

the ulnar side of the forearm to the radial side of the carpus, and descends as an aponeurotic band of very considerable strength, covering the palmar aspect of the whole of the 1st metacarpal bone, and the radial halves of the 1st and 2nd phalanges of the pollex to the phalangeal cartilage. It passes over the tendons of the thumb, and is *inserted* into the radial side of the carpus, the 1st metacarpal, and the 1st and 2nd phalanges of the pollex; into the skin over the radial side of the 2nd phalanx of the pollex; into the phalangeal cartilage attached to the distal end of the 2nd phalanx of this digit, and it is firmly fixed to the cartilaginous bar, running from the elbow down the radial border of the radius, on the anterior side of the manus to the phalangeal distal cartilage of the 1st digit. Over the middle of the radial side of the 1st metacarpal, the deep palmar tendon gives a strong slip which goes down to the head of the metacarpal and the base of the 1st phalanx.

The insertion of the longus primus in *Otaria* and the palmaris longus in *Arctocephalus* are alike, so is the insertion of the longus secundus in the former, and the palmaris superficialis in the latter, only the tendon of the superficialis goes down to the 1st phalanx of the 5th digit instead of stopping at the distal end of the 5th metacarpal. The longus tertius in *Otaria* and the palmaris profundus in *Arctocephalus* are not so close; the latter is much more complicated, its origin being more extensive and the insertion being very different. In *Otaria* it ends along the radial side of the 1st digit. All are supplied by the median and ulnar nerves.

The *Flexor communis digitorum* is a combination representing and built up from—(a) the flexor sublimis digitorum; (b) the flexor profundus digitorum; (c) the flexor longus pollicis.

It *arises* by three heads. *a.* The 1st head<sup>1</sup> may be regarded as the *flexor sublimis digitorum*, for it *arises* from the internal condyle below the palmaris longus (part two), and from the internal lateral ligament. *b.* The 2nd head<sup>2</sup> resembles the *flexor profundus digitorum*, for it *arises* from the inner surface of the ulna posterior to the internal lateral ligament down to 1 inch from the wrist. *c.* The 3rd head<sup>3</sup> corresponds to the *flexor longus pollicis* as it *arises* from the posterior half of the middle third of the radius below the pronator radii teres, and from the interosseous membrane. The first and third heads are conjoined at the lower third of the forearm, and form one belly; the second head forms another, and these two bellies unite at the wrist, and thus a broad tendon of considerable strength is formed, which immediately divides into an anterior and posterior set of tendons; in the anterior set there are three slender ones, in the posterior five stronger. The *anterior* set is superficial and disposed like the flexor sublimis digitorum; the *posterior* is deep, and the first or outermost tendon, like the flexor longus pollicis, goes to the pollex, the remaining four are distributed like the flexor profundus digitorum. Of the superficial set, or flexor sublimis digitorum, the three tendons descend upon the surfaces of the deep tendons for the 2nd, 3rd, and 4th digits, opposite the middle of the metacarpal bones; they enter the sheaths, and over the bases of the 1st phalanges divide to give passage to the deep tendons, and then are attached to the sides and heads of the 1st phalanges of the 2nd, 3rd, and 4th digits. Of the deep set (five), the first tendon or flexor longus pollicis runs along the inner side of the pollex, inside the sheath, and is attached to the head of the last phalanx. From this tendon a smaller one springs, and unites with the sheath of the pollex at the head of the 1st metacarpal bone; it may be regarded as the only lumbrical. The remaining four tendons or flexor profundus digitorum

<sup>1</sup> Humphry's flexor sublimis digitorum = Lucae's flexor communis digitorum (strongest head).

<sup>2</sup> Humphry's flexor profundus digitorum = Lucae's flexor communis digitorum (second head).

<sup>3</sup> Humphry's flexor profundus digitorum = Lucae's flexor communis digitorum (third head).