lymphatic glands to be detected. The urine, withdrawn with a catheter, was thick, with a deposit of muco-pus, and showed about a third albumen; there was no blood. The abdomen was well covered with fat and had thick walls. The patient appeared to be quite healthy, excepting for the growth and its effects. Until the operation it was always necessary to draw off the urine with a catheter, the patient becoming much distressed at times from the retention, and quite unable to pass urine without assistance. On March 22nd she was placed under the influence of ether and a supra-pubic cystotomy was performed. The bladder was washed out and then injected with a small quantity of boracic acid solution. No rectal bag was used. After incision of the bladder wall the sides of the incision were sutured to the edges of the skin wound on each side. A large drainage-tube was placed in the bladder, and the upper part of the wound was brought together with silk sutures. The patient was then placed in the lithotomy position and the growth fully exposed by the use of Sims's speculum and retractors. An incision was made on each side from before backwards; the one on the right side extended to the bone; these were joined in front by a curved incision following the arch of the pubes in front of the clitoris; the whole of the mass beneath the pubic arch, including the attachments of the clitoris, was now rapidly dissected back, the bone being bared. The upper limits of the growth were more accurately defined, and it was removed with the scissors by cutting through the bladder beyond it. The invasion of the bladder by the growth had extended further along the anterior than along the posterior wall, and as the section had gone through the edge of the growth in front, an additional inch or more of the anterior wall required removal, leaving an opening through which three fingers could be passed. The bladder was in a condition of subacute catarrh. After the arrest of hæmorrhage, which was comparatively slight in amount, the posterior wall of the bladder was drawn forward and attached to the anterior edge of the wound by means of wire sutures. There was some tension on the stitches towards the right side of the wound, but the bladder was completely closed by the sutures, which brought the edges well together. Iodoform was used to the wounds, iodoform gauze was applied to the supra-pubic wound around the drainage-tube, and plugs of the same gauze were placed in the vagina. Two days after the operation she developed bronchitis, and the temperature rose to 103° F. at night. She was delirious, abusive, excited, and tried to get out of bed at night. It was difficult to manage the supra-pubic tube, as she tried to pull it out and interfered with the flow of urine through it. Possibly in consequence of obstruction to the flow thus caused some leakage took place from the subpubic wound. There was no sloughing. On the 30th the wire stitches were removed. The wound had closed very well, excepting to the right of the middle line close to the pubic ramus, where there was a small sinus surrounded by indurated tissue. Syringing with boracic acid lotion was carried out daily. She was still very noisy at night, but quieter during the day; the temperature had been generally above 103° in the evenings of the days which had intervened since the 24th, but the condition of the chest was improving. By April 3rd the temperature had become normal and the previous condition of excitement was followed by a period of depression, with low temperatures. The bronchitis cleared up, and the subpubic sinus diminished in size after the application of solid nitrate of silver. It had not closed entirely when she left hospital on May 23rd, but was not larger than a crow's quill at the surface, and the leakage was very slight when she walked about, but she refused to have anything done to close it. There was no evidence of glandular infection. She was in good health bodily and mentally, and apparently quite able to manage the apparatus (Buckston Browne's), which answered its purpose admirably. Microscopical examination of the growth showed it to be a carcinoma without cell nests.

Remarks by Mr. BATTLE.—I have been called upon to treat several cases of malignant disease (chiefly epithelioma) of this region during the past few years, in some of which the urethra had become involved in extension of the growth. In the removal of these growths it proved possible to do the operation without impairing the action of the sphincter. The question as to what would be the best course to pursue should it be necessary to remove the whole of the urethra had necessarily presented itself. In the excision of growths of malignant character from this part of the body it is

advisable to make a free removal, otherwise the disease will speedily recur. It was probable, therefore, that a case might apply for relief in which removal of the growth would result in a condition of permanent incontinence of urine. Some months before this case came under care I had considered the question of the treatment which it would be advisable to follow, and had decided to act in the way described. Had the bladder been much inflamed I should have done the supra-pubic operation some days before proceeding to excise the growth, for I had some fear lest an unhealthy mucous membrane with decomposing urine should interfere seriously with the healing of the subpubic wound, and possibly cause a spreading inflammation in the cellular tissue about the bladder. As the cystitis was but slight, I completed the operation at one sitting. Since the patient went out of the hospital I have heard nothing from her; before she left she was far happier than when admitted, and appeared able to manage the apparatus quite satisfactorily. It might, however, be possible to arrange so that the bladder should be emptied at intervals and the necessity for wearing constantly an apparatus, such as that supplied, done away with. The mental condition after the operation was that of an insane person, and it is interesting to note that such a state of mind has most frequently followed operations on the genito-urinary organs. The character of the delirium was not accounted for by the severity of the bronchitis or by any apparent septic condition of or about the wounds. My best thanks are due to Mr. A. R. O. Milton, the house surgeon, for his great care of the patient.

LEEDS GENERAL INFIRMARY.

INTESTINAL ANASTOMOSIS BY THE MURPHY BUTTON FOR RELIEF IN AN ADVANCED CASE OF CANCER OF THE COLON AND STOMACH; NECROPSY; REMARKS.

(Under the care of Dr. A. G. BARRS and Mr. MAYO ROBSON.)

ALTHOUGH in the following case life was probably neither materially lengthened nor shortened by the operation performed, it seems to be desirable to report it as an example of a comparatively new method of treatment in a patient extremely ill and unable to bear a prolonged operation.

A man aged sixty-five years was admitted under the care of Dr. Barrs on March 25th complaining of abdominal pain, vomiting, and constipation, the pain having been present for nine months and the vomiting for a fortnight. During the latter part of his illness he had rapidly lost weight, decreasing from 14 st. to 10 st. 12 lb. On admission the patient looked ill and emaciated and the abdomen was generally distended. He complained of pain in the region of the umbilicus, the pain being increased by food and relieved by the vomiting which shortly followed the taking of anything solid. An ill-defined hardness was felt under the left ribs, though there was no tenderness here or elsewhere in the abdomen. No peristalsis was visible. Though a little flatus was passed, after the rectum had been cleared by enemata no proper action of the bowels occurred. The tongue was coated. Mucous râles and emphysema of the lungs were noted. The urine was normal. Dr. Barrs diagnosed the case as one of intestinal obstruction, probably dependent on growth, and advised operation, the patient being transferred to the surgical wards on March 29th, under the care of Mr. Mayo Robson, who opened the abdomen the same day by a three-inch incision in the middle line below the umbilicus. Exploration showed a large tumour on the left of the spine involving the splenic flexure of the colon and the stomach, and being too extensive for removal even if the patient had been in a condition to bear a prolonged operation, which he was not. The ileum and sigmoid flexure of the colon were therefore brought into the wound, surrounded by an elastic tourniquet, and made to communicate by means of a medium-sized Murphy's button, after which the abdomen was closed. The anastomosis occupied a little under five minutes, the time being noted without the operator knowing this was being done. The parietal wound was united by silkworm gut sutures. No shock followed, and after the ether sickness had passed off there was no further vomiting. The wound pursued an ordinary course and the sutures were removed on the seventh day. Flatus was passed on the second day and the bowels were moved by an enema on the third day. Prepared food, milk, and other light diet were given from the second day onward. There

had been a little cough and expectoration throughout, and on April 2nd the patient complained of his chest. The temperature remained normal and there were no abdominal symptoms, but the hypostatic congestion of the bases of the lungs and purulent expectoration increased in spite of stimulants and propping up in bed, and he quietly succumbed on April 9th, eleven days after the operation. Post-mortem examination showed hypostatic congestion of the lungs and entire absence of peritonitis. A free opening was found between the ileum and sigmoid flexure of the colon. The detached button was found in the cæcum. The connexion between the ileum and colon was quite secure, but easily detachable, as there had been very little inflammatory reaction, and the margins only of the two apertures in the gut were united. The cancerous mass had completely blocked the splenic flexure of the colon and was adherent to the stomach and omentum.

Remarks by Mr. MAYO ROBSON.—The case illustrates, first, the ease and rapidity with which anastomosis by means of Murphy's button can be effected even in the presence of general distension of the intestines; secondly, the slight amount of shock following a short operation on the intestines even in a patient extremely debilitated by disease; and, thirdly, the very slight amount of inflammatory reaction caused by the sloughing out of the button and, therefore, the slender bond of union between the connected loops. In this case the button fell into the bowel on the proximal side of the stricture, and, therefore, the stricture being impassable, it could not have been parted with. Although in an incurable case this was a matter of no importance, in other cases the imprisonment of the button might make a great difference to the patient. I should think that the difficulty might be overcome by making the distal flange of the button slightly larger than the proximal. The button has been so successfully employed by the inventor and by others that it now must form a necessary part of the armamentarium of all surgeons who perform abdominal work; though, like others who have written on the subject, one cannot help feeling the undesirability of leaving large foreign bodies inside the alimentary canal. The great advantage possessed by the button is the rapidity with which it can be employed. Where, however, such haste is not necessary, as in many cases of enterectomy for new growths and other similar procedures, I still prefer the use of the decalcified bone bobbin, which I have hitherto found of so great service.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL AND DISPENSARY.

OVARIOTOMY FOR MULTILOCULAR CYST; RECOVERY, COMPLICATED BY FEMORAL HERNIA; REMARKS.

(Under the care of Mr. J. B. PIKE.)

THE following case is an example of the rare complication of strangulated femoral hernia after the removal of a large ovarian tumour. For the notes we are indebted to Mr. A. Palmer, house surgeon.

The patient, a feeble edentulous female stating her age to be sixty years, but looking more like seventy, was admitted to the Loughborough and District General Hospital early in June, 1894, for the treatment of a tumour which nearly filled the abdominal cavity. The growth had been very rapid, and it had not attracted her attention until about six months before her admission. Percussion gave dulness anteriorly, extending more to the right side, and resonance in both flanks. The uterus was movable, and fluctuation could be felt in Douglas's pouch. An ovarian cyst with several compartments was diagnosed, and ovariectomy was performed by Mr. Pike on June 10th, with the assistance of Messrs. Eddowes, Corcoran, and Phelps. The tumour having been exposed by an incision extending from near the umbilicus to within about two inches of the pubes, a large anterior cyst was tapped with Wells's trocar, and seven or eight pints of fluid were evacuated. With slight traction a second cyst came through whole, and this was incised and carefully emptied. No adhesions could be felt, but the tumour still did not present itself. Mr. Pike therefore enlarged the opening in the second cyst by tearing with the fingers, and passed his hand into it. He was thus able to break down the remainder, and by squeezing it in the hand to draw it through the opening. This portion was multilocular, containing thick gelatinous matter. No fluid

escaped into the abdomen. The pedicle was thin and was ligatured by transfixion with a blunt needle. The cavity having been sponged out, a Keith's tube was inserted and the wound closed with silk sutures. The tube was removed on the third day with some difficulty, a band of lymph having insinuated itself through one of the perforations and requiring to be snipped through with scissors. The patient suffered from severe shock, but rallied quickly, the wound healing by first intention and the temperature scarcely rising above 100° F. On the 27th the patient was attacked by bilious vomiting, with severe symptoms of shock, almost amounting to collapse, which caused considerable anxiety as to the lymph bands which might possibly exist in the pelvis. This was found to be due, however, to a small femoral hernia, which had not descended as long as the tumour was *in situ*. The hernia was reduced by taxis, and since then the progress of the case has been satisfactory.

Remarks by Mr. PIKE.—This case appears to be of interest on account of the feeble condition of the patient and the very misleading complication during convalescence. I attribute the success of the operation to strict asepticism; to only one person's hand entering the abdomen, that one hand having been frequently cleansed with perchloride of mercury solution during the operation; and to the care bestowed upon the case by our house surgeon and nurses.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Special General Meeting.—*Further Observations on the Development of Mammary Functions by the Skin of Lying-in Women*—*Intra-peritoneal Rupture of Bladder successfully treated by Suture.*

A SPECIAL general meeting of this society was held on June 11th, Mr. HUTCHINSON, President, being in the chair, for the purpose of electing a treasurer in the room of the late Surgeon-General J. A. Bostock, C.B. The Council nominated Mr. J. Warrington Haward for the office, and he was duly elected.

The last ordinary meeting of the society for the present session was then held.

Dr. CHAMPNEYS and Mr. BOWLBY contributed a paper on *Further Observations on the Development of Mammary Functions by the Skin of Lying-in Women*. Reference was made to the previous paper¹ containing a record of thirty cases, and the description of the lumps there given was quoted. The opinion there expressed was that the lumps were developed from the sebaceous follicles of the skin. Three sets of specimens had since been obtained and subjected to microscopical examination. They were seen to consist of (a) a covering of normal skin; (b) loose subcutaneous tissue and fat; and (c) aggregation of glands. The glands were situated deeply, in the situation of sweat glands, and much more deeply than the sebaceous glands, which were seen unaltered. The glands were of the tubular type, the deeper parts much convoluted, the terminal ducts nearly straight and opening through interpapillary processes. The cells of the deeper parts appeared to be columnar; those of the duct were polyhedral, in two or three layers. The glands, in short, were like sweat glands, but extended more deeply, were more irregular both in structure and extent than those in normal skin, and were interpenetrated by plentiful unstriated muscular fibres; they formed the lumps in question. There was no appearance of mammary tissue or any other tissue except that described. They agreed in microscopical appearance with the description of skin glands in the human axilla by Dr. Creighton.² The conclusions drawn were (1) that the lumps consisted of modified sweat glands; and (2) the fact that various mammary secretions were produced by modified sweat glands seemed to show either that mammary tissue was not necessarily a direct modification of sebaceous gland tissue or that similar secretions could be produced by more than one variety of skin

¹ Transactions of the Royal Medical and Chirurgical Society, vol. lxx., p. 419.

² *Ibid.*, vol. lxx.