

go to the heads of the terminal phalanges of the four fingers; over the base of the 1st phalanges they run through the slits in the superficial tendons. Humphry gives the flexor sublimis digitorum as a distinct muscle with three tendons, but Lucae and I find that the three heads unite to form a common mass, and out of this superficially the subline tendons come, but cannot be dissected out of this mass from their insertions to their origin.

In *Arctocephalus* it is also formed by three muscles—(a) the *Flexor sublimis digitorum*, (b) the *Flexor profundus digitorum*, and (c) the *Flexor longus pollicis*. The 1st head or *Flexor sublimis digitorum* is a short band, which arises from the internal condyle of the humerus, and from the internal lateral ligament. It is inserted into the anterior half of the flexor profundus digitorum, about the middle of the shaft of the ulna. It is tendinous on its surface. b. The 2nd head or *Flexor profundus digitorum* is covered by the sublimis in its upper half. It arises from the internal surface of the upper third of the ulna, anterior to the ridge, from the whole breadth of the ulna as far as the lower third of this bone, and from the internal lateral ligament which is continuous from the joint down the shaft. It terminates in a strong tendon which widens over the carpus. c. The 3rd head or *Flexor longus pollicis* arises from the whole of the inner surface of the shaft of the radius to its lower third, from the capsule of the joint, from the interosseous membrane, and from the anterior border of the ulna in its upper two-thirds. It descends over the carpus as a strong tendon, and joins the flexor profundus digitorum. The single tendon thus formed soon divides into five slips, the 2nd, 3rd, and 4th being double tendons which are anterior and posterior. The 1st or radial tendon divides into two slips. The outer runs down the middle of the 1st metacarpal bone and the 1st and 2nd phalanges, and is inserted into the head of the 2nd phalanx of the pollex. The inner descends along the ulnar side of the 1st metacarpal, and is inserted into the ulnar side of the base of the 1st phalanx of the pollex. These two pollical tendons come chiefly from the muscle, having origin similar to the flexor longus pollicis. The 2nd, 3rd, and 4th tendons, after splitting into anterior and posterior slips, descend over the middle of their metacarpal bones, and over the proximal ends of the 1st phalanges the superficial slips are split opposite the metacarpo-phalangeal articulations for the deep tendons; and descend to the bases of the 2nd phalanges, into which they are inserted. They almost cover the 1st phalanges on their inner surfaces, and are adherent to them. The 2nd, 3rd, and 4th deep tendons pass through the openings in the superficial tendons, and then become anterior to the short flexors, and are inserted into the heads of the terminal phalanges for the 2nd, 3rd, and 4th digits. The 5th tendon is single and is inserted into the head of the terminal phalanx of the 5th digit. The deep tendons terminate by dividing into three slips, a central strong and two lateral fine ones; the central slip terminates upon the terminal phalanx, the lateral pass from the sides of the central and end on the sides of the same phalanx. The lumbricals are absent in *Arctocephalus*.

In *Trichechus* the origin of the flexor sublimis digitorum is the same as in *Arctocephalus*, and it joins the head of the flexor profundus digitorum. The flexor profundus digitorum and the flexor longus pollicis are nearly alike, except that in *Arctocephalus* the flexor longus pollicis has an additional origin from the ulna. As in *Arctocephalus*, the flexor digitorum and flexor longus pollicis combine in the palm for the flexor tendons. From an examination of fig. 4 (Murie) picturing the inner aspect of the fore-limb, I find that the distribution of the tendons might be said to correspond. In Murie's paper there is a perforating tendon to the 5th digit, not represented in the plate. As in the Phocinæ only, it has a lumbrical muscle to the pollex.