

*Posterior Extremity.*—The extreme length of the *femur* in the adult male from the Messier Channel (No. 3) was 112 mm. The head was smooth and without a fossa for the ligamentum teres; the neck was stunted, the great trochanter was well marked, and with a shallow digital fossa for the obturator muscle; the small trochanter was a distinct tubercle, of no great size; there was a faint posterior intertrochanteric line, a very feeble anterior intertrochanteric line, but no trochanter tertius. The shaft was broadened laterally, though not so much as in *Leptonychotes* and *Macrorhinus*; its inner lateral border was almost straight, its outer lateral border slightly concave, differing therefore from the other two genera, in which, more especially in *Leptonychotes*, these borders were markedly concave; though the posterior surface was flat the anterior was slightly convex. A rough ridge passed down the inner border of the bone towards the posterior surface, which apparently represented a *linea aspera*. The external tuberosity was more prominent than the internal, and they were both grooved; the outer groove being for the tendon of the popliteus. The patellar articular surface was not hollowed from side to side, and was convex from above downwards; it was so large as to occupy almost the whole of the front of the lower end of the femur, whilst in *Macrorhinus* and *Leptonychotes* it occupied only about the middle third of that part of the bone. This surface was prolonged downwards and backwards so as to be continuous with the internal condylar articular surface, but was separated from the external condylar surface by a narrow groove; the condylar surfaces were situated on the back of the lower end of the bone, and were separated from each other by an intercondylar fossa. The inner condylar surface was concave from side to side, whilst the outer was convex. In *Arctocephalus gazella* the femur was only 93 mm. long, and much more slender than in the Messier Channel seal, and this indeed was a character which distinguished all the bones of the hind limb; the trochanter minor was absent even in the most fully ossified of the two skeletons, in which the head was united to the neck of the bone. The patellar articular surface was continuous with the inner condylar articular surface, but was separated from the outer by a narrow groove, to which the adipose ligament was attached as well as to the intercondylar fossa. The outer border of the shaft of the femur was more concave in *Arctocephalus gazella* than in *Arctocephalus australis*.

The *patella* was 28 mm. long, and in both species of *Arctocephalus* had an articular surface transversely elongated and slightly concave from above downwards; its cutaneous surface was elongated superiorly into a strong tubercle, whilst lower down the bone was flattened, so that whilst the upper end of the bone was 18 mm. in antero-posterior thickness, the lower end was only 10 mm.

The *tibia* was 235 mm. long in the Messier Channel adult male. Its superior surface was divided into two articular facets with a rough groove between them, and the outer facet was wider than the inner. The ligamentum patellæ was attached to the front