pain and some bleeding during his motions. A fortnight after he saw a medical man, who told him he had an ulcer in rectum. This appeared to have healed. He consulted Mr. Bryant soon after, who found a lump about the size of a marble half an inch from anus. There was no prolapsus. On Oct. 9th the polypus was found, ligatured, and then cut off. The patient complained of pain for some days, and on the 15th he took castor oil, which acted on the bowels. He was discharged relieved on the 17th.

## MANCHESTER ROYAL INFIRMARY.

### REMOVAL OF ASTRAGALUS FOR COMPOUND DISLOCATION.

(Under the care of Mr. HEATH.)

FOR the following interesting notes we are indebted to Dr. H. Tomkins, late senior house-surgeon, now resident medical officer, Monsall Fever Hospital.

W. S——, a strongly built man, aged thirty-four, of intemperate habits, was brought to the infirmary on the 27th April, 1878, having been thrown from the seat of an omnibus which he was driving. On examination he was found to have sustained a compound dislocation of the astragalus of the left leg. A wound two and a half inches in length extended from the internal side of the tendon of the tibialis anticus on the dorsum of the foot downwards and backwards towards the heel, through which the astragalus and the internal malleolus projected, the foot being completely turned outwards. The ligaments between the under surface of the astragalus and the os calcis were completely torn asunder, and also those between the astragalus and the scaphoid, exposing the whole of the under and front surfaces of the bone. The internal lateral ligaments were also torn considerably, and a small piece of the outer side of the bone was split off.

After placing the patient under chloroform an attempt was made to reduce the luxation, but without success; it was therefore decided to remove the astragalus and attempt to save the foot before resorting to further measures. The remaining attachments of the astragalus were therefore divided, and the bone, from its already loosened condition, was easily removed; the small fragment broken off from the outer side was also severed from the outer ligaments and removed. In doing this the posterior tibial artery was unfortunately wounded, and was ligatured with catgut. The foot having been brought into position, and a splint with a side piece adjusted to the outer aspect of the leg and foot, the wound was syringed out with glycerine and carbolic acid, brought together with four sutures, and a drainage-tube was inserted right across the joint. Dressings of carbolic glycerine were applied, and forty minims of Battley's solution were given.

He passed a good night, and in the morning was free from pain. Temperature 99·8°. Dressings not removed. On the 29th the wound was dressed with carbolic glycerine. It looked very well. There had been some slight hæmorrhage; no suppuration. Morning temperature 100·4°. On May 1st the wound was again dressed. There was slight suppuration, and it was syringed out with carbolic glycerine. Leg and foot rather swollen. Morning temperature 101·6°; evening, 102·4°. Patient restless.

The wound was now dressed daily, suppuration being freely established.

On May 4th patient complained of much pain up the leg, which was swollen, hot, and red, but the wound itself looked healthy, and two of the sutures were removed. The skin of the leg being very tense and dry, it was painted with compound tincture of benzoin. Morning temperature, 101·4°; evening, 103·8° (this being the highest point reached throughout the progress of the case). Tongue dry; pulse 120, weak. He took but little nourishment; stimulants ordered freely. From the 4th to the 13th the patient continued in a very shaky condition, temperature ranging from 99·8° to 102·6°, semi-delirious at night, dry tongue, much thirst, and with difficulty made to take nourishment. The leg and foot continued very swollen, painful, and suspiciously red, so that for some few days erysipelas was feared, but the wound and its immediate neighbourhood continued to have a fairly healthy appearance. Numerous bullæ formed on the leg, which were painted with tincture of benzoin, and the wound was syringed and dressed daily with carbolic glycerine.

After the 13th the constitutional disturbance slowly subsided and the general condition improved, but the skin gave way on the outer side of the ankle, and a communication was established right through the joint. The limb was then placed upon a back-splint with sole-piece. The wound progressed favourably, but the healing was very tedious, and it was not until the beginning of July that he was able to get up. On the 27th July both wounds were healed, and there was but little pain when passive motion was attempted. A small sore on the back of the foot, from long contact with the splint, caused him more pain than the original wound.

He was discharged on August 12th, able to get about very well with the aid of crutches, but could not yet bear much weight upon the limb. There was a limited amount of movement in the false joint, which will probably become more extensive by use.

*Remarks.*—This case, although extremely tedious in its progress, affords a good illustration of the benefits of conservative surgery, and although the constitutional disturbance was far in excess of what might reasonably have been expected after an amputation, yet saving the man's foot certainly compensates for the extra time and trouble taken in so doing.

## CHELTENHAM HOSPITAL.

### POPLITEAL ANEURISM SUCCESSFULLY TREATED BY REPEATED PROXIMAL APPLICATIONS OF AN ELASTIC COMPRESSOR.

(Under the care of Dr. G. B. FERGUSON.)

THIS case illustrates a simple, and in this instance successful, modification of the treatment now commonly and rightly known as Reid's.

The patient, H. T——, aged sixty-nine, a cabinet maker, recommended by Dr. Gooding, of Cheltenham, was admitted into the hospital on March 9th last with popliteal aneurism.

He was a good-complexioned man, of good general health, rather above the average stature, and of temperate habits. The aneurism was very apparent, being about the size and shape of a large hen's egg, and expanding forcibly and characteristically at each pulsation. The organs generally were sound, and his femoral, radial, and other arteries not palpably atheromatous. The circumference of the right knee (the side of the aneurism) was sixteen inches, that of the left knee thirteen inches. There was much œdema of the right leg, and continuous aching pain in the leg and foot. The aneurism had been noticed for three months. It could be ascribed to no distinct cause, and had recently increased rapidly in size.

The patient was at once confined to bed and given ten grains of iodide of potassium in a bitter infusion three times a day, with a view to favourably dispose his blood and his aneurism, the first to clotting, the last to contraction (accordantly with the recommendations for the treatment of aneurism given by Dr. Balfour, of Edinburgh, in his recent work on Cardiac Diseases). With a similar aim his diet was greatly restricted as to liquids.

Seven days of this preparatory medical treatment having passed, though without much apparent improvement, and the opinion of the other medical officers of the hospital being favourable to the treatment by pressure, this was commenced on March 16th, at 11 A.M., by the simple application of an india-rubber cord, of about the thickness of the little finger (Esmarch's compressor), twice around the circumference of the junction of the middle and lower thirds of the thigh, the ends of the cord being pulled and secured just so tightly as to stop the aneurismal pulsation. No preparatory elastic bandaging of the limb was practised, nor was the patient directed previously to get out of bed so as to distend the aneurismal sac, as one distinguished surgeon has recommended. The leg and foot, however, as a precaution against gangrene, were enveloped in cotton wool and loosely covered by a flannel bandage.

The mode of procedure may be thus briefly tabulated:—

One hour of the elastic compressor: contraction of aneurism, but no solidification.

Two hours and twenty minutes of digital pressure: no further change.

Half an hour of compressor: notable solidification, but still appreciable pulsation.

One hour of digital pressure: no further change.
Half an hour of compressor: aneurism much shrunk and very hard, but still faintly pulsating.
One hour and twenty minutes of digital pressure: no further change.
One hour of compressor: pulsation now very dubious.
One hour of digital pressure: positively no further pulsation, and aneurism shrunk and hard.

The active treatment thus occupied between eight and nine hours, the cord having been applied for three hours in all, being removed as often as the comfort of the patient required it, and being reapplied also mostly as soon as he felt ready again to bear it. For some few subsequent hours the patient himself moderated digitally the current through the upper part of his femoral artery, and thus the treatment closed.

On the next morning (March 17th) the note was: Had slept well; no pulsation of aneurism. Temperature 98°; pulse 80. Less pain than before treatment; no albumen or sugar in urine, sp. gr. 1020.

On March 18th he had again slept well. Temperature 98·4°; pulse 68. A small artery was seen actively pulsating near the inner border of the patella, and a large one over the centre of the internal condyle. A good deal of darting pain was complained of about the ankle and great toe.

March 19th.—Had slept well; less pain than on preceding day, and this relieved by friction with opium liniment.

25th.—Circumference at knee 14¾ in. (Before treatment it was 16 in.)

On April 8th, a small artery was noticed pulsating over the hardened aneurism. At this date, three weeks after the treatment, he was allowed to get up for a short time every day. He was kept in the hospital some six weeks longer to prevent his returning prematurely to work. When he left he was able to walk fairly, and without pain, although, after long hanging, the affected leg was still prone to swell somewhat.

*Remarks by* Dr. FERGUSON.—The case is noticeable for the age of the patient (sixty-nine), this being much the oldest subject hitherto thus treated; for the simple nature of the treatment, all preparatory or concomitant elastic bandaging, as in all the previous cases, being dispensed with; for the comparatively loose manner in which the elastic was applied, only just so tightly as to stop the pulsation, any greater degree of tightness being found largely to increase the unavoidable, although for a time quite bearable, pain of the application; and, beyond all, for the four times repeated application of the bandage.

There can be no question that the aneurism was cured by the elastic pressure solely, which, however, without the intervals of digital pressure (during which nothing was lost), could not have been sufficiently long endured without anæsthetics (to which the patient objected) to secure a successful result. Possibly, too, the preparatory medical treatment was not without some salutary predisposing influence. The digital femoral pressure, which thoroughly commanded the pulsation, was easily made with the assistance of a cylindrical bag of shot of an effective weight of 14 lb. suspended over a pulley, and acting on the fingers—an arrangement which was found to be far more comfortable, and not less competent, than a tourniquet.

Excepting a short period when an intelligent convalescent assisted us in maintaining digital compression, the entire treatment was easily, and without fatigue, carried out by the junior house-surgeon, Mr. H. E. Paxon (to whom my best thanks are due), and by myself.

Nearly all the previous cases of this treatment, differing in details only, have been recorded in THE LANCET. Mr. Thomas Smith (May 26th, 1877) narrates a successful case, and gives the following references to successful cases:—Reid's original case (Sept. 25th, 1875, and Aug. 5th, 1876), Wagstaffe's (vol. ii. 1876, p. 461), F. A. Heath's (vol. ii. 1876, p. 638[1]), and J. Wright's (vol. i. 1877, p. 163); this was a case of femoral aneurism in Hunter's canal. More recently three successful cases of popliteal aneurism have been recorded in THE LANCET: one by Mr. Tyrrell, of Dublin (vol. i. 1877, p. 940); one by Mr. Croft, of St. Thomas's Hospital (vol. i. 1878, p. 85); and one by Mr. Manifold, of Liverpool (vol. i. 1878, p. 86). Besides these, Mr. Cornish, of Taunton, has recorded a case of aneurism of the anterior tibial artery successfully treated by the elastic bandage (vol. i. 1878, p. 238). Croft's and Wagstaffe's cases are noteworthy as having been treated by an elastic bandage only applied to the whole limb—i.e., without the usual addition of the compressor proximally. An unsuccessful case is recorded (March 23rd, 1878), and two unsuccessful cases are mentioned in Mr. Smith's paper, making, with the present case, ten recorded successes against three recorded failures.

I hope I am justified in my expectation that the method of repeated application (if required) of the elastic cord will be found hereafter considerably to diminish the number of failures after the employment of this facile method, first employed by Staff-Surgeon Reid.

[1] Mr. Smith incorrectly refers to this case as reported in the British Medical Journal.

# Reviews and Notices of Books.

*The Organic Constituents of Plants and Vegetable Substances, and their Chemical Analysis.* By Dr. G. C. WITTSTEIN, Translated by Baron FERD V. MUELLER. pp. 332. Melbourne: M. Carron Bird and Co. 1878.

WE have been very much pleased with this little work. It supplies a hiatus that has been felt. It is not everyone who can afford to purchase the ponderous tomes of Pereira, or Watts's Dictionary of Chemistry; and yet all are desirous at times of being able to refer to some authority who can be relied upon for the latest and best information in regard to the nature or composition of the essential principles of the several drugs and vegetable remedies they are in the habit of prescribing. The volume before us will supply the practitioner with just the information he requires. It contains no therapeutics, but is limited to an account of the chemical properties of the substances mentioned. The several substances are given in alphabetical order, and are easy to find. We give a single example.

"*Ergotin.* — One of the three alkaloids (ecbolin, ergotin, and trimethylamin) of ergot. Precipitate the aqueous extract of the drug with acetate of lead, free the filtrate from lead by sulphuret of hydrogen, concentrate the liquid, and add pulverised chloride of mercury; as long as a precipitate ensues, filter and precipitate the filtrate with phosphomolybdic acid; digest the precipitate while still moist with water and carbonate of baryta, filter, and evaporate the liquid to dryness. Ergotin closely resembles ecbolin, but differs from it in not being precipitated by the chlorides of mercury and platinum (unless under the addition of ether-alcohol) and by cyanide of potassium. The name 'ergotin' was formerly applied to another substance obtained from ergot, prepared by boiling the pulverised drug, previously freed from fat by means of ether, with alcohol, evaporating the tincture, adding water to the residue, and collecting the separated flocky mass. A fine reddish-brown powder; smells specifically, especially when hot; tastes acrid, bitter, and aromatic; decomposes by heat without fusing; dissolves only by traces in water and in ether, with red-brown colour in alcohol, also in alkalies, not in diluted acids."

The work is divided into two parts, each subdivided into three sections. The first division of Part I. treats of the nature and mode of origin of the proximate constituents of plants, with a table of their molecular weights; the second gives a synopsis of those plants which yield the proximate constituents described under Section 1; and the third a list of plants from which organic constituents are prepared. Part II. treats of the apparatus required for phyto-chemical analysis, the chemicals required, and, lastly, contains a very good account of the general course of systematic phyto-chemical analysis. The translation has been well done by Baron F. v. Müller, though we must admit we occasionally trace the hand of a foreigner.

*Cyprus, Historical and Descriptive.* Adapted from the German of FRANZ VON LÖHER, with much additional matter, by Mrs. A. BATSON JOYNER, and two maps. London: W. H. Allen and Co. 1878.

WE are introduced to the island in this book without an introductory sentence of any kind whatever. The writer