normal in position, but slightly enlarged. The sound passed two inches and three-quarters. In the right posterior quarter of the pelvis a firm irregular mass could be felt about the size of a hen's egg. On the left side there was considerable resistance, but no definite tumour. The thoracic organs were normal. Temperature 98° 6'. The urine contained a decided trace of albumen.

On April 7th the abdomen was opened. The omentum was firmly adherent to the anterior abdominal wall and to the back of the uterus; there were also adhesions between the uterus and intestine which were troublesome on account of their density and vascularity. After these had been separated the right Fallopian tube was discovered dilated and flaccid, and when traced backwards and downwards it was found to be continuous with the enlarged ovary, which was lying deeply in Douglas's pouch, embedded in adhesions. With great difficulty these parts were freed, brought to the surface and removed; about three fluid ounces of blood-stained non-offensive pus escaped from the ovary during the manipulations. The adhesions were very vascular and bled freely when broken down. The left appendages were adherent but otherwise normal and were not interfered with. The peritoneal cavity was douched with hot boracic lotion and the bleeding checked. A glass drainage-tube was introduced and the wound sutured with silkworm-gut sutures. The portion of the tube removed was irregularly enlarged and contorted, four inches and a half in length, the fimbriated portion was completely occluded by its adhesion to the diseased ovary, but there was no communication between the two. The mucous membrane of the tube was swollen and acutely inflamed and covered with thick, yellow, inoffensive pus. The ovary measured two inches and a half by two inches and contained several distinct loculi lined by an inflamed membrane and full of pus. Convalescence was somewhat impeded by a faecal fistula which made its appearance on the morning of the fourth day after a severe attack of vomiting the previous night. Faecal matter and occasionally flatus continued to escape from the wound in gradually diminishing quantity for a month, when the escape ceased and the wound healed. She was discharged on May 26th feeling quite well. On June 3rd the patient presented herself on account of the sinus having reopened. There was a free discharge of inoffensive pus, the patient's health otherwise was excellent.

Remarks by Dr. CULLINGWORTH.—Recurrent pelvic peritonitis in the female is, in the immense majority of cases, an indication of the presence of pus either in the Fallopian tube or in the ovary, or in both. It therefore almost invariably calls for surgical treatment, for the anatomical position of the tube is such that pus once poured out cannot drain away as it can from most of, if not all, the other mucous surfaces of the body, whilst in the case of the ovary the imprisonment of the pus is, if possible, even more absolute. The six cases forming the above series happened all to be in the ward at the same time. They were all admitted for acute pelvic inflammation and at least four of the patients were extremely ill. The history showed that in all but one of the cases there had been previous attacks, proving the presence of some chronic source of irritation. No one who saw the cases or who reads the foregoing abstracts, carefully prepared by my house physician, Mr. Banks, can doubt that operative interference was the best method of dealing with the cases and in some of them was probably the only possible means of saving life.

How do the contents of an ovarian cyst become infected? What determines their suppuration? There seems good reason for believing that the most common channel of infection is the Fallopian tube. Given cystic disease of the ovary and suppurative inflammation of the Fallopian tube (whether septic or gonorrhoeal), there is strong evidence in favour of the view that the process of suppuration may be set up in the contents of the ovarian cyst by the passage of infective micro-organisms from the diseased tube. Case 1 is a good example of this method of infection in a case of gonorrhoeal salpingitis. But this is not the only source of infection. For instance, in Case 2 it is more than probable that the suppurative process in the ovaries was due to contamination from the vermiform appendix, which was found in a condition of the most acute inflammation and so adherent to the wall of one of the cysts as to be apparently embedded in it. It will be noticed that in two of the cases faeces made their appearance in the discharges from the abdominal wound during convalescence: in one case on a single occasion only, in the other (Case 6) during thirty successive days. The liability for temporary faecal fistulae to occur after abdominal opera-

tions where the intestines have been seriously involved in the adhesions is well known. It is due to the ease with which the intestine gives way when its wall is rendered soft and friable by inflammation and its external support is lost by the removal of parts to which it has been adherent. Under such circumstances the strain produced by a fit of laughter or of coughing or the act of vomiting is quite enough to burst the bowel and permit the escape of flatus and faeces. Fortunately it is an exceedingly rare event for a fistula so formed not to heal spontaneously. It must not be supposed that the fact of there having been an escape of faeces in two out of the six cases is any real indication of the proportion of cases in which this accident ordinarily occurs, for these six cases were all of more than average difficulty and severity and the intestines in most of them participated to a more than usually serious extent in the general pelvic inflammation. One important lesson brought home to us by these histories is the wonderful tolerance of the peritoneum. The peritoneum may be soiled by the spilling of fetid pus and even by the passage of faeces over it for many days together without injury, provided ample means of exit exist by which the offensive material can be quickly got rid of by the intra-abdominal pressure. In every one of the six cases purulent material escaped more or less freely into the peritoneal cavity, owing to rupture of the thinner and more densely adherent portions of the cyst wall during the process of separation, and in no instance did any constitutional harm result. Again, in Case 6 faeces passed over the peritoneal surface for thirty successive days without any perceptible ill effects. It may be said, in reference to the bursting of the cysts, that it was the subsequent irrigation that prevented injury. I am a profound believer in the value of flushing of the peritoneum, but I cannot think that it is effectual to the extent of washing the surface absolutely clean. It is, in my opinion, sound practice to ensure free subsequent drainage for at least some hours whenever pus has escaped, so that any portion that may remain after the flushing and sponging may find an easy way out. The powerful force of intra-abdominal pressure is then usually quite equal to the task of effecting its expulsion. For the same reason free drainage should always be provided when there is the least ground for fearing the escape of the intestinal contents. If they are thus provided with a means of exit they will avail themselves of it without delay and the danger of peritonitis will be avoided. Another lesson taught by these and similar cases is that the method that was here adopted of removing the cysts entirely is infinitely to be preferred to that of merely emptying and draining the abscess cavity and then stitching the cyst wall to the edges of the abdominal incision. The presence of the most formidable adhesions ought not to deter the operator from attempting the more complete operation.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

TWO INSTRUCTIVE RENAL CASES.

(Under the care of Dr. CLAY, Mr. WHIPPLE and Dr. PRANCE.)

BOTH these cases are important, as the real cause of the patient's serious condition was in Case 1 not diagnosed until the disease was very advanced; in Case 2 the kidney was never considered to be the primary cause of the patient's serious condition. In Case 1 death occurred whilst the patient was still under the influence of the anæsthetic, which was A.C.E. mixture; chloroform had been given at first, but when the patient was anæsthetised A.C.E. mixture was administered instead. The patient became convulsed and cyanosed and pulseless in a few seconds. She had never had fits during her childhood or pregnancy. The left kidney presented the appearance of a pyonephrosis due to calculus, the renal structure had entirely disappeared and the walls of the abscess cavities were quite smooth. The ureter was very thick, but its lumen was small. The pelvis was very much altered and filled up with fibrous tissue. In Case 2 there was nothing during the latter part of the patient's life to lead one to suspect kidney trouble. No tumour could be felt in the loin and nothing was found in the urine. Post-mortem examination showed how it was his condition was overlooked. The ureter was blocked; the abscess cavity had emptied itself, partly into the colon, and partly had made its way into the base of the right lung, where acute miliary tuberculosis had been set up. In both of these

cases there was well-marked compensatory hypertrophy of the other kidney, showing that if the diseased kidney had been removed there would still have been enough renal tissue left to be compatible with life. For the account of these cases we are indebted to Mr. A. Stanley Thomas, house surgeon.

CASE 1 (under the care of Dr. Clay and Mr. Whipple).—F. W—, aged twenty-nine, married, was admitted on April 12th, 1892, with the following history. Two months previously she had been delivered at full term of a stillborn child. She had enjoyed good health throughout her pregnancy, except during the last two weeks, when she suffered from pains in her legs. She got over her confinement very well and was up and about on the fourteenth day. After that she began to suffer from pain in the left side, which was thought to be due to pleurisy, but not until a month later did she notice anything amiss, when she found that the left loin was very swollen. The urine was examined, and was said to contain pus.

On admission she was extremely thin and pale and looked very ill. Temperature 101°F ; pulse 130. She complained of pain in the left hypochondriac region, which was markedly swollen and extremely tender. Dulness extended in the left flank from the seventh rib in the mid-axillary line downwards to the crest of the ilium; behind, it extended from the vertebral column forwards to within three fingers' breadth of the umbilicus. The swelling was very tense and no fluctuation could be obtained. Urine was acid; sp. gr. 1014; it contained abundant phosphates, no albumen or pus, and nothing was found by microscopic examination. No increase in frequency of micturition.

On April 13th her condition was much the same; temperature 100.4° . She had passed twenty-four ounces of urine in the previous twenty-four hours. It was acid; sp. gr. 1014; no pus. On April 14th, her temperature having been between 100° and 102° since admission and her condition having in no way improved, she was recommended to have the swelling in the left loin explored. That afternoon she was given chloroform; when fully under the influence of this anæsthetic A.C.E. mixture was given throughout the rest of the operation. An incision parallel to the last rib was made in the left loin and very offensive pus was evacuated. A second abscess cavity was then opened above the first and similar pus escaped. Both cavities were irrigated with boracic-acid solution and a large drainage-tube was put into both cavities and the wound was then dressed with carbolic-oiled gauze and wood-wool wadding. The administration of A.C.E. mixture had been stopped for quite a minute when the patient, who had been breathing well all through the operation, became quite suddenly convulsed and cyanosed, the pupils became dilated and the radial pulse, which had previously been good, suddenly ceased and the patient never regained consciousness in spite of every restorative means being applied.

At the post-mortem examination, which was unfortunately not a complete one, the capsule of the left kidney extended from the brim of the pelvis upwards to the seventh rib. In front the colon and small intestines were adherent. The kidney substance was replaced by abscess cavities, the walls of the cavities being smooth, the contents thick fetid pus. The pelvis of the kidney and the perinephritic tissue were extremely thick and the opening into the ureter was very small, but the lumen was not at all dilated. The sac and the remnants of the kidney weighed one pound two ounces. The right kidney weighed eight ounces and was quite a healthy hypertrophied organ.

CASE 2 (under the care of Dr. Prance).—R. E—, aged thirty, a labourer, was admitted on March 9th, 1892, with the following history. About a year ago he began to suffer from pain in the back and in the legs; he got gradually weaker, but not until early in February of this year did he take to his bed. On March 2nd he had his chest aspirated and a small quantity of pus was withdrawn from the right side. He had no history of any urinary trouble, and there was no history of phthisis in his family.

On admission he was very emaciated and complained of pain in the right side of the chest. He had a very troublesome cough; his expectoration was very offensive, but rather scanty. There was dulness over the right base and diminished vocal fremitus. On auscultation, fine râles and bronchial breathing were heard over this area. Respiration 22; temperature 98.8° . On palpating the abdomen nothing could be felt; patient complained of pain in the back; urine high coloured; sp. gr. 1014, acid; albumen present; no pus or blood. Microscopic examination revealed nothing. There

was a superficial abscess over costal cartilages on the right side.

On March 10th the abscess was opened below the twelfth costal cartilage. It contained gas and most offensive pus. Its cavity ran upwards between the liver and diaphragm. It was washed out and a drainage-tube put in, and then dressed with carbolic oiled gauze and wood-wool wadding.

March 11th.—Had a better night. Has lost all pain in right side. Dressed. Breathes through the opening beneath the twelfth rib. The patient's condition was now thought to be due to an empyema, which had perforated the lung and diaphragm.

12th.—Not so well. Will not take any nourishment.

14th.—Bowels were opened three times. Motions very offensive and liquids resembling pus.

15th.—Patient became comatose and died early this morning.

At the post-mortem examination the incision made beneath the twelfth rib communicated with a perinephritic abscess. This abscess had extended upwards between the diaphragm and liver, the former had been perforated and the surrounding lung tissue was consolidated and affected with miliary tubercle. The rest of the right lung was normal, except that there were a few small calcareous nodules at the apex. The left lung also had signs of old tubercle at the apex. The abscess sac was adherent in front to the colon and had ulcerated into it in one place; the colon contained pus similar to that found in abscess. The right kidney weighed $10\frac{1}{2}$ oz. and on section it was found to be riddled with abscesses, the walls of which were rough and irregular; and the contents varied from caseous material to thick yellow pus. The upper part of the ureter was dilated; five inches from the bladder it was kinked or twisted and at this spot the lumen was completely blocked. The left kidney weighed 12 oz. and was composed of quite healthy kidney tissue. There was no other sign of tuberculous disease.

Reviews and Notices of Books.

A Text-book of the Practice of Medicine for the Use of Students and Practitioners. By R. C. M. PAGE, M.D., Professor of General Medicine and Diseases of the Chest in the New York Polyclinic; Visiting Physician to Randall's Island Hospital, St. Elizabeth Hospital, the Polyclinic Hospital, and the North-Western Dispensary Department of Diseases of the Heart and Lungs; Member of the New York Academy of Medicine and the New York Pathological Society, &c. New York: William Wood and Co. 1892.

WE do not think that we can do better than quote the substance of some remarks from the author's preface to this work in order to describe its nature, design and general scope. He says that the chief objects in preparing the volume have been to facilitate clinical instruction and enable both the physician and student to obtain in brief the most practical as well as scientific view of the various subjects treated in it. Students in medical colleges and those who visit New York and other medical centres for the purpose of taking a supplementary course in clinical medicine, as well as the busy practitioner, often find that they have not sufficient time at their command to sift out desired information on any given subject from extensive treatises and systems. While such books are necessary and invaluable, it is believed that a shorter work is called for and will prove a valuable aid. Only the chief points in pathological anatomy, for instance, are given, and if further study in this direction is necessary recourse must be had to works specially devoted to the consideration of such subjects. On the other hand, the author has gone more fully than usual into detail regarding treatment, not only naming the drugs found useful but in many instances giving the prescription and dose. It is unquestionable that such books have their use, and the busy practitioner must frequently apply to a practical and compact work in which he can obtain the information he needs in a concise and condensed form, together with such methods of treatment as have been practically tested and