

*The dorsal layer.*—This layer consists of four dorsal interosseous muscles and an abductor ossis metatarsi minimi digiti.

The abductor ossis metatarsi minimi digiti is a short powerful muscle which takes origin from the outer side of the tuberosity of the os calcis, and is inserted into the fibular aspect of the base of the metatarsal bone of the minimus. This is the only abductor of the minimus, but the outermost belly of the flexor brevis digitorum, from its being inserted upon the outer side of the first phalanx, must in addition to its flexing power possess a very considerable abducting influence, and in this way help to spread out the integumental web which connects the digits.

The dorsal interossei (Pl. IX. fig. 5) have a very complex arrangement, and in order to obtain a proper understanding of them they must be dissected from the dorsal aspect of the foot before the flexores breves are interfered with. The fourth dorsal interosseous ( $d^5$ ) muscle is single headed and inseparably united with the outer head of the flexor brevis annularis. It arises from the dorsal surface and outer side of the fourth metatarsal bone, and is inserted into the outer side of the extensor tendon of the annularis.

The third dorsal interosseus ( $d^4$ ) at first sight appears to consist of a single large head which springs from the dorsal aspect of the fourth metatarsal, but on separating the bones between which it is placed a second and much smaller head is discovered lying along its inner side, and taking origin from the outer aspect of the base of the third metatarsal. These slips, but more especially the larger one, are partially fused with the flexores breves of the annularis and medius respectively. Both heads unite near the roots of the toes, and end in a fibrous arch which extends between the contiguous sesamoid bones of the medius and annularis.

The second dorsal interosseus ( $d^3$ ) is also two-headed, and partially fused with the corresponding slips of the flexores breves of the medius and index. The larger and outer slip springs from the dorsal surface of the third metatarsal near its base, whilst the smaller slip, not so dorsal in position, takes origin from the contiguous bases of the third and second metatarsals. The majority of the fibres are inserted into a fibrous arch thrown across between the adjacent sesamoid bones of the medius and index; the other fibres end in a tendon which passes forward upon the dorsal surface of the arch (with which it is closely united) and finally splits into two delicate slips. These diverge from each other, and are inserted into the extensor tendons on the dorsal aspect of the medius and index. The second and third dorsal interossei, therefore, act as approximators of the index, medius, and annularis. Further, it would appear as if this were the first stage of the process, which was seen completed in the *Cuscus*, where certain of the dorsal interossei are differentiated into approximators and abductors. Here each of the muscles in question consists of two parts, but these have not attained separate insertions. The first dorsal interosseus ( $d^2$ ) is a small slip which arises from the dorsum and inner surface of the second metatarsal. In most cases it is inseparably fused with the inner head of the