

origin from the base of the middle metatarsal bone, and crossing obliquely the metatarsal of the annular digit, is inserted into the outer side of the base of the proximal phalanx of this toe. The second slip (*d*⁵) lies in the fourth interosseous space, and springs from the adjacent bases of the two metatarsal bones between which it lies, and, like the corresponding slip of the third dorsal interosseous muscle, ends in a tendon which bifurcates to gain a double insertion into the contiguous sides of the bases of the proximal phalanges of the annularis and minimus.

The third and fourth dorsal interossei, therefore, each consists of two slips, of which one possesses the characteristic insertion of the muscle to which it belongs, and must in consequence be looked upon as an abductor, whilst the other, by its peculiar double insertion, must act as an approximator of the digits into which it is inserted. In the *Cuscus* therefore, there is apparently a tendency to the formation of a fourth layer of muscles, endowed with a new function, by the splitting of the dorsal interossei. In the manus of the *Thylacine* a similar splitting of the dorsal interossei and the development of approximating muscles has already been noted (p. 22).

In the foot of the *Cuscus* an opponens minimi digiti is also to be found (*op.*⁵). It is a strong quadrate muscle, placed obliquely in the pes, which arises from the outer margin of the plantar cartilage, and is inserted into the whole length of the fibular margin of the metatarsal bone, and also by a few fibres into the outer aspect of the base of the first phalanx of the minimus.

Phalangista vulpina (Australian Opossum).

The foot of this animal in external characters closely resembles that of the *Cuscus*. The hallux is broad, and opposable to the other digits. The medius and index have a common integumental covering, and the annularis is the longest of the four outer toes. Dissection however, reveals certain important points of difference in the arrangement of the intrinsic muscles.

Plantar layer.—The muscles composing this layer were found to differ in their arrangement in the two specimens which were dissected. In one they closely resembled the corresponding muscles in the *Cuscus*. Thus a median raphe extended from the base of the second metatarsal, to the outer side of the base of the proximal phalanx of the index. From this the adductor minimi digiti, the adductor annularis, and the adductor hallucis took origin. The adductor of the ring digit, however, was very feebly developed.

In the second specimen, the raphe stretched from the base of the middle metatarsal to the inner side of the base of the proximal phalanx of the annularis. From this, three muscles arose, either entirely, or in part, viz.:—

1. The adductor minimi digiti.
2. The adductor indicis.
3. The adductor hallucis.