

Flexor brevis hallucis (fig. 3, f^1).—The two bellies of this muscle are separated by the tendon of the flexor longus hallucis. They have a common origin from the thickened part of the plantar cartilage close to the base of the first metatarsal bone. Each belly is joined by the abductor and adductor respectively, and is inserted one into the inner sesamoid bone and the other into the outer sesamoid bone at the base of the first phalanx of the hallux.

The succeeding three flexores breves (fig. 3, f^2 to f^4), viz., for the index, medius, and annularis present the usual arrangement. That for the annular digit, however, is the strongest of the series, seeing that it is in connection with the longest toe. Both bellies of this muscle arise from the base of the third metatarsal bone, and therefore they lie obliquely in the sole. This muscle also differs from the other members of the series in being inserted not only into the sesamoid bones but likewise into the extensor tendon.

The flexor brevis minimi digiti (fig. 3, f^5) is represented merely by a slender tibial head which arises by a long tendon from the cuboid bone. The fibular head is inseparably united with the opponens minimi digiti.

Dorsal layer (d^1 to d^6 a.m).—This layer is represented by only four muscles.

1. The abductor hallucis (d^1).
2. The abductor minimi digiti (d^6).
3. The abductor ossis metatarsi minimi digiti (a.m).
4. The abductor indicis or first dorsal interosseus (d^2).

The abductor hallucis arises from the inner margin of the cartilaginous portion of the plantar fascia and is inserted into the tibial side of the first phalanx of the hallux in conjunction with the inner head of the flexor brevis of the same toe.

The abductor minimi digiti takes origin from the inferior surface and outer border of the os calcis. It likewise receives a small separate slip from the plantar cartilage. The fleshy belly of the muscle soon ends in a long tendon which is inserted into the outer side of the proximal extremity of the first phalanx of the minimus. In all probability the small fasciculus which is derived from the plantar cartilage represents the third factor of the abducting apparatus on the outer margin of the foot.

The abductor ossis metatarsi minimi digiti arises from the os calcis in common with the preceding muscle. It has the usual insertion into the base of the fifth metatarsal bone immediately under that of the peroneus brevis.

The abductor indicis consists of fibres which extend between the adjacent margins of the first and second metatarsal bones. It also arises by a long narrow tendon which lies under cover of the flexor brevis hallucis and springs from the tibial side of the base of the metatarsal bone of the hallux. The muscle is inserted mainly into the inner aspect of the base of the first phalanx of the index, but some fibres are likewise inserted into the hallux along with the adductor hallucis.