

The plantigrade character of a foot has apparently no effect in regulating the relation which exists between the intrinsic muscles and the metatarsus. In the Badger the plantar position of these muscles is quite as well marked as it is in the Otter and other digitigrade Carnivora.

Trichechus rosmarus (Walrus), (Pl. XI. fig. 3).

The Walrus which I examined was a very young specimen, and one which had been preserved in spirit for a great number of years in the stores of the Edinburgh Anatomical Museum. The muscles, however, were in a remarkably good condition, and I experienced little difficulty in obtaining a satisfactory display of the intrinsic group. Dr. J. Murie in his elaborate series of papers upon the Anatomy of the Pinnipedia, published in the Transactions of the Zoological Society, devotes part 1 (vol. vii.) entirely to the Walrus, and he figures and describes the intrinsic pedal muscles (p. 456). In some points the specimen which I dissected differs from his description.

In the Walrus the intrinsic muscles of the pes are poorly developed, and in no respect proportionate in size to that of the foot. The dorsal and plantar layers are very meagrely represented. The intermediate layer, however, is almost complete as regards its number of elements.

Plantar layer.—The adductor hallucis is the only member of this layer which is present. It consists of two very distinct portions, viz., an adductor obliquus (p^1, o) and an adductor transversus (p^1, t). Both are narrow flat fleshy bands. The former arises from the plantar surface of the base of the fourth metatarsal bone, and the latter from the fascia covering the flexor brevis minimi digiti close to its insertion. The two heads coalesce upon the plantar aspect of the flexor brevis indicis, and a long narrow tendon emerges from the point of union. By this tendon the muscle is inserted into the extensor tendon upon the fibular aspect of the first phalanx of the hallux.

A slender fibrous band occupies the position of the adductor minimi digiti (p^5). It springs from the base of the fourth metatarsal bone, and is inserted upon the tibial side of the base of the first phalanx of the minimus.

Dr. Murie gives no description of these muscles in the text, but he figures (fig. 8, p. 456) two muscular slips and names them superficial layer of interosseous muscles. One of these has very much the same position as the adductor obliquus hallucis in my specimen, whilst the other occupies the place of the fibrous adductor minimi digiti. He represents both, as arising from the plantar surface of the middle metatarsal. The transverse head of the adductor hallucis is not figured at all.

Intermediate layer (f^1 to f^5).—Each digit is provided with a short flexor which, except in the case of the hallux, is two headed. The flexor brevis hallucis (f^1, f) has only a fibular head; the fibular head of the flexor brevis medii (f^3) is remarkable for its small size; and the two portions of the flexor brevis indicis (f^2) arise at some distance