

which has precisely the same connections as in the two preceding animals; (2) the abductor minimi digiti, which in this case is single; (3) four dorsal interossei, which are arranged similarly to the corresponding muscles in *Dasyurus*; (4) the abductor hallucis, which arises from the base of the first metatarsal bone, and is inserted into the outer side of the base of the proximal phalanx. It lies in close contact with the flexor brevis hallucis, but is easily separable from it.

Cuscus maculata (Pl. V. fig. 1, and Pl. VI. figs. 5, 6).

The foot of this animal in the undissected state is seen in Plate V. fig. 1. The hallux is a broad powerful digit placed at right angles to the long axis of the foot, so as to oppose the other toes. It is not furnished with a claw, and is curved somewhat towards the sole. The index and medius are poorly developed, and are enveloped in a common integumental covering as far down as the second phalangeal joints. Independent movement of these digits, therefore, is rendered impossible. Of the four outer toes the annularis is much the largest. In every respect this foot is admirably adapted for grasping the boughs of the trees in which the animal passes its existence.

The position of the hallux, so far apart from the other toes, somewhat disconcerts the typical arrangement of the muscles in so far as this digit is concerned. Still, sufficient indications remain to justify the conclusion that its three muscles, viz., the abductor, flexor brevis, and adductor belong one to each of the three layers that are here laid down as typical.

The *plantar layer* (fig. 5 p^1 to p^5) consists of three muscles, viz. :—

1. Adductor hallucis (p^1).
2. Adductor minimi digiti (p^5).
3. Adductor annularis (p^4).

The adducting muscles of both manus and pes of all animals show a strong tendency to place themselves obliquely or even at right angles to the digit upon which they operate. In this manner they obtain a more powerful adducting influence. In the feet of the *Thylacine*, *Dasyurus*, and *Phascogale* we have seen these muscles seek the middle line for their origin, and from this they radiate towards their insertions. In *Phascogale* they all lie upon the same plane, but in *Thylacinus* and *Dasyurus* the adductors of the index and minimus in pressing inwards, have thrust the adductor of the annularis upwards, and have thus come to coalesce and lie superficial to it (*vide* Pl. VI. fig. 1, and Pl. XI. fig. 5). Again, in the human foot we see the transversus pedis placing itself at right angles, and the adductor hallucis obliquely in relation to the great toe. But still more striking examples are to be observed in the hand and more especially in the foot of the *Cuscus*. In the hand the adductors arise from a median fibrous raphe placed over the middle metacarpal bone. In the foot, adduction is effected towards a line drawn through the index, and the raphe is placed over the metatarsal bone which belongs to this digit (fig. 5, *r.*).