ventral surface. The popliteal line, which begins about the middle of the shaft in all, runs forwards and ends at the dorsal side of the ventral tuberosity. A casual look at the bones might suggest that the concave surface giving origin to the tibialis posticus is the inner surface, but such is not the case. The small triangular surface for the popliteus also belongs to the inner surface. This is best seen in *Macrorhinus*, where the popliteal surface advances upon the inner to a greater extent than in the rest. In *Arctocephalus* the inner surface is more convex, and the popliteal line stands out like a ridge; this is still more evident in the Phocinæ. The popliteal line in the Seals only gives origin to the flexor longus digitorum.

In the Phocinæ and *Macrorhinus*, where the pes is always in line with the trunk, it will in the backward and forward motion of the paddle, assist in bringing the pes to the middle line, *i.e.*, adduct it, and turn the sole a little upwards, *i.e.*, pronate it. In *Arctocephalus* in walking it will extend the ankle, raise the inner side of the pes and the heel, besides giving the other movements when swimming.

PES.—The OUTER REGION in all the specimens has one muscle, the extensor brevis digitorum.

The *Extensor brevis digitorum* in the Phocinæ *arises* from the outer surface of the os calcis, ventral to the peroneal tendons, from the superior dorsal border of the os calcis, and slightly from the surface below the latter. It forms three muscular slips which end in two small tendons, the common extensor of the first running backwards between them. The ventral slip goes between the 1st and 2nd metatarsal bones, and is *inserted* into the ventral side of the proximal end of the 1st phalanx of the 1st digit. The dorsal slip goes between the heads of the 4th and 5th metatarsals, and is *inserted* into the proximal end of the 1st phalanx of the 3rd digit.

In *Macrorhinus leoninus* it is in two separate slips. The dorsal slip *arises* from the os calcis ventral to the peronei, and passes between the 1st and 2nd metatarsals, and is *inserted* into the proximal end of the ventral side of the 1st phalanx of the 2nd digit, and, by a small tendon from the side of this one, into the distal dorsal side of the 1st metatarsal. The ventral slip *arises* from the astragalus on its outer surface, and from the outer surfaces of the scaphoid and external cuneiform bones. The tendon passes back to the interval between the 4th and 5th metatarsals, and is *inserted* into the proximal dorsal side of the 4th digit.

In *Arctocephalus gazella* it is in two parts. The dorsal part has two heads of origin. The larger head *arises* from the dorsal surface of the os calcis and from the dorsal surface of the cuboid. The smaller head *arises* from the same bones, but to the ventral side of the large head. These two heads unite and are *inserted* into the proximal end of the 1st phalanx of the 2nd digit. The second part *arises* from the adjacent sides of the os calcis and astragalus, and from the cuboid, and is *inserted* into the proximal end of the 1st phalanx of the 3rd digit.

The INNER or PLANTAR REGION has adductors, flexores breves of the phalanges, and abductors. In *Macrorhinus* the inner head of the flexor of the hallux and the abductor hallucis were the only two intrinsic muscles seen; the rest had evidently decomposed.

The Adductors.—In *Phoca vitulina* the adductor minimi digiti is found. In *Arctocephalus* there are the adductor hallucis, the adductor minimi digiti, and the adductor ossis metatarsi primi.

The *Adductor minimi digiti* in *Phoca vitulina arises* between the bases of the 3rd and 4th