ceased beyond this point, as the drug then produced sickness. Since 35 grains were given it had caused slight headache. Improvement was very rapid. The special nurse was not required after forty-eight hours. By January 7th the patient was so far recovered as to be able to sit by the fire. Movements still persisted, but they became very slight, and were confined to the right hand and leg. After January 16th the drug was twice stopped for a day owing to sickness, and on January 23rd the dose was reduced to 40 grains thrice daily, and Easton's syrup was given. The dose of antipyrin was then gradually further reduced. Slight movement of the right hand persisted for some time, but this also finally disappeared. She was dismissed quite well on March 7th, 1893.

Did space permit many other similar cases, in which equally good results were obtained, might be quoted, but the above may be taken as fair samples of the whole; and I may sum up my experience in the following aphorisms:

1. Antipyrin is not the dangerous drug which some observers have led us to suppose.
2. It may be given with safety in large doses, even in the case of children, in most cases, although the initial dose must be small, and it must be slowly and cautiously increased, the patient always being carefully supervised.
3. In large doses it often yields surprisingly good results, and in chorea it is the only medicine from which cures may confidently be anticipated.

FORMATION OF A NEW SOCKET FOR AN ARTIFICIAL EYE.

By ALEX. OGSTON, C.M.,
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THE following unusual case, where after enucleation of the bulbus oculi, no socket remained to contain an artificial eye, and a new one was made by operation with satisfactory results, may prove of interest to those engaged in the practice of operative surgery.

The lady, B. W., who was the subject of treatment, describes the commencement of the deformity as follows: "When about 2 years of age, I had a violent attack of whooping-cough, after which my left eye was found to be so much injured, that immediate removal was deemed necessary. The operation was performed by — in April, 1870. For fifteen years my socket was left quite empty. In 1885 I went to Dr. Mackenzie Davidson, who, on examining my socket, said that unless it could be enlarged it would be impossible for me to wear an artificial eye."

Dr. Davidson enlarged the socket on several occasions by making incisions into the orbit, and keeping up dilatation of the space thus gained by tampons of various kinds, so that the patient was enabled to wear an artificial eye, and was for a time "exceedingly comfortable," while the eye "looked fairly well."

In the year 1890, however, the contraction of the socket had returned to such a degree that some further operations had to be done by Dr. Davidson, but these were unfortunately not successful in maintaining the required space, and the "socket closed up so that it was only with the utmost difficulty" she "could insert the tip of" her "little finger."

At this stage, in April, 1892, Dr. Davidson requested me to see the patient. There was no detectable diminution of the size of the bony orbital cavity, and I suggested the plan of operation which was subsequently carried into effect. Dr. Davidson was kind enough to transfer her to the wards of the Aberdeen Royal Infirmary, under my charge, and, on April 13th, 1891, the operation agreed on was performed as follows: A skin flap, A B C, Fig. 1, including the subcutaneous tissue and nutrient skin vessels, was dissected up from the temporal region, remaining attached by its base A C. The flap, which was about 3 inches long and 2 broad, was next divided into two tongues for about three-fourths of its length by an incision B D. Through the base of the flap an incision, shown at the line A C, was next carried, but so as to divide only the skin, the vitality of the flap being maintained by the vessels of its subcutaneous tissue, which remained undivided at its base. From the base A C a scalpel was carried beneath the skin and subcutaneous tissue into the shrunk socket, that barely held a pea, and the lids were freed and the socket enlarged by cutting upwards and downwards, parallel to the

surface, to an extent corresponding to the shaded area in Fig. 1.

After the bleeding, which was quite moderate, had been arrested by a few fine catgut ligatures and pressure, the flap was turned inwards behind the freed lids until it lay with its raw surface looking forwards and its cutaneous surface back-

FIG. 1.

wards towards the orbit, one tongue of the flap lining each lid within, and in this situation, having been adjusted in as natural a fashion as possible to the lids, it was secured by a number of fine catgut sutures in the position shown by the vertical shading in Fig. 2. There was so little of the natural

FIG. 2.

conjunctiva remaining that none of it was seen in doing so save over the caruncula lacrymalis, where it formed a small portion of the covering of the new socket. The temporal wound, now left raw by the turning in of the flap, as seen in Fig. 2 on the area shaded with horizontal lines, was next drawn together as far as practicable by sutures that approximated its edges.

In the new socket was placed a disinfected marble, Fig. 2A, of about the size of a normal bulbus, and the temporal wound was dressed with iodoform vaseline. All the steps of the operation were carried out under antiseptic measures, sublimate lotion of the strength of 1 to 1,000 being chiefly used.

The healing proceeded to a wish, and soon the temporal wound had cicatrised, leaving a scarcely visible mark. The

The quotations in this paper are taken from notes of her case written out by the patient herself.

socket was found to be completely lined with a moist white skin and the marble was easily and perfectly retained in it, leaving just the proper amount of its surface visible, so that the palpebral opening corresponded in size with that of the sound side. But the socket lay too far outwards towards the temple, and, when the marble was in its place, looked like a tumour just within the outer margin of the orbit.

To remedy this the patient, when the healing of the socket was complete and had reached a state of permanent quiescence, was again put under chloroform on October 26th, 1891. The marble was removed, and the index finger of the left hand passed into the socket. Guided by this finger within, the outer, lower, upper, and, to some extent, the back parts of the socket were subcutaneously detached from their connection by a slender tenotome entered from the facial aspect of the lids at convenient punctures, and the detachment was proceeded with until the new socket came, as it readily did, to occupy its just position in the centre of the orbit, and lie symmetrically with that of the normal right eye. The marble was then reintroduced, and the dressing continued on the same lines as after the former operation. The marble, which had a circumference of almost $2\frac{1}{2}$ inches, remained in position save when it was frequently removed and washed, until it was certain no further changes were to be anticipated in the socket. From the first the result was satisfactory, and it became clear that a good and symmetrical socket had now been obtained, which harmonised with the healthy side, and was neither too prominent nor too sunk. The socket now showed when the marble was removed a smooth, moist, white, spherical cavity, lined with skin, while the remnants of the former conjunctival sac had shrunk to a small pit or dimple, just large enough to contain a grain of barley, and lying behind the caruncula lacrymalis.

In November, 1892, a year after the second operation, wax models of an artificial eye, and a Mules's artificial vitreous of suitable size, fitted with a projecting point of wax to lie in the old conjunctival sac, and thus steady the eye, were introduced in place of the marble, and it was decided that all was now ready for the fitting in of an artificial eye.

By Dr. Davidson's advice, the patient was sent to Mr. Atkinson, London, with instructions and her models. Mr. Atkinson took great pains to supply her with a suitable prosthesis, and succeeded in doing so without requiring to utilise the old conjunctival pit for steadying it. On her return home the result was found to be very satisfactory indeed, as is shown by the photographic likeness (Fig. 3), from which it

Fig. III.

is clear that, while further experience of the operation will doubtless lead to even better results, the plan adopted has resulted in a distinct success.

EXTRACT FROM A CLINICAL LECTURE

ON INFANTILE SCURVY IN SURGICAL PRACTICE.

By HOWARD MARSH, F.R.C.S.,

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In his very able and instructive Bradshaw Lecture recently delivered before the College of Physicians, Dr. Barlow has given a full and clear account of all that is at present known of infantile scurvy, or, as it has been termed, scurvy rickets. As the medical aspect of the affection has been thus completely dealt with, it may be useful, while Dr. Barlow's essay is still fresh in the memory, to direct attention to infantile scurvy as it presents itself in surgical practice. The ground for doing so lies mainly in the fact that, unless great care is exercised there is considerable danger that this condition may be mistaken for something entirely different, and that thus serious errors of treatment may occur. That this should be the case will excite no surprise when it is remembered:

1. That the disease is rare, and that many practitioners have had no opportunity of seeing it.

2. That the circumstances under which it occurs are apt to be misleading, for, as Dr. Barlow and others have pointed out, it is not amongst the poor, who generally nurse their infants at the breast, and, later supply them with a mixed, though not in all ways a very suitable, diet, that infantile scurvy is most often met with. It is most frequently seen (where, *prima facie*, it would be least expected) in the families of the well-to-do, for in this class some mothers, unable to nurse their offspring, or anxious to escape from the drudgery of doing so, and believing that the various proprietary foods are a complete substitute for breast milk and fresh foods, feed their children for months together entirely on the former set of preparations.

3. That the likeness which cases of infantile scurvy often present to other forms of disease may be, at least at first sight, very deceptive. The following, so far as I have seen, are the surgical affections between which and infantile scurvy diagnosis may be at fault:

1. *Fracture of the Femur.*—A male infant, aged 13 months, was reported to have fracture of the left femur, for which a long splint had been applied. A large bruise on the hip was regarded as evidence, along with suddenly developed and severe pain in the thigh, that the nurse had let the child fall. There was, however, no fracture, but the child, as indicated by its pale and waxy appearance and spongy gums, was evidently the subject of scurvy. A considerable firm swelling, such as might result from the presence of callus, surrounded the lower end of the femur. This swelling was no doubt produced in the manner described by Dr. Barlow. It was due to the osseous material which had been thrown out by the periosteum after that membrane had been raised by hæmorrhage between it and the shaft of the bone, and was "analogous to what is found round the base of a recovering cephalhæmatoma."

Although the diagnosis of fracture in this case was erroneous, it must not be forgotten that spontaneous fracture of the shafts of the long bones, though it is rare, is yet one of the most striking results of infantile scurvy. In a very remarkable instance recorded by Dr. Colcott Fox, several of the long bones presented one or more fractures through their shafts. The preparations from this well-known case are in the museum of the Westminster Hospital. Fracture depends on the weakening of the shaft as the result of hæmorrhage into the medullary canal, and the consequent rarefaction or excavation of the bony tissue. In Dr. Colcott Fox's case the bones looked as if they had been "broken up by being run over." This form of fracture, involving the shaft of a long bone, must not be confounded with the separation of the epiphyses, which is much more frequently seen.

2. *Infantile Paralysis.*—A child, 11 months old, was believed to have severe infantile paralysis. Both the lower limbs