chain-saw the parts are much less disturbed than when Butcher's saw is employed; the radius or ulna must be firmly steadied by an assistant holding the forearm, while the fragment to be removed is secured by the lion forceps in the hand of another assistant. Too much importance cannot be placed on early movement of the fingers; probably a week or nine days after the operation it will be advisable to shorten the splint, so that it does not extend beyond the base of the fingers, and then motion should be commenced by the patient himself, or by the nurse in attendance. Free openings should be left for discharge of matter during the progress of the case, and drainage tubes may be introduced with advantage when sinuses remain in the neighbourhood of the joint.

Probably six to twelve months will elapse before there is much consolidation of the parts at the site of the excision, and before the hand can be of very great use; but even if three or four times that period is required before much benefit is evident, the patient will be far better off than if he had submitted to such a formidable mutilation as the loss of a hand.

Good nourishing diet, and removal to the pure air of the country, are, no doubt, as after all operations, of the greatest importance. Had my patient, Mary Horton, been able to avail herself of these circumstances, I cannot doubt that her progress would have been more rapid. In Hancox's case removal to a Sanatorium some miles from Birmingham was followed by the marked improvement of both the local and general condition.

In conclusion, I trust that my surgical brethren may be induced to give this operation a more extensive trial than it has yet enjoyed, and I am confident that in the hands of many of them even better results may be obtained than in those cases which I have narrated.

ART. VI.—*On Excision of the Ankle-Joint, being an Account of the Second Case in which that Operation was Performed in Britain.*

By HENRY MURNEY, M.D., M.R.C.S., Eng., &c., &c.; Surgeon Belfast General Hospital.

W. C., aged fifteen, was admitted to the Belfast General Hospital 10th May, 1856, labouring under disease of the left ankle; states that on the 26th December, 1854, he experienced most acute pain in the joint, accompanied by swelling. The pain was much

aggravated by pressure or motion of the joint; believes he must have hurt or strained it, but cannot recall the exact occasion; from this time he never completely recovered the use of the articulation. He was treated at first at home, but matters becoming worse he was admitted into hospital, where he had rest, and afterwards counter-irritation. He was discharged on the 24th June a good deal improved. A fresh accession of suffering caused him to seek re-admission on the 14th February, 1857. He is a delicate, strumous-looking subject, smart and intelligent. As yet the appetite is good; he sleeps well, and he has not lost flesh. There is considerable swelling around the ankle, especially at the sides of the articulation, but there is no swelling or tenderness to indicate that the astragalo calcaneal joint is involved. The slightest motion causes pain for a considerable time. The joint was put up in splints to give complete rest, afterwards starch bandage was applied for the same object; mild counter-irritation, and then more severe irritants were resorted to, with temporary benefit. But after two months' trial his general health was beginning to suffer, and his appetite to fail. It was quite apparent operative interference was now necessary, and a consultation was held. All agreed on the propriety of removing the diseased parts, but some difference of opinion existed as to whether the case was an appropriate one for excision, or whether a better prospect would be afforded by amputation at the lower part of the leg. The principal difference being how far the tibia was involved, it was finally arranged that the articulation should be opened, and if, as was hoped, the disease was of limited extent, excision would be performed; but if it occupied much of the leg bone amputation must be resorted to. On the 21st April, 1857, the operation was performed as follows:—

An incision was commenced at the posterior margin of the tibia, about an inch and a half from its lower extremity, and carried downwards below the malleolus, then curved forwards and outwards across the instep to the outer malleolus, behind which it was carried straight up along the fibula as high as the incision at the inside of the limb. The vertical portions of this incision were cut down to the tibia and fibula at once; that across the instep was carried through the extensor tendons and the dorsalis pedis vessels. A ligature was applied to the bleeding artery, and the lateral ligaments were cut. Now that the joint was open it was determined to excise. The saw was applied to the neck of the astragalus, and the bone cut obliquely downwards and backwards, emerging at the posterior part, and

D^r MURNEY'S CASE OF EXCISION OF THE ANKLE.

slicing off the trochlear surface with the upper portion of the facets for articulation with the malleoli. The remainder of these were taken off with the bone forceps, and lastly, the lower articular surface of the tibia with a very thin layer of bone, and the two malleoli was removed with the saw.

The synovial membrane had undergone the *brown fibro-gelatinous* degeneration, and the cartilage was completely removed from several points of tibia, fibula, and astragalus, while that which remained was much thinned and readily separated from the subjacent bone.

The parts were brought together by sutures, water dressings applied, and the limb placed on a splint which had a foot-piece attached at a slightly obtuse angle, it extended from the popliteal region beneath the heel forwards to the toes. His after progress was most satisfactory, in six weeks the wound entirely closed, two sinuses only remaining open. The splint was removed and starch bandage applied. He was discharged from hospital on the 29th June, 1857, nine weeks after operation.

In the Winter Session of 1857-58 his case was detailed at, and the lad exhibited to, the Belfast Clinical and Pathological Society. The sinuses had closed for some months; he could lean his weight on the limb in walking, but used a stick; he had a pony, and could ride a considerable distance without pain.

He was lost sight of from that time till the autumn of 1868, when on account of the very useful limb he had it was considered of interest to exhibit him at the meeting of the Ulster Medical Society on October 5th, when the following description of his condition was given:—

He is now twenty-seven years of age, muscular and strong; has enjoyed uninterrupted good health since he left hospital; is active and fond of walking, and considers the left is stronger than the right limb; does not use a stick; in progression there is a slight halt, but not more than is frequently observed from a corn. This, to the ordinary observer, would be attributed to a slight *in-turning* of the toes of left foot, as when he walks the right foot is turned out, the left is placed straight. On examination there is considerable deposit of new tissue between the bones which were cut. The foot is slightly extended. This makes the toes and anterior part almost of proper length, but the heel is one inch and a half higher than its fellow, which he remedies by placing a wedge-shaped piece of cork wood in the heel of his boot.

The power of extension of the toes is as complete as in the opposite limb, and sensation is also perfect.

The first excision for disease of the ankle in Great Britain or Ireland was performed by Mr. Henry Hancock, in the Charing Cross Hospital, in January, 1851, and proved most satisfactory in every way. This case was the second, and, as described, the result has exceeded the most sanguine expectations, the patient not even requiring the support of the usual side irons for weak ankles. Since 1851 Mr. Hancock has never ceased to advocate this operation, and has frequently performed it. It has also been resorted to by other surgeons.

In a course of lectures delivered at the College of Surgeons, England, in 1867, on the Anatomy and Surgery of the Human Foot, Mr. Hancock^a says:—

“I find that the ankle-joint has been excised thirty-two times for disease by British surgeons.

“That the ages of the patients operated upon varied from four to forty-two years.

“That the sexes given show the proportion of sixteen males to six females.

“That of the thirty-two patients operated upon twenty-one recovered with good useful limbs, seven died, two suffered secondary amputation and recovered, whilst the result of two was doubtful.

“The proportion of deaths consequently is a fraction above twenty-one per cent., a large proportion, I must admit, when compared with that of Syme's amputation. But it is not in reality so great when we inquire more closely into the matter; for instance, of the seven deaths four are reported to have died of consumption, of which disease one is stated to have been suffering at the time of operation; another died of the effects of syphilitic poison in the system. We can scarcely, therefore, attribute the deaths of these four consumptive patients exclusively to this operation; consequently, if we make allowance for them, we find the death-rate of average cases ten instead of twenty-one per cent., while the mortality of amputation of the leg for disease in civil surgery is twenty-six per cent.”

Since that time the only case recorded is one of a *partial* excision performed by Mr. J. D. Hill, at the Royal Free Hospital.^b It has proved successful, but not being a complete excision of the joint, it cannot be added to Mr. Hancock's table, so that the number now

^a Lancet, 1867, Vol. ii., p. 62.

^b Medical Times and Gazette, Vol. i., 1868.

stands thirty-three operations, "with good useful limbs" in twenty-two of them.

I was fully satisfied with the progress of the case after operation, and with the usefulness of the limb when the patient was shown to the Clinical and Pathological Society nine months after excision; but I was astonished to find such strength, capability for divers movements, and absence of deformity when I saw him in 1868. As I had been urged to amputate, and not excise, I cut the extensor tendons, as already stated, but it is worthy of being noted how completely the power of extension of the toes was restored. I should also call attention to another matter. It is held, and properly so, that the *dorsalis pedis* and the *plantar vessels* should be studiously avoided. The first named was cut, yet no appreciable lowering of temperature or other unfavourable symptoms followed.

I have frequently sought for cases which would hold out a good prospect for excision, but as yet only succeeded in this one instance. Profiting by the experience of the thirty-three resections which have been performed, if about to operate now I would avoid the tendons and *dorsalis pedis* artery, not as absolutely essential for the well-being of the patient, but considering it desirable to cause as little injury as possible compatible with *complete* removal of the entire diseased articulation.

ART. VII.—*Clinical Report of the Rotunda Lying-in Hospital for the Year ending 5th November, 1869.* By GEORGE JOHNSTON, M.D.; Fellow of the King and Queen's College of Physicians; President of the Dublin Obstetrical Society, and Master of the Hospital.

As the question of the great prevalence of zymotic diseases and consequent mortality in large hospitals, particularly lying-in hospitals, in comparison with the lesser mortality in extern maternity charities and small lying-in hospitals, has for some time back occupied the attention of the profession, I think this a fitting opportunity, and I consider it is incumbent on me, filling the important post of Master of the Rotunda Lying-in Hospital, to come forward and lay before you the report of our institution for the past year. From the facts therein set forth, I think I will be able to show that the accusations brought against us are incorrect.

Previously, however, to doing so, I may be allowed to repeat a