

## ARTIFICIAL LIMB MAKING

By HAMISH MACGREGOR, M.B.E.

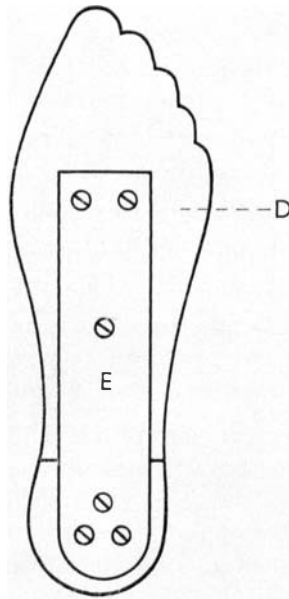
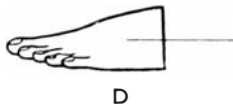
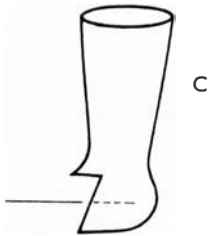
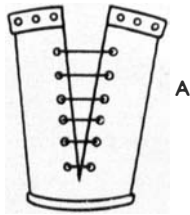
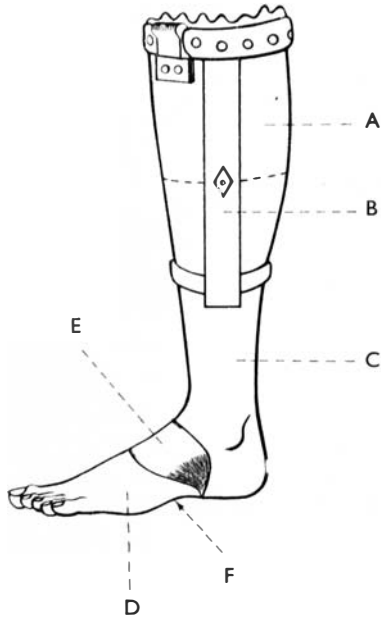
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One of our patients with a completely disorganised foot and ankle and with chronic ulceration was eventually persuaded to undergo below the knee amputation. Although a Sea-Dayak he is a singer of Malay songs and was the recognised soloist with our orchestra but, due to the ulceration, he had to give this up. Amputation was advised but he was most reluctant to agree until members of the orchestra prevailed upon him to have it done and thus be able to take part in their various activities. Following the amputation he was as miserable as could be for he was still unable to join with them during the Christmas entertainments but, thanks to two members of our staff, he was fitted with a home-made artificial limb and joined in the celebrations of both Chinese New Year and Hari Raya.

The artificial limb is made of materials which are readily available here and in most places:

- A. Stump-holder made of strong leather with a soft leather lining or cork-latex cast to the actual stump; the holder can be made to lace up or to fit the actual stump—whichever is desired.
- B. Metal strips (two) which are rivetted to the stump-holder and screwed to the wooden leg—one to each side.
- C. Wooden leg—local timber and shaped as required.
- D. Wooden foot—local timber and shaped as required; a thin metal rod is passed into the wooden foot and screwed into the wooden leg to prevent any swivelling of the foot.
- E. Leather flap which helps to hold the foot and leg in position.
- F. Metal strip (thin springy metal preferably) inset into foot and base of leg—which acts to hold both foot and leg together and as a spring when walking.

The great merit of this limb is not only that the patient can and does walk but that it can be made up wherever there is a handyman available and it is relatively cheap to make. When Dr J. Ross Innes, the Medical Secretary of the British Leprosy Relief Association, visited us in 1960 he advocated surgery for a number of patients and stated that the first operation, whatever it might be, must be successful for then other patients would readily come forward. This has been proved by the fact that since this limb was successfully fitted a number of patients, with equally useless feet, have requested





amputation—knowing now that they can be fitted with artificial limbs and will be able to walk around.

Great credit is due to the two members of staff who worked on this project and whilst it is still subject to adaptation, as and when experience indicates, the fact remains that it works, is cheap to make, the patients concerned are happily walking about and no longer occupying hospital beds.

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