body has risen to 110 deg., or upwards, a bath of 98 or 100 deg., Fahrenheit's thermometer, has been found to be very cooling and comforting, and conducing to diaphoresis: when the head has been very hot, and delirium impending, cloths, wrung out of a bucketful of cold water, applied over the head, and frequently renewed, have been beneficial. This, with the mildest febrifuge medicines, such as diluted liquor ammoniæ acetatis, with or without spirit of nitric ether, or an effervescing mixture at intervals of four hours, chalk mixture when diarrhœa has prevailed, and the mildest possible aperients, if any were required; with weak alum gargles for the throat during the acme of fever, and for some days afterwards—have constituted all that has been done. It may, however, be as well to mention that a free use of chloride of lime in the patient's room has seldom been neglected, but whether with advantage to the patient is more than I will undertake to affirm or deny. Doubtless it has been employed with a view to prevent infection: I will leave it to others to inquire—if they think it worthy of inquiry—how far the continued inhaling of chlorine gas may tend to influence the virulence of the disease, or tend to a favourable result.

With two cases only I wish to trouble the reader, in which the principles of treatment thus set forth were violated, especially as they tend to establish their importance in an eminent degree. One of them, an ordinary case of scarlatina, occurred in a school, and the other was complicated with croup.

The case complicated with croup occurred in a child under two years old, the only child of wealthy parents, and which of course had everything done for it that parental anxiety and ample means could command. The symptoms of croup set in very soon after the appearance of the eruption, which was very imperfectly developed. All the usual remedies were had recourse to—an emetic, warm baths, leeches, bleeding in the jugular vein, and calomel and antimony, and a blister;—but it would be very difficult to say whether these appliances tended most to promote or to delay the catastrophe, since the little sufferer died on the third day from the commencement of the croup. Neither were the remedies necessary to the result, for I greatly fear the patient will always die under such an unfortunate complication of diseases.

The other case, as has already been stated, was an ordinary case of scarlatina, occurring, with others, in a school. The patient was the only son of a highly respectable family, and his parents sent their own medical attendant to see him. There was nothing unusual about the case; the boy was in no respect worse than any of the others, of which there were many. It appeared, however, in the course of our consultation, that his liver was torpid in its action, and nothing would satisfy the consultee but that a mild dose of mercury, combined with a gentle aperient, should be given to him, the bowels being rather confined. The next day after taking this medicine the tonsils began to slough, and continued to do so until his removal from the school, after which I saw him no more; but learnt at a subsequent period that the boy's recovery was slow, and not without apprehensions of an unfavourable result. Now, it may have been accidental, but it is worthy of notice that, in no other of the cases did any sloughing of the tonsils take place. And here I would ask the professional reader to pause for a moment and consider how frequently or otherwise he has seen sloughing of the tonsils in scarlatina, except in cases in which mercury or antimony, or both, had been administered; for certainly, in my experience, such occurrence has been rare; and should it be objected that so small a quantity of mercury could not by any possibility produce the effect, I would briefly reply that, I have known a single grain of calomel, given in combination with compound extract of colocynth, to an adult, in the early stage of continued fever, to produce ptyalism that ended in gangrene and mortification of the gums, and in the death of the patient.

In conclusion, that the purport of this exposition may be rightly appreciated, I beg to mention that I have now retired from practice, and have therefore no personal interest at stake; and if any apology should be thought necessary for thus obtruding upon space that might possibly have been better occupied, I would only refer to the quotation with which I have commenced this letter, the like of which are unfortunately but too frequently to be met with in the daily press.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

VI—Orthopædic and Autoplastic Operations.

The sixth division of my cases includes the operations which I have performed for the cure of deformities of various kinds, exclusive of the removal of supernumerary fingers, which I have classed among the amputations. They are for club-foot and other contractions, and to relieve the scars produced by burns—in other words, *orthopædic and autoplastic operations;* and they will be described in this order: congenital talipes; acquired talipes; contracted tendons in other parts; autoplastic operations rendered necessary by burns; and, lastly, a few miscellaneous cases, which cannot be brought under the other heads.

Talipes. Case dcxl. C. G., aged 3 years, had been under surgical care before I saw him, and each tendo Achillis had been divided. He had both his feet turned inwards, but the right was much the worst. I divided, in the right foot, the tibialis anticus tendon and the plantar fascia; and, at a subsequent period, the tibialis posticus, at a little distance above the ankle. In the left foot, I only divided the tibialis anticus. The feet became much straighter at once; and they were, after a few days, put up with small straight splints, with foot-pieces attached, by which they were straightened and brought into excellent position. He went out able to walk well, with some little boots and irons to support his ankles.

Case dcxli. T. S., aged 11 weeks, with talipes varus of both feet. (This was my first case, and occupied much time; but the result was very satisfactory.) I began with dividing the tendo Achillis in each foot; and subsequently I divided the tibialis anticus in both, and the extensor longus pollicis in the right. He was treated by bandaging his feet to the wooden foot-pieces of small straight splints; and the plan succeeded well. He became my patient some years afterwards, in consequence of fractured clavicle; and he could walk well on the soles of his feet.

Case dcxlii. S. T., aged 18 months, with congenital varus of the right foot only. The tendons divided were the tendo Achillis and tibialis anticus; and the foot became at once so loose that it could be easily brought into a normal posture, and it was kept so. This patient was taken out much better, but there had not been time for a cure.

Case dcxliii. C. M., aged 4 years, with congenital varus of both feet. She walked on the outer part of the feet, not touching the ground with her toes. She had been operated on before she became my patient. I divided the tibialis anticus and tendo Achillis in each foot, and began the treatment as in the other cases; but there was considerable difficulty, for the child screamed constantly, and the mother removed the apparatus. The right foot became so inverted again that I divided the tibialis anticus again; and she became better, but was shortly taken away without permission.

CASE DCXLIV. C. H., aged 10, had also been under treatment before she came into my care, having been operated on for congenital varus of both feet. I divided the tibialis posticus on each side, with immediate advantage. The treatment was interrupted by an attack of pemphigus, after which she went out much improved.

CASE DCXLV. W. K., aged 11 weeks, with congenital talipes varus of both feet. I divided the tendo Achillis on each foot, and the tibialis anticus on the right; and, after a few weeks, he was taken home much improved, but was brought back in about three months after the first operation, with the right foot straight, and the left still drawn inwards. I therefore divided the tibialis anticus and posticus tendons of the left foot (and apparently the posterior tibial artery also), and applied bandage and compress, and subsequently an apparatus made of gutta percha; and he was discharged with his foot much straighter, but not quite well.

CASE DCXLVI. B. B., aged 3 months, with congenital talipes varus of both feet. I operated, and divided the tendo Achillis and tibialis anticus in each; and he went away after a short time, much improved.

CASE DCXLVII. B. C., aged 1 year, with congenital varus of both feet. I divided in each, at one time, the tibialis anticus and posticus, and the tendo Achillis. There was free bleeding until the little compresses were applied to the punctures. The feet were very much improved even before the splints were applied; but the child was taken away before I had time to see the result of the case, the parents having gone to reside elsewhere.

CASE DCXLVIII. E. L., aged 1 year: congenital varus of both feet. I divided tibialis anticus and posticus in the left foot, and the tendo Achillis also in the right. There was free bleeding. The case did very well.

CASE DCXLIX. E. P., aged 4 months, with congenital varus of the right foot. The tendo Achillis and tibialis anticus required division in this case, which terminated satisfactorily. She was taken out with the foot in gutta percha, and straight, in a fortnight after the operation.

CASE DCL. A. B., aged 2 months, with well marked varus of both feet. The tendo Achillis and tibialis anticus required division; and, when it was performed, both feet were much straighter. He was bandaged up with gutta percha, in the way I shall describe, and went out very much improved.

CASE DCLI. W. L., aged 8 months, with congenital talipes varus of the left foot. I divided the tibialis anticus and tendo Achillis, and the wounds bled freely. When they were soundly healed, gutta percha was applied, and the case ultimately did well.

The next set comprises cases of talipes acquisitus.

CASE DCLII. H. H., aged 16, with talipes varus of both feet, of some years standing, in consequence of partial paraplegia. He walked on the dorsum of each foot. I divided the tendo Achillis, tibialis anticus, and flexor longus pollicis in the left foot, which became straight at once. He went on well for a time; but, when the tendo Achillis became united, it drew the foot down again; and he was at this juncture attacked with scarlatina, and transferred to a medical ward. When he came under my care again, his foot was again drawn up, and I divided again the tendo Achillis and tibialis posticus. The foot became much better; and subsequently I divided, on the right foot, the tibialis anticus and posticus, the flexor longus pollicis, and tendo Achillis; and, after a lengthened treatment and another division of the tendo Achillis, he was discharged much better, the heel being still a little drawn up.

CASE DCLIII. T. D., aged 28, with talipes equinus of the left foot, and talipes varus of the right foot, which conditions had existed from childhood. I divided the tendo Achillis of the left, and, on a subsequent occasion, the tibialis anticus and posticus and tendo Achillis of the right; and, after a considerable length of treatment, she was able to walk on the soles of the feet.

CASE DCLIV. C. B., aged 27, injured his right knee some years before I saw him; and this accident was followed by a contraction of the gastrocnemius, so that his knee being quite stiff, his toes only touched the ground; and, six weeks before his admission, he fractured the fibula of the same side. I divided the tendo Achillis; and, as soon as the wound was healed, I made him get up and walk, and his foot very soon obtained its normal position. He was quite cured in a month.

This man became my patient about eight years afterwards, in consequence of another injury to the same knee, by which the anchylosed joint was so loosened that he obtained some limited power over flexion and extension. The movements and position of the foot and ankle had been quite satisfactory since the former operation.

CASE DCLV. L. S., aged 21, with old disease of the left ankle, contraction of the tendo Achillis, and inversion of the foot. I divided the tendon; and by means of a splint on the outside of the leg, and a foot piece at right angles, brought the limb easily into the proper position; and she went out very much improved.

CASE DCLVI. E. M., aged 20, with talipes equinus from partial paralysis of the extensors, and some general wasting of the leg. I divided the tendo Achillis, and put up the foot as in the last case. She walked about fairly with the heel down in three weeks; and was discharged cured.

CASE DCLVII. T. O., aged 4, with talipes equinus. I divided the tendo Achillis; and he walked about, with his foot straight and the heel down, as soon as the wound was healed; and went out cured in a few days.

CASE DCLVIII. B. D., aged 12, with a wasted leg and contracted flexors. I divided the tendo Achillis; and, after a few days, adapted a splint with moveable foot-pieces, to which India-rubber bands were attached. His foot was thus soon drawn up, and he went away able to walk tolerably well.

CASE DCLIX. T. P., aged 30, met with a severe accident some years before he became my patient. He fell upon his heels from a considerable height; and ever since he has had contraction of the extensor tendons, so that he could not bring his toes to the ground, without flexing the knees so as to bring the centre of gravity of the body in the proper position. The flexors were partly paralysed by the concussion. He had been also subject to a chronic ulceration of the heel. I divided the tendons of the tibialis anticus, extensor longus digitorum, extensor proprius pollicis, and peroneus tertius. He soon recovered from the operation, and was able to stand upright for the first time for many years. The ulcer healed up; but after he went home, I was told that it had reappeared.

CASE DCLX. C. R., aged 7, had lost the use of the legs for three years, from paraplegia following fever. She had varus of both feet. I divided the tendo Achillis only in each foot; and after a long and tedious treatment, she returned home, so far improved that the sole of the foot was brought into its proper position, but the limb was inverted; and this was due to my not having divided the tendons of the tibial muscles.

CASE DCXLI. A. B., with varus of the right foot and valgus of the left. I divided in the right side the tibialis posticus and tendo Achillis with some difficulty. The skin in this case was so tender that, upon application of the least pressure, a vesication was formed, and treatment was almost impossible. When she went out, she was no better.

CASE DCLXII. M. A. S., aged 20, had talipes varus of the left foot following a sloughing ulcer of the ankle. I divided the tendo Achillis and tibialis anticus under chloroform, and put her foot straight at once, and bandaged it so. This patient remained under my care for a great length of time, and ultimately she went out no better. She was afterwards under the treatment of one

of my colleagues, and it was found that she voluntarily turned her foot, and removed the apparatus at night. She is permanently lame from the contracted state of the foot.

CASE DCLXIII. W. H., aged 11, with strumous ulcerations of the skin of the back of the leg, with contraction of the skin and tendo Achillis. He only touches the ground with his toes. The case was most troublesome and unsatisfactory. After dividing the tendo Achillis, and applying a splint with a moveable foot-piece and India-rubber bands, the skin of the dorsum of the foot, and even the tendo Achillis, sloughed, and the treatment was given up. He went out no better; and I believe that after many months his leg was amputated.

CASE DCLXIV. E. M., with talipes equinus of both feet, but principally in the right foot. I divided the tendo Achillis and flexor longus pollicis, and the foot became straighter. The tendo Achillis became so firmly united and so contracted again, that I divided a second time in a few weeks from the operation; but she went out before the cure was complete, and I lost sight of her.

REMARKS. These cases, although not very numerous, are encouraging and satisfactory. All were either cured or very much improved, except those in which the operation was rendered necessary by some previous accident involving loss of skin; and, although we do not usually see our patients long after they have been under treatment, yet we do now and then, and in them the result is generally good. It appears to me that this morbid condition is relatively more frequent among the children of the poor than among the richer classes; and I should like to know the opinion of other surgeons in this respect. In all cases, I use Dieffenbach's tenotomy knife, which is in a handle, and opens like an ordinary pen-knife, being much the shape of a French pen-knife, or like a small, fine, but strong curved bistoury, and I think it is the best instrument for the purpose, being not nearly so clumsy as those generally sold in the tenotomy cases, and it is adapted for every operation of this kind.

That large class of cases where club-foot, or some other bodily deformity, depends on the excessive contraction of one set of muscles from partial paralysis of their opponents, is of great interest. The flexors, being much stronger than the extensors, get the advantage, and cases of abnormal contraction in them are the most numerous. These patients are much relieved by the section of the faulty tendons; and it appears as if the weaker set of muscles gave up the contest, until they, in their turn, were relieved by the section of their more powerful opponents, and thus have once more a chance of trying to restore the just balance of power.

In the year 1841, cases of contracted tendons of every kind were sent to Dieffenbach's *clinique* at Berlin from all parts of Germany and the neighbouring countries, and I had the privilege of witnessing his operations, and of seeing almost every muscle in the body divided. He kept his little knife in his waistcoat pocket, and used it always, except in one or two instances where a much longer bistomy was necessary, as in dividing the muscles of the back. Some of the most interesting examples were those where he divided the muscles of the face for the relief of paralysis of the portio dura of the opposite side. The effect of this operation was very striking and immediate; for, instead of the distorted and twisted appearance that they presented before, the equilibrium was restored, and a natural expression returned to the face. I do not believe, however, that the improvement was lasting in any instance.

In the division of the tendon of the tibialis posticus, I believe that the posterior tibial artery is frequently divided, and I think that I have cut it at least five times; but the compress and bandage in a young child are enough to stop it, and it is not a subject for the least anxiety.

In using gutta percha after operations, instead of other apparatus, I do it in the following way. When the foot has become quite loose by the division of the muscles, and this can be effected in most cases as soon as the wounds are healed—that is, in three or four days—I carefully bandage the foot, and then envelope it in a layer of thick gutta percha, made perfectly soft by being kept in water at 212°, and covered over on each surface with some thin paper to prevent it sticking to the bandages. It must be adapted closely to the foot by bandaging; and then, by grasping the limb with both hands, and bringing the foot into a natural position at right angles with the tibia, I plunge it into a pan of cold water, when I hold it until the gutta percha is quite firm, and about five minutes will be found sufficient for this purpose.

Wry Neck. CASE DCLXV. A. B., aged about 10, with well marked contraction of the left sterno-mastoid muscles, producing considerable deformity. I divided the clavicular portion of it with the curved bistomy under chloroform, passing the blade from the outer margin of the muscle behind it, and cutting towards the skin. It was easily effected, and answered well. The head became much straighter, and but little inconvenience or deformity remained.

Contracted Fascia of the Foot. CASE DCLXVI. A. I., aged 13, with considerable shortening of the foot, from contraction of the plantar fascia and extensor of the great toe. I divided them both, and he went out with his foot much improved.

[*To be continued.*]

Transactions of Branches.

BATH AND BRISTOL BRANCH.

ON THE PROPRIETY OF EXCISING THE EYE-BALL IMMEDIATELY, WHEN DESTROYED BY INJURY.

By WM. MICHELL CLARKE, Esq., Surgeon to the Bristol General Hospital.

[*Read November 28th*, 1861.]

THE subject upon which the following notes are written, is one in which I have for some time taken an interest; and, although it has already received considerable attention, yet I believe that the point of practice which I desire to illustrate is somewhat new.

Penetrating wounds of the eye are not uncommon; and a considerable number of the cases are of such severity, that there is no difficulty in pronouncing the injured organ destroyed. The ordinary mode of dealing with these cases, is to use such means as will obtain the healing of the part. The globe remains collapsed and shrivelled; and it is a fact well established, that such a cicatrised organ is a source of great danger to the opposite eye, and that, at any time, it may set up such an amount of irritation as may lead to the destruction of it. Against this serious state of things, there is no remedy, except partial or complete extirpation; and it is a very unfortunate thing for the patient if this be not recognised by his surgeon.

I believe that one of the members of our own Branch, Mr. Prichard, was the first to practise complete excision of the eyeball for sympathetic ophthalmia; and the first case was published by him before Feb. 5th, 1861.

The following is Mr. Prichard's account of it; and it bears so well upon my present subject, that I do not hesitate to quote it. "J. F., aged 46, injured his left eye with a piece of iron thirteen years before I saw him, and he had frequently been laid up with attacks of severe pain and inflammation; and for nine months