Zoology Part XVI: ANATOMY of the THYLACINE, CUSCUS and PHASCOGALE, By D. J. Cunningham. Bound in Volume 5,1882.

plantar cushion, they have little or no space wherein they can be separated and approximated, and consequently such muscles, had they been present, would have been almost functionless. Another remarkable feature in the foot of this animal is its resemblance to that of the Hyrax in the manner in which the intrinsic muscles derive their nerve supply. The intrinsic pedal muscles are entirely plantar in position.

The *plantar layer* consists of a single minute muscle—a transverse adductor of the index—which we may term the transversus indicis (p^2. *t*). This muscular slip arises from the head of the fourth metatarsal bone and the fascia covering the flexor brevis annularis, and passes transversely inwards upon the surface of the flexor brevis medii to be inserted into the fibular side of the sesamoid of the index.

Miall and Greenwood describe also an oblique adductor of the index which they term a "plantar interosseus." According to these authors this muscle "arises from the tarsus, opposite the bases of the third and fourth metatarsals, and is inserted into the fibular side of the base of the second digit." No such muscle existed in the fœtus dissected by me, but there was a strong fibrous band having precisely the same attachments, which I have no doubt is its representative (p^2).

Intermediate layer.—This is the only group of intrinsic muscles which is well developed. Each digit, with the exception of the hallux, is provided with a well-marked flexor brevis. These muscles are termed dorsal interossei by Miall and Greenwood.

The flexor brevis indicis (f^2) is the best marked muscle of the series. It consists of two heads, which arise from the fibrous textures in relation to the tendon of the peroneus longus, and are inserted one into each of the sesamoids on the plantar aspect of the base of the first phalanx of the index.

The flexor brevis medii (f^3) is also strongly marked, and composed of two heads which arise from the base of the middle metatarsal bone. The inner head also derives numerous fibres of origin from the fibular side of the fibrous cord which represents the oblique adductor indicis. The muscle is inserted in the usual manner into the sesamoids at the base of the medius.

The flexor brevis annularis (f^4) is more feebly developed. Its two heads are scarcely differentiated from each other, and its fibular slip passes for a short distance forwards into the fourth intermetatarsal space, which suggests the idea that combined with it is the absent fourth dorsal interosseous muscle. Like the preceding muscle it arises from the base of the fourth metatarsal, and is inserted into the sesamoids at the root of the annularis.

The flexor brevis minimi digiti consists of a single well-marked tibial head (f^5. *t*). From its taking a more proximal origin and from the stunted character of the metatarsal bone of the minimus this muscle does not lie in series with the other members of the group. Indeed, at first sight it is apt to be mistaken for an adductor, and Miall and Greenwood have described it as such. The fact, however, that all the deep branches of

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