he could see and smell perfectly. The skin over this exostosis was perfectly free, and in no way adherent to the bones of the face. He was not aware of any others possessing a similar deformity, nor had

he received a wound or blow in the face. It grew of itself, and had not been artificially produced.

I have not observed a similar fulness in others; and from inquiries which I have made, no information tends to confirm the statements that any large number, or tribe of persons similarly affected, are to be found in Western Africa, or the conjecture that any artificial means have been used to produce this deformity.

In a good many negro skulls a kind of ridging of the zygomatic process of the maxilla may be observed, but not reaching the length

of the brim of the orbit, and involving the bones of the nose, as exists in these cases, and forming an exostosis of the infra-orbital ridges of the maxillary bones.

SUTURE OF DIVIDED ULNAR NERVE AFTER SIX MONTHS.

By SURGEON F. J. JENCKEN, M.B.,
Army Medical Staff, Limerick.

PRIVATE W. D., L.—Regiment, was admitted into hospital on July 24th, 1886, in the following condition:—

The little finger and ring finger of his right hand were cold and paralysed; both fingers were vesicated, and he stated that he had a whitlow on the little finger; but though there was pus beneath the skin, the coldness of the surface and absence of pain excluded the idea of its being an ordinary whitlow, but rather suggested suppuration, from want of vitality, such as was called "blue foot" in the surgical history of the American war, when it occurred in the lower extremity.

The history was that he had received two or three cuts on the front and ulnar side of his forearm near the wrist seven months before. The wound had severed the ulnar artery and nerve, and the scars were quite evident. The palm of the right hand, seen from the front aspect, was broadened out to a triangular shape, with the apex at the metacarpo-phalangeal line of articulation and the base at the wrist, the broadening being due to loss of tone and substance in the interossei and lumbricales muscles of the ring and little fingers (see Fig. 1). There

Fig. 1.

was complete loss of surface sensation over the front of the little finger and the ulnar half of the front of the ring finger, and the corresponding portion of the palm, so much so that he would often allow these parts to remain in contact with the flame of a lamp or gas jet until the skin was burnt, for the amusement of his comrades. When first seen by me they were black, vesicated, and cold. The skin at the top of the little finger was very thick, the nail deformed, and pus could be squeezed out of the top of the finger and from under the nail. He was quite unable to grasp with the affected hand.

On July 30th, 1886, I operated antiseptically, making an incision over the course of the ulnar nerve, at the wrist, passing through the old cicatrices. After a long and difficult dissection, owing to the matting together of the tissues, I found the divided extremities of the ulnar nerve, separated by an interval of about an inch. I refreshed them, but it was only by flexing the wrist forcibly that I was enabled to unite them, which was done by horse-hair sutures. I then closed the wound, and dressed it with carbolic oil and tenax, keeping the hand forcibly flexed over a pad. On August 2nd (four days afterwards), I opened the wound under the spray, and removed a few skin sutures, and put in two new ones. There were only a few drops of pus. No smell, no sign of inflammation, and there never was any rise of temperature. Sensation had returned to the affected fingers in great part. Dressed as before, still keeping the hand flexed over a pad of lint, as at first, the wound had quite healed in a fortnight, and sensation had

returned to the fingers. I used the galvanic battery for some weeks afterwards. At first, owing to the wasting of the anterior interossei, which are supplied by the ulnar nerve, when he attempted to straighten the fingers, the whole of the fingers went back behind the plane of the hand, as the root of the finger was not fixed as it should have been (Fig. 2) by the anterior interossei muscles.

Fig. 2.

The man is now quite well, the skin of the fingers is normal in thickness and temperature, he has perfect sensation, and can grasp firmly.

OPERATIVE TREATMENT OF SQUINT.

By CHARLES BELL TAYLOR, M.D., F.R.C.S.E.,
Surgeon, Nottingham and Midland Eye Infirmary.

À PROPOS to Mr. Snell's suggestion to divide the internal rectus from above, will you allow me to remind your readers that von Graefe always operated from above; a fact to which I called attention when lecturing on squint ten years ago in the following words: "von Graefe incises the conjunctiva over the insertion of the internal rectus, inserts a small hook along the upper border of the tendon—not the lower, as usually stated—and divides it with scissors close to the sclerotic." Whenever I saw von Graefe operate, Dr. Waldau, who

was like a third hand to him, always kept the eye everted with forceps during the whole process; von Graefe, however, exposed the tendon, and I gather Mr. Snell operates sub-conjunctivally. For my own part, I have for years operated from above, but in a somewhat

different fashion; I pinch up and incise the tissues just below the internal rectus, insert a small hook under the lower border of the tendon, cause its extremity to project beyond the upper border, and cut upon it, dividing the attachment to the sclerotic under the small bridge of conjunctiva which is allowed to remain.

The puncture and counter-puncture is an advantage, as it permits the escape of blood, and the upper border of the tendon, so apt to slip off the hook in the ordinary operation, is in this way certainly secured. I usually divide both recti, but prefer to have an interval between the operations. Children require ether or chloroform, but when cocaine is also used, a few whiffs of either anæsthetic suffice. There is one point I did not see mentioned during the discussion on squint, that is the limiting suture which is used in order to avoid over-correction; this should be inserted during anæsthesia, and afterwards tightened or withdrawn according to the after-effect of the operation. As a rule, children who squint do so because they cannot see unless they do; their eyes are so flat that many of them are obliged to make an effort to see even at a distance, and in some cases the maximum of accommodation has to be exerted in order to read. This cannot be done without convergence; convergence means squint; squint means double images, and double images are embarrassing, hence one eye soon comes to be used exclusively for working, and the other gets weak. I am aware that this doctrine of amblyopia from exclusion, weak sight of one eye from disuse, has been much discredited of late. Some surgeons even aver that it does not exist (Schweigger), but admitting that in certain cases weak sight of one eye is precedent to squint, I cannot doubt that in a large proportion it is a result of the deformity, if only from the marvellous improvement which I have seen follow total exclusion of the best eye, whether such exclusion has been the result of inflammation, accident, or intention on the part of the surgeon. An excellent means of compelling the weak eye to work is to paralyse the accommodation of the best eye for a time with atropine. Spectacles are usually required after operation, but will not suffice of themselves. The operator should aim at under, rather than over, correction, as immediate brilliant results are apt to be followed by divergence; and when this is the case, it may become necessary to divide one or both external recti, and perhaps also to secure temporary convergence by a new suture.

CASE OF LUMBAR SPINA BIFIDA; INJECTION OF MORTON'S IODO-GLYCERINE SOLUTION; CURE. A NEW INSTRUMENT FOR THE OPERATION.

By J. CAREL VOIGT, M.D., C.M. (EDIN.),
Formerly Senior Resident Medical Officer, Infirmary, Bury, Lancashire.

M. R., aged 3 months, a well-nourished infant, was brought to me in June, 1887, for treatment of a lumbar spina bifida, the size of a small hen's egg. It was perfectly round in shape, and the central part was more translucent than the rest, and of a pinkish bluish tint. There was no club-foot nor any other deformity.

On June 10th I performed Morton's operation, Mr. A. H. Baines, of Birkdale, very kindly assisting me. The lower part of the sac was punctured on the right side; the instrument used was a small trocar and cannula. A considerable quantity of pale straw-coloured fluid escaped when the trocar was withdrawn. The tumour had collapsed to about half its original size before half a drachm of Dr. Morton's iodo-glycerine solution could be injected. The opening was sealed with collodion on salicylic wool, and over this a sublimate wood-wool pad, fixed by a broad flannel bandage, was applied. Within five minutes after the puncture had been made, the child became extremely pale. A feeble, fluttering pulse, sighing respiration, and an occasional low, moaning cry, with icy coldness of the extremities and inability to take the mother's breast, were noted, and lasted for fully two hours, and only gradually disappeared with the application of warmth to the surface, and the frequent administration of brandy in half-teaspoonful doses.

On June 11th the pulse and temperature were normal. The child was well, but very sleepy. The antiseptic dressing was changed, and found partly soaked with iodine-stained fluid, which had continued to escape through the puncture. A fresh antiseptic dressing was applied as before.

On June 18th, the first operation having evidently made no impression whatever on the tumour, which was of exactly the same size and appearance as before, a second puncture was made. The instrument employed was one constructed on the model of an ordinary German hypodermic syringe, but larger and graduated for half drachms, with the smallest of its three needles corresponding in size to a large sized hypodermic needle, and with a metal top screwed to the glass barrel