the vascular erectile bodies on the turbinated bones. Bosworth found that cocaine acted only on the venous sinuses, and not on the capillaries. He noticed its effect both on the middle and inferior turbinated bodies. My observations are confined to the latter. I append brief notes of its action in two cases; but the effect of cocaine in this respect is so remarkable, that it really needs to be seen to be believed.

CASE I.—E. C., aged 19. On February 18th, an examination of the right side of his nose was made with the electric light and Fränkel's speculum. The inferior turbinated body was considerably swollen at its anterior part, so that only a slight view of the middle turbinated body could be obtained. The mucous membrane of the inferior appeared red. The anterior part of the inferior turbinated body was painted with a 4 per cent. solution of hydrochlorate of cocaine, by means of a camel's hair brush. After three minutes, the anterior extremity of the inferior turbinated body was decidedly less swollen, and more of the middle body could be seen. A globular prominence was visible on the inner (median) surface of the inferior turbinated body, at some distance from the anterior nares. This swelling was then painted with a 4 per cent. solution of cocaine. Five minutes later, the swelling had become pale and much diminished in size, so that the whole of the lower part of the middle turbinated body (including its inferior border) could be plainly seen. The inner surface of the inferior turbinated body could also be traced backwards to a great extent. The movements of the palate, during deglutition, were not seen, probably on account of swelling of the posterior extremity of the turbinated bodies, or of a swelling on the right side of the septum, which was seen on posterior rhinoscopy. More than a quarter of an hour later, the inferior turbinated body continued collapsed, and the globular swelling mentioned on its inner surface had almost disappeared.

CASE II.—J. M., aged 60. On February 19th, an examination of the right side of the nose was made with reflected sunlight and with Fränkel's speculum. The inferior turbinated body was erected at its lower part, and very red—thus preventing all view of the palatal movements on deglutition, but allowing a clear view of the middle turbinated body. The inferior turbinated body was painted with a four per cent. solution of hydrochlorate of cocaine, not very freely. After three minutes, it was found rather less swollen at its anterior part. It was painted again freely and deeply with a four per cent. solution of cocaine. Five minutes later, the inferior turbinated body was collapsed so that its inner (median) surface could be traced to a great depth, and the palatal movements during deglutition could be plainly seen through the inferior meatus. It was still red at its anterior extremity. More than half an hour later, the inferior turbinated body remained in the same condition, and the movements of the palate could be plainly seen.

In another case, as in the first above mentioned, I have observed that the application of cocaine had a blanching effect on the inferior turbinated body. It therefore, contrary to Bosworth's opinion, appears sometimes to act on the capillaries, as well as on the cavernous tissue.

The great practical value of this contracting power of cocaine will be fully recognised by those accustomed to practise anterior rhinoscopy. It will render inspection of the nasal cavities easy in many cases in which it would be impossible except by drawing aside the swollen turbinated bodies. It will facilitate operative procedures on the nose; and cocaine, applied to the nasal cavities, will doubtless come into use as a therapeutic measure in cases of undue tendency to erection of the inferior turbinated bodies. Again, it will very probably be of service in cases of hæmorrhage from these structures; and will, if needed, help to settle the diagnosis between hypertrophy of the inferior turbinated bodies and simple erection of their cavernous structures.

The anæsthetic action of cocaine is now so well known that it needs no confirmation. But I may say that recently, in a highly nervous lady under my care, after two applications of a four per cent. solution, I have removed roots of nasal polypi with the cold wire-snare, and touched the same freely with the galvanic cautery, without her experiencing any pain.

DONATIONS AND BEQUESTS.—The Brompton Hospital for Consumption and Diseases of the Chest has received £100, and St. George's Hospital £100, "In loving memory of T. B. Christmas."—Mr. T. Martin, of Beechwood, has given £100, additional, to the Sussex County Hospital, Brighton.—Messrs. Coutts and Co. have given £105 to the Middlesex Hospital.

MEDICAL MAGISTRATE.—Mr. John Francis Marshall Miles, The Grove, Dingle, has been appointed to the commission of the peace for Kerry, upon the recommendation of the Right Honourable the Earl of Kenmare, K.P., Lieutenant of the county.

CASE OF RECENT FRACTURE OF PATELLA, TREATED BY WIRE SUTURE.

Read before the Bath and Bristol Branch.

By JOSEPH HINTON, M.R.C.S.ENG., Warminster.

It must be acknowledged that the routine-treatment of fractured patella rarely gives the surgeon much satisfaction. After months of somewhat anxious watching, an apparently very successful case of short ligamentous union may be attained; but a few months' use often stretches the ligament, and renders the limb permanently weak. What if, by a special good fortune, bony union have attended our efforts; is it not more than probable that most of our professional brethren examining the case would doubt the correctness of our original diagnosis?

About fifteen years ago, a patient who had recently come to reside in Warminster, and who, moreover, was only just recovering from this accident, in getting out of a fly at my door, slipped, and the other patella gave way. This case, my old partner, Mr. Bleack, whose whole professional life was spent in the town, used to say was the only case of this accident he had heard of in the district; yet, strange to say, while this lady was under treatment, her sister, living in the same street, slipped in her bedroom, and the same accident occurred. In this second case, the upper fragment was remarkably small, and though the ligamentous union was both very firm and short, her powers of movement and her confidence in the leg were equally small. This went on several months, without any improvement, the upper fragment always appearing to me to be tied down below the level of the lower portion. She never had any other feeling, but that the leg would double up under her. I then sent her up to the late Mr. Hilton, and I put this question to him: Would it not be possible to lift this upper fragment and place it in a better position? Of course, he discountenanced the idea. Antiseptics were then in their infancy. My patient returned with a cumbersome but most useful apparatus, which prevented her knee from bending beyond a certain point. With this, she contrived to walk very fairly; without it, the leg was almost useless. I have little hesitation in saying now that the lifting of this upper fragment, and the tying together of the two fragments, would have placed her in a far more favourable position. Since that date, no case had occurred in the neighbourhood until January of this present year.

On Sunday, the 28th of that month, a fine well built young fellow, the factotum of one of our neighbouring villages, slipped in church, and his right patella yielded. He was brought to our Cottage Hospital, and on my arrival I found that one of my medical brethren had at once carefully adjusted the leg on a back-splint. There was already considerable effusion in the joint.

I had been particularly struck by the series of cases recorded in our JOURNAL, in November 1883, by Sir Joseph Lister, in which he described several cases of this accident treated most successfully by suturing the fragments with silver wire. Little dreaming I should so soon meet with a case, I had mentally resolved to try to follow his steps, if ever the accident presented itself. Accordingly, on February 4th, eight days after the accident, I proceeded, under strict antiseptic precautions, to operate. As all the steps of the operation are graphically described by Sir Joseph Lister in his most interesting paper, it is quite unnecessary for me to occupy your time with any account. I only differed from his plan, if difference it can be called, in placing a drainage-tube on each side of the joint, instead of on one. Suffice it to say that there was never anything like a bad symptom. The leg was placed on a MacIntyre's splint; the dressings were changed on the 7th, 12th, 18th, and finally 25th. One drainage-tube was removed on the 18th, the other on the 25th. The temperature never rose to 101°, nor the pulse beyond 90.

Sir Joseph Lister had kindly written me, that if I used wire sufficiently strong, one-sixteenth of an inch, I might let my patient walk about in a month. I scarcely dared to follow this; but on the day five weeks after the operation, he walked across the ward, and six weeks after the operation, he returned home, having walked nearly a mile on the previous day. [The patient was introduced.]

You will notice that the natural condition of the patella is somewhat out of the ordinary shape, and that the lower segment is altogether narrower; it was here that the fracture occurred. Also, the fracture extended higher at the posterior part.

It may appear somewhat presumptuous in me to attempt to add anything to Sir Joseph Lister's clear and admirable directions; but as any operation may develop fresh contingencies, I hope I may be pardoned for venturing on one or two remarks.

For my case, I procured two ordinary bradawls. I selected them about the fourteenth of an inch in diameter. As it happened, we had a *post mortem* examination in the hospital a day or two before. I then had the advantage, fortunately, of going through the operation. I then found the bradawls of this diameter too short for the purpose; although I was astonished at the ease with which they were pushed through the patella.¹ No longer bradawls of that diameter being procurable, the difficulty was met by filing down a larger size, and these answered very well. I, however, had also one shorter and stouter, with which I pierced the harder external portion of the bone.

Secondly, it is a matter of very slight moment, which fragment is pierced first, if they be nearly equal in size; but when, as in my case, and in one of Sir Joseph Lister's, there is great disparity in the size, it seems to me a rule absolute that the smaller portion, whether upper or lower, should be the fragment on which the operation should be first performed. By such action we are enabled to select the strongest point for the insertion of the bradawl or drill, and thus make the puncture in the larger portion, where it is less necessary to select the strongest point, adapt itself to the smaller.

When the two portions were threaded, I seized each end of the wire with pliers; and pulling this straight, allowed the wire to move freely backwards and forwards; I was thus certain there was no twist of the wire. The pliers, too, gave me a much firmer hold in twisting, so that the two fragments were well home, and in close apposition before the twist. One and a half turns were made.

I notice that, in some of the cases similarly treated at Leeds, a transverse incision was made. This, I take it, is not advisable; the scar, being transverse, is in the bend of the joint, and I think, therefore, likely to be injured in use; there is ample room for all the manipulation in the longitudinal incision.

Sir Joseph Lister mentions, in the case where he had a very small fragment to deal with, that large quantities of osseous material were subsequently thrown out. A comparison of the two patellæ in this case shows the same condition, and the fractured bone is now considerably the larger.

January, 1884.—This patient has, during the winter, been playing football, and considers one leg just as good as the other.

THE RAPID CURE OF DUPUYTREN'S CONTRACTION BY EXCISION.

By H. A. REEVES, F.R.C.S.E.,

Surgeon to the Royal Orthopædic Hospital, Senior Assistant-Surgeon and Teacher of Practical Surgery at the London Hospital.

THE following case is worthy of record, not simply because it proves the possibility of speedily remedying a disease of long standing, and which has hitherto been considered slow of cure, or intractable and even irremediable, but also because it is the second case of this deformity occurring in females which has come under my observation during the past five months. Though only three months have elapsed since the operation, the case may be considered complete on account of the method of operating, which removed the cause of the distortion, so that no fear of relapse need be apprehended, as the linear cutaneous cicatrix is unlikely to retract to any noteworthy extent. There is a slight longitudinal depression along the site of the excised band, but the finger is perfectly straight and thoroughly serviceable.

Before narrating the case, some remarks of Mr. Noble Smith in a recent number of the JOURNAL require notice. He says, in his paper on Dupuytren's Contraction, "Modern writers have stated that contraction of the palmar fascia is only found in men. This statement is incorrect, etc." Of course it is; and just as incorrect as Mr. Smith's statement that modern writers say that the deformity only occurs in men. If Mr. Smith will refer to the BRITISH MEDICAL JOURNAL, 1881, vol. ii, p. 1049, he will see that I was the first to show that Dupuytren's contraction does occur, and not very uncommonly, in women; and, since then, I have drawn further attention to the subject at p. 354 of my book on *Bodily Deformities*. Shortly after my paper, Mr. F. A. Southam, of Manchester, corroborated my statements, and others did likewise.

Mrs. P., aged 45, is a relative of a student at the London Hospital, who was present at the operation. She first noticed a thickening in the palm and contraction of her right ring-finger at the age of 32. She thought it might have been produced through falling from, and being dragged some distance by, a horse, while holding the reins. Shortly after-

wards, she worked much with a sewing-machine, which was as a new toy to her. Being fond of music, she practised a great deal on a digitorium. The contraction increased, and, when seen by me, it presented the condition shown in the accompanying figure.

The right hand figure is from a photograph of the case a month after operation, and the perfect correction of the deformity, which continues to be maintained, is well shown.

Assisted by Mr. P.—Dr. J. Oliver administering an anæsthetic—I made an incision through the skin down to the band, and along its entire length. The skin was then separated from the band, which was thoroughly isolated, except at its ends, and was divided at its upper end. I then tried to straighten the finger, which, however, only became straight after the use of a little force, which was accompanied by two loudish snaps, due to the rupture of some deep fibres. The band was then freely excised, and, after removing Esmarch's bandage, as there was no hæmorrhage, I accurately adjusted the skin-edges with fish-gut sutures, and put the hand in a long back-splint for the forearm and hand, with the fingers fully extended. The bandages had to be relaxed in twenty-four hours, having purposely been applied somewhat firmly, in order to keep up full extension. The wound healed by first intention; and, within three weeks, my patient could play the piano, write letters, etc. I saw her a short time since, and find that the finger is quite straight, and that the use of it is so very like the normal as to be termed perfect. I should state that this is the patient's view of the condition as well as mine.

Mr. Hardie, of Manchester, has recently revived Goyrand's operation with encouraging results; but I think the plan I adopted and intend to repeat, of excising the offending band, and removing the cause of the contraction, is the proper proceeding. Certainly, the result in the case, narrated is most satisfactory; and, now-a-days, we know that cleanliness is all that is necessary in a healthy patient to insure good union of a wound, so that the former risks of the treatment by open division are no longer feared.

Before this case was operated on, I was strongly in favour of subcutaneous division; but seeing how slow, and sometimes uncertain, this plan is, and knowing the liability to recontraction when the band is left, I have no hesitation in stating my belief that excision of the band will be the operation of the future when dealing surgically with Dupuytren's contraction.

I must, in accuracy, state that we attempted to use the spray; but those present will bear me out in the observation that our backs were drenched instead of the hand, so that the carbolic spray did not have a fair chance; but this seemed to be of no consequence to the wound.

TRAUMATIC URETHRAL STRICTURE CURED BY EXCISION.

By A. W. MAYO ROBSON, F.R.C.S. Eng.,
Surgeon to the Leeds General Infirmary.

It is taught in all the text-books that urethral stricture can be relieved, but is incurable; the following example proves an exception, and I am inclined to believe that the treatment followed out in the present case may be pursued in so many others, that a new rule may be formulated as follows. All narrow strictures of the urethra may be cured by excision, if situated anterior to a point half an inch in front of the membranous urethra; easily if behind the scrotum; without much difficulty, if covered by the scrotum or even if penile.

Whilst formulating such a rule, I would have it clearly understood that I would not advise or practise excision of the stricture unless it did not yield easily to the ordinary forms of treatment, or rapidly relapsed into its old condition. The following notes of one of my hos-

¹ Much more easily than in the actual operation. The patient had died of malignant disease, and the bones, it struck me, were softened.