

LOWER LIMB.

SOLE OF FOOT—No. 1.

SUPERFICIAL DISSECTION.

The skin and superficial fascia have been removed from the sole to show the deep fascia and the cutaneous nerves and vessels.

The superficial fascia of the sole is thick and dense, consisting of a quantity of fat, arranged in lobules in a network of strong connective tissue. At the root of the toes, the connective tissue framework is arranged in a series of transverse bands, which constitute the superficial transverse ligament of the toes.

The deep, or plantar fascia is a strong sheet of fibrous tissue, which covers the superficial muscles of the sole, and which in many respects is similar to the palmar fascia.

The central portion (3) is very strong, and is triangular in shape. It is attached behind to the internal tuberosity of the os calcis, covers the flexor brevis digitorum muscle, and in front, divides into five slips which pass to the toes. Between these slips the digital vessels and nerves and the lumbrical muscles emerge.

The lateral parts of the plantar fascia are much weaker.

The outer (4) invests the abductor minimi digiti muscle, and in connection with it a strong band passes from the outer tuberosity of the os calcis to the base of the fifth metatarsal bone.

The inner portion (5) is a thin sheet, covering the abductor hallucis muscle.

The digital nerves which supply the toes have the following origin:—on the inner side of the foot is a branch from the internal plantar nerve, supplying the inner margin of the great toe, and cutaneous branches from the same nerve make their appearance in the adjacent three interspaces, and run forward to supply the sides of the toes which bound the spaces, while on the outer side of the foot is found a cutaneous branch from the external plantar nerve, and in the adjacent space is a branch from the same nerve, which supplies the adjacent sides of the fourth and fifth toes.

Small digital vessels accompany these nerves.

The figures indicate—

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| 1. Os calcis, posterior part. | 6. Division of central portion of fascia into slips. |
| 2. Base of fifth metatarsal bone. | 7. Superficial transverse ligament of the toes. |
| 3. Central part of plantar fascia. | 8. Cutaneous branch of external plantar nerve. |
| 4. External part of plantar fascia. | 9. Cutaneous branch of internal plantar nerve. |
| 5. Internal part of plantar fascia. | 10. Digital artery and nerve running in company. |

