left eye, and the lids were almost closed. When he came to himself, he complained of darting pain across the forehead; the pulse was 100, small and feeble; he perspired freely. Cold was applied to the head; two grains of calomel were ordered every four hours; and a purgative enema was given. Next day, there were no fresh symptoms. He was observed to have nearly lost the power of hearing on the injured side. The pulse varied between 80 and 90. On June 17th, the pulse was still further reduced (to 58). He complained of shooting pains across the forehead. He spat up a small quantity of mucus mixed with blood, both this day and the preceding. This morning, a small quantity of blood and serum again oozed from the left ear. He went on after this very well, and had no bad symptoms. He still complained, however, of much pain on that side of the head; and was so giddy on trying to move, that he was obliged to keep in the recumbent position for a fortnight. On June 30th, he was able to quit his bed; and was discharged cured on July 8th. He still, however, continued deaf in the injured ear, being quite unable to hear a watch when held in the air close to his ear; but, when the watch was laid against the mastoid process, he could hear it plainly.

ST. BARTHOLOMEW'S HOSPITAL.

FRACTURE OF THE BASE OF THE SKULL BY CONTRECOUP IN A CHILD.

Under the care of E. STANLEY, Esq.

[From Notes by E. S. EARLE, Esq., House-Surgeon.]

CASE IV. A child, aged 8½ years, was admitted into Queen's ward, on July 3rd, under the care of Mr. Stanley, in a state of insensibility. It appears that he had been riding on the back of another child, who was only twelve years old, and fell on to the pavement striking his left temple. On admission, bloody serum was observed to be oozing out of his right ear. The pupils were contracted and did not act; the pulse was small, 120; the skin and respiration normal. There was ecchymosis over the left temple; no injury to the skull could be felt. The boy remained in a state of insensibility for an hour, when he gradually recovered, and next day seemed quite well. He spoke with his brother for some time quite rationally. He was ordered milk diet, but no medicine was necessary. On the following day, however, July 5th, at one p.m., he was seized with convulsions, and became speedily insensible. The pupils were dilated; the pulse 130, small and frequent; the features and tongue were drawn to the left side. He was ordered three grains of calomel every three hours; four leeches were applied to the temples, and a blister to the back of the neck, and this was dressed with strong mercurial ointment. He sank rapidly, however, and died on July 6th.

On post mortem examination, extensive inflammation of the membranes of the brain was found, and pus had been formed at the base. The convolutions of the brain were flattened from distension of the ventricles. A fracture was seen extending through the petrous portion of the right temporal bone, and cutting across the meatus auditorius internus, and the membrana tympani was ruptured. A bruise was found on the left temple, on the opposite point of the skull to the fracture.

Original Communications.

WHY DOES THE OPERATION FOR THE CURE OF STRABISMUS SOMETIMES FAIL?

By C. HOLTHOUSE, Esq., Surgeon to the Westminster and to the South London Ophthalmic Hospitals.

[Continued from page 576.]

FAILURE of an operation for strabismus may be owing not only to imperfect division of the structures engaged in its production, but to the implication of the opposite eye in the deformity. This was pointed out many years ago by Mr. Elliot of Carlisle, who, in an excellent paper on the subject in the *Edinburgh Medical and Surgical Journal*, set forth the grounds on which he was led to this conclusion, and illustrated its truth by many well-selected examples. He went, however, too far in affirming that strabismus can never be regarded as confined to one eye, and the facts on which he relied in support of this doctrine I have elsewhere shown must be differently interpreted. Nevertheless, the discovery of Mr. Elliot, that the persistence of a squint, after division of the adductor muscle of the affected eye, may be owing to the implication of

the other eye in the deformity, led to a great improvement in practice; for surgeons had hitherto directed their attention solely to the worse eye, and if division of its adductor failed to rectify the squint, they proceeded to divide other muscles of the same eye, and the result was an exchange of one deformity for another equally unsightly. The inversion was, indeed, removed; but there was substituted for it either a bulging, staring, expressionless eye, looking nearly twice as large as the other, or the inward squint had been converted into one in an opposite direction. It will readily be imagined that results such as these contributed not a little to bring a very useful operation into discredit. The present practice, then, for which we are indebted to Mr. Elliot, is to divide the adductor muscle of the second eye as soon as we have ascertained, by a thorough exploration with the blunt hook, that no mechanical cause is in operation to prevent the rectification of the first eye. But failure of an operation may manifest itself, not only by a persistence of the squint in the eye operated on, but by a transference of the deformity to the other and, apparently, unaffected eye. We operate, for example, on a patient supposed to be affected with single convergent strabismus of the right eye, we divide its adductor, and the eye becomes straight, it is bound up, and the patient sent home; on removing the bandage a day or two afterwards, the eye continues in good position, but the left eye is now observed to be inverted, and the operation gets the credit, or rather discredit, of having brought about this new deformity. Now, it is scarcely necessary to observe, that the inversion of the left eye is not really a new affection, for it was equally strabismic before the operation, though masked, so to speak, by the greater deformity in the right eye; and the disappointment which is always felt under these circumstances is owing to the surgeon not having recognised the doubleness of the squint prior to operating, and so failed to apprise his patient of the probability of a second operation being required on the other eye.

The failures I have hitherto alluded to arise from the operation being imperfectly done, and are therefore apparent at the time, or immediately after the patient has recovered from the chloroform, if that had been given him; but occasionally failure does not manifest itself till some days after the operation has been completed; and in this case it would seem to be due to some of the following causes:—The re-attachment of the divided muscle too near its original insertion. Thus Lucas affirms that he had several times been obliged to perform a second operation; and that, on these occasions, he was able distinctly to see both the original and the new insertions of the muscle. The same fact has also been observed by M. Lenoir, and is recorded by M. Berard. The muscle again may be united to the sclerotic, medially, through the intervention of a band of condensed cellular tissue, as in the following case related by Mr. Prescott Hewett. The patient was affected with divergent strabismus, for which he underwent the operation of division of the abductor muscle of the squinting eye. The success at the time appeared to be complete; but rather more inflammation followed than is usually observed in these cases; and, after its subsidence, the defect, though diminished, was not removed. Exactly one month after the operation, he died of pneumonia; and, on examination of the orbit, the external rectus was found to be completely divided just at the point where it was beginning to be tendinous: it had retracted to about three-fourths of an inch, but was connected with the globe by a strong band of cellular tissue, about three lines in width and six in length, and was attached to the ball of the eye, about two lines behind the original insertion of the muscle. Lastly, owing to the too free division of the conjunctiva, and the inflammation which sometimes follows, contraction may take place during cicatrisation, to such an extent as again to draw the eye inwards. To whichever of these causes the reappearance of the squint may be owing, nothing can now be done except to redivide the shortened structures; but, as prevention is better than cure, I always direct the patient to commence practising lateral movements of his eyes on the third day after the operation. He will not do this violently, for it would cause pain, and, moreover, is not necessary; but I believe it to be perfectly effectual in preventing a relapse: at least, it has never happened in any case that I have operated on; and I am, therefore, disposed to attribute this success to the above practice.

Before concluding, I must say a few words on the giving of chloroform in this operation. When possible, I always dispense with this anæsthetic—for the following reasons. It completely masks the result for the time being, so that we have no means of knowing, till the patient has recovered from

its effects, whether we have operated successfully or otherwise—whether what we have just done is sufficient, or whether the other eye should be operated on. I therefore never administer it without first apprising my patient of the possibility of a second operation being required. If we could always be sure that the strabismus was either single or double, we might pronounce a positive prognosis; but, in the uncertainty which often exists on this point, it will save disappointment to the patient and our own credit to give the warning just referred to. Another serious objection to chloroform is its liability to produce sickness, which both renders the operation more tedious and the hæmorrhage more considerable. I have seen so much blood poured out during the straining efforts to vomit, as to raise visibly the conjunctiva from the sclerotic, and to leave the eye discoloured for upwards of six weeks afterwards.

In conclusion, I would observe that the object of this and of the preceding papers was threefold:—

1. To call attention to the existence of a feeling, widely diffused among the profession, inimical to operative measures for the cure of strabismus.

2. To show that this feeling originated in the frequent occurrence of failures, whence the operation has acquired the character of being an uncertain one.

3. To point out the several causes of failure. Without a knowledge of these, it is a mere lottery whether success or failure shall result. With this knowledge, any surgeon possessing sufficient manipulative skill, may perform the operation with certainty and success.

PORT WINE ENEMATA AS A SUBSTITUTE FOR TRANSFUSION OF BLOOD IN CASES OF POST PARTUM HÆMORRHAGE.

By H. LLEWELLYN WILLIAMS, M.D. Edin., St. Leonard's-on-Sea; late Physician to the Dispensary and Maternity Charity, Beverley.

ON September 22nd, 1856, I was called into the country, a distance of four miles, to attend Mrs. C., aged 42, then about to be confined of her tenth child. All her previous accouchements had been favourable. When about six months advanced in pregnancy, she received a violent shock by the sudden death of her youngest child, since which time her general health had become much impaired. She had a peculiar pasty anæmic appearance, and complained much of general weakness.

On my arrival, I discovered the os uteri fully dilated; the membranes ruptured spontaneously; and, after three or four powerful pains, a fine female child was born. Placing my hand on the fundus uteri, I felt it slowly contracting under my grasp. My patient exclaimed, "I am flooding away," and fainted. I immediately had recourse to such restoratives as were at hand, and presently she began to revive. On making an examination, I found the placenta lying detached in the vagina, and removed it without difficulty, together with a large quantity of coagula. I had administered a dose of volatile tincture of ergot. The uterus continuing to contract feebly, and more than the usual amount of discharge being present, I applied some cold cloths to the vulva and hypogastric region; this having little apparent effect in arresting the discharge, though steady pressure was continuously applied with the hand on the abdomen, I had recourse to the plan recommended by Gooch, of throwing a quantity of cold water suddenly on the abdomen. My efforts still being foiled, and the hæmorrhage continuing, the powers of life manifesting evident symptoms of flagging, I introduced my left hand into the uterus, after the manner also recommended by Gooch, endeavouring to compress the bleeding vessels with the knuckles of this hand, whilst with the other I pressed upon the uterine tumour from without. This combination of external and internal pressure was equally as unavailing as any of the other plans already tried. At last, by compressing the abdominal aorta, as recommended by Baudelocque the younger (*Mémoires de l'Académie des Sciences*, Jan. 1835), I was enabled effectually to restrain any further hæmorrhage. The condition of my patient had now become sufficiently alarming, she having been for upwards of half an hour quite pulseless at the wrist, the extremities cold, continual jactitation being present, the sphincters relaxed, and the whole surface bedewed with a cold clammy perspiration. It now became a question what remedy could be had recourse to, which should rescue the patient from this alarming state, it being utterly impossible to administer any stimulant by the mouth. My distance from home, together with considerable

objections to the operation itself, which it is not here needful to dwell upon, made me abandon the idea of transfusion of blood; but, as a means which I believe will prove equally as powerful as transfusion in arresting the vital spirit, I had recourse to enemata of port wine, believing that this remedy possesses a threefold advantage. The stimulating and life-sustaining effects of the wine are made manifest in the system generally; the application of cold to the rectum excites the reflex action of the nerves supplying the uterus; and the astringent property of port wine may act beneficially by causing the open extremities of the vessels themselves to contract.

I commenced by administering about four ounces of port wine, together with twenty drops of tincture of opium. It was interesting to note the rapidity with which the stimulating effects of the wine became manifest on the system. Two minutes after the administration of the first enema, there was a slight pulsation distinguishable in the radial artery, which perceptibly increased in strength for the space of five minutes, after which the pulse again began to flag, and I had recourse to the administration of a second enema twenty minutes after the first. A more marked improvement was now manifest in the patient. She regained her consciousness; the pulse continued feebly perceptible at the wrist. In half an hour, I had again recourse to the enema, with the most gratifying result; and, after ten hours most anxious watching, I had the happiness of leaving my patient out of danger. The quantity of wine consumed was rather more than an ordinary bottle.

Pressure of business and subsequent ill health have hitherto prevented me giving the foregoing case to the profession. I hope it may now be perused with interest.

CASE OF OSTEO-SARCOMA.

By CHARLES HALLETT, Esq., Axminster.

FANNY COOK, aged 21 years, died under my care on June 21st, 1857. She was of a scrofulous habit, with light hair and complexion; and her mother informed me that she had been unhealthy from childhood. At about the age of 10 years, she had an enlargement of the abdomen, no doubt from disease of the mesenteric glands. At the age of 16, menstruation commenced, and the swelling gradually subsided; but from that time she was subject to severe pains in the upper part of the thigh on any unusual exertion, and she had several attacks of acute rheumatism.

She came under my care in September 1856, for acute rheumatism. She was at that time working in a silk-factory. She recovered from the attack in about four weeks, and resumed her work, but only for a few days. She now complained of a violent pain in the right hip; and, in about a week, it extended to the upper third of the thigh. The pain continued excessive, with tenderness and swelling of the parts; the pulse was seldom less than 100, often 120; the tongue dry, and skin hot, with frequent rigors. I considered it to be a case of inflammation of the periosteum, and treated it accordingly; but the disease gradually advanced, and the tension became so great, with indistinct fluctuation, that I divided the fascia freely, supposing there might be some confined matter; but the discharge was small, and very little relief was afforded. She now had occasional convulsive fits; and the pain was only relieved, so as to allow her a little sleep, by very powerful opiates. She said "the pain was all in the bone"; and I was of opinion that it was extensively diseased, and, from the progress of the case, supposed it to be osteo-sarcoma, and stated my opinion to her friends.

I was allowed to examine the parts after death, and found the circumference of the right thigh at the largest part to be twenty-six inches; that of the left thigh at the same part was only eight inches. The tumour extended from the hip to within six inches of the knee, and was of an ovoid shape. The skin was tense and shining as far as the tumour extended, and appeared ready to burst at several places; it showed a tendency to point at about three inches below Poupart's ligament, on the outer side. On being cut into, it had much the appearance of brain, and was intersected by fibrous bands; and had, for the most part, the feel and hardness of scirrhus liver; but it was softened in some parts, and contained pus; and osseous matter was intermixed, so that, when the tumour was cut, a grating sound was produced that could be heard at some distance. The head and shaft of the femur, to within six inches of the knee, were almost destroyed, except a thin plate of bone, full of holes, and giving way to a slight pressure of the knife, but only extending through about half the length of the tumour; and be-