appeared. The urine was acid; specific gravity 1022, turbid with mucus.

On July 6th a stone was crushed with Bigelow's lithotrite into fragments, and this instrument having been withdrawn comminution of the fragments was attempted by the ordinary scoop lithotrite. But the fragments were too hard to yield to the male-blade of this instrument, and Bigelow's was used again for the whole crushing. The modified Clover's wash-bottle was employed in this case also for evacuating the débris, and the whole of the stone was extracted. The operation altogether occupied about three-quarters of an hour. The patient suffered hardly at all after the operation. The temperature remained normal until July 9th, when, unperceived by the nurse, the patient left his bed to go to the watercloset, where he found that suddenly difficulty in passing water and pain came on. At noon a slight shiver occurred, and the temperature rose to 105.2° F. in the evening, to fall slowly through the two following days to normal range, from which thenceforth it never departed. Blood disappeared from the urine on the second day after the operation and did not reappear during the fit of pyrexia. The urine retained a copious mucous cloud for more than a week after the operation; but the bladder, tested by the catheter, after ordinary micturition was found to have no residuum of urine. On the 28th, as a good deal of mucus remained in the urine, the patient was etherised, carefully sounded, and the bladder washed with the débris wash-bottle. But no trace of stone was discovered. During the patient's stay in hospital an indurated syphilitic sore developed in the glans penis with consequent multiple enlargement of the lymphatic glands of the groins. By cross-examination it was discovered that an opportunity for contagion had occurred three weeks before his admission into hospital. In order to watch the development of this sore the patient was kept in hospital until August 12th, and on his departure the micturition was quite natural; the urine was clear pale-straw colour, sp. gr. 1020, free from pus and albumen.

Of the débris, eighty grains were collected and were composed chiefly of oxalate of lime with some phosphate.

Remarks.—These cases of stone in young men are remarkable for the long, almost lifelong, presence of irritability of the bladder. But the structure of the calculi which were extracted indicates that the patients as children had suffered from oxaluria; and probably part of their sufferings were due to the irritating quality of their urine, from which at last a concretion formed that grew into a stone large enough to be detected by the sound. In the first case, it is true that blood had been discharged after the urine for many years, but it is difficult to believe that the small stone which caused his later sufferings had caused the hæmorrhage from the neck of the bladder throughout this time. The very moderate amount of suffering and immediate subsidence of the bladder's irritability which followed the crushing and exhaustion of the débris, and the rapidity with which recovery was afforded, are signal proofs of the advantage of freeing the patient of his stone at a single sitting. A few words may be devoted to describing the extracting bottle employed on these occasions. It is the result of various improvements of Clover's original wash-bottle most of which were suggested to Mr. Berkeley Hill by the late Mr. Clover himself, and it now forms an extractor more simple in structure and much shorter than Bigelow's or Thompson's (see fig. 1). The evacuating tube (fig. 2) measures only

FIG. 1.

FIG. 2.

8½ in., and including the trap only 10 in., from the end in the bladder to the exit in the bottle; while Thompson's measures 14 in., and Bigelow's old pattern was as much as 25 in. Being perfectly straight, with the exception of the short curve at the beak of the tube, and divested of heavy taps and stopcocks,

the apparatus is very easily managed with one hand. Further, it can be made at much less cost than the others. The cardinal principles of rapid evacuation of débris are—1. Width of tube, that the fragments may not need fine comminution, but even when large pass easily to the bottle. In the present case Nos. 25 and 30 of the French scale are those employed. 2. Shortness of tube, that the fragments may have only a short distance to travel before reaching the bottle and thus escape quickly beyond the in-draught of the reflux water into the bladder. 3. Good elasticity in the bottle, that the outward flow may be rapid and set in before the fragments stirred up by the injection settle again at the bottom of the bladder.

SEAMEN'S HOSPITAL, GREENWICH.

CARDIAC DISEASE; PROLONGED INTERMISSIONS OF CARDIAC ACTION; ANTE-MORTEM CLOT IN HEART AND AORTA.

(Under the care of Drs. CURNOW and HALE WHITE.)

JOSEPH B—, aged forty-two, was admitted on July 11th, 1882, with a history of pain in the left side occasionally for two months, shortness of breath, and slight hæmoptysis. He had had rheumatic fever eleven years before. On admission the heart's apex beat was found in the fifth space outside the nipple-line. A double aortic murmur was present as well as a mitral systolic at the apex, with occasionally a presystolic also. The second sound was ringing at the base and the pulse collapsing. He left the hospital on July 25th, much improved. On Sept. 29th he was readmitted, under Dr. Hale White, complaining, in addition to his former symptoms, of frequent faints. The cardiac action was now found to be very slow, though variable (usually about forty per minute). Physical examination gave a result similar to that previously obtained, but the murmur antecedent to the systolic was now more marked and persistent. It seemed also to vary in its position in time in the cardiac rhythm; when the heart's action was very slow indeed the murmur appeared to occur in the middle of the interval between the cessation of the second sound and the commencement of the first, a distinct interval elapsing between its termination and the systolic sound; on the other hand, when the action became more frequent, the murmur was heard immediately before the systolic sound and running right up to it; occasionally when the heart began to quicken, it even seemed possible to hear both these murmurs at once, a very slight interval separating the one from the other. The patient was subject to frequent transient attacks of syncope, which caused him much distress. On the morning of October 7th, these attacks occurred with greatly increased frequency, and about 9 A.M. he presented the following symptoms:—For the first three-quarters of each minute the heart beat strongly and regularly, about thirty-three times, and then ceased abruptly and entirely for a quarter of a minute when its action again commenced, to repeat the same course as before, each cycle of action and intermission occupying a second or two over the actual minute. When the heart stopped, the face at once began to grow paler and paler, the respiration became slow, deep, and sighing, with occasional low murmurs of distress; towards the close of the period of cessation of cardiac action, the pupils (always rather large) became widely dilated, then the eyelids dropped, the muscles of mouth and hands began to twitch, and the head fell back, and then just when it seemed death must occur the heart recommenced its slow measured action. With the first beat the face began to flush, but the twitchings of mouth and hands did not cease until the fourth or fifth beat, when also the eyes opened, the head was lifted and the patient seemed as it were to return to life. Between the periods of intermission he was quite conscious, and dreaded the moment when, as he said, his heart would "pull" within his chest, and he would lose his senses completely. When visited half-an-hour later the attacks had passed off, and from that time till October 10th, when he died, they only occurred at irregular and infrequent intervals. The treatment consisted in the administration of stimulants—viz., alcohol, ether and ammonia, but during the thirty-six hours previous to the morning of October 7th, he was taking in addition five-minim doses of tincture of digitalis every four hours.

Necropsy.—Heart of rounded shape with much hyper-

trophy and dilatation of both sides, weight $19\frac{1}{2}$ oz. Much atheroma and general dilatation of the ascending aorta, this condition extending quite down to the aortic orifice which measured nearly 4 in. in circumference. The aortic valves showed slight thickening and small calcareous nodules at their angles of junction. Immediately below the aortic orifice the wall of the ventricular septum presented a depression of $2\frac{1}{2}$ in. from side to side, and $1\frac{1}{2}$ in. from above down, the base of the hollow being formed by a fibrous membrane placed on a level with the inner lining of the right ventricle, but not bulging at all into that cavity. From the apex, where its base lay entangled among the columnæ carneæ, a large clot extended up into the aorta nearly to the top of the ascending arch. The base presented the usual pale yellow colour, and elastic, homogeneous texture of a clot formed just before death; on tracing it upwards that part lying near the aortic orifice became much tougher, darker in colour, and more fibrous, while beyond the valves, the part lying in the aorta was shrunken, flattened, brownish in colour, and when incised displayed a cavity full of dark grumous-looking matter with fibrous-looking walls. The clot had all the appearance of having been formed by accretion to the base, while the head became gradually more and more prolonged from its original place of formation at the apex of the left ventricle, so as ultimately to lie in the cavity of the aorta. Notwithstanding the presence of the murmur described above as to all appearance presystolic, the mitral orifice did not seem at all contracted.

GUEST HOSPITAL, DUDLEY.

CASE OF LIGATURE OF THE LEFT COMMON CAROTID ARTERY FOR HÆMORRHAGE.

(Under the care of Mr. M. A. MESSITER.)

THE following case is similar in its history and results to the one that was shown at the Clinical Society last October by Mr. Pepper.

R. R.—, aged twenty-four, was admitted on Oct. 20th, 1882. On Oct. 11th he caught cold, and the left tonsil was found enlarged and inflamed; no swelling was visible externally, but during the two or three following days a fulness simulating mumps was observed on the left side of the neck and under the jaw, extending as far up as the mastoid process, but closure of the jaws prevented examination of the inside of the mouth and fauces.—Oct. 15th: Without any warning, profuse arterial hæmorrhage, to the extent of three pints came on; his voice, hoarse previous to the hæmorrhage, now became subdued to a soft whisper; the lips and conjunctivæ were blanched. Pulse 80, compressible. He complained of a feeling of suffocation, but the syncope was not alarming. It was noticed that the tumour in the sub-maxillary region disappeared completely after the hæmorrhage. Patient said that the blood appeared to come from the back of the left ear. Cough did not precede the hæmorrhage, and the blood was not mixed with pus or air; it was arterial, and formed a firm clot. For twenty hours after this the patient seemed convalescent, when another swelling in the exact site of the last was noticed, which, in two or three hours, was dispersed by a second hæmorrhage to the extent of two pints of arterial blood; the syncope was greater than before, and the patient was thought to be moribund; he rallied, however. On the 19th hæmorrhage again occurred, and he consented at last to be moved into the hospital.

After consultation with his colleague, Dr. T. E. Underhill, Mr. Messiter ligatured the left common carotid above the crossing of the omohyoid. Antiseptic precautions were observed. Catgut ligature was used, and cut short off. Two minutes after the vessel was ligatured there was facial paralysis on the affected side, but it passed off in two hours.

The man went on well until Oct. 26th, when he had a severe rigor, and a temperature of 105° F., and his evening temperature came down a degree each evening until Oct. 31st, when it stood at 100° F.

On Nov. 8th he had a similar attack, with a temperature of 103° F. These attacks may have been caused by some slight septicæmia. His general condition, however, was fairly satisfactory all through; the wound looked healthy all the time; he had no swelling near it, no discharge of collected pus, and no hæmorrhage. The only symptoms that occurred in connexion with the high temperature were

weakness and sweating.—17th: Wound nearly healed, and the patient allowed to get up. He had gained in flesh since entering the hospital, and looked anything but anæmic. His mental condition was good. There was no headache, nor swelling about the neck or side of the jaw. The left carotid pulsated up to the point of the ligature, but hardly perceptibly on the other side. There was no pulsation in the facial artery of the affected side, and it was but slight in the left temporal. There was no paralysis or loss of sensation. A loud double aortic murmur existed, which did not exist when he was taken ill, and on his admission into the hospital only a faint aortic obstructive bruit was found.

Remarks.—I may add that the common carotid was chosen as the vessel to place the ligature upon, as it was thought that the close proximity of so many large branches would make it unsafe to ligature the external carotid. I fail to see how a distance of a quarter of an inch even could be obtained free from branches on the latter vessel, whereas the absence of all branches makes the common carotid so peculiarly the vessel to apply a ligature to.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Cases of so-called *Erythema Gangrænosum*.—*The Pathology of Diphtheritic Paralysis.*

THE ordinary meeting of this Society was held on the 9th inst., Professor J. Marshall, F.R.S., President, in the chair. The subject of Dr. Fox's paper on erythema gangrænosum was illustrated by some models from Guy's Hospital museum; and in addition to the microscopical specimens of the spinal cord in diphtheritic paralysis, showed by Dr. Kidd, some similar specimens were exhibited by Mr. Horsley.

A paper was read on two cases of so-called Erythema Gangrænosum, by Dr. T. COLCOTT FOX. The term erythema gangrænosum has been applied to cases in which the inflammatory patches presented very different degrees of severity, and were not all gangrenous. Case 1 was a lady, aged forty-seven, in whom gangrenous patches continued to evolve off and on from June, 1877, until the present time. The patches were limited to the regions of the chest and arms, and occurred over and over again about the site of former patches, sometimes for a time forming only on one arm, then on the other, and then about the chest, but a sort of symmetry was often kept up. The formation of patches was very frequent at first, but as the general health improved and the habit of intemperance was avoided, the patches were seen less frequently. She showed none of the ordinary signs of hysteria, but at one time had an attack of paraplegia lasting two or three months. Case 2 was a girl, aged seventeen, of an extremely hysterical and neurotic temperament, in whom severe inflammatory vesicating areas (not gangrenous) continued to form for many months. They occurred with fair symmetry over the body and extremities, but there was here also a marked tendency for the patches to recur about the sites of former lesions. In neither of these cases was there any cachectic condition sufficient to account for the severity of the lesions, and the surfaces healed fairly well. The question at issue is whether there exists an idiopathic affection consisting in the continued evolution of inflammatory areas of different degrees of intensity and often gangrenous, such as have been described under the term erythema gangrænosum, or whether these cases should not invariably be pronounced to be artificial. In support of the first proposition there are only five cases on record of a similar nature in which malinger has not been actually proved, but these cases are all surrounded by the greatest suspicion, for they occurred in females, generally young, and decidedly hysterical or eccentric. The sites of attack and mode of evolution of the patches was most peculiar; there was an entire absence of any enfeebling condition sufficient to account for the occurrence of gangrene, and at the same time a healthy reparative process went on; and the patches were such as might be produced by a caustic agency. Dr. Fagge's case of gangrenous patches occurring in a man in the last stage of tubercular phthisis, Charcot's