

Of the *cuneiforms* the ento- was as usual the largest and the meso- the smallest. The ento-cuneiform articulated behind with the scaphoid, internally with the eighth tarsal bone, anteriorly with the 1st metatarsal, externally with the 2nd metatarsal and the ecto-cuneiform. The meso-cuneiform was visible both on the dorsal and plantar surfaces of the foot; it articulated laterally with the other cuneiforms, behind with the scaphoid, in front with the 2nd metatarsal. The ecto-cuneiform was also visible on both surfaces of the foot; externally it articulated with the cuboid, internally with the meso-cuneiform and 2nd metatarsal, behind with the scaphoid, and anteriorly with the 3rd and very slightly with the 4th metatarsals.

The *eighth* bone of the tarsus, or *entoscaploid*, was in the adult *Arctocephalus australis* 21 mm. long by 14 mm. broad, situated internally, and articulating by distinct facets with the inner surfaces of both the scaphoid and ento-cuneiform bones towards the plantar aspect. It was present in the other skeletons from the Messier Channel, and in both the skeletons of *Arctocephalus gazella*. Obviously therefore it is a constant bone in this genus.¹ This additional bone represents, I believe, the tubercle of the scaphoid which has remained as a separate ossicle. Occasionally in man the tubercle of the scaphoid ossifies as a distinct ossicle in connection with the tendon of the tibialis posticus, to which it seems to have the relation of a sesamoid bone, and some years ago I described in an adult a specimen of this kind.² Karl Bardeleben has also stated³ that in the human embryo at the second month there is a special cartilage, corresponding to the tuberosity of the scaphoid, which he regards as homologous with the scaphoid bone of the carpus. In a youth of 15 years he had once seen it as a separate ossicle.

The toes were of almost equal length as regards their skeleton, but the integument was prolonged in a variable extent from 105 to 110 mm. beyond the terminal phalanx. Each toe had an elongated convex nail on the dorsum of the last phalanx, but the integument was not haired. The three segments of the hallux measured collectively 237 mm. Each was longer than the corresponding segments in the other digits. The 1st metatarsal articulated by much the greater part of its proximal end with the ento-cuneiform and very slightly with the 2nd metatarsal; it was the longest and the most

¹ Dr. Murie says that *Otaria jubata* possesses the normal number of tarsal bones, and he figures the seven tarsalia. In a skeleton of the Grey Sea Lion of Australia, *Eumetopias cinereus*, I found the eighth tarsal bone occupying a position similar to what I have described in *Arctocephalus*, and articulating with both scaphoid and ento-cuneiform. In a young *Arctocephalus gazella* dissected by Dr. Miller, the entoscaploid was still cartilaginous, and received a large part of the tendon of the tibialis posticus. In *Macrorhinus* there was no separate entoscaploid, and the tendon of the tibialis posticus was inserted into a thick plate of cartilage continuous with the scaphoid bone in the region of the tubercle. In both a young and adult *Phoca vitulina* dissected by Dr. Miller, the tendon of the tibialis posticus was inserted into the tubercle of the scaphoid, but a strong slip passed distally from that tendon to end in an ossicle which in the adult was 13 mm. long and 8 mm. broad. This ossicle was situated internally to the ento-cuneiform, but had not a definite faceted articulation either with that bone or with the scaphoid as was seen in *Arctocephalus*. In a young Walrus, the ossicle was represented by a cartilaginous nodule intimately connected with the tendon of the tibialis posticus, and having a distinct facet for articulation with the ento-cuneiform.

² *Journ. of Anat. and Phys.*, October 1882, vol. xvii. p. 82.

³ *Journ. of Anat. and Phys.*, July 1885, vol. xix. p. 510.