

The fourth dorsal interosseous muscle (d^5) is also small. It takes origin in the interval between the rudimentary fifth and the fourth metatarsal bones, and almost immediately ends in a slender tendon which is inserted into the expansion formed by the outer part of the third dorsal interosseous muscle on the dorsum of the second phalangeal joint of the annularis.

But it may be asked, What has become of the other members of the intrinsic group of muscles? I believe that the adductors, and the marginal abductors are suppressed whilst the flexores breves have wandered to the dorsum of the foot and coalesced with the dorsal interossei. I have come to this conclusion, from an examination of the corresponding muscles in the manus of the same animal, and as the arrangement found in this is even more remarkable than that in the foot, I am induced to give a description of it (Pl. IX. figs. 3 and 4).

In general features the manus of the three-toed Sloth is very similar to the pes. The metacarpus and the phalanges resemble in almost every respect the corresponding bones of the foot. The intrinsic muscles, however, are not banished from the palm. There is a distinct palmar layer of adductors; rudiments also of the flexores breves are to be found.

Palmar layer (fig. 3, p^2 p^{2x} p^4).—This layer is composed of two muscles, viz., (1) the adductor annularis (p^4), and (2) the adductor indicis. These muscles are flat ribbon-shaped bands which cross each other in the palm like the limbs of the letter X.

The adductor annularis is the more superficial of the two. It arises from the bases of the first and second metacarpal bones, and extends obliquely across the palm to the inner margin of the hand, where it is inserted partly into the palmar face of the stunted first phalanx, and partly into the head of the metacarpal bone of the annular digit.

The adductor indicis is composed of an oblique ($p. 2 \times$) and transverse part ($p. 2$). The former takes origin from the base of the fourth metacarpal bone, and extending obliquely towards the root of the index is inserted into the radial and palmar aspect of the first phalanx, and also into the head of the metacarpal bone of this digit. The transverse adductor is a small slip which springs from the palmar surface of the middle metacarpal bone, near its head, and stretches transversely from this towards the index where it joins the oblique adductor close to its insertion.¹

As the digits have no more power of independent movement these adductors can have little or no action beyond bracing together the margins of the manus. That they are undergoing retrograde development is rendered likely from the fact that they are largely composed of tendinous fibres. It is probable, therefore, that these muscles in

¹ Although I have described these palmar muscles as adductors of the index and annularis from their insertions into these digits, I am rather of opinion that they represent the adductors of the absent hallux and minimus. This view would account for their palmar insertions.