THE

MONTHLY JOURNAL

OF

MEDICAL SCIENCE.

No. LXVIII. AUGUST 1846. No. 2. NEW SERIES.

Part First.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Amputation at the Ankle.* By JAMES SYME, Esq., Professor of Clinical Surgery in the University of Edinburgh.

IN the number of this journal for last month, I find the following passage extracted from a foreign medical periodical:—

"A tibio-tarsal amputation was performed some years ago on a young soldier, by Dr Baudens. The patient could walk very well for a year afterwards with an ordinary shoe, attached by two metallic splints. He walked considerable distances in this manner without fatigue, ascended and descended stairs easily, danced and leapt with agility. This patient afterwards entered the hospital wards of the Hotel des Invalides, where he has remained several months. His stump became excessively painful; the cicatrix re-opened, and ulcerated in many places. Two abscesses, which formed in the tissue of the cicatrix, were opened a few days ago, by M. Hutin, and it is probable that the subjacent bones were diseased. The patient experiences great suffering, and eagerly demands another amputation near the knee.

"This case gives rise to certain questions, of which our readers have to demand an account. First, we must remark, that the indifference with which civil and military surgeons have received the memoir of M. Baudens, is no proof of the non-value of the operation, for it has been performed by Mr Syme of Edinburgh a dozen times with perfect success. It is true, however, that Mr Syme has generally operated on children, and that he has only published the immediate results of the operation. Now the question is, what are the remote consequences? since, in the case of M. Baudens, the cicatrix did not inflame, ulcerate, or re-open, for more than a year after the operation. It becomes the more important to know the actual state of Mr Syme's cases, as it might

enable us to decide, whether the bad condition of the cicatrix in the patient now at Les Invalides depends on a constitutional disease (as we presume is the case), or on the form of the flaps, or of the stump. We should remember, however, that in the operation of M. Baudens, the head of the malleolus was sawn through after the disarticulation, whilst Mr Syme preserves the malleolus intact. We must say, that until new facts enlighten us on the subject, and notwithstanding the great aversion that the civil and military surgeons of Paris experience in adopting the tibio-tarsal operation, we persist in believing it advantageous in many cases. We amputate at the articulation of the wrist, why then hesitate at the same point in the inferior extremity?" [1]

With reference to this statement, I beg to mention,—1. That I have operated in more nearly two than one dozen of cases with perfect success,—2. That most of the patients have been adults,—3. That I have in no instance "preserved the malleolus intact;" and have always removed the whole articulating surface, except once or twice, when I detached the malleolar processes, by means of cutting pliers; having on all other occasions sawn off a thin slice from the tibia, connecting the projections of bone at each side—and, 4. That the following letters relative to the two cases, which were first subjected to the operation, and gave rise to my original papers, will, I hope, be considered satisfactory evidence as to the "remote consequences." In the first of these cases, the disease being seated between the astragalus and os calcis, only the malleolar parts of the articular surface of the ankle were removed. In the second, as the ankle joint itself was extensively carious, the whole articulating surface was removed by the saw.

As to the mode of performing the operation, I have nothing to say in addition to what has been already stated, except that I find a flap sufficiently large for the purpose, is obtained by cutting from the centre of one malleolus to that of the other, right across the sole of the foot; the dissection from the os calcis is thus facilitated, and the risk of sloughing lessened, if not entirely prevented.

From THOMAS AITCHISON, Esq., Surgeon, Dunbar, to Mr SYME.

Dunbar, 4th June 1846.

MY DEAR SIR,—It gave me great pleasure to hear, by yours of the 2d instant, that the boy Fargie's case is likely to terminate so satisfactorily.

I sent for the boy Wood, whose life was spared by a similar operation, executed by you two or three years ago (September 1842, age 16). I examined most carefully the *stump*, which was all sound. He had had a renewal of the false foot since he had seen you. He told me he suffered no inconvenience from the stump, or the slightest tenderness. He has become a country tailor, and

[1] Annales de Thérapeutiques, Mars 1846.

has often ten and fifteen miles a day to go to his work; still he feels no *discomfort*. He says, he, with a few of his young comrades, ran off to see the operations of the North British Railway at Penmanshiel tunnel, and must have walked fully thirty to thirty-five miles, without feeling his amputated limb.

You may rely upon it, nothing can be more satisfactory than this case of the boy Wood; and if Fargie's and all similar cases prove, under your hands, as successful, amputation at the ankle-joint, and its effects, will prove the greatest blessing to the human race, especially those unfortunates so afflicted.—I am, my dear Sir, yours most faithfully, THOS. AITCHISON.

The young man Fargie, alluded to by Mr Aitchison, had suffered from caries of the tarsus for fourteen years. He had the foot amputated, and left the hospital, restored to health, and with a sound stump, six weeks after the operation.

Dr —— to Mr SYME.

Edinburgh, 9th June 1846.

DEAR SIR,—You will remember that I lost my foot in January 1843. The stump healed rapidly, and in six weeks had all closed, except one small aperture, from which a slight watery discharge continued to come till the month of June, when it suddenly ceased, and complete cicatrization occurred. Since that period, I have experienced no pain, or uneasy sensation of any kind, in the stump, nor any tenderness, making standing or walking irksome or unpleasant. I have very rarely experienced the feeling of the lost foot being still part of the body and the seat of pain, which is so common a complaint among those who have been deprived of limbs. For the last two years, I am not aware that I have known this sensation at all; if I have, it has made no impression on my memory. I can lean the weight of my body on the naked stump without inconvenience; and, with a single stocking over it, am in the habit of walking through the house when my boot is not at hand.

The artificial foot I wear, within an ordinary half boot, is made of light wood, with a spring across the part corresponding to the roots of the toes. This spring, however, is of no use, as the rigidity of the boot enclosing it prevents it acting. The foot might as well be made of one piece of wood. At the heel, it is hollowed into a concavity, corresponding to the shape of the stump, but rising up before and behind into two prolongations, which, seen in section, would resemble the horns of a crescent. The foot is cased in shamois leather, which is carried up from the borders of the concavity, and cut into the shape of the upper part of a lady's cloth boot. Like it, also, it is laced up the inner side, and has a tongue; the latter is made of thick soft leather, and is of much service in securing the fitting of the foot. There are no straps or buckles, or steel supports of any kind, nor are they needed. From the bulbous form of the stump, and its circumference being considerably greater

than that of the leg above it, the lacing of the upper leather completely suffices to hold the artificial foot on. It would be impossible, indeed, to pull it off, without loosening the lace or tearing the leather.

The artificial foot, as originally furnished, was thickly padded; but I found the padding so apt to shift, and so liable to become uncomfortable from saturation with moisture, that I had it all removed. It is much more convenient to pad the stump, by covering it with two or more worsted or shamoy leather stockings, which can be changed at pleasure. I use a stick in walking; but, except on rough causeways or very uneven ground, it is unnecessary, neither is it requisite in ascending or descending stairs.

The results of an inflammatory attack of the lungs make me a bad walker, nor have I ever ascertained how long a pedestrian journey I could achieve; but I have stood for six hours (not consecutively) daily, for months together, without any inconvenience, and I wear the artificial foot, without intermission, from morning till bed-time. Very sincerely, —— ——.

This gentleman was in such a state of weakness and illness at the time of the operation, that, in my opinion, he would not have had the slightest chance of recovery from amputation of the leg.

ARTICLE II.—*Case of Primary Cancerous Infiltration and Ulceration of the Lungs, with Remarks.* By JOSEPH BELL, Member of the Faculty of Physicians and Surgeons of Glasgow, Lecturer on Botany, Andersonian University, Glasgow.

(Continued from p. 33.)

REMARKS.—1*st*, *Diagnosis.*—I have no hesitation in confessing, that it gave me a very great amount of consideration before I could come to a satisfactory conclusion regarding the nature of this case. It was not until, after several careful examinations, and much reflection, that I entered the following diagnosis in my note-book.

Cancerous Infiltration, and Ulceration of both Lungs—the existence of a malignant tumour at cardiac region—Emphysema of right lung—also Cancerous Degeneration of Stomach.—It may not prove uninteresting to review the reasoning which led me to form the above opinion, particularly as it embraces the principles of the diagnosis of pulmonary carcinoma.

In forming an opinion regarding the precise nature and seat of the lesions upon which the symptoms in this case depended, it will at once appear evident to the practitioner of any standing, that four diseases chiefly required to be taken into consideration, viz. Pleuritis, Pneumonia, Phthisis, and Cancerous Infiltration.

1*st*, *Pleuritis.*—Though we had extensive dulness on percussion, diminished vocal fremitus, absence of vesicular murmur, &c., yet