side-irons to a convenient height, and, so far as possible, in a position comfortable to the owner. The splint engraved above is a very excellent one for the purpose; fixing the knee, the foot, and the limb; with wide margins at the heel, ankle, and knee; it is capable of the most accurate adjustment. And then, do withhold your interference, either by dressings or readjustments. If your antiseptic dressings are potent enough to kill the supposed germs, they run a risk of killing your patient; cleanliness is all that is wanted; and, in my opinion, the only advantage gained by the antiseptic method is to remind the careless to be careful. There are some who accept the variegated light of a stained glass window, and clerical formalities, as accessories to religious fervour; there are others who can do their duty perfectly well without them.

Lastly, we must allude to the comparisons which are made between the remnant after an excision of the knee, and a stump after amputation of the thigh. In my judgment, decision must be given in favour of the remnant after excision, both in length of limb, utility, and even appearance.

Some surgeons say that the intrusion on the epiphyses in excision of the knee interferes with the growth of the limb, and that such dwindled limbs prevent their performing this operation on children. Does not amputation of the thigh, by one fell swoop, interfere far more with the growth of the limb? Is not even half a limb better than no limb at all? Tibio-femoral impaction secures osseous ankylosis, and prevents relapsing distortion; and is not a human foot at the end of an osseously fixed limb (shorten it as you please) the best finish? Does there exist such an enthusiastic machine-maker as will pit his contrivance, however ingenious, against his Creator's model? I protest, in the plainest English at my command, against any operator pruning a limb so as to fit the stereotyped patterns of any tradesman. And with reference to appearance, I have never yet seen a stump so graceful as to drown the floating thought "abruptly unnatural." Strip the two cases naked, excision of knee, and amputation of thigh; the former will be less likely to offend our senses than the latter.

I must take exception to a common error, quoted by Fergusson and other surgeons, in comparing the advantages of excision of the knee with an amputation of the thigh. Fergusson speaks of an amputation of the thigh as "a formidable operation which involved great risk to life, and included the actual loss of wellnigh *one-fourth* of the frame." Feeling how exaggerated this argument was, I took the weight of an emaciated woman (*post mortem*); then amputated her right thigh as high up as the trochanters permitted, and weighed the limb. I found the proportion in pounds was as 56 (the whole body) to 6 (weight of the limb); so that the proportion relatively is reduced from one-fourth to about one-ninth or one-tenth.

I trust that in these comments on resection of the knee I have pointed out a mechanical plan of treating these operations which will help to ensure success, prevent relapse, and render the operation available for young persons. The same method of impaction is applicable also to ununited fractures, and will, may be, lead to further improvement in the practice of our surgical art.

TWO CASES OF URINARY ABSCESS FOLLOWED BY FISTULÆ IN PERINÆO: PERINEAL SECTION: CURE: WITH REMARKS.

Read before the West Kent District of the South-Eastern Branch.

By F. BOWREMAN JESSETT, F.R.C.S. Eng.

CASE I.—J. B., aged 38, was, in May 1868, at a field-day, at Bangalore, in India. When attempting to jump a ditch, his horse refused, and he was pitched on to the pommel of the saddle, receiving a severe bruise in the perinæum and scrotum. This caused retention of urine, of which he took no notice for two days, when he was obliged to be carried to the hospital. At this time, there was extensive extravasation of urine into the scrotum and over the abdomen, extending as high as the umbilicus, the result of rupture of the urethra caused by the accident. He was placed under the influence of chloroform, and thirteen incisions made in the scrotum, perinæum, and abdomen. He remained in a very precarious state for some time; but, after several weeks, an improvement took place. The surgeon under whose care he then was, tried to pass a catheter, but failed; after this, the man became worse, but soon rallied, and shortly afterwards was discharged from the hospital, as he was getting low-spirited, and the surgeon thought a change would be beneficial to him. He was shortly afterwards invalided and sent home; during the voyage, all the wounds healed, and he arrived at

Netley Hospital, convalescent, on November 2nd, 1869. On December 14th of the same year, he was discharged from the hospital and the service.

In March 1871, a swelling formed in the perinæum, for which he went to St. Mary's Hospital; here the surgeon endeavoured to pass a catheter, but failed. He was discharged after being in the hospital for ten days. Some time after this, an abscess formed in the perinæum and broke, and urine escaped through the opening. This did not prevent him from continuing his work. He kept in much the same condition until 1875, when matters became very much worse; there was much swelling over the perinæum and scrotum. He then went into St. Bartholomew's Hospital, where he was treated with hot fomentations and poultices, and, after many trials, a No. 3 gum-elastic catheter was passed into his bladder. After six or seven weeks, he was discharged, being told "that nothing more could be done for him;" he was sufficiently improved, however, to enable him to return to his work.

In 1879, he again became very much worse, and was admitted into the Erith Cottage Hospital under my care. I endeavoured to pass a catheter, but failed. At this time, he had three fistulous openings in the perinæum and one in the scrotum. The tissues of the scrotum and penis were very much thickened. The prepuce was elongated and infiltrated, and he had a very tight phymosis, so much so that it was difficult to hit upon the orifice of the urethra. The urine dribbled away by the urethra, but the larger quantity passed through the fistula. I placed him under chloroform, slit up the prepuce, and endeavoured to pass a catheter, but failed. He was kept in bed for some weeks, and hot fomentations and poultices applied. As he refused to submit to any operation, he was discharged, much improved in health, and passing much more urine by the urethra, although I was still unable to pass an instrument.

In September 1880, he returned, and I found him in a sad plight; scarcely any water passed by his urethra, and that only in drops. He had four or five fistulæ in his perinæum and two in his scrotum. The scrotum and prepuce were enormously hypertrophied, and the latter was so inconvenient that I determined to remove it. He had an enlargement in the perinæum, of the size of a chestnut, behind which the chief fistulous opening existed; this lump was hard and felt of almost cartilaginous consistence. The man was much affected in his mind, owing to his infirmities; his clothes always being saturated with urine, he smelt so that his wife loathed him, and his fellow-workmen shunned him; his life was a burden to him, and he got so low-spirited, that he often felt inclined to make away with himself. He now begged me to do anything for him I thought best. He had a tight stricture at the orifice of the urethra, and the whole canal was thickened and rough as far as I could pass an instrument.

After a good dose of aperients, on September 22nd, I had him placed under chloroform; and first removing the prepuce in the ordinary way, I passed a grooved staff as far down as I could. I had him tied up in lithotomy position, and made a free incision in the middle line of the perinæum down to the point of the staff, dividing the urethra upon the groove of the instrument, and bringing the point out through the wound. I then, keeping in the middle line, carried my incision freely and deeply, dissecting along the course of the urethra, when I came without difficulty upon the dilated end of the urethra on the cystic side of the stricture. Then, passing a No. 10 silver catheter in the place of the grooved staff, I, by means of a broad grooved director which I passed into the bladder through the wound, conducted the catheter into the bladder, and tied it in. The patient was then returned to bed, and given a full dose of opium.

I did in this case what I always do when having to tie a catheter into the bladder, that is, I fastened a long piece of India-rubber tubing on to the end of the instrument, and conducted it into a vessel under the bed. This I find in practice most useful; it saves an infinity of trouble to oneself and nurse, and inconvenience to the patient, besides having the advantage of always keeping the patient's linen sweet and clean, the bladder empty, and thus giving the wound a much better chance of healing.

After the operation, the temperature rose to 100°. He had no rigors, and in three days all the urine passed by the catheter. On the eighth day, I withdrew the catheter, and he passed a good stream of water by the urethra without pain or trouble, a very few drops passing by the wound. On the eleventh day, this had completely ceased, and the wound healed rapidly. An instrument was passed for him from time to time; and a few months ago I saw him, and he was quite well, there was no appearance of sinus, and he passed a good stream of urine.

CASE II.—A gentleman, aged 60, suffered some years ago from stricture of the urethra, of which he took little heed. About eight years since, he had a great deal more trouble in passing his water. At the same time, he complained of great pain in the perinæum, accompanied with swelling and pain in defecation. Hot fomentations and poultices were constantly applied over the parts, and after a few days a free incision was made in the perinæum, and a large quantity of pus escaped. The abscess gradually closed up, leaving a fistulous opening, through which much urine passed. As this did not close, and only a small instrument could be passed into the bladder, a London surgeon, in consultation with his then medical attendant, decided to pass a full-sized catheter into the bladder, and lay the sinus freely open. This was done, and the patient made a good recovery.

Two years ago, he consulted me, complaining of pain in passing water about the neck of the bladder; "a sharp cutting pain" as he described it. I passed No. 8 catheter with ease, and without the least pain. There was no pain or tenderness on pressure over the perinæum; no swelling, nor anything to lead me to expect any serious mischief. I treated him with liquor potassæ and henbane, as his urine was rather acid, ordered hot hip-baths, and gave him a brisk aperient, restricting his diet, and denying all stimulants. As he did not improve, I took him to the surgeon who had operated on him six years before; he made a careful examination of him, but could find nothing to account for the symptoms, and suggested it was merely a catarrh of the neck of the bladder.

Two days after his return home, he had a slight shiver at bedtime, and the next morning there was distinct fulness in the perinæum. I ordered poultices and a hot hip-bath with aperients, and saw him again in the evening, when, the swelling being more pronounced, I, after passing No. 10 catheter into the bladder, made a free incision in the middle line of the perinæum, letting out some nasty unhealthy pus smelling of urine. I tied the catheter into his bladder for a week, when the wound cleaned, and commenced healing; and in two or three weeks he was convalescent.

I instructed him to pass a soft Jaques catheter every four hours, when he wanted to pass water, for some time. He kept this up for a time, when, feeling better, he left off doing so; and, a short time afterwards, sent for me, complaining of his old symptoms. I examined him very carefully, and felt a small swelling in his perinæum in the old situation. I at once made a free incision, letting out a little unhealthy pus; and, the next morning, a few drops of urine escaped through the wound.

I again tied a catheter into his bladder, and the sinus soon healed. I instructed him never to pass water without passing a soft Jaques catheter to draw it off, and told him to pass the instrument at stated times every four hours, and at night if necessary. He has done this regularly up to the present time, and has had no return of his trouble.

REMARKS.—These two cases are of great interest, as showing how one end may be obtained by two distinct means. In Case I, we have a man suffering from abscess in the perinæum, with urinary fistula, the result of external violence, which, through neglect, was allowed to become a most formidable case to deal with; while, in Case II, we have a perineal abscess, caused undoubtedly from ulceration of the urethra on the cystic side of an old stricture, the result of gonorrhœa.

In both these cases, had the patients in the early stages of their complaint, that is, when they first commenced to notice a difficulty in passing water, then taken a surgeon's advice, and had an instrument passed from time to time into their bladders, so as to keep the passage patent, undoubtedly they would have saved themselves all the pain and misery they endured, to say nothing of the risk to their lives.

In Case I, the operation of perineal section was performed without difficulty; and, although I did anticipate difficulty in finding the cystic end of the urethra, there was none; neither have I found any difficulty in other cases on which I have operated; and I must confess I consider it far easier to dissect down, keeping strictly to the middle line of the perinæum, and find the cystic end of the urethra, which is nearly always much dilated, than it is to perform Furneaux Jordan's operation of cutting into the neck of the bladder, and passing a gum-elastic catheter from the bladder, along the dilated urethra, forward, to the stricture.

The most interesting part of Case II is, that, when the abscess formed two years since, and six hours after the operation of perineal section for the previous abscess and fistula, the urethra was perfectly patent, and freely admitted a No. 8 catheter. The question that arose in my mind was, Did the abscess commence from ulceration in

the urethra, or, did it commence externally and open into the urethra? Taking all the circumstances of the case into consideration, I was convinced the abscess originated from a small ulcer in the urethra itself; and this was confirmed by the second abscess which formed a few months afterwards. My reasons for forming this opinion were: the pain was first noticed in the urethra; at this time there was neither fulness nor tenderness in the perinæum; and then, after a slight shiver, caused probably by the ulceration of the urethra extending through its walls, and a drop or two of urine gravitating into it, the following morning there was both swelling and tenderness, which increased most rapidly, and gave rise to considerable constitutional disturbance.

Now, with regard to treatment. Early and free incision into the perinæum, directly any fulness and tenderness is perceptible, is, I believe, the key to success. Even if no pus escape, the relief to the inflamed and distended parts is very great, and often prevents more deeply-seated mischief taking place. Then, if urine escape by the wound, pass in the largest catheter you can; if a stricture exists, divide it by internal urethrotomy, or split it up with Holt's dilator; the latter, in my hands, has proved of the greatest possible service, and excellent results have followed. A catheter having been passed and tied in, great comfort is derived from attaching a long India-rubber tube to the end, and conveying it to a vessel under the bed.

The fistula being closed and the wound healed, it is all-important to teach your patient to pass a catheter for himself; and these catheters (Jaques's patent), which I now employ, are admirably adapted for the purpose, as there is no fear of mischief; they are easily passed, and can always be carried either in a pocket-book or small case without trouble.

In such cases as Case II, it is in the highest degree important that the patient should not pass urine for some considerable time after the parts are all healed, without passing a soft elastic catheter, as this case most clearly showed, for, after the abscess of two years since, so long as the patient kept to this rule, he had no return of the mischief; within a very short time, however of his neglecting to do so, the trouble returned.

On one or two occasions, I allowed him to pass urine in his presence; and, when he had finished, passed a gum-elastic catheter; with the result in each case of drawing off about an ounce of muddy urine, which had clearly collected either behind the prostate, or in a *cul de sac* in the membranous portion of the urethra, behind the old stricture.

THE CITY AND THE PARKES MUSEUM.—On Thursday, September 20th, a deputation from the Parkes Museum of Hygiene waited upon the Court of Common Council at Guildhall, to present a memorial asking the Council to aid the Museum by a contribution of money to its funds. The deputation consisted of Dr. Poore, Vice-Chairman; Mr. Charles H. Parkes; Mr. E. C. Robins; Dr. Steele; Dr. Dawson Williams; Mr. Mark H. Judge, the late Secretary; and Mr. White Wallis, the newly appointed Secretary of the Museum. The memorial pointed out that the Museum was established at University College in 1876, where its collection was exhibited, free of cost, until last year, when the Museum was removed to premises in Margaret Street, and opened by the President, H.R.H. the Duke of Albany, in May last. As evidence of the economical management of the institution, it was stated that only £595 had been paid in salaries during the seven years ending June 30th last. On the motion of Mr. Alderman De Keyser, the memorial was referred to the Finance Committee, for consideration and report.

CYSTICERCUS CELLULOSE IN A DOG.—It has for long been understood that the immature form of the common tapeworm, *Tænia solium*, is peculiar to the pig, just as the cysticercus of *T. medio-canellata* is found in the ox, Leukart having failed to infect any other animal by adding the ova of the latter species to its food. M. Trasbot, in a recent number of the *Bulletin de la Société Centrale de Médecine Vétérinaire*, describes a case of cysticercus in a dog, which appears to have been kept in a yard where human excreta were frequently deposited. Its master observed that its body had become very tender, the most gentle pat causing the animal great pain. After death, all the voluntary muscles were found to be thickly infiltrated with cysticercus cellulose. The dog has hitherto been credited as the host of the mature *Tænia echinococcus*, the cysticercus of which has been found in the human brain, the vitreous body, and other parts, but M. Trasbot's case shows that the scolex of *T. solium*, the well-known cause of measly pork, can also live in the tissues of that carnivorous animal.