived from buried animal sutures, and systematically to extend their applicability in the general field of surgery, we quote his emphatic directions: "There is but one rule, and it cannot be too rigidly enforced—the aseptic suture must be aseptically applied in aseptic structures, and the wound must be maintained aseptic. The failure of either of the above-mentioned factors not alone endangers the result, but may be followed by the most serious consequences. Modern surgery demands of the operator every safeguard to insure an aseptic wound, but he who uses buried animal sutures must take, if possible, even greater precautions, since infection carried into a wound thus firmly closed is, for obvious reasons, attended with much greater danger than in a wound united by interrupted sutures which, at the end of a few days, are to be removed, and where drainage is relied upon to permit the escape of infective or foreign material. It is in part on account of defective technique, the use of drainage, and the too often septic wound, that failure to effect a cure after hernial operations so generally occurs.

"I began to use the buried animal suture in operating for the cure of hernia in 1871, and since that time have for the most part used it in the closure of all operative wounds; and in all my operations for the cure of femoral hernia, where the integrity of the intestine has not been involved, I have never observed a subsequent symptom indicating danger, and, so far as I have been able to learn, there has not been a single recurrence. There is little pain, and even edema of the tissues does not ensue. After a few days in bed the patient is allowed to sit up. In some instances I have permitted the use of the chair the second day, without any apparent harm. I never advise the subsequent application of a truss.

"If it can be demonstrated that femoral hernia is curable, then the advisability of the operation should be taken into consideration; and if it can be proved that the cure remains permanent, it adds much to the argument in favor of operative measures; but where it is demonstrated that, under proper precautions, based upon an accurate anatomical knowledge of the structures involved, the operation is not severe, does not cause long detention from active duties, does away with the punishment inflicted by the life-long wearing of a truss, and is almost without danger, there remains

no reason why all the sufferers from femoral hernia should not profit by surgical measures and demand to be restored to the ranks of active service."

Dr. Marcy makes an equally strong plea in behalf of surgical intervention for the cure of sufferers from umbilical and ventral hernia. In umbilical hernia he dissects the peritoneal sac quite within the margin of the ring, sutures it across at its base, and resects it. The subsequent steps of the operation are conducted under irrigation. There are conditions when it is wise to resect the ring and close as in an ordinary laparotomy; but the method which Dr. Marcy more generally recommends is one quite peculiar to himself. The structures composing the ring are divided laterally upon the plane of the abdominal wall, about one-half of an inch in all directions. This admits the coaptation of the sundered parts, and, by lines of strong continuous tendon sutures, the separated edges are coaptated in a way greatly to broaden the united parts. This widens the line of union to an inch or more, instead of bringing together the narrow edges of the tendinous ring; and, besides affording this great depth to the united portions, it brings together refreshed surfaces in a high state of vitalization, likely to be followed by a firm union. It also admits the joining of the tissues in three distinct layers of strong sutures. As in the other forms of hernia, the skin itself is closed by a line of running or lacing sutures, taken from side to side through the deeper portions of the skin only, which admits of its coaptation by sutures entirely hidden from view. Such a wound requires no drainage and it is permanently sealed with collodion. The weight of years of experience in active surgical practice enforces the value of Dr. Marcy's contributions upon a subject of the highest surgical importance, since the radical cure of hernia is considered by many as yet *sub judice*.

Dr. J. H. Carstens, of Detroit, said everything stated in the paper gave him pleasure except the employment of ether. He hoped some time the hub would learn from the tire out west that chloroform was the best anesthetic. In operating he made the usual incision, and returned the gut if all was right. He then took silk, with the needle which he used for operating on the lacerated cervix, and encircled the hernia opening completely. He tied that so as to close it up perfectly. He did not like to trust the buried animal suture. He dissected out the sac in the usual manner and cut it off short, then took catgut and with that sewed the wound carefully in the usual manner until the wound was entirely closed up except the skin, which he closed with two or three silkworm-gut sutures. He used no drainage tube. He wished to strongly emphasize what Dr. Marcy had emphasized, that the time for the drainage tube in the operation for hernia ought to cease.

Dr. H. O. Marcy then exhibited to the association some specimens of kangaroo tendon and explained the method of preparing the various animal sutures.

Dr. W. J. Asdale, of Pittsburg, said, with reference to the drainage tube, that he used it when in doubt what to do. He regarded the tube with many small perforations as a dangerous one. He followed the practice, where he used the drainage

tube, of turning it at short intervals, every few hours—at any rate, at every visit.

Dr. R. P. Hall, of Cincinnati, said that he had practised drainage in every case of abdominal section since October, 1887. He had never had occasion to regret placing the drainage tube. Some cases in which he placed the tube, feeling at the time that it was not necessary, would undoubtedly have died had the tube not been placed.

Dr. E. E. Montgomery, of Philadelphia, had for a long time been averse to introducing silk either into the wound or covering it up in the abdominal cavity. In reoperation upon a case a year or more after the first operation, he found the silk still remained, and in some cases it was a source of irritation. He was strongly inclined to the use of the animal ligature. He had not had the opportunity of using kangaroo tendon, but had resorted to carefully prepared catgut. He considered the care of the instruments as a very important part of the technique of abdominal surgery, particularly the needles. He advocated cleansing the needle with a soapy towel, then cleaning it with benzine, and finally placing it in absolute alcohol. When the catgut and needles were ready for use they were placed in a tray and covered with alcohol. If the catgut is placed in water it softens and swells, and is somewhat difficult to tie; but from alcohol it is hard, and when it is introduced it swells and fills up the track made by the needle. Dr. Wathen made a good point in regard to drainage. It is usually considered that drainage should be from the lowest portion of the abdomen; but if we look at the abdomen when it has been cleansed and the intestines have settled down, we will find that the liquid gravitates to the upper surface. He had no doubt but that many cases of intestinal adhesion were due to the fact that there was present a fluid which to a slight degree became infected, sufficient to give rise to a slight superficial peritonitis and gluing together of the surface. In these cases drainage by gauze or by wick is oftentimes very efficient.

THIRD DAY—MORNING SESSION.

Discussion of papers by Dr. Wathen and Dr. Marcy resumed.

Dr. W. W. Potter, of Buffalo, said he had kept watch of Dr. Marcy's work in this direction, and had been somewhat familiar with his writings on the subject. His little treatise, published two years ago, upon the subject of hernia was a revelation to many with reference to the modern technique in the operation for hernia. Dr. Potter reported a case of ventral hernia upon which he had operated fourteen years ago with success.

Dr. R. B. Hall, of Cincinnati, said he hoped that Dr. Marcy, in closing, would give in detail the method of closing the abdominal wound after operating for hernia—whether he advises and uses the kangaroo tendon in closing the peritoneum. He had operated a number of times, using catgut, and was disappointed in its results.

Dr. J. H. Carstens, of Detroit, illustrated on the board the old-fashioned method of including all the tissues in one sweep, resulting frequently in hernia because too much of the peritoneum was included in the tissues taken up. He said that if

you will take catgut or kangaroo tendon, or whatever you like, and sew, layer by layer, up to the skin, you will get perfect union; you get peritoneum together, you get fascia together, and you get no umbilical hernia. If you follow in the track of Lawson Tait, you will be astonished at the number of cases of umbilical hernia you will find; and if Mr. Tait would advance to the American plan and accept a little from us, and make use of the buried animal suture, he would very seldom have a case of hernia following an operation.

Dr. R. T. Morris, of New York, wished to lay emphasis upon the danger of peritoneal hernia where the operation was performed with one suture, not bringing the different layers together successively.

Dr. Jas. F. W. Ross, of Toronto, said he regretted that we were not able at the present moment to decide the question between the method of taking peritoneum, skin, and fascia together, and the other method of suturing each separately. He had always adopted the single suture, taking up all the tissues, and up to the present time had only two cases of hernia. He wished to ask Dr. Marcy whether it had been experimentally proved that fibrous tissue unites to fibrous tissue, and can be traced absolutely as fibre in the scar; whether muscle unites to muscle, and can be traced as muscular tissue in the scar. On the surface, where we can see, we find it is not true skin in the scar.

Dr. H. O. Marcy, closing the discussion, said he wished to speak more particularly in reference to the subject presented by Dr. Wathen. Dr. Wathen's excellent results showed him to be a very careful operator, but there were some points in which he did not agree with his method of operating. It is some twenty years since, as a pupil of Mr. Lister, Dr. Marcy first began the study of wound treatment. During this time he had carried on many careful bacteriological experiments in his own laboratory. He thought it would not be quite right to accept Dr. Wathen's conclusion that it is no longer antiseptic surgery, but aseptic surgery, although the aseptic wound is our highest ideal and is that to which we strive to bring the result.

We place far too much emphasis on what we call the atmospheric condition, and far too little on a dirty finger nail. He was not prepared to feel that we could afford to dispense with irrigation. Another point was, not to fill the wound with a dozen or twenty compression forceps, and then expect union by first intention.

In his last hundred laparotomies he had turned on an aseptic gas—oxygen gas—the moment he entered the abdominal cavity. It is a non-irritating gas, and displaces the column of infected air that would otherwise gain access to the wound.

Septic wounds are to be treated in one way, aseptic wounds in another; the latter should never have a drainage tube applied. He uses a far less number of drainage tubes than formerly, and insists upon it that the drainage tubes shall be smaller, shorter, and less in number.

In reference to sutures, silk is encysted; it is not absorbed. He had removed it after it had been in place three years. Silkworm gut is equivalent to wire. At the best the tissues encapsulate

it; they do not utilize it by absorption or a replacement of other tissues. For many years he was satisfied with catgut, he prepared his own; but he was brought to feel that catgut was not reliable—may not be reliable. The best tendons which he had been able to find were those taken from the tail of the Australian kangaroo, after experimenting with tendons from the deer, moose, squirrel, caribou, buffalo, and other animals.

He illustrated on the board the anatomical conditions pertaining to umbilical hernia.

Dr. X. O. Werder, of Pittsburg, Pa., reported cases illustrating

SOME MOOT POINTS IN ECTOPIC GESTATION.

On the 23rd of May last he operated on a patient, thirty-eight years of age, mother of five children, in whom the menses had been regular up to six weeks previous to operation, during which time there had been a constant flow of blood. A mass in Douglas' cul-de-sac had been made out, pushing the uterus to left of medium line, soft, semi-fluctuating, of the size of a large orange. After intestines and omentum which were adherent to this mass had been separated, a blood tumor was found, and, several handfuls of blood coagula having been emptied out of the abdominal cavity, the ruptured, dilated right tube, containing a placenta, was brought up into the abdominal incision and ligated. The abdominal cavity had been perfectly free from blood previous to breaking into this mass, and there were no signs of any inflammatory trouble. There is no doubt that this tumor was a pelvic hemocele, caused by tubal pregnancy rupturing into the abdominal cavity. Rupture had undoubtedly occurred, as the history shows, about six weeks previous to operation.

This case illustrates, contrary to the teachings of Tait and others, that not all cases of intraperitoneal ruptures of tubal pregnancy prove fatal.

Two other cases seen by the author, of undoubted ruptured tubal pregnancy into the abdominal cavity, in which operation, urged as the only hope of recovery, was refused, also recovered, though convalescence was slow and tedious; in fact, the patients, though some months have elapsed since occurrence of this intraperitoneal hemorrhage, are still more or less invalids.

In two other cases laparotomy was not performed until five days after rupture had taken place, when the patients were recovering from their condition of collapse and apparently improving. Out of a total of six cases of tubal pregnancy, therefore, in five, recovery would have been probable without operation.

The author therefore concludes:

(1) Intraperitoneal rupture is not always fatal; a large percentage recover without operation.

(2) The convalescence of those recovering without operation, in his experience, is very slow and tedious, and often, perhaps, impossible without subsequent operation.

(3) Laparotomy is to be recommended not only in cases before rupture, and after rupture for the purpose of stopping hemorrhage which threatens life, but also after bleeding has ceased, and even if hemocele has formed, because by it we remove all present and future danger, and insure our patient a very rapid and uninterrupted convalescence. Laparotomy has proven to be, if performed

by skillful hands and all necessary precautions, a perfectly safe operation.

The remaining tube should not be removed—*i.e.*, the tube not the seat of fetation—as has been recommended by some to prevent a recurrence of pregnancy in that tube, unless it is markedly diseased. Removal of it became necessary only once in the four cases operated on for ectopic gestation by him. Two cases subsequently became pregnant, one has been delivered of two living children, and another is now in her seventh month of pregnancy.

Dr. Florian Krug, of New York, gave a short historical sketch of the employment of

TRENDELENBURG'S POSTURE IN GYNECOLOGY.

Dr. Krug witnessed a suprapubic cystotomy done in this position by Dr. Willy Meyer, formerly Prof. Trendelenburg's assistant. He was immediately impressed with the great advantages this method offered for abdominal work and at once set out to make use of it. He has since done over one hundred and fifty laparotomies in this posture, and has induced a great many operators on this side of the Atlantic to adopt it.

Dr. Krug claimed the following advantages for the method: If the patient's pelvis is raised up so that the symphysis forms the highest point and the body comes on an incline of at least 45° to the horizontal, all the viscera of the abdominal cavity will gravitate towards the diaphragm and the pelvis become free and easy of access. The small intestines will hardly come into view and never trouble the operator during the operation. The operator is enabled to see everything that he is doing and need not grope about in the dark. All bleeding points are readily detected and tied. In weak and anæmic patients the posture is a great advantage, preventing shock from acute anæmia of the brain. In all his operations he had never found any objectionable point or disadvantage in this posture. There are different ways of putting the patient in this position, very simple and very complicated ones. In most of his operations he had used the head-rest of an operating table, to which cushions were fastened with straps. Trendelenburg himself has had a very complicated operating chair constructed which answers all requirements. Several new devices have been brought out in New York lately.

Dr. Krug had lately constructed a frame of galvanized iron which can be screwed to any laundry or operating table. The upper part of this frame is covered with sailing canvas, a material which is durable, easily sterilized, and cheap. Straps are provided for the knees and ankles of the patient, whose pelvis can, by a simple mechanical arrangement, be elevated to an angle of 45° to 60°, and lowered again if required. The frame can easily be carried or taken along in a street car, and can be used on any kind of a table; it is easily cleaned and sterilized, and it is cheap.

Dr. R. T. Morris, of New York, said that those who had once seen an operation in this position would appreciate fully the great value of Trendelenburg's invention.

Dr. H. O. Marcy, of Boston, presented photographs showing a modification of the Trendelenburg chair.

Dr. J. H. Carstens, of Detroit, spoke of the

danger of atmospheric infection from the air rushing into the abdominal cavity, as had been stated was the case as soon as the abdominal walls were opened. He considered that that would be a decided objection to the Trendelenburg position.

Dr. Willy Meyer, of New York, replied to Dr. Carsten's objection that the danger from atmospheric infection would be very slight, certainly no greater than in amputations and similar open work, in which cases he always expected union by first intention. He then gave a demonstration of the Trendelenburg posture on a table after Trendelenburg's original model that he had imported.

Dr. Krug, in closing the discussion, said that ever since he had used the Trendelenburg posture he wondered how he ever got along before. He considered that it would be a pretty fine distinction between the amount of air which entered the abdominal cavity in this posture and that which enters in ordinary operations. He had used the operation in from one hundred and fifty to two hundred laparotomies, and was willing to match his results with those of anybody else who operates in a horizontal position.

Dr. Rufus B. Hall, of Cincinnati, read an essay upon

SUPPURATING CYSTS DEVELOPED FROM ADHERENT OVARIES AFTER REPEATED ATTACKS OF INFLAMMATION; AND SECONDARY OPERATIONS FOR REMOVAL OF DOUBLE INTRALIGAMENTOUS CYST.

His conclusions were to the effect that, if these cases were operated upon early, just as soon as the physician was certain that nothing but an operation could bring the hoped-for relief, the operator would not be called upon to treat such desperate cases as those reported. No operator is justified in leaving an abdominal operation incomplete, except in malignant disease, for the reason that all other growths can be removed, and it should be done when once attempted. As long as the general practitioner persists in pursuing what he pleases to call conservative treatment in these cases, and keeps the patients under his care just as long as he can keep breath in them, and surgeons of the older class turn these patients from their consulting rooms as non-operative cases and thus defer it, or the cases made still more complicated by incomplete operations, men engaged in this special work will continue to see just such desperate cases. While this state of affairs exists, what can we hope for other than a high mortality in these delayed cases, and who should be held responsible for the deaths? (See page 470, THE CANADIAN PRACTITIONER.)

Dr. M. Rosenwasser, of Cleveland, wished to protest against the assertion that these intestinal adhesions were due to the first operation. Intestinal adhesions are common to the broad ligament, and not to the cyst, and will be found there whether you operate the first time or the second time. He also wished to contradict the assertion that these cysts ought to be removed. It is better occasionally not to attempt removal. In some cases it is better to stitch the cyst to the abdominal wall and drain, leaving the cyst wall alone.

Dr. H. O. Marcy, of Boston, said that in a certain class of cases he had felt that we must stitch and drain. In another class of cases you can

readily get behind it, close it down by suturing, and close your wound as in a simple operation.

Dr. W. W. Seymour, of Troy, called attention to the method, suggested originally by Hegar, of approaching these collections of pus through the ischio-rectal space. There is the advantage of not invading cavities not ordinarily septic.

Dr. Hall, closing the discussion, said that the first case illustrated very forcibly the advisability of an operation on these cases of repeated attacks of inflammation early, as early as it is found that nothing but an operation can cure them. These cases further illustrate what Dr. Price has said, that we get the worst class of cases among the best class of patients, those of refinement and culture.

THIRD DAY—AFTERNOON SESSION.

Dr. Charles A. L. Reed, of Cincinnati, presented
OBSERVATIONS ON THE SURGICAL MANAGEMENT
OF PELVIC ABSCESS.

Pelvic abscess implies an accumulation of pus within the pelvis, but outside of the uterine appendages. Pus within the appendages is known either as pyo-salpinx or ovarian abscess, as the case may be. The terms are not interconvertible. The old pathology, which represented every accumulation of pus within the pelvis as cellular in its origin and location, was pernicious; but to deny the existence of such cases is wide of the truth, and to treat all intrapelvic pus cases as tubal or ovarian is likewise pernicious. Three illustrative cases were given in which the abdomen had been opened for pus tubes, but the appendages found free from disease. The pus was found within the cellular tissue and broad ligament, and was evacuated by incision along Poupert's ligaments. The suggestion for surgical management consists in adopting this operation as a line of practice. By this means we are enabled to treat the appendages, if diseased, and we are enabled to place the field of operation under complete control.

Dr. Paul F. Mundé, of New York, present by invitation, said that he felt diffident about rising to this question, although he had just said to Dr. Reed that it was a subject he felt very strongly upon and one which he had had considerable experience with. He quite agreed with Dr. Reed. There are many gentlemen who believe that laparotomy is the only thing. There are many who maintain that there is no such thing as pelvic abscess—abscess of the pelvic cellular tissue; everything must come from the tubes; everything is necessarily a pyo-salpinx, and could only get into the pelvic tissues secondarily. He did not believe anything of the kind. He knew there were gentlemen who believed it. From his own experience he could see no reason why there should not be just as much plastic exudation in between the layers of the broad ligament, or wherever there is cellular tissue in the pelvis, as in any other portions of the body where there is cellular tissue. We have boils and abscesses in other parts of the body, and why should we not have them in the pelvis? Besides, we know we have effusions of blood in the pelvis. We know also that ovarian tumors and fibroid tumors develop in the broad ligament, and dissect up the peritoneum almost as far as the diaphragm. Why

should plastic material from the blood not be exuded between the layers of the broad ligament and into the cellular tissue? That granted, why should it not break down and become pus? Lawson Tait has taught us to recognize these conditions of pus in the peritoneal cavity by bimanual examination without opening the abdominal cavity. The differential diagnosis is not always an easy one to make. Whenever a collection of plastic lymph in the pelvic cavity is immovable, it is usually extraperitoneal, and the same would apply to a fluctuating mass containing either pus or blood; when there is a limited movability to it or a limited movability to the uterus, particularly when pulled downward or upward, it was intraperitoneal.

Dr. Joseph Price, of Philadelphia, presented

A PLEA FOR EARLY HYSTERECTOMY AND PUERPERAL HYSTERECTOMY.

The history of abdominal and pelvic surgery is all aglow with the heroic effort, the personal sacrifices of its pioneers. Surgical invention has greatly improved upon and simplified methods. Where the spirit of innovation has bungled, the better genius of surgery has corrected. We are having cleanliness without the aid of chemical irritants and disinfectants. We are rapidly advancing to accept early operation as a dictum in pelvic and abdominal surgery. I can find no delight in so-called conservative methods. My experience disproves and condemns them. It will become an axiom of surgery not to delay longer than to establish the fact that operation will be necessary at some time. This granted, the earlier such operation is done the fewer will be the complications, and all the dangers attending operation will be diminished or avoided. There will be a shorter operation, less handling of the parts, less shock, surgical and dynamic, and quicker convalescence.

The simple entering the abdomen is without danger in the hands of experienced men. Now, when surgical experience proves that the simpler the operation the less dangerous it is, and that the danger increases by exact gradation as the complications increase, what other conclusion to the argument is there than to demand early operation for conditions that in almost all cases eventuate seriously? This is especially true in fibroid tumors. The removal of the appendages is proven to be efficient, in a majority of cases, in controlling hemorrhage, just as it is the clinical testimony that in almost all cases of fibroid disease there is real disease of the ovary itself. In large tumors the ugly nature of the complications, combined with the gradually increasing discomfort, is such that makes delay criminal. We must operate before the patient is past help, if we would save her. Surgery as a last resort after temporizing has failed is no criterion of what surgery can accomplish, and is no measure or standard by which it may be judged.

Dr. L. S. McMurtry, of Louisville, read a paper on

THE ESSENTIAL QUESTION OF DRAINAGE IN PELVIC SURGERY.

At an executive session the following officers were elected: *President*, Dr. A. Vander Veer, of Albany. *Vice-Presidents*, Dr. H. E. Hill, Saco, Me., and Dr. R. T. Morris, New York. *Secretary*,

Dr. William Warren Potter, Buffalo. *Treasurer*, Dr. X. O. Werder, Pittsburg. *Executive Council*, Drs. C. A. L. Reed, Cincinnati; Lewis S. McMurry, Louisville; George H. Rohé, Baltimore; James F. W. Ross, Toronto; and William W. Seymour, Troy.

St. Louis was selected as the next place of meeting.

The following-named physicians were elected to Fellowship: *Ordinary*: J. H. Cameron, Toronto, Ont.; Henry Gibbons, San Francisco, Cal.; John R. Haynes, Los Angeles, Cal.; Francis L. Haynes, Los Angeles, Cal.; J. B. S. Holmes, Rome, Ga.; James McCann, Pittsburg, Pa.; Willis G. Macdonald, Albany, N.Y.; R. B. Nevitt, Toronto, Ont.; Edward M. Pond, Rutland, Vt.; William Porter, Jr., Hartford, Conn.; E. Arnold Praeger, Nainaimo, B.C.; Charles N. Smith, Toledo, Ohio; Edwin Walker, Evansville, Ind. *Corresponding*: H. S. Griffin, Hamilton, Ont.; Henry T. Machell, Toronto, Ont.; Henry Howitt, Guelph, Ont.

Book Reviews.

Essentials of Anatomy and Manual of Practical Dissection, together with the Anatomy of Viscera. By Charles B. Nancrede, M.D., Professor of Surgery and of Clinical Surgery in the University of Michigan. Fourth edition, revised and enlarged. Philadelphia: W. B. Saunders, 1891.

This book has found favor in some localities, else the present new edition would not be so soon called for. We cannot, however, reverse the opinion which we expressed in reviewing a former edition, that the method adopted, in writing the book in a form of question and answer, is a bad one. We do not wish a student to handle a subject like anatomy after the same manner as a child learns the shorter catechism, with probably little consideration of the appropriateness of the answer to the question. We wish to give our students a book which they can read in an intelligent fashion and study thoroughly; such a book must be written in a rational style, and not as if it were intended for boys in the primary class of a common school. The colored plates taken from the works of Maclise, Savage, and others, are excellent.

A Treatise on Practical Anatomy for Students of Anatomy and Surgery. By Henry C. Boenning, M.D., Lecturer on Anatomy and Surgery in the Philadelphia School of Anatomy, etc. Illustrated with one hundred and ninety-eight wood engravings. Philadelphia and London: F. A. Davis, Publisher, 1891.

This is a work of considerable merit. The subject is presented in a concise form, and with-

in the compass of 459 pages we have presented to us the chief facts in human anatomy. The descriptions are too meagre for the student to trust to this book solely for his knowledge, but he will undoubtedly find it of great service in supplementing a larger text-book. The whole subject of human anatomy may be rapidly reviewed by a perusal of the contents. We congratulate Dr. Boenning on the successful way in which he has done his work. The illustrations are well executed, and the publishers deserve great credit for the attractive volume which they have presented.

A Text-Book of Physiology. By M. Foster, M.A., M.D., LL.D., F.R.S., Professor of Physiology in the University of Cambridge, etc. Fourth American, from the fifth English edition, thoroughly revised, with notes, additions, and two hundred and eighty-two illustrations. Philadelphia: Lea Brothers & Co., 1891.

This English text-book is so well known that it is unnecessary to say anything in criticism of it. It is with great pleasure that we welcome a fifth edition of Dr. Foster's work, which embraces much new matter and presents the subject dealt with in a manner thoroughly wrought up to date. We regret that the name of the American editor is not published in the book before us. It would have been satisfactory to have known the authority for the additions which have been made to the original work. These additions have, however, been few.

Manual of Chemistry. A Guide to Lectures and Laboratory Work for Beginners in Chemistry. A Text-book specially adapted for Students of Pharmacy and Medicine. By William Simon, Ph.D., M.D., Professor of Chemistry and Toxicology in the College of Physicians and Surgeons, Baltimore, and in the Maryland College of Pharmacy. New (third) edition; 8 vo., 477 pages. Cloth, \$3.25. Philadelphia: Lea Brothers & Co., 1891.

The unfortunate medical student forced to wade through, in two short winter sessions, the whole range of chemistry, organic and inorganic—to him a slough of despond—will welcome this manual. The chemistry essential to a knowledge of medicine in all its branches is fully taken up, special attention being paid to the many new compounds which are so rapidly being added to our modern *materia medica*.

A Manual of Hypodermic Medication; the Treatment of Diseases by the Hypodermatic or Subcutaneous Method. By Robert Bartholow, A.M., M.D., Emeritus Professor of Materia Medica, General Therapeutics, and Hygiene in the Jefferson Medical College, Philadelphia. Philadelphia: J. B. Lippincott Company, 1891.

This well known manual, which made its original appearance in 1869, has now reached its fifth edition. Bartholow, the first to publish a work in English upon the treatment of disease by subcutaneous medication, is determined that his work shall not be robbed of its well-won place of honor. Many additions have been made, embodying the latest advances in therapeutics, and bringing the book up to date.

Personal.

DR. E. ARNOLD PRAEGER, of Nanaimo, B.C., read the address on Surgery at the recent meeting of the Canadian Medical Association. It was an able exposition of the present position of spinal surgery. Dr. Praeger is one of the most progressive and able of Canadian surgeons. He attended the annual meeting of the American Association of Obstetricians and Gynecologists in New York, and then went on to the Washington Congress of American Physicians and Surgeons. We trust that this genial citizen of British Columbia will visit the United States "early and often."—*Buffalo Medical and Surgical Journal.*

DR. A. G. GERSTER has been elected president, and Dr. J. A. Wyeth vice-president, of the New York Surgical Society.

DR. J. R. HAYDEN has been appointed lecturer in venereal diseases in the University of Vermont.

DR. J. WEST ROOSEVELT has been appointed Professor of Clinical Medicine in the New York Post-Graduate Medical School.

DRS. THISTLE, Primrose, Baines, Davison, and Bingham have been placed on the active staff of the Victoria Hospital for Sick Children.

Therapeutic Notes.

ICHTHYOL IN PHLEGMONOUS ERYSIPELAS.—To obtain the best results from ichthyol in erysipelas there are certain rules which must be attended to:

(1) Ichthyol is most useful when used early, and the application made frequently.

(2) The application must be as extensive and thorough as possible.

(3) The air must be excluded.

These rules are applied or objects attained as follows:

"All the neighboring mucous membranes and skin must be cleansed with a concentrated solution of salicylic acid. Any wounds which may be present, disinfected with sublimate solution (1:1000) and covered with sublimated gauze. Then, not only the reddened skin, but the normal also for a hand's-breadth around is to be rubbed thoroughly for from ten to fifteen minutes with pure ichthyolated ammonia, or with that drug combined with lanolin (in equal parts or 2:1). This rubbing is like gentle massage, and must be as thorough as the pain will permit. By this rubbing so much of the drug is absorbed that the affected skin presents a brownish-red appearance. Over the whole of this area a layer of absorbent gauze, moistened with a solution of salicylic acid, is spread, and this dressing is covered with a thick sheet of *non-absorbent* sterilized cotton. . . Ichthyol is easily rubbed in, even where the hair is long, and is readily removed with hot water and soap. The dressing is changed daily."—*The Kansas City Med. Record—Epitome of Medicine.*

TOPICAL APPLICATION IN DIPHTHERIA.—Having used with signal success the following formula as a topical application to the throat in the treatment of malignant diphtheria, I make this report so that a thorough test of it may be made:

R.—Acid sulphurosi f ʒss.
Liquor potassæ gtt xl.
Aquæ calcis ad f ʒiv.

Mix, filter; keep well corked, in a cool place. To be applied topically to the throat by means of a sponge, probably every hour or two.—*Ernst Timmermann, M.D., in Med. News.*

PREPARATIONS OF COD LIVER OIL.—Dr. Simpson, in the *Montreal Medical Journal*, speaks of an excellent preparation of cod liver oil manufactured by the Davis & Lawrence Company, of Montreal, called the "D. & L. Emulsion of Cod Liver Oil with Hypophosphites of Lime and Soda," which he has used for two years, owing to its agreeable appearance, not unpleasant taste, and evident therapeutic qualities. It has the color and consistence of thick cream, and contains fifty per cent. of Norway oil well broken up in glycerine and mucilage, with six grains each of the hypophosphites of lime and soda to the ounce. Most children take it without trouble.

COMEDONES.—Unna claims that the following will not only cause the apparent disappearance of the comedones, but will also exercise sufficient tonic action to diminish and finally abolish the tendency to their formation :

R.—Wool fat, 10.
Vaseline, 20.
Hydrogen, peroxide, 20-40.
M.

This mixture is to be applied to the affected parts and allowed to remain.—*Medical Age*.

"ANTI-KAMNIA," according to the *Pittsburgh Medical Review*, is a mixture of acetanilide, 7 parts; sod. bicarb., 1 part; and a small amount of tartaric acid. As anti-kamnia sells for \$1 and acetanilide for fifteen cents an ounce, the thusness of the mixture is at once apparent.

STRYCHNINE AS A HEART TONIC.—Strychnine is a good stimulant for weakness of the heart. The heart beat becomes strong, the small arteries contract, and the blood pressure increases.

OINTMENT FOR ERYSIPELAS.—

Sublimate . . . ½ gr.
Lanoline . . . ʒv.
Vaseline . . . ʒiiss.

—*Medical Press*.

BROMIDES AND PHTHISIS.—M. Féré says that saturating an animal with bromides predisposes to tuberculosis.

Miscellaneous.

OTTAWA MEDICO-CHIRURGICAL SOCIETY.—At the annual meeting, held October 9th, the following officers were elected: President, Dr. L. C. Prevost; 1st vice-president, Dr. W. C. Cousens; 2nd vice president, Dr. A. A. Henderson; treasurer, Dr. R. W. Powell; secretary, Dr. C. J. H. Chipman; curator, Dr. J. A. Grant; librarian, Dr. H. B. Small.

CHANGES IN MCGILL MEDICAL FACULTY.—Dr. James Stewart has been appointed professor of clinical medicine in McGill University in the place of the late Dr. Richard L. MacDonnell. Dr. Blackader takes Dr. Stewart's former position of professor of materia medica. Dr. R. F. Ruttan has been appointed assistant professor of chemistry and registrar.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.—At the annual meeting, held October 9th, the following officers were elected: President, Dr. Buller; vice-presidents, Drs. James Stewart and Lachapelle; secretary, Dr. Kenneth Cameron; treasurer, Dr. J. A. Macdonald; librarian, Dr. T. D. Reed.

THE Russian Minister of Education has issued a circular permitting women who have finished a course of higher education to be engaged as apprentices in drug stores, and by examination to become pharmacists, with the same rights and privileges as a man.

THE medical committee on the preparation of the new German pharmacopeia is now at work. 1603 new remedies were proposed to be placed on the new list, but only 42 were deemed worthy of official sanction.—*Med. Press and Circular*.

THE gold medal recently presented to Prof. Virchow, of Berlin, on his seventieth birthday, contains nearly six pounds of material, representing a value of \$1,800. It has the inscription "omnis cellula a cellula."

DEATH FROM COCAINE.—A young physician in Bournemouth, England, died recently from the effects of cocaine, which he had applied too freely to an aching tooth.

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