

sesamoid bone is found; and then is *inserted* into the tubercle of the scaphoid, spreading over its plantar surface, and into the entocuneiform bone. A few fibrous bands end upon the proximal end of the 1st metatarsal to the inner side of the flexor brevis hallucis. In the large *Phoca*, from beneath the inner head of the abductor hallucis, a slip from the tibialis posticus tendon proceeds backwards to the inner side of the flexor brevis hallucis, and ends on the ventral or inner surface of the 1st metatarsal. In *Macrorhinus* the tendon is *inserted* into the scaphoid tubercle, into the entocuneiform, and the 1st metatarsal; and gives off a strong slip to the abductor hallucis.

In *Arctocephalus gazella* it is of the same size as the flexor longus hallucis. It arises from the anterior fourth of the ventral border of the fibula, from the inner surface of its head, from the inner surface of the tibio-fibular fusion, from the anterior three-fourths of the inner surface of the tibia dorsad to the oblique line, and from the anterior fourth of the interosseous membrane. About 1 inch from the ankle it forms a tendon, which goes beneath the annular ligament in the groove near the ventral border of the tibia. After traversing it the tendon expands and is *inserted* into the anterior half of the 8th tarsal or entoscaphoid bone.¹ On nearing its insertion it gives off a tendinous slip (slip i.), which crosses the surface of this bone and joins the plantar fascia. It also sends a strong slip over the inner or ventral half of the bone which runs along the ventral plantar side of the 1st metatarsal; opposite the middle of the shaft this slip divides into two (ii. and iii.). The dorsal slip (ii.) is prolonged to the distal plantar surface of the 1st phalanx of the hallux. The ventral (iii.) is inserted into the distal plantar ventral side of the 1st metatarsal. In *Otaria* it is only *inserted* into the scaphoid; but Murie does not mention it in *Trichechus*. Lucae agrees with me as to its insertion in *Phoca*, and Humphry gives the same scaphoid and metatarsal insertions, but states "that a considerable portion of its tendon extended into the ligaments under the tarsus and into the tendinous structure which represents the short muscles of the hallux." In the Phocinæ it is supplied by a branch of the great sciatic nerve.

The human tibia upon the posterior surface has a ridge dividing it into two; the outer division is for the origin of the tibialis posticus. In all the specimens of Seals there is no ridge, and the inner surface is for the tibialis posticus. The part of the bone covered by the muscle in the Phocinæ is deeply scooped out, and gutter-like, the convexity being on the outer side, and in most of the specimens the shaft is semitransparent. This formation gives lightness to the bones of the leg but little diminution in surface. In *Macrorhinus* the inner surface is very slightly concave, and the shaft is triangular in transverse section, the apex of the triangle giving attachment to the interosseous membrane. In *Arctocephalus* the inner surface is only moderately scooped in its anterior third, and the shaft is triangular like the last. In all, the origin reaches the dorsal tuberosity of the tibia, for the popliteal line begins at the dorsal side of the ventral tuberosity, but in man the insertion of the popliteus prevents this.

The ventral surface of the tibia is apt to be included with the inner surface, unless a number of tibiæ are examined. The ventral border begins at the internal malleolus, runs along the shaft, and terminates at the junction of the outer two-thirds and inner third of the ventral tuberosity. The dorsal border runs from the external malleolus forwards to the junction of the external and internal tubercles on the outer side of the bone. The space between these two borders is the

¹ See Sir W. Turner's Report, p. 50. In the Phocinæ I found a sesamoid bone in the tendon of the tibialis posticus, but there was none in *Macrorhinus*.