

**SOME LEADING EUROPEAN GYNECOLOGISTS AND
THEIR WORK.**

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My last letter described very briefly what I saw in Paris; this letter will speak of some well-known gynecologists in Florence, Vienna, Prague, Dresden and Berlin.

PESTALOZZA, OF FLORENCE.

Having heard that Pestalozza was doing a large amount of good work, I left the beaten track and went to Florence to see him. He received me most courteously and invited me to come next morning, which was Sunday, at 7 o'clock to see some operations. He has an immense clinic, being in sole charge of forty gynecological and eighty obstetrical beds. Ten of the latter are reserved for isolating infected cases coming from outside. Among his own cases he has had no death from sepsis since several years. The first operation was abdominal hysterectomy for multiple fibroids in a woman who had also prolapse of the vagina; he left a small portion of the cervix, to which he afterwards stitched the upper part of both broad ligaments in order to draw up the vagina. He used isolated silk ligatures for the two ovarian and two uterine arteries, and he operated very quickly. The silk was prepared by first soaking it for twelve hours in ether to extract the fat and then sterilizing it in steam for two hours, after which it remains indefinitely in 2 per 1,000 sublimated alcohol. As it appeared to be particularly good, I took down the address of the manufacturer, Bontl, silk manufacturer, Porta Rossa, Florence. He afterwards removed a cervix, which had been left after hysterectomy two years before and which had now become cancerous. Some of the old silk ligaments were found encysted and calcified. He then took me over his hospital and showed me about twenty patients convalescing from laparotomy. I would strongly advise those who intend to visit gynecological clinics in Europe to spend a few days with this talented gentleman.

SCHAUTA OF VIENNA.

During my short stay in Vienna I was unfortunate in not seeing Schauta operate, but this was amply compensated for by seeing his first assistant (Dr. Schmidt) perform a vaginal extirpation of the uterus and appendages for pyosalpinx. He opened the anterior vaginal fornix first and then the posterior, sewing the peritoneum carefully to the vaginal edge in order to avoid hemorrhage, after which he placed just six silk ligatures in the broad ligaments, completely controlling the bleeding, of which there was almost none. By cutting off the lower half of the uterus he obtained more room for the difficult task of detaching and bringing down the densely adherent appendages.

KOLLISCHER.

I spent another profitable morning with Dr. Gustave Kollischer, second assistant to Prof. Schauta, who is quite celebrated for his work on the bladder. He catheterized the ureters and gave me a fine view of the bladder with the catheter in the ureter, by means of his cystoscope which is a modification of Nitzze's and Brenner's. I was so pleased with its easy working after seeing it used on several cases that I procured one at Leiter's, instrument maker, Vienna. It has many advantages over examination by speculum, the principal one being that it does not require any dilatation, nor external light. All one has to do is to draw off the urine, fill the bladder with clear, warm water, introduce the cystoscope and touch the button for connecting the current from a little 5-cell battery, when the whole of the bladder is beautifully lighted up and the smallest foreign body as well as the openings of the ureter can be easily seen. There is a small channel adjoining the optical apparatus through which the elastic bougie is past and can be guided into either ureter. He also showed me a beautiful little curette for removing granulations and also little scissors for cutting off polyp and forceps for seizing calculi. He told me that he had removed several wandering silk stitches from the bladder, which had ulcerated into it after laparotomies and vaginal fistulas.

PAWLIK.

Pawlik, of Prague, received me very kindly and put me in a good humor by mentioning many of my papers. Speaking of electricity he said he had employed Apostoll's method in a great many cases and with very good success in arresting hemorrhage, in diminishing the size of fibroids and in expelling some of them from the uterus, but he had given it up because he could not be sure of the result in any given case. He removed a large ovarian cyst by abdominal incision, using catgut for ligatures and burning instead of cutting off the tumor in order to avoid adhesions to the bowel and also to lessen risk of sepsis. He closed the abdomen with two rows of buried catgut and a third of superficial silk sutures. He prefers the abdominal route for fibroids and pus tubes.

I saw them using 3 per cent of ichthyol in glycerine in the outpatient department, as a local measure. Pawlik is a great linguist and speaks English, French and German perfectly, besides three other languages, but what he excels in is catheterising the ureters. He showed me the instruments which he used twenty years ago in Vienna, where he told me the proceeding was employed for the first time and by him. His skill in using the ureteral catheter is wonderful; he seemed to introduce it into the bladder and up into the ureter with one gliding movement. No dilator, no endoscope; no artificial light, not even by sight, but merely by the sense of touch! I asked him to measure the catheter and it was found to be 32 centimetres long. In a case of pyonephrosis he first injected 200 grammes of water to distend the bladder and then introduced the ureteral catheter and injected 130 centimetres of 1-3,000 nitrate of silver solution, which he gradually increases after some days to 1-1,000. Sometimes he uses sublimate solution. The patient told him when her kidney was distended and on removing the rubber pipe the solution spurted out of the catheter. On making intermittent pressure on the kidney the liquid could be made to spurt out in jets. He also showed me the woman from whom he had removed the whole of the cancerous bladder.

LEOPOLD, OF DRESDEN.

As my train did not get to Dresden until 9:30 a. m., and I did not reach the hospital until 10, I was too late to see Leopold operating, as he begins every morning at 7 o'clock. He is a firm believer in total extirpation of the uterus whenever both ovaries and tubes are severely diseased. He gave me his recent paper on the results of sixty-seven such cases with a mortality of one and a half per cent. Also another paper giving results of 100 cases of removal of the uterus by the vagina for myoma with a mortality of 4 per cent.

OLSHAUSEN, OF BERLIN.

I studied under this master ten years ago and was pleased to see that he had not apparently aged at all since then. He gave me a kind welcome and invited me to an operation next morning at 8. When he has several operations he commences at 7 sharp. One has to rise at 5:30 or 6 to be there in time. This case was a woman of 65, who had a bleeding polypus, which on removal and examination a few days before was found to be cancerous. He opened the two pouches and sewed the peritoneum to the vagina. He used nothing but catgut throughout, but he always ties three knots on the arterial ligatures. The ligaturing of the

broad ligament was greatly facilitated by his having the best needle I have ever seen, known as Olshausen's "Unterbindungsnadel," and much superior to Deschamp's. As he trusted entirely to catgut I asked him how it was prepared. First soaked for six hours in sublimate water 1-1,000; second, the water is removed by soaking for twenty-four hours in sublimate alcohol 2-1,000; third, matured for several months in absolute alcohol and used directly from that. After the operation he took me over his wards and showed me a great many cases convalescing nicely from laparotomy. In the latter he closes the abdominal wound with four layers of catgut in fat patients, or three in thin ones. He objects to through and through silk worm gut for fear that it will lead pus into the peritoneum; altho another operator, Landau, told me of a woman having died on the sixteenth day, owing to being closed up by layers of catgut; the pus could not get out and so broke into the peritoneum, which would have escaped to the skin if she had been sewed up with through and through stitches. Olshausen dresses the abdominal wound with a very little iodoform and a single little strip of gauze, over which collodium is painted so as to completely seal the wound, and this remains undisturbed for twelve days. I saw several of these first dressings removed and they looked very well; the catgut was all absorbed and the knots could be brushed off. As I thought that the buried catgut would cease to hold the wound after a few days, I asked him if he ever saw hernias. He replied that they would happen in spite of any method of suturing. I told him that I used silk worm gut and left it in a month, and so get few hernias. He does ventrofixation by passing a silk worm gut stitch around each round ligament near the uterus and fastening it to the abdominal fascia and leaving it buried there. I saw him introducing a pessary and sending a woman away, who was brought for operation with a freely movable retroverted uterus, which he first replaced. Next day he did abdominal section for an ovarian tumor with twisted pedicle, and another case of pus tubes and suppurating ovaries, also by the abdomen, taking great care to wall off the bowels with quantities of sterilized gauze.

No one here flushes the abdomen with water, and they have also abandoned constant irrigation in vaginal work, using instead great numbers of little gauze sponges which are thrown away as fast as used. Olshausen did not remove the uterus, but carefully closed all bleeding points and left it in. On the walls of the operating room he has two cards, "NOLI TANGERE" and "FVETE LINGUIS." He told me he was going to get another one with "Do not expectorate" in Latin. He showed me two cases of eclampsia, of which he has about sixty a year, sometimes as many as six at a time. As is well known he is the first authority in Germany on obstetrics and is accoucheur to the Empress.

MARTIN, OF BERLIN.

Martin still stands at the top of the gynecological ladder in Germany. He operates at his private hospital every day at 12, which is a great boon for visitors, as it enables us to see two or even three other operators each day, and he did two or three a day during the whole week. The first was a vaginal hysterectomy for cancer of the cervix, using catgut for the broad ligaments. It would have been a very difficult case for any one else, but was apparently quite easy for him. The second case was vaginal fixation in a lady who had been wearing a pessary for retroversion for many years without being cured. He is the quickest operator I have ever seen, only taking ten minutes for this pretty operation. The same running catgut suture went through vagina and peritoneum and the fixation stitch was of catgut. The third case was one of cystic ovaries, in which he opened the abdomen by the vagina, brought out the ovaries, found them diseased, removed four-fifths of them and carefully sewed up the remainder with catgut, and put them back again. After closing the vaginal incision he did an anterior and posterior colporrhaphy on the same patient. Next day he did vaginal hysterectomy for a small fibroid which was difficult on account of senile atresia. I made particular inquiries whether he had ever known of a case of post-operative hemorrhage and he replied not for seven years, because they tied the ligatures together. Next day he did two vaginal fixations for retroversion. He was greatly aided by an instrument I have never seen before, consisting of a forceps, the posterior blade of which was a stout uterine sound, and which being introduced was used as a lever to lift the uterus forward, while he was opening the vesico-vaginal plica or fold. He then detached the appendages and removed them, and after carefully closing the torn surfaces on the back of the fundus, he attached the uterus at the level of the internal os to the vaginal wound. The bad results of pregnancy following the operation in the early cases due to fastening,

the top of the fundus to the vagina, the uterus then being held upside down, are avoided by the modification adopted by Martin. In another case he brought out the appendages, emptied some cysts in the ovaries and replaced them, and then did vaginal fixation. The next day I saw him cauterizing an inoperable cancer with a very pretty electrical cautery made by Hirschman, 15 Johannes Strasse, Berlin. It consisted of a sharp porcelain tip heated by platinum wire and was supplied with current from a small storage battery not larger than a cubic foot. It was quite portable and only cost \$60, including a cystoscope and a head lamp for operating on dark days.

LANDAU, OF BERLIN.

Landau is one of the leading teachers of Berlin. He is assisted by his brother and he has a large and handsome private establishment in the Phillip Strasse, near the Charite. The pathological department is looked after by Dr. Pick, who speaks English fluently. He has a beautiful method of preparing specimens which are first hardened in 4 per cent of formalin and then stretched on wire netting. They have the specimens of every case, both macroscopical and microscopical, from whom they have removed anything even down to curettings and vaginal discharges, systematically indexed for ready reference. I have never seen anything like it anywhere. Dr. Pick gives a course of microscopy to physicians. I saw Landau remove large double ovarian tumors which Dr. Pick took sections from and mounted and stained while the operation was going and showed us in a few minutes to be carcinoma. Landau used silk to tie the pedicles and through and through silver wire for the abdomen. Another day I saw him remove pus tubes by the vagina in a case of retroversion with fixation. He split the uterus up the middle with his scissors and after digging out the pus tubes he put two or three clamps on the broad ligament on each side and cut the tubes. I was very favorably impressed with this method in this case. But immediately afterwards he operated on another patient in whom the pus tubes were much higher up in the pelvis and he had tremendous difficulty in getting them out by the vagina, and I felt sure that he could have done it much easier by the abdomen.

DUHRSSSEN, OF BERLIN.

Duhrssen seems by common consent to be acknowledged as the ablest among the younger men of note. He is not much over forty, but his large private hospital at 25 Schiffbaudamm is filled with important cases and maintained at his own expense and testifies to his ability and energy. He received us most courteously and patiently answered my very numerous questions. He showed me a patient from whom he had removed the uterus by the vagina for hemorrhage due to hemophilia, which interested us particularly, because three years before she had come to him for the same thing and he had employed Speguloff's steam cure, which cooked the mucous membrane so well that she did not menstruate at all for three years. He kindly set it going for me. It is a little boiler fitted with a thermometer so as not to let it get hotter than 120 degrees Centig. and the steam is conveyed into the uterus by means of a double catheter during a quarter to five minutes. The cervix must first be thoroughly dilated and there must be a rubber tube over the steam pipe so as not to burn the cervix, which would cause a stricture. He is an enthusiast for vaginal laparotomy and claims to be the inventor of vaginal fixation for retroversion, he having published his first fifteen cases before any one else published one. I was very much opposed to the operation before coming here, but since I have seen Duhrssen doing three in an hour as well as several other operators doing it very quickly, and after hearing its manifest advantages I have been most favorably impressed with what I have seen of it. He opens into the peritoneal cavity in two minutes or less, hooks out the ovaries, tubes and uterus, destroys all cysts by ignipuncture, replaces them, passes a silk worm gut ligature through vagina, peritoneum, uterus and out again on the other side through peritoneum and vagina. This is left untied until he has sewed up the opening in the peritoneum with a running catgut suture and the vagina with another row of catgut, after which the fixation ligature is tied. I made many inquiries about Alexander's operation, but nobody here does it. When I told Olshausen that I could generally find the round muscle with my eyes shut he invited me to do the operation on a case, but on examination her uterus was found to be fixed, and therefore unsuitable. Next day I saw Duhrssen remove the vermiform appendix and double pus tubes by the abdomen; which he does in about 25 per cent and by the vagina in 75 per cent. Next day he removed a pair of very angry, gonorrheal pus tubes by the vagina. There

was recent peritonitis. As she was a young woman he left the uterus and one ovary. This was a very nice case as he did it very quickly and all outside of the vagina.

MACKENRODT, OF BERLIN.

Mackenrodt is one of the coming great men, if not already one. He appears to be under 40 years of age, and is a fine operator. I saw him doing a Caesarean section and subsequent total extirpation of the uterus for cancer. The fetus, about eight months, was taken out alive and did well. There was hardly any bleeding. As soon as the child was removed through the opening in the uterus he put on two ligatures on each side and a few temporary ones on the uterine side and cut between them until he came to the uterine arteries, which he tied. He then separated the bladder and freed the uterus until he had it and the vagina like one tube free almost to the vulva. He felt for the large artery and cut the vagina below it, not with a knife, but with a large cherry red electrical cautery, his object being to prevent it from infecting the peritoneum. The current measured 17 amperes and was obtained from the street. The asepsis of himself and assistants was most thorough, they spending twenty minutes by the clock in disinfecting their hands. He and most of the operators here stand on the patient's left, so as to use their right hands.

In closing my letter from Berlin I must truly say that I have seen more here in one day than I have ever seen in any other city and I cannot speak too highly of the kindness with which I was received by one and all. Nearly every day I was up before 6 a. m., in order to get to Olshausen's by 7, and from there I went to Landau's, and from there to Duhrssen's or Mackenrodt's and from there to Martin's, where I remained till nearly 2, by which time I felt that I had seen enough for one day. As all these places are within a few minutes of each other, Berlin offers especial advantages for a post-graduate course. My next letter will speak of Sanger, Zweifel and Jacobs.

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This letter will give you a short description of what I saw at Leipsic and Brussels, and will conclude my series of three articles on the above topic.

SANGER OF LEIPSIC.

Sanger is a man of about forty-five years of age, and like all the great men I have seen over here is a tremendous worker. Altho he is a titular professor of the University, he has no beds at the public hospital, but he invited me to his private hospital, No. 24 Koenig strasse, where he has twenty-five beds and attends rich and poor alike. He told me that he had had no death there since seven months, during which time he had performed two hundred and twenty operations, seventy of them being laparotomies, either vaginal or abdominal. He attributes his success to his very rigorous asepsis, he and all his nurses and assistants preparing their hands for twenty minutes before the operation. Since ten years he has been using coarse sand and soft soap for his hands, followed by alcohol and then sublimate water. He uses nothing but silk, which is prepared as follows: First it is boiled in 1 to 100 of washing soda to remove the dirt, and then in Bergmann's solution, namely, 10 of sublimate, 200 of alcohol and 800 of water. It is then wound on little pieces of wood, on which the size is marked, and kept in sublimate alcohol. The patient is always shaved the day before and her skin is prepared with soap and water, ether, alcohol, and sublimate solution. The preparation of the patient occupies three-quarters of an hour. The assistant in charge of ligatures burned them instead of cutting them.

The first operation I saw was for the removal of a four-pound fibroid by abdominal hysterectomy. He removed it with clamps very quickly, and then tied each artery separately with No. 6 silk. He only crosses his first knot once. His hemostasis is very perfect and he keeps on tying until the wound is absolutely dry. His method of sewing up the abdominal wound is peculiar: he passes silk sutures on two needles from within every centimeter apart, including the whole abdominal wall, but only the very edge of the skin. Before tying these he puts in another row of interrupted No. 3 silk sutures, so as to bring the fascia and muscles together exactly and these remain permanently. Between the through and through stitches he placed superficial silk ones every half centimeter, so that they were very close together. The wound was then covered with a light strip of iodoform gauze and this with a large strip of plaster very carefully sealed.

Next day he did a precisely similar operation. He takes about one hundred minutes to do the operation, being the most careful man I have yet seen. Ether was the anesthetic used, and the inhaler was a large wire mask covered with rubber, completely covering the face so that a comparatively small quantity was employed. As the patient was only 25 years of age, he left one ovary and tube in the peritoneal cavity, so as to prevent her from having the nerve-storms of the artificial menopause.

The third morning he removed a hernial sac from the left inguinal canal, which contained a rudimentary uterus, a tumor of the right tube and ovary and a rudimentary left tube. This was a very rare case, there being only a few on record.

The fourth morning he performed implantation of the ureter into the bladder. I was fortunate in seeing this operation, as this was only the third time that it has been done in Germany, once by Wenzel and once by another operator, whose name I have forgotten, altho it has been done in America several times, I think by Fenger, and by Van Hook of Chicago and Boldt of New York. On opening the abdomen he found that she had closed tubes and that one ovary contained a large cyst. He cut out the cyst and left the rest of the ovary, after carefully sewing up the flap with fine interrupted silk ligatures. He opened up the closed tubes by cutting off the fimbriae and sewing the mucous to the peritoneal edge. The patient, who was a young woman, had had a very severe first confinement, during which the uterus and ureter were torn across, and when they healed there was a utero-ureteral fistula and her urine poured constantly from the cervical canal. Sanger began by cutting the ureter off level with the uterus, after putting a temporary ligature on it. He then sewed up the hole in the uterus, after which he dissected out the ureter from its original home beside the iliac artery until he had it free to a distance of six inches. He then closed the long opening in the peritoneum, after which he threaded the ureter, attached to a bodkin, so to speak, between the peritoneum and the abdominal wall into the top of the bladder, where he carefully stitched it. I have since heard that the operation was a perfect success. I was perfectly delighted with the four mornings I spent with Sanger, and I have no hesitation in classing him among the world's gynecologists of first rank.

ZWEIFEL OF LEIPSIC

Zweifel is the geheimrath or chief professor of gynecology, and has a large number of beds in the public hospital for women, which is a large and beautiful building. He is about sixty-five years of age. I saw him perform a very difficult operation for vesico-vaginal fistula in a woman, who had had hysterectomy several years before in another city. As the day was dark he used a very nice electric headlight, supplied from the street current. The nurses did all the shaving and scrubbing in the operating room while the assistants were getting ready. As it was high up he had the greatest difficulty in paring the edges and in passing the ligatures, and then he found that in paring the fistula he had opened into the peritoneal cavity. He at once, without rising from his seat, made a nine-inch incision in the abdomen and instead of using Trendelenburg's posture to get the intestines out of the way, an assistant took the bowels out of the abdomen and held them back, so as to give him room, and even then he had great difficulty. As Leipsic is Trendelenburg's town, I was surprised to see any one in Leipsic open the abdomen with the patient horizontal! He finally succeeded in closing the fistula so that it stood the test that the bladder being distended with water none escaped either into the peritoneum or into the vagina. He closed the abdominal incision with one layer of catgut for the peritoneum; a second for the fascia and a third for the skin, with a sort of sewing machine lock stitch, with two needles, which I had never seen elsewhere, and which made a very fine union of the skin.

His assistant then operated on a ventral hernia, which had followed laparotomy. As he did not employ Trendelenburg's position he had a good deal of difficulty in keeping the bowels in.

I saw a very interesting operation performed by Dr. Georgi, Trendelenburg's assistant. It was a colotomy for cancer of the rectum and uterus, and instead of opening the colon in the inguinal region, he made a median incision near the epigastrium and drew the transverse colon out two or three inches and sewed it there. Then he made another incision two or three inches to the left of the first, but only through the skin. The loop of intestines was past under the skin and brought out of the second incision and carefully stitched there. The first incision was carefully closed and sealed with collodion, after which the bowel was opened at the second incision and the mucous membrane sewed to the skin, where the pent-up feces poured out. By this ingenious operation, invented by Wenzel and Van Hacker of Innsbruck, perfect control of the artificial anus is obtained, simply by pressing a pad over the colon as it passes under the skin, and the patient can have one or two evacuations a day.

TRENDELENBURG OF LEIPSIC.

Although not a gynecologist, yet Trendelenburg has next to Lister done more for gynecological surgery than any other man living, and I made him a visit especially to tell him what we thought of him and thanked him every time we did an abdominal hysterectomy or other piece of difficult pelvic surgery. Those of my readers who have never seen a bad pair of pus tubes removed in the pre-Trendelenburg days can have no idea of the misery which the operator endured nor of the danger to which the patient was exposed. As the work was all done in the dark, the intestines were often torn or infected without our knowing it, or some little artery would be steadily pumping into the peritoneum without being seen. Now all that is changed; the intestines are out of the way and we cover them with sterilized towels and we have always well-lighted space to work in, so that we tie every oozing point until the peritoneum is perfectly dry and clean. As I did not see any nice table there it would be quite appropriate if the abdominal surgeons of America were to present him with a solid silver Trendelenburg table. I attended one of his clinics, at which there were over a hundred students present, and it was easy to see how much he was beloved by them. He is a man of over fifty, but of exceeding modest appearance, and as he called batches of students down to the arena to examine the patients, who were wheeled in, he gave each one the marks he had earned.

JACOBS OF BRUSSELS.

Although only thirty-five years of age, Jacobs has by his enormous industry reached one of the highest positions in Europe. I am told that he is not connected with the University, the position of professor of gynecology there being held by a military surgeon; nor has he any beds at any of the public hospitals of Brussels; but he has forty-five beds at his own private hospital, which is the most beautiful I have yet seen either in Europe or America, and its cost being over a hundred thousand dollars. The nurses are Catholic sisters. He has opened the abdomen by the vagina, mostly for hysterectomy, seven hundred times, with a death rate of less than two per cent, and he has performed over one hundred abdominal laparotomies for removal of the uterus and appendages, with less than two per cent of deaths. His method of disinfection is peculiarly his own, so I will describe it: First he scrubs the patient with green soap dissolved in alcohol and shaves her himself. If the operation is a vaginal one he uses a sponge on a holder to scrub the vagina. The field of operation is then scrubbed with equal parts of saturated solu-

tion of carbonate of ammonia and bichlorate of soda. He then scrubs with alcohol, then with two per cent of formaline. The first morning he did a perineorrhaphy, taking a great deal of time to do it, but doing it beautifully, using black silk for most of the stitches, only three of them being of silkworm gut. The stitches were only one-eighth of an inch apart. He then sealed the wound with alternate layers of iodoform and collodion, so that it was quite air and water proof. He obtains his silk from a Bordeaux chemist, already sterilized, wound on glass tubes and enclosed in other tubes sealed with a rubber band. The Bordeaux firm buys it from a Philadelphia firm, which in turn buys it from an English firm, which in turn obtains it from China. He has also the daintiest operating room I have ever seen, all the tables being of polished brass and plate glass. Next day he removed the uterus, tubes and ovaries by the abdomen for double pyosalpinx, an ovarian cyst and a fibroid tumor. One peculiarity about his method is that he cuts first and ties only the vessels which spurt as he goes along, his object being to put four or six ligatures at the most on the isolated arteries and not on the nerves. And this reminds me of his answer to the important question, which was the main object of my visit to Brussels. Why, I asked, did he abandon vaginal hysterectomy with clamps, in which he had become so wonderfully adept? Because, he said, with the clamps you compress the nerves and cause the woman so much suffering for two days that it takes her two weeks to get over it, while if you tie only the arteries and close up the peritoneum she will be practically well the next day. In this case, as the tubes were adherent to the whole anterior surface of the rectum, he carefully detached them with scissors until he had entirely freed the two large tubes, as thick as saucers. He then removed them in one piece, with the uterus at the head of the internal os, and cauterized the cervical canal and sewed the two flaps of the cervix together. The denuded rectum was cleverly covered by sewing the anterior flap to it. He had the fewest assistants I have yet seen, one of them being dispensed with by using an abdominal speculum or retractor at the lower end of the incision, and this was held tightly drawn down by having a chain and a weight attached to it, and he did not have any side holders. In closing the abdomen he used thin buried silkworm gut for the peritoneum and fascia, and larger ones for the fat and skin, and he dressed it with plain dry sterilized gauze; but this was covered most thoroughly with diachylon plaster, several layers, each piece overlapping the other. He was very careful and took nearly two hours to the operation, chloroform being used. He tells us that he considers half an hour more of no consequence compared with the importance of thorough hemostasis. Like Sanger, he brings the skin sutures very near the edge of the wound.

Next day he removed an ovary and tube from a young woman, altho he told me that his experience with conservative surgery was far from satisfactory. In cases in which he had cut out the half of an ovary they had suffered for many years afterward from cicatricial contraction in the portion that was left; while in cases in which he had removed the uterus for fibroid, leaving the ovaries, the latter had within two years completely atrophied. Moreover, he says that since we had ovarian extract at our command, we no longer have anything to fear from the artificial menopause. To every woman in whom this occurs he gives extract of cows' ovaries every morning in a glass of port wine, which makes it so palatable that they do not know they are taking it. He says he has even cured insanity with it. The next day he removed tubes and ovaries from a woman, whose peritoneum was covered with miliary tubercle, which he said he had several times seen cured by laparotomy. He allows his patients to eat heartily the day before the operation, but not for several days after; he does not fear distension of the bowels, which he says always means sepsis. He never gives strychnine, but gives them plenty of morphine if they are in pain. He thinks that the high death rate of certain celebrated operators is due to their working at such great speed that rigorous asepsis is impossible. Next day he removed a cancerous uterus by the abdomen, first getting rid of the appendages and fundus down to internal os. He then split the cervix down the middle, so as to get his left fore finger into the vagina, previously stuffed with sublimate gauze, rendering the removal of the cervix very easy, as he had only to cut it all around as it lay on his finger, at the same time feeling if the vagina was infiltrated. He also feels if there are infected glands in the broad ligament and removes them. In all his work Jacobs is an artist, using his knife like a paint brush, while in his plastic work one would think he was sketching with a pencil. I had the pleasure of spending an evening with him at his palatial residence, 53 Boulevard Waterloo, full of rare works of art and was astonished to see him and one of his assistants sit down at two pianos and play Wagner's most difficult pieces at sight, while another sang. This concludes my series of three articles, and I trust that my effort to share the priceless privilege I have enjoyed of seeing these great men at work will be appreciated by those who cannot get away and who must see these things through the eyes of others.