

and the 4th runs down the radial side of the 5th metacarpal. The 1st, 2nd, and 3rd portions expand over the heads of the metacarpals, and continue expanding until they reach the heads of the 1st phalanges, to which they are strongly adherent. Then they pass over the posterior phalangeal joints as fine aponeurotic sheets, which go to the terminal phalanges, and are bound throughout their length to the bases of the phalanges and to the posterior ligaments over which they pass. They are *inserted* into the dorsal surface of the heads of the 2nd, and the bases of the 3rd phalanges of the 2nd, 3rd, and 4th digits to their radial sides. As has already been shown, the extensor minimi digiti is derived from the origin of the extensor communis digitorum. It divides upon the carpus into three tendons, the highest, the middle, and the lowest. The highest is the shortest, and is *inserted* into the radial side of the base of the 5th metacarpal. The middle is intermediate in size, and is *inserted* into the radial side of the middle of the 5th metacarpal, between the bases of the 4th and 5th. The lowest is the largest, and goes over the dorsum of the 5th metacarpal base as a narrow slip; and is *inserted* into the head of the 1st phalanx, and descends from this to the terminal phalanx as a thin fibrous sheet.

Vrolik in Section 25 points out that "close by the origin of the extensor digitorum a muscle peculiar to the Seal takes its rise," no doubt the secundus of the communis digitorum. Humphry and Lucae found two extensors, one above the other. In *Otaria* the common extensors arise by a common origin, but divide into three groups. The anterior, outer, or extensor communis digitorum divides into three tendons for the 2nd, 3rd, and 4th digits. The middle or extensor medii digiti has two tendons, one for the 3rd, and one for the 5th digit. The third, innermost, or extensor minimi digiti, has tendons for the 5th metacarpal and for the 4th digit. In *Trichechus* according to Murie the extensor communis digitorum has three tendons for the 2nd, 3rd, and 4th digits, which go into the distal ends of the 1st phalanges. The extensor medii digiti is also found, but adheres very closely to the extensor communis and ends in the interspace of the 4th and 5th digits in four or five short tendons. The extensor minimi digiti divides into two slips for the 5th metacarpal.

In all the Seals and the Walrus the extensors of the 2nd to the 5th digits of the manus are of the same type, each having an extensor mass subdivided into two sets of muscles. The Phocinæ have the two sets superimposed and they are described as primus and secundus. In *Arctocephalus* the two consist of the extensor communis digitorum and the extensor minimi digiti as in man. The *Otaria* and *Trichechus* have three muscles out of the two sets. The extensor communis being one set, the extensor medii digiti and minimi the other. In the Common Seal, Murie states that Duvernoy has noted that the index receives a tendon as well as the median digit, and to this muscle in question he applies the term "extensor propre de l'index," but Murie finds in *Otaria* and *Trichechus* no special indicator. The 1st digit in the Phocinæ gives attachments to two extensor tendons, and these are slips from the primus and secundus division of the common extensor. Neither of these can be called special indicators for they belong to the common group going to the other digits. The index in these animals is a collective unit in the manus, and its action is very much like that of the other digits, all being surrounded by the integument, as is seen by examining the combined actions of the extensors. In the Phocinæ the tendons of the extensor communis primus are placed along the radial sides of the phalanges, and when extending the digits will also adduct them, whereas the extensor communis secundus being on the ulnar side will extend and abduct. In *Arctocephalus* the extensor communis simply extends while the extensor minimi digiti