uvula, so as to excite reflex contraction of these parts. In this way, when the throat is moderately capacious, we may bring into view the posterior openings of the nasal fossæ, the turbinated bones, the opening of the Eustachian tube, the septum narium, and the roof of the pharynx.

In illustration of the practical value of rhinoscopy, I may refer briefly to one case. A gentleman, twenty-four years of age, consulted me on account of an obstruction of the right nostril, which had existed for two years. On examination with the mirror, the posterior opening of the right nasal fossa was seen to be obstructed by a globular tumour (fig. 4), as large as a full-sized marble, and of a yellowish-green colour. I asked my colleague, Mr. John Wood, to devise a plan for removing the tumour. He introduced a slender curved polypus-forceps through the anterior opening of the nostril, and grasped the tumour, which burst, and discharged a glairy fluid like white of egg. The patient felt immediately that the obstruction was removed; and, on rhinoscopic examination, the shreddy remains only of the tumour were seen attached to the middle turbinated bone, which had before been concealed by the tumour. (Fig. 5.) The tumour had evidently been a mucous cyst. This

Fig. 5.—The Posterior Nares, after the removal of the Tumour represented in fig. 4. *a.* The abraded surface from which the tumour was torn. *b.* The middle, and *c.* the inferior turbinated bone. *e.* The Eustachian tube.

case occurred ten years ago; and I heard only a few days ago that there has been no return of the disease. The practical value of rhinoscopy in this case can scarcely be questioned. It is doubtful whether, by any other mode of examination, the position and nature of the tumour could have been determined with sufficient certainty to warrant an operation for its removal.

THE PNEUMATIC ASPIRATOR IN RETENTION OF URINE FROM ENLARGEMENT OF THE PROSTATE GLAND.

By WILLIAM BROWN, M.R.C.S.Eng., Callington.

I THINK the following case will be considered a striking example of the value of the pneumatic aspirator in extreme cases of inflammation and enlargement of the prostate gland, and of inflammation and thickening of the mucous membrane of the bladder—cases which not only cause retention of the urine, but which sometimes absolutely prevent the introduction of the catheter, whether silver or elastic, without great risk or fatal injury. And the case now detailed not only proves the value of the instrument as the ready means of relieving suffering, and of prolonging life temporarily, but even of saving life for an indefinite period. Before going farther, I should state that whatever credit or praise, if any, in the management of this case, is due, is as much due to my partner, Mr. H. Davis, as to myself, as he took a full share in the conduct of the case from beginning to end.

W. C., a tall, swarthy man, in his seventy-third year, a farm-bailiff, came to our surgery on December 29th, 1873, in a state of great suffering. I was out of town. Mr. Davis found him with dusky countenance, dry, coated, striped tongue, febrile pulse, and complaining of great pain in the back and limbs, and especially pain and pricking at the neck of the bladder, inability to stand erect, and with a constant desire to urinate, but with power only to pass a few drops at a time. On examination, he found the bladder to be distended and extremely tender. The patient had been becoming worse and worse in regard to the bladder and

prostate symptoms, for a fortnight, having to get out of bed ten or a dozen times of a night—every half-hour, or oftener sometimes. He had had difficulty in, and frequent desire for, micturition ever since Michaelmas. Mr. Davis gently attempted to pass the catheter, but had not succeeded when I arrived. I carefully and patiently tried catheters of various sizes, but could not reach the bladder. The penis itself was turgid, and disposed to considerable erection, the glans penis livid, and the prostate would bleed with the least touch of the instrument. We then sent our patient to his home, giving him a draught containing twenty grains of chloral hydrate and half a drachm of tincture of henbane, to be taken when he reached home, ordering him to have a fire in his bedroom, to go to bed, and to use fomentation flannels or a large linseed meal poultice over the pubes, perinæum, etc. This was at 2 P.M. At 7 P.M., we visited him at his house. I then passed a No. 8 silver catheter after some difficulty, and drew off about thirty ounces of high-coloured, acid urine. We then ordered a mixture of nitrate of potash, infusion of buchu, liquor potassæ, and tincture of henbane, according to my usual custom. At 9 A.M. the next day, a messenger was sent to say that he was again in great agony. Mr. Davis went, but failed to pass the catheter. At 3 P.M., we both went, when, after a time, I again succeeded. The case proved so difficult to operate on, from the enormously enlarged state of the prostate, and the patient was in such a bad state generally, that we tied in the catheter for the night. On the following day, Mr. Davis, after emptying the bladder, removed the catheter, hoping its reintroduction would be less difficult. At 10 P.M., I was enabled, after considerable difficulty, to introduce, instead of the No. 8, a No. 10 long curve, or prostatic catheter. We had Sir Henry Thompson's black elastic catheters, and other catheters, but they proved quite useless.

On the next day, January 1st, at noon, the catheter could not be passed at all, or it seemed to pass into the bladder, but urine did not flow, as if from the blocking up of the aperture into the catheter, and of the end of the catheter also, by clots, mucus, etc.; unless (and this I deem the more probably correct explanation) from the almost disorganised state of the prostate and membranes of the prostatic portion of the urethra and of the neck of the bladder, the catheter passed between the membranes and carried the mucous membrane before it. I did not use force enough to cause complete tunnelling. In further proof of the size and condition of the prostate, I would here say, that we passed our fingers up the rectum, with the view of guiding the point of the catheter, but found the organ to project back like a large hard cancerous tumour, quite obliterating the channel of the gut; and the touch of the finger caused acute pain. We could not in the least feel the catheter or get above the tumour.

From the state of the prostate and bladder, and the patient's handling of the penis in his frequent violent efforts to urinate, the glans penis and prepuce, the whole outward organ, was now in a semi-sloughy state. And the patient, in all other or general respects, was in a most deplorable condition. His countenance was dusky and haggard; the heart's action at times over 140 beats in the minute, at other times alarmingly intermittent; and altogether he was getting into a condition of almost hopeless prostration. At 10 P.M., we used the aspirator, and drew off about twenty-eight ounces of urine.* I then seemed to introduce a No. 8 catheter, but not to my complete satisfaction, and only a few drops of urine passed. We tied in the catheter, but the next morning we found that the patient's efforts during the night had caused it to come out some inches. From this time, January 2nd, we found it absolutely unjustifiable to attempt to use the catheter until the night of January 12th; but we used the aspirator daily, and, on some occasions, the pain was such as to require the operation to be performed twice in the day. Altogether, we performed the operation fifteen times, with immediate relief on every occasion, and without the smallest inconvenience or injury from the punctures or perforations of the needle. By this time, the swelling and sloughy state of the penis had passed away, to the extent of its having nearly reacquired its normal appearance.

On the night in question, 11.30 P.M. January 12th, after pumping off by the aspirator, with the aid of Mr. Davis, the usual quantity of urine, of much more natural colour, I introduced with ease a No. 8 Liston's silver catheter, and drew off from six to eight ounces of urine, very thick and white or mucous at the finish, which showed the quantity the portion of the bladder below the brim of the pubes contained at this stage of the case, thereby affording another proof, beyond that of the easy passing of the catheter, how much the enlargement of the prostate must have abated. We then tied in, and as before carefully plugged, the catheter, and withdrew the plug daily, as also did the patient's wife, until the 15th, when Mr. Davis removed the catheter. The patient then found himself capable of passing small quantities of urine na-

* The instrument we used was a Coxeter's Stomach-Pump, converted by him into a pneumatic aspirator as well.

turally as he lay in bed. On the 17th, I temporarily reintroduced the catheter with ease, and again on the 19th.

During this period, from about January 2nd, the patient had refused to take any medicine, and, during certain parts of the period, was so profoundly prostrate, that his friends thought it quite useless to attempt to do anything more for him. At times, we found the irregularity and intermission in the action of the heart so great, that there could not be counted at the wrist twenty distinct beats in the minute; and, of course, there were corresponding symptoms of hypostatic congestion of the lungs and congestion from blood-poisoning. On finding him able to be sufficiently raised in bed, on January 19th, we ascertained that the affection of the lower and middle lobes of the right lung had passed through the stage of congestion, or congestive pneumonia, into the state of complete infiltration, or asthenic hepatisation, of the parts. We then ordered the inunction of an ointment composed of compound mercurial ointment, iodide of potassium, and croton oil; and the administration of a mixture of infusion of senega, iodide of potassium, bicarbonate of potash, carbonate of ammonia, tincture of squill, and compound tincture of camphor. But he did not take the whole of one bottle. From this time, he never required any operative proceedings, and did not take any more medicine, except a little castor oil when needed; he slowly improved, gradually increasing in appetite and strength. He could, on February 27th, come downstairs during the greater part of the day, and was about to resume his outdoor duties; he could urinate quite as well as he could before Michaelmas, and merely required to pass urine once or twice in a night: and the blocking up of the lung had also been removed by absorption in a marvellous degree.

Without the aspirator, the poor man whose case is above related must have perished miserably, as, from the size and the projection backwards of the prostate, it would have been impossible to tap *per rectum*, and it is not likely that an ordinary trocar and cannula could have been passed into the bladder, above the pubes, daily and twice a day, during twelve consecutive days, with safety, to say nothing of the pain and shock of so considerable an operation in a patient so profoundly prostrate, with low congestive inflammations and low febrile symptoms, that on many occasions he appeared to be within a few hours only of death; and to have attempted to have kept an ordinary cannula tied in above the pubes during that period would probably have terminated in a fatal result.

CASE OF DROPSY: TREATMENT BY ACUPUNCTURE.

By W. MUNRO, M.D., C.M., Cupar Fife, N.B.

THE following short *résumé* of the treatment, or rather the important part of the treatment, of a severe case of renal and cardiac dropsy, may be of interest. In such a case, of course, life could only be prolonged; but in those, rarely seen in this country, but not uncommon in hot climates in which there is no organic disease, it may be saved.

On May 14th, 1873, I was called to see A. B., and found him propped up in bed, suffering from dyspnoea. Both legs were much swollen. His heart was enlarged. There was albumen in the urine. I tried various diuretics, but he continued to grow worse, the legs swelling more and more until the skin was tense and glistening, and white in colour. There was also oedema of the back.

On May 21st, he was fast suffocating, and could not have lived another day. I began puncturing, first making twenty or thirty holes in each leg with small sewing needles. As the water escaped, he began perceptibly to improve. I now punctured three times a day for some days, watching for any signs of inflammation, and dropping to once or twice a day when it did appear. Whenever I did not puncture often enough, however, A. B. became worse, and care was required in keeping between the two extremes of doing it so often as to produce local mischief, or not often enough to give relief. I found very soon, however, that I could use larger needles, and ultimately preferred a short thick darning needle, which I held between the middle and third fingers and pressed in with the thumb-nail. I found that the thick needles, making larger holes, obviated the necessity of puncturing so often, such holes not closing up soon as smaller ones. I gradually lengthened the period between puncturing to every second day and every fourth day, but three times over was compelled to shorten the time, the water having collected so fast. On these occasions, and on one of them in particular, A. B., who was gasping for breath when I began, to my surprise was much easier *before I had finished puncturing*, and in two hours was relieved entirely of the dyspnoea. I found that the addition of five or six punctures

with a lancet-point assisted me in lengthening the intervals, the holes remaining longer open than those from the needles. The patient's health improved so that he was able to get up and walk about, and in September he was able to leave home for a short time. At that time, I was only puncturing the legs once in ten days or so. He became worse again, however, in October, when he had to be much confined to the house. In November, he caught a cold, resulting in pneumonia. At this time, I was forced to puncture about every third or fourth day. He passed through the pneumonia; but it had been too much for his strength, and he died on December 17th from exhaustion, having thus lived seven months, as I firmly believe, by the assistance of acupuncture.

I have avoided giving details; but I may say that I tried all kinds of diuretics, with only temporary increase of the quantity of urine passed, and ultimately gave up the use of any medicines except such as were required to palliate troublesome symptoms.

From all that I saw of the case, I was quite hopeful of getting him over the winter, and consider that in one sense he was prematurely cut off by the exhaustion caused by the pneumonia. Otherwise there seemed to be no limit to the length of time his life might have been prolonged.

I may say that at first there was absolutely no pain caused by the treatment. Afterwards, as the size of the legs fell and the skin became more natural and sensitive, there was soreness, but, in spite of this, the patient insisted on the puncture being done, looking on it as his sheet-anchor.

Five years ago, I treated a negro girl in St. Kitts, suffering from anæmic anasarca (caused by poor living), there being in her case no organic disease, by puncturing the legs with a needle. She was completely swollen all over the body, and had continued so for some time in spite of treatment; but the relief afforded by the punctures, which I only used twice, seemed to assist nature so much that in a week or two the anasarca quite disappeared, and she recovered.

I have omitted to mention that I found bathing the feet in hot water assist the flow of water from the punctures, which was sometimes so great that cloths wrapped round the leg had to be changed every half-hour, being thoroughly soaked.

I have thought it right to publish this case, so that others having such to treat may not give them up whenever they find diuretics and other medicines of no avail, and also to point out how much more irritation the skin can stand than might be expected. When I first began, fears of sloughing of the skin and such like evils used to stand like phantoms before my mental vision, making me, as I now know, more timid than I otherwise might have been in using large needles. But no more mischief was ever done than a slight erythema being brought on, which possibly at the same time might have been caused by the state of the patient, and which was easily got rid of by lead lotion.

THE RELATION BETWEEN ARTERIAL TENSION AND ALBUMINURIA.

By F. A. MAHOMED, M.R.C.S.ENG.,
Resident Medical Officer to the London Fever Hospital.

IN the number of the BRITISH MEDICAL JOURNAL published on May 9th, Dr. George Johnson does me the honour of criticising my paper recently read before the Royal Medical and Chirurgical Society. Assuming that "the increased arterial tension is the result of contraction of the terminal muscular arterioles", Dr. Johnson doubts the possibility of this increased tension being a cause of albuminuria; for he believes that, the tension in the arteries being increased by the contraction of the arterioles, the tension in the capillaries is actually diminished, I cannot, however, admit Dr. Johnson's assumption. On the contrary, I believe that the increased pressure commences in the capillaries themselves, and that it is brought about in the following manner. All physiologists admit an attraction existing between the blood and the tissues when in a normal condition, which varies with altered conditions of nutrition and secretion. This "chemico-vital" attraction for the blood, possessed by the tissues, has been termed "capillary power". It is undoubtedly an important element in the circulation, and its existence has been abundantly demonstrated by experiment (*Principles of Human Physiology*, by Dr. Carpenter, 7th edit., p. 300). Destroy this attraction by a blood-poison of any description, and the difficulty of capillary circulation will be increased; a condition of partial capillary stasis will be produced. The "capillary power" being diminished, the *vis a tergo* must be increased; hence arises high tension in the capillaries and