the left, twenty-one ounces and three quarters, avoirdupois.—*Heart*: The pericardium contained about one ounce of turbid serum. The serous membrane was almost everywhere covered with a thin lamina of soft lymph. There were no adhesions of the pericardium, and no fat deposited beneath it. The heart was enlarged as a whole.—*Left ventricle*: Walls much too thick; cavity dilated; endocardium thickened throughout the ventricle; aortic valves slightly thickened; a few yellow spots in the mitral valve; orifice natural.—*Right ventricle*: Walls double the natural thickness; cavity not much dilated; endocardium and valves healthy; tricuspid orifice admits three fingers only, and is therefore not dilated.—*Right auricle* dilated; left, of the natural size; a valvular opening, two lines in diameter, on the site of the foramen ovale; a few atheromatous spots in the aorta. The right ventricle and auricle contained a considerable-sized coagulum, partly colourless, and partly black. Left ventricle empty. Weight of the heart, empty, thirteen ounces and a quarter avoirdupois.—*Abdomen*: Peritonæum healthy; stomach and intestines not opened, but were healthy externally.—*Liver* much enlarged, especially the right lobe; colour dark; substance very brittle, and contained much blood; weight, eighty-six ounces avoirdupois.—*Spleen* rather large, and soft; weight, six ounces avoirdupois.—*Pancreas* not examined.—*Kidneys*: Both kidneys were much increased in volume, were of a dark-red colour, and contained much blood; the surface was smooth. There were one or two serous cysts in the right one; none in the left; no deposition of foreign matter, or other appearance of disease, visible by the naked eye. Weight of the left kidney, seven ounces and three quarters; and of the right, seven ounces, avoirdupois. The urinary bladder and ureters were not examined.

SUMMARY OF THE CASE, WITH REMARKS.

Pathology and diagnosis.—The patient died so soon after he was admitted, that the history of the case is necessarily very imperfect.

Lungs.—1. Of the morbid conditions found, perhaps those in the right pleura were of the earliest date. The patient had had an illness similar to his last one, twenty years before. It is not improbable that the illness referred to arose from the pleurisy of which we found the remains on the right side.

2. There had probably been some chronic bronchitis, for the cartilaginous portion of the bronchi in the left lung was found hypertrophied.

3. This bronchitis, together with the attack of pleurisy, sufficiently explain the small amount of emphysema which was observed. The inconvenience produced by all these affections, however, could not have been very great, for it was stated that the patient's health had been good.

4. The pleurisy, with empyema of the left side, was evidently recent, and no doubt commenced with the last illness, three weeks before the patient's death. To this must be referred the pain in the "lumbar region," (by which expression is probably meant the back of the chest,) with cough, dyspnoea, and a hot skin. This was also the cause of the dullness on percussion over the lower part of the left side, and which was almost the only physical sign which the state of the patient permitted us to observe.

Heart.—1. The pericarditis was very extensive, but moderate in amount. Judging by the morbid appearances, it may be assumed as almost certain, that the inflammation of the pericardium was more recent than that in the pleura. The accumulation of so much pus in the pleura must have been a work of some time, and the history sufficiently indicates the same fact. The pericarditis was apparently incipient. No adhesions had formed, as might have been expected if the disease were terminating rather than beginning, for the small amount of fluid present would not have presented a valid obstacle to the occurrence of partial adhesions.

2. The decided hypertrophy of the right ventricle was the result of the long-continued and habitual obstruction to the pulmonary circulation, occasioned by the moderate compression of the right lung, consequent on the old pleurisy, and also by the bronchitis and trifling emphysema. The hypertrophy was not accompanied, as it commonly is, by much, if any, dilatation of the ventricle; because, the obstruction being very moderate in amount, the accumulation of blood in the ventricle would be correspondingly insignificant.

3. The moderate hypertrophy, with dilatation of the left ventricle, may have been produced by some previous endocarditis, of which there were the usual anatomical signs.

4. The open condition of the foramen ovale deserves no more than a passing indication. The valvular form of the opening would probably prevent the transmission of blood through it, and a much greater freedom of communication is

now known to be of frequent occurrence, without giving rise to any symptoms.

5. Neither the pericarditis nor the structural changes in the heart were attended with any obvious symptoms. There was no œdema of the feet; the old disease in the chest was too inconsiderable to produce it; and the very serious amount of dyspnoea observed at last was of too short duration.

Liver.—The liver was very greatly enlarged: this might, in part, be due to the habitual obstruction in the chest for so many years. The patient's residence in a warm climate may also have exposed him to the causes of disease of the liver.

Kidneys.—The weight of the kidneys shows that they were decidedly diseased. They had the appearance of being simply hypertrophied and congested; without a microscopic examination, it is impossible to say what the nature of the disease was; but the presence of serous cysts, which are so frequently found in Bright's disease, renders it probable that there was some change of structure, and not simple hypertrophy. No opportunity was afforded us of examining the urine.

Causes.—1. *Of the renal disease*. The reverses of fortune and changes of climate to which the patient had been subjected, imply an exposure to the common causes of disease of the kidneys. Perhaps the habitual obstruction to the general venous circulation would contribute to the production of the hypertrophy of the kidneys.

2. *Of the pleuritis*. This seems to have arisen immediately from exposure to cold air, and the fact of the symptoms supervening within a few hours afterwards, adds much to the probability of this being the true exciting cause. When, however, we consider the great influence which disease of the kidneys has in producing various internal inflammations, (as established by other cases,) it seems probable that this constituted a powerful predisposing cause in the present instance.

3. *Of the pericarditis*. There had never been any rheumatism. There is likewise no mention of any exposure to cold after that which caused the pleurisy. It seems most likely, therefore, either that the inflammation of the pericarditis was induced by an extension of that from the left pleura—the two structures being in contact, and the inflammation in the one being, as we have seen, more recent than in the other; or that it was an effect of the disease of the kidneys, or perhaps of both these causes together.

Treatment.—There was no opportunity for treatment after admission. The patient had, however, been seen by a medical man, and had been bled and blistered, and had taken tartarized antimony. Severe idiopathic pleurisy, in a previously healthy subject, is not a very common disease, and when it does occur, is very rarely fatal. The unfavourable termination of this case, therefore, is an additional reason for supposing that the disease of the kidneys had some share in producing the inflammation of the pleura, and this complication may have been the chief cause of its fatal character.

KING'S COLLEGE HOSPITAL.

SURGICAL REPORTS, WITH CLINICAL OBSERVATIONS.

By WILLIAM FERGUSON, Esq., F.R.C.S., Surgeon to the Hospital, &c.

CALCULUS IN THE BLADDER.—PASSAGE OF STONE INTO URETHRA; EXTRACTION.

CASE 4.—J. C.—, aged four years, admitted Oct. 20th, 1845. His mother states, that about three years ago, she first perceived symptoms of his present ailment. He voided his urine with difficulty, and there was occasional complete stoppage, until the child's position was moved. Being told by a practitioner that there was gravel, she took the boy, about two years ago, to St. Bartholomew's, where he was examined, but a stone could not be detected. She afterwards took him to Guy's; and there, too, she was informed that there was no stone. About a year and a half after this, the boy, getting worse, was brought to King's College Hospital; and there, also, a stone could not be detected. He remained in the house for nearly a month in the beginning of the present year; and since that time, up to a recent date, he has improved in health generally, and suffered much less from local irritation than before. On the 18th instant, complete retention of urine occurred. He was taken to a surgeon, who drew off his water, and declared there was a stone. The mother, next day, brought the child again to King's College Hospital, where, as he had passed no water since the previous evening, a catheter was introduced, and a larger quantity of urine was drawn off. The stone was not felt on this occasion.

Oct. 23rd.—Since last report, he has passed water involuntarily during the night, as has generally been his custom since his illness commenced; and, during the day, has voided it with difficulty and pain. To-day, Mr. Fergusson has introduced a sound, and detected a stone, apparently in a pouch in the urethra, close upon the neck of the bladder, but has found nothing in the bladder itself.

Nov. 2nd.—Last evening, the house-surgeon, (Mr. Dyer,) finding he had passed little water during the day, introduced a catheter; and shortly after, the boy was seized with shivering and vomiting. Has suffered a deal of pain during the night; and this morning the catheter has been again required. The instrument has been passed into the bladder with great difficulty, for a stone has been found blocking up the passage near the neck of the bladder. About six ounces of dark-coloured urine was drawn off, and some gritty particles came away at the same time. Pulse quick; tongue furred; very thirsty; no appetite; bowels freely open.

3rd.—Has remained in much the same state as yesterday. Stone seems to have passed further along the urethra. Penis somewhat swollen, and the prepuce cedematous. Catheter has to be used twice a day, and there is difficulty sometimes in getting it past the stone.

4th.—In the morning, much in the same condition as above reported. To-day, at the visit, the stone was detected in front of the scrotum, and, by a little manipulation, was brought along the urethra as far as the orifice in the glans, where, finding that it was too large to be forced out, Mr. Fergusson made a slit with the point of a bistoury; and then, with the scoop end of a director, extracted it with facility. It was of an oval shape, about the size of a large pea, and seemingly composed of lithic acid.

11th.—Since the 4th, has got quite well. The fever which distressed him so greatly during the passage of the stone, speedily disappeared within two or three days. The wound in the orifice of the urethra soon healed, and the swelling in the penis and prepuce rapidly disappeared. He now holds his urine during the night, and is to-day discharged cured.

Remarks.—Mr. Fergusson stated, that perhaps the chief peculiarity in this case was, that the stone should have been so difficult to detect, for, taking its history into consideration, there could be little doubt that it had been present on every occasion when the sound was used. At all events, he was satisfied it must have been about the bladder when he himself examined the boy in the early part of the year. He admitted that he had searched the bladder with the utmost care on several occasions, but had not perceived the slightest indication of a stone being there. Such things did occur from time to time in stone cases, and he had himself seen many similar examples, both in his own practice and that of others.

It was stated in the report, that when the boy was brought to the hospital on the last occasion, he had detected the stone at once. Although this was the case, he had hesitated about resorting to an operation, because he thought the stone was either so small as not to demand an immediate use of the knife, or so fixed about the neck of the bladder, that he was anxious to study the case a little longer, before submitting the boy to lithotomy. Its true character had been developed spontaneously as it were, and fortunately there had not been any necessity for such a formidable proceeding, as the stone had passed from its dangerous locality without any active interference on his part. It was curious how it had done so just at this particular period, and it now seemed strange that the stone was not passed when it was of a smaller size. Although the result of this case was highly satisfactory, it was worthy of notice that the patient had not been altogether free from danger. It would be observed, that there had been considerable fever, and complete retention of urine; both, no doubt, from the stone irritating and blocking up the urethra. He (Mr. Fergusson) had not himself any idea that the stone was so large as it proved to be. If he had thought so, he would certainly have cut down upon it through the perinæum, for there had doubtless been hazard of the bladder or urethra behind the stone giving way, and of infiltration of urine being the result. He was not sure but that it might be deemed indifferent practice, not having used the knife at an earlier date; although, perhaps, the best answer to such a view was an appeal to the issue of the case. The feverish condition of the patient, and his own uncertainty as to the size and locality of the concretion, had both deterred him from an operation such as that alluded to; and the interval between the stone being actually ascertained to be fairly in the urethra, and its progress onwards had been so very short, that there was no time (nor in-

deed occasion) to think of any other proceeding than that which had been pursued.

The case was a good example of the passage of a stone of the utmost size, perhaps, that the urethra would admit of. The swelling of the prepuce and penis was similar to that occasionally seen in the adult during the outward progress of fragments after lithotripsy, when there was considerable irritation in the urethra and neck of the bladder. The escape of the stone in this instance was entirely the result of chance in the first place, and what had been done latterly had been very clearly indicated. He (Mr. Fergusson) was not disposed on all occasions to cut into the bladder so soon as a stone was felt in a patient so young as this one, for if it were small there was a chance of its passing by the urethra. Besides this case, two others had recently come under his notice, where the stone had come away in like manner, but with less distress. One of these had been brought to him by his friend, Dr. Andrews, of Suffolk-place, and the stone felt so small that it was not thought advisable to perform lithotomy at the time. Diluents and antispasmodics were recommended, and within a month, a stone, half the size of a pea, had been voided, since which time the little patient had been perfectly well. He thought it was a lucky chance when the stone thus came into the urethra, and one which the patient should have if the circumstances seemed favourable. It had been proposed, indeed, to make such a result more a matter of certainty than of chance. A practitioner on the Continent had lately advised the use of belladonna over the region of the bladder, with a view of relaxing the neck of the bladder and orifice of the urethra, and had adduced several examples of the efficacy of the practice. He (Mr. Fergusson) was, however, disposed to attribute the results in these cases as much to good luck as to any peculiarity of practice, at least, beyond that with which the profession was already familiar—viz., the use of diluents, diuretics, and antispasmodics, among which the warm bath was probably one of the most essential.

LITHOTOMY.—DEATH TWO MONTHS AFTER.

CASE 5.—J. S.—, aged seventy-four, admitted 30th Dec. 1845. Has always enjoyed good health, until about twelve months back, when he first perceived symptoms of his present ailments. Six months ago, was sounded by Mr. Fergusson, when a stone was detected. He is now suffering from the usual indications of stone in the bladder, and has come into the hospital to undergo an operation for its extraction.

Jan. 3rd, 1846.—Sounded to-day. Stone readily struck. Mr. Fergusson supposed it to be about the size of a chesnut.

10th.—To-day, lithotomy has been performed in the usual manner, and a stone, of lithic acid, and of the size predicted, has been removed. It was caught at the first gush of urine, occurring when the forceps were introduced. The operation was speedily and easily accomplished, and the patient suffered very little from the shock.

13th.—Doing well, not a single unfavourable symptom.

Feb. 2nd.—Has gone on prosperously. Wound nearly closed; part of the urine comes through it still, but the greater portion comes by the urethra. A smarting pain which annoyed him as the water passed, has nearly gone; had a dose of castor-oil last night, which has produced three or four fluid evacuations; complains of griping pain in the bowels; tongue slightly furred; no thirst; pulse 95, and fuller than usual.

10th.—Does not alter much; complains again of scalding pain as the water passes; urine still comes partly by the wound, and partly by the urethra; bowels irregular—sometimes costive, sometimes loose. Rests pretty well at night; tongue clean; no thirst; pulse 90; appetite moderate; does not gain strength; mind disturbed about some domestic affairs; and he fears that he shall not recover.

18th.—Since last report, has remained in much the same condition. The wound seems to have opened up somewhat, and the urine now passes in great part through it. This morning has had a smart rigor; face is now flushed, (half-past one P.M.) complains of thirst; pulse 95; tongue brown and dry; bowels open.

19th.—In the course of the afternoon yesterday, the feverish symptoms above reported almost entirely disappeared; but this morning they have come on again, and he is now much in the same condition.

20th.—Got better during last evening, as on the previous one, and has remained so until to-night, when he has again had shivering, and an accession of the other bad symptoms; pulse 100; wound showing a disposition to ulcerate.

21st.—A little better to-day, in some respects; pulse, however, 103, and feeble; appetite very indifferent; has had two

or three dark-coloured motions, the results of laxatives and an enema.

22nd.—Much the same as yesterday; wound as open as ever; and for the first time yesterday evening, nurse noticed, that in spite of all her endeavours to keep the bed clean, no sooner were fresh clothes applied, than they were covered with a foetid, dark-coloured discharge. This morning, she has ascertained that the discharge alluded to is of a feculent character, and passed entirely by the wound.

24th.—Is somewhat better and stronger to-day; was placed on a water-bed yesterday, and feels more comfortable; all the urine passes by the perinaeum; wound touched with nitrate of silver.

26th.—Considerably better to-day; tongue much cleaner; thirst moderate; skin cool; pulse 90—95; countenance not so anxious; appetite somewhat better; takes four ounces of gin, four of wine, and a pint of porter, daily; bowels open; discharge from wound more healthy.

28th.—Not so well again; in much the same condition as on the 22nd.

March 3rd.—Has made no improvement; is low and desponding; appetite nearly gone; eats nothing but an egg and a small chop in the course of the day; takes all his gin, wine, and porter; has restless nights, and dozes a great part of the day; slight oedema in right leg.

7th.—Much the same; tongue still furred; countenance haggard and sunken; pulse very feeble; urine and faeces continue to pass by the wound; oedema still.

10th.—Gets worse; sordes collecting about the mouth; pulse more feeble; takes little or no notice of anything going on around him, but answers questions rationally; dozes much, and when awake moans almost constantly. Takes nothing but gin, wine, and porter.

11th.—Strength has gradually diminished, and he died at eight o'clock P.M.

On inspection of the body, sixteen hours after death, the general cavity of the abdomen presented a perfectly healthy appearance. In the pelvis, slight adhesions between the sigmoid flexure of the colon and upper part of the rectum; and lymph, seemingly of a recent date, was effused on the cul-de-sac of the peritonaeum, between the rectum and bladder. A lateral section of the pelvis was made, when an extensive abscess was found, stretching from near the incision in the perinaeum, made during the operation, up as high as the middle height of the sacrum. The interior of this cavity was rough, having ulcerated hollows at various parts; its surface was like that of a sloughing ulcer, and the matter upon it was of a dark unhealthy character, resembling exactly the discharge which the nurse had so frequently observed in the evacuations. The matter was lying in contact with the periosteum, covering the inner surface of the left tuber ischii, and also the lower part of the sacrum. The parts were removed from the pelvis and carefully dissected. The rectum and bladder were laid open, when it was found that the wound in the latter had completely closed, the prostate gland seeming as if it had never been touched. In the membranous portion of the urethra, a small opening, such as would admit the point of an ordinary sized sound, was found communicating in front with the wound, and below, with the cavity of the abscess. In the track of the original wound, the rectum was quite healthy, and of its natural thickness; higher up, the abscess came into close contact with it, and near the upper end of the abscess, about six inches from the anus, the peritonaeum seemed to have been raised from the anterior surface of the gut, at which part there were two small ulcerated openings into the rectum, through which the faeces had evidently passed into the abscess, and so through the wound in the perinaeum.

Remarks.—Mr. Fergusson stated his belief that it was occasionally the custom with some surgeons, who were anxious to have the mortality resulting from lithotomy, as performed by themselves, appear very small, to attribute death occurring in such a case as this to any other cause than the true one—the operation itself: and here such parties would say the patient had died of an abscess in the pelvis; for it would be observed, that the wound in the neck of the bladder—the most dangerous part in the incision for lithotomy—had entirely healed. And besides, the external wound had at one time nearly healed too, the closure being such, that, as in the ordinary cases of success, most of the urine had come away by the natural passage about the tenth or twelfth day. There was a sophistry in this, however, of which he did not approve, and he thought it best at once to admit that the death resulted from lithotomy; in other words, that the operation had been unsuccessful. There were several peculiar

and interesting features in this case which had puzzled him very much, for its progress was very different from the usual course of fatal cases. Everything had gone on prosperously up to a period when all danger was usually deemed past. Within the first three weeks the wound had well nigh closed, and the water came chiefly by the urethra. After this, things for about a fortnight remained much the same, when a train of bad symptoms set in, and ultimately death supervened at the lapse of two months after the operation. The cause of the unfavourable symptoms latterly had been overlooked by him. On more than one occasion he had supposed that the patient had got ordinary fever, and thus, again, from the symptoms disappearing so rapidly, he had concluded he was wrong. He certainly had been most inclined to think that, combined with the effects of the operation, the great age of the patient was the principal cause of the extreme prostration preceding death. With the exception of the rigors, there had been little or nothing to induce the suspicion that an abscess was forming, and the character of the matter which came by the wound was not likely to induce any such view. That there was mischief somewhere in the track of the wound seemed evident enough, both from its slow healing, or rather from its opening up again, as also from the feculent character of the discharges observed towards the last. Even this feature appeared strange to him; for there never had been any indication that the rectum had been wounded during the operation; nor could he, with the finger passed per anum, detect any opening in the gut, either at the under surface of the track of the wound, or where the finger could reach. Dissection, however, had revealed all. The immediate cause of death had evidently been the extensive abscess, and it was now clearly seen that the opening, or rather openings, (for there were two,) into the rectum had been the result of ulceration, at a point far distant from the course of the knife, finger, or instruments, used during the operation.

Such an abscess, and occurring under such circumstances, was both unusual and unlooked for, and in his own practice he had not met with a similar case. He had seen patients die of inflammation, of urinary and of purulent infiltration; but usually, such results of lithotomy, or any other interference with the urethra, perinaeum, or rectum, occurred very speedily after the primary mischief. Here, however, the patient seemed to have got over all the early dangers, yet a larger ulcerated cavity was found contiguous to the wound than could almost be imagined under any circumstances. In his opinion, the mischief had been induced by the urine causing a little unhealthy inflammation at a certain part of the wound; ulceration had then supervened, and as the space increased, a large quantity of urine had remained on the surface, causing further mischief; and so, at last, a large space had been made, and even the rectum itself had been implicated. In all probability, had the patient been younger, the inflammation would have been of a more adhesive character, and there would have been no such ravages. It could not be said that there was urinary infiltration, yet, in all probability, the urine had caused all the mischief after the operation. The danger from the urine producing mischief arose chiefly within the first few hours, or days, at most; here it had seemingly not caused any harm until the lapse of weeks. If there had been infiltration within the first two or three days, he might have attributed it to the circumstance of not using a tube in the wound to let the urine flow away; but this was a practice pursued by so few, while infiltration occurred so very rarely in the numerous instances where a tube was not used, that he could not lay any blame here. In fact, he felt unable to account for what had happened here, and could only draw the attention of his pupils to all the features of the case, as giving an example of an unsuccessful issue to the operation of lithotomy. He would only further remind them, that in looking as to what should be done for this patient, when an operation was resolved upon, he had deemed lithotomy more likely to be successful than lithotrity. What might have been the result, if the latter process had been followed, no one could say. Certainly, it could not have been worse than that which they had witnessed.

HULL AND SCULCOATS DISPENSARY.

MALIGNANT PELVIC TUMOUR, INVOLVING THE RIGHT OVARY.

Reported by THOMAS T. LAMBERT, Esq., House-Surgeon.

L—, a female, aged forty-six years, had been suffering for four or five years from a slowly increasing tumour, formed in the pelvic cavity, on the right side, and which swelling slowly enlarged until it attained a very considerable size. Its