

tendon. All the slits of the other superficial tendons are lateral, and not antero-posterior as in the other Seals.

In *Arctocephalus gazella* the insertion of the combined flexor tendons out of the union of the flexor longus digitorum and the flexor longus hallucis forms a rectangular band, which divides at the base of the 2nd metatarsal bone into two broad tendons, the ventral and the dorsal portions. The ventral portion also divides into two; forming the flexor longus hallucis tendon and the first or inner flexor longus digitorum tendon. The ventral or flexor longus hallucis slip runs backwards to the terminal phalanx of the hallux, and after expanding is inserted chiefly into its proximal plantar surface, and into the whole of the plantar surface of this phalanx, by the prolongation of the tendon of insertion over the surface of the terminal bone. The first or inner flexor longus digitorum tendon, formed out of the dorsal part of the ventral division of the main tendon, is described with the following deep tendons. The outer or dorsal main portion breaks into three slips, that for the 5th digit coming off higher than the other two. The four long flexor tendons thus formed go backwards along the plantar sides of the 2nd, 3rd, 4th, and 5th digits to the distal phalanges; opposite the bases of the 1st phalanges they pass through the aponeurotic tunnels in the short flexors formed from the plantaris, becoming anterior to them, and are inserted into the phalanges as the tendon of the flexor longus hallucis.

The action of these combined muscles in the Phocinæ and *Macrorhinus* is to bring the pes to the middle line and to bend the digits. In *Arctocephalus* they will raise the heel in walking, otherwise they are the same.

There is an important difference in the relation of the flexor longus digitorum and flexor longus hallucis in the Phocinæ, *Macrorhinus*, and *Arctocephalus*. In the first two the flexor longus hallucis is to the dorsal side of the flexor longus digitorum from origin to insertion, but in the last the flexor longus hallucis is superficial to the flexor longus digitorum and crosses anterior to the ankle to the ventral side of the pes; and the flexor longus digitorum in the pes lies dorsal to it—the reverse of what is found in the Phocinæ and *Macrorhinus*.

While recognising the intermingling of the tendons of the flexors, I find it impossible to work out how far the tendons of the flexor hallucis and flexor longus digitorum cross each other to assist in forming the flexors of the digits, and therefore I have described only what is easily made out.

Humphry writes "in the case of the pollex the superficial tendon did not divide as in the other toes." In my dissections of the Phocinæ I find that the slip out of the combined tendon comes off singly, and very soon divides into two long slips, one being the flexor longus hallucis and the other the flexor brevis hallucis. The same author also explains that "the tendons of each muscle (flexor longus hallucis and flexor longus digitorum) contributed some fibres to each of the tendons (with the exception presently to be mentioned), but the deep tendons were derived mainly from the flexor longus pollicis, the flexor digitorum being distributed chiefly to the superficial tendons. The superficial tendon of the 4th digit was in one foot, and that of the 5th in both, derived from the plantaris." The flexor longus digitorum in the Phocinæ is not crossed by the flexor longus hallucis as in human anatomy, but they pass each other along their contiguous edges without crossing. The two tendons for the most part keep their own side in the pes. The flexor longus digitorum gives off the tendons for the hallux and 1st digit, the flexor longus hallucis for the 3rd, 4th, and 5th digits. I find that the plantaris forms the anterior slip for the sheath of the 4th digit and not the superficial tendon, and in the 5th digit the tendons were principally formed by the flexor