massive of all the bones of the toes. The 2nd metatarsal articulated with the 1st and 3rd and with the three cuneiforms; it was bent a little inwards, much less than in the Elephant Seal, in order to pass slightly behind the 1st metatarsal. The 3rd metatarsal articulated with the 2nd and 4th and with the ecto-cuneiform; it was the shortest of the metatarsals. The 4th metatarsal articulated with the 3rd and 5th and with the ecto-cuneiform and the cuboid, it was not hollowed out on the outer side of the shaft as in *Macrorhinus* and *Leptonychotes*. The 5th metatarsal was next in length to the first, but much less broad; it possessed at its tarsal end a peroneal tubercle and articulated with the 4th metatarsal and the cuboid. The terminal phalanx of the 2nd, 3rd, and 4th toes was prolonged into a pointed ungual process on which the nail rested, but the corresponding phalanx of the 1st and 5th digits had no such process, and the nails were smaller than in the other toes. A pair of sesamoids was situated on the plantar surface of each metatarso-phalangeal joint. In the adult male all the epiphyses were fused with the diaphyses, but in the young male the epiphyses were seen to have a similar arrangement to those described in the metatarsals and phalanges of the Elephant and Weddell's Seals.

The tarsalia in *Arctocephalus gazella* corresponded in number, form, and arrangement to those of *Arctocephalus australis*. The bones of the digits were also similar, but more slender, and the epiphyses as in the young male of the other species were not ankylosed.

Nearly twenty years ago the late Professor Allen Thomson described[1] the ossification of the digits in the common seal, *Phoca vitulina*. In the manus he said that the 1st metacarpal bone and all the digital phalanges, except the terminal phalanx, each possessed only a proximal epiphysis, whilst in the four other metacarpal bones there were only distal epiphyses. In the pes again, the 1st metatarsal bone had both a proximal and a distal epiphysis like the phalanges generally, except that the terminal phalanx had only a proximal epiphysis; the four other metatarsals had each only a distal epiphysis. In the year 1869, the late Mr. A. B. Stirling prepared and mounted, in the Anatomical Museum of the University of Edinburgh, specimens to illustrate this method of ossification of these bones. The description which has been given in this Report of the manus and pes of *Macrorhinus*, *Leptonychotes*, and *Arctocephalus*, shows that in them the bones of the digits of the manus do not ossify in the same manner as in the manus of *Phoca vitulina*, but that in all these three genera the digits both of the manus and pes ossify after the same plan, which corresponds with that seen in the pes of the common seal.

The length of the spine of the adult male Fur-Seal from Messier Channel was 1490 mm., the dried intervertebral discs being included, and that of the skull of the same animal was 233 mm., giving a total length of 1723 mm. or 5 ft. 6 in. The length of the spine of the adult female, including the dried intervertebral discs but exclusive of the six terminal caudal vertebræ which were missing, was 1100 mm., and the length of

[1] *Journ. of Anat. and Phys.*, November 1868, p. 140.