

So far as could be made out all the intrinsic muscles of the hand were supplied by the deep division of the ulnar nerve (fig. 3, *d.u.n.*). This passed outwards in the palm under cover of the adductor muscles.

The literature bearing upon the intrinsic muscles of the pes and manus of the *Bradypus tridactylus* is very plentiful, but somewhat conflicting.

Professor Macalister¹ in his paper upon the myology of this animal says:—"The short muscles of the hand are—abductor primi digiti, a short flat band passing from the scaphoid bone, and the annular ligament to the first phalanx of the inner digit; on raising this and the flexor tendons, I could see no traces whatever of palmar interossei. Extensor brevis digitorum manus, a small muscle on the back of the hand, which seems to contain the displaced germs of the dorsal interossei; its tendon joins the aponeurosis of the extensor digitorum longus, and is inserted along with it." From its connections it would seem that this abductor primi digiti is the muscle which I have named, the adductor annularis. Further, I believe that the extensor brevis manus is in reality the dorsal interossei.

Macintosh² gives the following account of the intrinsic muscles of the manus:—"Abductor annularis is bicipital, one head from the base of the germ of the inner metacarpal, and the other from the pisiform. Adductor annularis extends from the outer side of the carpus obliquely inwards to the distal end of the fourth metacarpal. . . . Adductor pollicis arises from the ulnar side of the base of the combined metacarpal, and is inserted into the base of the rudimentary thumb. The first and second palmar interossei, normal in our specimen and in Professor Humphry's, were absent in Professor Macalister's." Speaking of the foot he says:—"The muscles of the digits are abductor and adductor indicis and medii, all more or less fused; abductor annularis from rudimentary fifth metatarsal to the extensor tendon of the outer digit; adductor annularis from the fourth metatarsal to the same digit. The two plantar interossei send in two slips on the plantar aspect of the foot."

This description is somewhat difficult to follow. It appears, however, that whilst the dorsal interossei never alter in their arrangement, the vestiges of the flexores breves and adductors are subject to considerable variation. Thus they may be absent in the hand, as in Professor Macalister's specimen; present in both hand and foot as in Mr. Macintosh's specimen; or present in the hand and absent in the foot, as in my specimen.

In Professor Humphry's³ account of these muscles which, in so far as the dorsal interossei are concerned, agrees in almost every respect with that which I have given, there is no mention of plantar or palmar muscles as distinct elements, but the author speaks of

¹ On the Myology of the *Bradypus tridactylus*, with Remarks upon the General Muscular Anatomy of the Edentata, *Annals and Magazine of Natural History*, vol. iv. p. 62.

² On the Myology of the Genus *Bradypus*, *Proc. Roy. Irish Acad.*, vol. i. p. 524.

³ Myology of the Limbs of the Unau, the Ai, the two-toed Ant-eater, and the Pangolin, *Jour. Anat. and Phys.*, vol. iv.