ligament; this steadies the wire, and prevents it from slipping up or down during tightening. In many cases it is necessary to do a good deal of enucleation before the wire can be applied; thus the capsule of the tumour may have to be incised right across the anterior surface, and the bladder carefully peeled back, and a similar enucleation may have also to be performed behind or even on both sides as well; in the latter case two layers of vessels have often to be secured, and as they are usually of great size this is, when necessary, a part of the operation requiring great care, or very serious hæmorrhage may occur; the ureters are often in very close relation to the vessels, and great care is necessary to avoid including them in the ligatures or drawing them into the wire as it is tightened.

As soon as the wire is tightened and before the tumour is cut away, a strong pin should be passed through the base of the tumour just outside the wire, and a little screw cap fitted on to its sharp end. This prevents the stump slipping back into the abdomen, and holds it in the external wound. As soon as this is applied the tumour is cut away, the stump neatly trimmed and packed round with dry antiseptic dressing, and then its cut surface is lightly smeared over with solid perchloride of iron. This is far preferable to any sewing over of peritoneal edges, which only serves to confine discharges, which are very likely to be septic, as the opened uterine cavity is in the middle of the stump. This cavity should be very carefully dried as soon as it is exposed in cutting away the tumour, and it is a good plan to clean it well out with little pledgets of cotton wool soaked in tincture of iodine or corrosive sublimate lotion. Putrefaction always occurs in the stump sooner or later when it is thus treated extraperitoneally; indeed, it is a necessity for the separation of the stump, but it is well to delay its onset till the tissues all round about are well sealed by the natural healing processes. A dry antiseptic, or rather aseptic, stump is a very troublesome thing to deal with, and often greatly delays the convalescence. This sloughing and separation of the stump is the great danger in and objection to this extraperitoneal method, but practically it rarely leads to any trouble if the stump is allowed time to separate, and not pulled and messed about too much when the wound is dressed. Sometimes it is advisable to cut the wire and remove it about ten days after the operation, but sometimes it separates with the whole external part of the stump about this time or a little later. It is well, when cutting away portions of the stump, or cutting the wire, or removing the pins, to have some perchloride of iron at hand, as troublesome little hæmorrhages sometimes occur from cutting a little too deeply into the stump, or from tearing at its union to the parietes, and it is better to seal these up at once, or septic absorption may take place. When the stump finally separates a deep granulating pit remains, and this sometimes takes weeks before it is thoroughly healed, and during the whole of the healing the wound should be carefully supported with strapping, or a weak place in the scar and rupture may result.

The only other method of performing hysterectomy to which I shall direct your attention is the complete intraperitoneal one, which we owe originally to Schroeder. The early steps of the operation are the same as those I have already described, except that an elastic ligature is used instead of the wire, and is removed when the suturing of the stump is complete. The great advantage claimed for the operation is that, as in intraperitoneal ligature and dropping of the ovarian pedicle, nothing is left outside to slough and separate. After the tumour is cut away each portion of the stump is separately sutured with rows of fine interrupted points of silk, which are cut short and buried by the next row. Mucous membrane is sutured to mucous membrane, uterine tissue to uterine tissue, and finally peritoneum to peritoneum, the sutures being applied so closely that they also completely control hæmorrhage.

Theoretically this is a perfect method, as nothing remains outside to putrefy and separate and no raw surfaces are left in the peritoneum; but practically it has certain great difficulties and dangers. First, it is very difficult in many cases so to suture that hæmorrhage is efficiently controlled, and, if it is at the time, oozing is very likely to come on later as the uterine tissue contracts. Secondly, it is very difficult, and in some cases impossible, to make the inside of the stump

thoroughly aseptic. The opened uterine cavity must always be in the centre of the stump, and the sutures which close the mucous membrane may acquire putrid material during application, and from them putrefaction may spread into the stump. This is, of course, more likely to occur if there be some oozing and tension. Such a condition of affairs must obviously be still more dangerous than a putrid stump outside, for, though there is a possible outlet for discharge through the cervix into the vagina, it is a very uncertain one, and one very likely to be blocked.

I have, however, had some excellent results from this method in cases in which I found it impossible to get a stump for external treatment, and when cases do do well their convalescence is much quicker than by the extraperitoneal method. I have no doubt, however, that the mortality is and will be higher in any series of cases thus treated than in a similar series treated by the extraperitoneal method. I shall not occupy your time with any description of the method by complete enucleation and suturing of large flaps of peritoneal capsule in the abdominal wound, for I can see nothing to recommend it, and it is, so far as I have seen it performed, a clumsy and needlessly bloody and dangerous proceeding.

It only remains for me to thank you for the patience with which you have listened to this very inadequate sketch of one of the most important questions which we have to face in the treatment of the diseases of women, and to express the hope that any shortcomings will be amply rectified by the speakers who follow my lead, so that the whole result of our discussion may be a clear exposition of the present state of our knowledge and practice.

CASE OF PORRO'S OPERATION FOR IMPACTED LABOUR WITH ACCIDENTAL HÆMORRHAGE.

By THOMAS H. MORSE, F.R.C.S. ENG.,

Surgeon to the Norwich Dispensary and Assistant-Surgeon to the Jenny Lind Infirmary for Children.

Mrs. P., aged 33, had been married ten years, during which time she had been under my care at intervals. She had had four miscarriages and four children born dead; and finally, after prolonged administration of mercury, two healthy living children aged respectively, at the time of her present illness, 4 and 2½ years. The confinement 2½ years ago was normal, and nothing unusual was discovered about the pelvic organs.

On March 14th, 1892, labour commenced, she being then in the ninth month of pregnancy. When I arrived at the house, she complained of a constant pain in the abdomen. On examination, I found the uterus about its normal size at full time, but in a state of tonic contraction, extremely hard and tender to touch; the os would hardly admit one finger, and from it dark blood was slowly running. The pelvic cavity was occupied by a semisolid tumour which appeared about 3 inches in diameter; in front of it the os uteri was with difficulty reached close behind the pubes and high up. I endeavoured to push the tumour up into the abdomen, but failed, owing to its being fixed in the pelvis; at the same time it was ascertained to be separate from the uterus and not compressible.

Hæmorrhage continued slowly, and the pulse gradually rose from 80 to 100 per minute. Dr. Burton-Fanning and Mr. Walters saw her with me shortly afterwards, and we decided that she must be delivered by abdominal section. It was now nearly nine hours since the commencement of labour, and the pulse was becoming empty and more rapid; the face also was getting pale and respiration was quickened.

Dr. Burton-Fanning gave ether; the abdomen was opened as rapidly as possible by an incision 4 inches long in the middle line; the uterus was of a purplish colour. I passed my hand round the uterus and felt the tumour in the pelvis, where it was firmly adherent. Great difficulty would have attended its removal while the enlarged uterus was in the way. I therefore freely incised the uterus. No hæmorrhage took place. I introduced my hand and pulled out by the leg a dead fetus of the usual size at full time. The placenta, which was lying loose in the uterus, followed easily, as also

did about two pints of dark blood clot; the uterus immediately contracted and was drawn out of the wound; two pins were passed through the cervix, and, while Mr. Warlters was adjusting and tightening Koerberlé's *serre-nœud*, I enucleated from its adhesions in the pelvis a dermoid ovarian cyst rather larger than an orange. The uterus and tumour were cut away; the abdomen washed out with sterilised water and sponged dry; the wound was united round the stump, no drainage tube being used. The operation was completed in half an hour.

The shock which followed was very severe, and was vigorously treated with artificial heat and brandy. The pulse remained feeble for many hours. She slowly rallied; then followed complete suppression of urine for sixty-eight hours, so that I began to fear lest the ureters had been included in the clamp. However, by the greatest care in the after-treatment, and especially at this time, after prolonged hot sponging, the kidneys began gradually to act. At first only 4 ounces of urine were passed in twenty-four hours; next day 8 ounces; then 13 ounces, then 15, and so on until the normal amount was reached. Portions of slough were cut away, and the clamp came off on the seventh day.

She had the best nursing, and the most careful attention to dieting and after-treatment, her convalescence extending over six weeks, after which her recovery was complete, and she went to the seaside.

At the present time—January, 1893—she is in perfect health.

NOTES OF A CASE OF VAGINAL MYOMECTOMY PAR MORCELLEMENT.

By JAMES MURPHY, M.A., M.D.,

President of the North of England Branch of the British Medical Association.

I HAVE been waiting for several years to find a case of uterine myoma suitable for removal by the vagina by the method of *morcellement*—taking it away piecemeal—invented and practised almost daily by my friend and former teacher, M. Péan. I have had the advantage of having assisted M. Péan in at least twenty similar operations, and to see him do the operation is to me one of the most interesting sights in the whole field of surgery, and shows him as the original, brilliant, and dexterous surgeon that he is.

I am indebted to my friend Dr. Drummond, of South Shields, for the opportunity of doing my first case, as he was good enough, in January, 1892, to place under my care a patient with the following history.

History and Condition before Operation.—Mrs. S., aged 42, mother of one child, aged 18, had suffered from a myoma in the posterior wall of the uterus for some years. For the past few months it had caused her great inconvenience from its pressure on the rectum and bladder, necessitating the almost constant use of the catheter. The pain was severe and the tumour was growing. Some hæmorrhages had occurred, but the reasons for removing it were—increasing growth, pain, and the rectal and bladder troubles caused by its pressure. On examination, a large tumour could be felt in the posterior uterine wall blocking the pelvis. The os was represented by a slit high above the pubes, and the tumour presented in the vagina a condition very similar to a pregnant retroverted uterus. On examination of the abdomen the tumour reached nearly to the umbilicus.

Operation and After-history.—On February 3rd, 1892, she was placed in the lithotomy position, her legs supported by Clover's crutch. I then incised the capsule of the tumour from before backwards, stripped it off as far as I could, then, applying a powerful forceps to the tumour, snipped off a portion the size of a Tangerine orange, with a strong scissors. I then removed a similar portion at each side, and in this way, always working from the circumference to the centre, removed piecemeal more than three-fourths of the tumour, when I was enabled to enucleate the remaining portion. As there was considerable oozing of blood, I plugged the cavity with some wood-wool, a small portion of which I unfortunately overlooked in removing the plug next day. This had the effect of sending the temperature up to 104° on the sixth and seventh days; otherwise she made an excellent recovery, and the uterus now feels like an ordinary multiparous uterus, and she is in perfect health.

REMARKS.

The accompanying excellent drawing, for which I am indebted to the kindness of my friend Dr. Baigent, explains the mode of operating. From the position of the myoma, situated as it was in the posterior uterine wall, and protruding into the vagina and completely filling up the pelvis, it would have been impossible to have removed it by abdominal section and extra-

peritoneal clamp, and to have removed it through the abdomen by first tying the vessels in the broad ligaments, and then removing the whole mass, both uterus and myoma, would have left an enormous opening between the abdomen

and vagina, difficult, if not impossible, to close; whereas by removing it as here recorded, the peritoneum is not opened and the uterus is left behind.

THE GRAPHIC METHOD APPLIED TO THE DIAGNOSIS OF OBSCURE ANEURYSMS.

By W. SOLTAU FENWICK, M.D.LOND., M.R.C.P.,

Physician to Out-Patients to the Evelina Hospital for Sick Children, Medical Tutor to the London Hospital;

AND

WALKER OVEREND, B.A.Oxon., B.Sc.,

Late Radcliffe Fellow, Oxford.

In a paper read before the Medical Society of London recently Dr. Richardson drew attention to a method of intrathoracic auscultation which he proposes to employ as an aid to diagnosis in cases of commencing stricture of the œsophagus, in certain diseased conditions of the stomach, and in cases of aneurysm of the larger thoracic arterial trunks. It so happens that during the early part of the year 1890 we made a series of experiments in the same direction. In the first instance it was the great difficulty experienced in the diagnosis of an aneurysm of the descending portion of the arch and of the thoracic aorta which induced us to employ an intrathoracic method. By its means we hoped to obtain graphic records of movements communicated to various parts of the œsophagus. We also imagined that the method might prove serviceable in the diagnosis of aneurysm in the upper part of the abdominal aorta, and, when introduced into the rectum, in the recognition of aneurysm of the common and internal iliac trunks.

The apparatus consisted of a long soft rubber œsophageal tube, to the end of which a piece of very thin elastic membrane, capable of inflation, was firmly secured. At the opposite end the tube was connected with a Marey's tambour and with a