very sore. The severe pain in the back passed off at this time.

New and larger spots were noticed on the 28th, whilst the old ones had faded; they were confined to the upper part of the body on this occasion. No further bleeding occurred, so that it had lasted during four days. Three or four days later little trace remained of the purpura; the tongue and mouth had become pale, and the general health as good as before the attack; so it continued till the next period arrived for this disturbance of the system.

December 24th. The lumbar pain was less on this occasion; the purpura more severe; the tongue presenting a larger bleeding surface; the elevations on the under lip amounting to bullæ, and the spots extending over the whole body, diminishing in size from above downwards, so that on the feet they were miliary. Her ordinary state of health was recovered within ten days, and she was then discharged at her own request.

I am indebted for the foregoing particulars to the minute and faithful record of the case drawn up by Mr. Gorringe, the Assistant House-Surgeon of the Infirmary. It would be useless to enter into the details of treatment. Mild alteratives, and chalybeate tonics were chiefly used during the intervals, and derivative emmenagogues at the monthly period. In the second attack a few leeches were applied near the vulva, and the bleeding was profuse and with some difficulty stopped. Electro-magnetism was tried, but was only once submitted to, as it caused considerable pain and more alarm. These and the other means used, produced no distinct modification of the symptoms, and the opportunity for treatment was unsatisfactorily curtailed.

Since she left the Infirmary, six months ago, our art has not I believe been much in requisition, but nature has been effecting important changes in the direction of the erethism of the minute blood-vessels. Mr. Nankivell, of St. Columb, the able surgeon who has been her ordinary attendant, has kindly enabled me to bring down the history of the patient to the present date, confirming at the same time the statements made by herself. Writing on the 13th, instant, he says—

“St. Columb, July, 13, 1847.

“My dear Dr. Barham,

“I have to-day seen Ann Teague; she looks worse than she ever did; is quite blanched. The uterus has in an abnormal measure parted the catamenia. Three months since she menstruated, and it continued for a week, being accompanied throughout with profuse bleeding from the nose, but *not from the gums*. Twice since then she has had hæmorrhagia (*without epistaxis*), continuing for a fortnight. A week since she was again taken unwell, and fears that it will continue several days longer. There are about a dozen spots of purpura on the neck. You are aware, I think, that she menstruated once when 16 years old, and never since until recently, except vicariously. She thinks that since *that time* she has had the hæmorrhage from the gums about twelve times. She tells me that she passes many coagula. There is no leucorrhœa.”

A case of hæmorrhage from superficial vessels, vicarious of the menses, occurs to my recollection, which was under my care as an out-patient at the Infirmary, about eight years ago. The patient was a girl about 20, who had an ulcer below the knee, from which a copious sanguineous exudation took place for some days monthly. The catamenia which had been for a considerable time suspended, did not return during several months, when she continued under my observation, and the ulcer remained unhealed. I speak of this case entirely from memory.

Another out-patient still under treatment, presents an affection of some superficial vessels of the left mamma of an analogous description, though less strongly marked with the evidence of substitution for the uterine discharge. She is a girl 20 years old, of robust form, though short, with fully developed mammæ. Menstruation is stated to have been regular and free in quantity, from the age of 16 to 18. It then was suddenly suspended, and has remained so, with the exception of a very transient appearance about ten days ago. She received a blow from a man's fist on the left breast, a twelvemonth since, and it then exhibited decided marks of the contusion; but they disappeared speedily, and it was not till six months after the bruise that they seemed, as it were, renewed on the same spot, and they have now for the last half-year alternately become vivid and receded, at no very regular intervals,—sometimes once, sometimes twice or more, in the week, varying from the appearance of purpura to that of ecchymosis. The part concerned is painful when the spots are high-coloured. There has not been very much constitutional disturbance, a painful fulness towards the left inguinal region being the chief amenorrhœal symptom, besides some of the ordinary results of plethora ad molem.

CASE OF SIMPLE FRACTURE AND DISLOCATION OF THE GREATER PORTION OF THE RIGHT ASTRAGALUS, FORWARDS AND OUTWARDS.

By EDWARD JOHN SPRY, Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South Western Branch of the Provincial Medical and Surgical Association, held at Truro, July 16, 1847.)

Thomas Rogers, a tall, muscular, and robust miner, aged 42, was brought to the Infirmary on the 24th of September, 1846, and was admitted under the care of Mr. Bull. From the statement made by the patient, it appeared that whilst at work in the morning of the day preceding, at Poldin Mine, in Gwennap, he had slipped from the end of a scaffold, about five or six feet high, and had fallen perpendicularly to the ground, the hollow of his right foot coming in contact with a large projecting stone, which caused him to be thrown on his right side. On attempting to stand, he found that he could place no weight on the injured foot, that it was distorted, and very painful. The surgeons of the mine were promptly on the spot, and endeavoured to restore the displaced parts, but without

success, and on the following day they sent him to the Infirmary, where he arrived about nine in the evening. The limb was then examined by Mr. Gorringe, our assistant surgeon, acting for Mr. Bull, and by my colleague, Mr. Bassett, who persevered for a considerable time in their attempts to reduce the dislocation with the aid of the pulleys, but with no better result than attended the former efforts.

The next morning, being at the Infirmary, I was requested to examine the limb, and ascertained its condition to be as follows:—

The foot was extended, the toes turned inwards, and the outer edge of the foot downwards, the foot being twisted inwards. There was considerable swelling of the soft parts, but the skin was not broken. The inner malleolus was deeply buried in the angle of adduction of the foot, and could only be felt with much difficulty, whilst the outer malleolus was remarkably prominent; and just below, and a little in front of it, there was a large projecting bony surface, immovable, covered only by the skin, and a light effusion of serum in the cellular tissue. The foot, could be brought into a straight line with the tibia, and could be flexed to some extent without much effort; but immediately that the hand was removed, the parts resumed their former relative positions, and the patient had no control whatever over the limb. A slight crepitus could be felt on rotating the foot, when it was brought into the position last described, which had induced the impression that the inner malleolus had given way, and that the whole of the foot had been dislocated outwards. After a careful examination, I felt satisfied that there was no fracture of either malleolus; the partial mobility of the foot rendered it improbable that it was entirely dislocated; the well defined outline of the projecting bone suggested that it was some portion of the plantar arch, and that from its size and situation, it could be no other than the astragalus, but having never before seen an accident of this nature, I arrived at this conclusion with some diffidence, although there was no resisting the anatomical evidence thus supplied.

My colleagues concurring in these views, it was agreed that one attempt more should be made to restore the displaced bone, and that as the patient was very muscular and strong, he should be prepared for the process by a large bleeding, and by being kept fully under the action of the tartarized antimony for two or three hours. This was done, and the pulleys were again used most perseveringly, pressure being at the same time made on the projecting bone, but after continuing extension to the utmost degree that would be justifiable, the man being in the most favourable state for overcoming mere muscular resistance, we were satisfied that it was perfectly useless to go any farther. On removing the apparatus it was observed that the pressure on the outer surface of the foot had produced complete absorption of the effused fluid, and that the bone was only covered by the skin, which a mere touch with the knife would have divided; but as the attachments of the bone were uncertain, and it could not be ascertained at this time that it had been broken, it was thought best to leave the future management of

the case to the natural efforts, as it was clear that the integuments must slough, and that in due time the bone might be separated.

To favour these efforts, the limb was placed on an inclined plane; fomentations were diligently applied, an anodyne was given, and he passed a good night. The pulse on the morning of the 26th being only 93; but little constitutional disturbance was excited. On the 29th the pulse was still 93; he felt easy, and the swelling gradually subsided. Vesications formed over the projecting bone.

October 2nd. From this time the sloughing process proceeded, which extended over the outer ankle; pulse 76. The patient's strength was duly supported by suitable diet and medicine. On the 6th the bone was partially uncovered; and on the 20th it was found to be so loose that Mr. Gorringe had no difficulty in detaching it after dividing only a little ligamentous tissue. A large cavity was of course left exposed, in which could be seen the concave articulating surface of the tibia. Some hæmorrhage ensued, which was readily suppressed by applying a pledget of lint and a roller.

The portion of bone removed proved to be the large convex articulating surface of the astragalus, broken off from the head of the bone, obliquely through its neck. It will be seen that the inner corner of the trochlea is carried away, showing pretty clearly that the foot must have been partially extended at the moment the shock was communicated to the limb, when, by the perpendicular and sudden descent of the patient, the whole weight of the body was received. On the upper and half-exposed surface of the astragalus, the anterior edge of the tibia acting like a chisel in cleaving the fracture, the foot being at the time prevented from yielding to the blow by being wedged up firmly with the projecting stone which occupied the plantar arch before described.

22nd. There is a great discharge from the cavity; the finger was carefully introduced, to ascertain if the other portion of bone was sufficiently loose to take away, but although its rough surface could be easily felt, it was too firm to remove, and it was considered best to make no further attempt to do so. This examination afforded an opportunity of verifying the opinion before given that the inner malleolus was quite sound.

24th. An abscess which had formed on the inner surface of the foot near the ankle was opened to-day, which gave him great relief. His strength was now so much reduced from the excessive discharge, that it was necessary to increase his allowance of porter to a quart daily, with four ounces of wine.

27th. This appeared to be the critical period in the history of the case. The discharge was excessive, his weakness was extreme, and it was much feared that amputation would be immediately required; but from this time the symptoms became more favourable, granulations appeared in the cavity and over the outer ankle, where the skin had given way. By gradually and carefully following out the principle of supporting his constitutional power, he had so far recovered on the 18th November as to be able to raise his leg a little

from the bed. The limb now rested on cushions in the extended position.

Dec. 16th. He has steadily improved, so that he is now able to sit up daily; the wounds are healing.

Jan. 1st., 1847. He is now able to walk about the ward with the help of crutches; the wounds are cicatrized; the limb is about an inch shorter than the other, and the foot is turned inwards, considerable prominence still remaining on the outer surface of the foot; he can, however, place some weight on his toes, and passive motion of the joint can be carried to some extent, without producing pain. He left the Infirmary the following day. I saw him again in June, when he was able to walk firmly on his right foot with the help of a stick, and was in very good health. The foot has an awkward appearance, but there is very useful motion in the ankle joint, which he thought had been gradually increasing.

As a proof of the rarity of this accident in Cornwall, it may be stated that I had never before met with it, although I have resided in this neighbourhood as pupil and practitioner about thirty years. Mr. Bull, who has been resident House Surgeon at the Infirmary since its opening in 1799, does not recollect the admission of any such accident. Several professional friends, to whom the casualties of many thousands of our miners are entrusted, have assured me that they had never seen a similar accident. I am indebted to the wood-cut in Mr. Bransby Cooper's edition* of Sir Astley's invaluable work on "Dislocations and Fractures of the Joints," for a very satisfactory representation of this particular accident, the outlines of which corresponded as accurately as possible with the *contour* of the limb in the present case; and to the publications† of my townsman, Mr. Turner, of Manchester, for much useful information respecting the management of a case in which I could not avoid feeling a considerable interest. Indeed, although Mr. Turner appears to have omitted nothing essential to make his description of the varied dislocations of the astragalus minutely correct, yet the case now detailed presents some peculiar characteristics, serving in the main to confirm the opinion he has formed, after a careful analysis of a large number of cases, namely, that a dislocation of the astragalus cannot take place without a fracture of some portion of the bone, and that when effected, its reduction is almost impracticable.

* Fifth edition, p. 322.

† Vide "Transactions" of the Provincial Medical and Surgical Association for 1843, Vol. XI., subsequently published as a separate Treatise in 1843.

ON THE USE OF THE NITRATE OF SILVER IN THE CURE OF ERYSIPELAS.

By JOHN HIGGINBOTTOM, F.R.C.S.E.

(Read before the Provincial Medical and Surgical Association, at the Anniversary Meeting, at Derby, Wednesday, August 4th, 1847.)

I have found that if the nitrate of silver be applied *early*, it subdues local inflammation and irritation, if we employ at the same time, the most efficient means for regulating the digestive organs.

At an early period of my practice, in slight cases of erysipelas, I used constitutional remedies alone, hoping that the inflammation would have been arrested; but having been so often disappointed, I now use both local and constitutional remedies simultaneously, and especially the nitrate of silver. Even in mild cases of erysipelas, in which I did not apply the nitrate of silver, I found the disease very long in duration, and I observed that the patients had sometimes numerous small abscesses requiring the use of the lancet, which might have been prevented altogether by the early application of the nitrate of silver.

The objections I formerly entertained to the very early application of the nitrate of silver, were the pain and the inconvenience attending the discolouration of the part on which it is applied, which remains for a week or more, but these objections are trifling compared with the continued severity of the disease, if permitted to run its usual course, particularly on the head, in which there is also great danger of inflammation of the membranes of the brain and of serous effusion. I have found that when the inflammation has been subdued by an early use of the nitrate of silver, the constitutional symptoms were immediately relieved, the constitutional disturbance is directly aggravated by the least increase of local inflammation, and in a few hours, after a decided application of the nitrate of silver, the inflammation is arrested and gradually subdued, and with it the constitutional symptoms cease.

Even in idiopathic erysipelas, there is no period of the disease when I would not apply the nitrate of silver. I have never in any cases seen metastasis, or any other bad effect from the use of this important remedy.

When it is necessary to apply the nitrate of silver over an extensive surface as in erysipelas, I have for some years used the concentrated solution in the manner proposed by Mr. John Gooch, Surgeon, R.N., in a paper published in the *Lancet* of September 15th, 1832, entitled "Practical remarks on Erysipelas as it appeared on board His Majesty's ship *Prince Regent*." The strength of the solution is not given in this paper; I prescribe it in the following manner:—

R. Argenti Nitratis		scr. iv.
Acidi Nitrici		gtt. vj.
Aquæ Destillatæ		oz. iv.

In erysipelas of the face when it is spreading on the forehead, or at all on the scalp, the head should be shaved as early as possible, in order that we may trace the extent of the inflammation on the scalp, which often can only be detected by pain, or by an œdema being felt on pressure with the finger. The affected part should be well washed with soap and water to remove any oily substance from the skin, and afterwards with pure water, to wash away any particle of soap remaining. The concentrated solution may be then