bone. The spine of the atlas was rudimentary; in the axis it was massive; in the 3rd cervical it was short and it gradually increased in length to the 7th cervical. A strong process, distinct from the transverse process, projected backwards for nearly half an inch from the pedicle of the 7th cervical immediately below the articular process, and indications of a similar process were seen in both the 6th and 5th. The bodies of the cervicals were mesially keeled on the ventral surface, and in the 7th the keel was elongated into a plate-like hypapophysis, which was very projecting in the adult Messier Channel male.

The *dorsal* vertebræ had relatively short transverse processes, which were the longest in the more anterior dorsals, but diminished in length in the posterior dorsals so as to be scarcely recognisable in the 14th and 15th. Anapophyses were present in all the dorsals; in the more posterior they were elongated and styloid, in the middle and more anterior they were stunted and tubercular, and in series with the strong backward-projecting process from the pedicle of the 7th cervical. Metapophyses projecting forwards from the anterior articular processes were especially seen in the middle and posterior dorsals. The spines projected backwards; they were elongated and strong in the anterior vertebræ, but gradually diminished in size from before backwards. The bodies of the more anterior and more posterior dorsal vertebræ were keeled on the ventral surface.

The *lumbar* vertebræ had transverse processes which projected downwards, outwards, and forwards; in the 1st lumbar they were very short, but they increased in length to the 4th. The spines were short and hatchet-shaped. Anapophyses had almost entirely disappeared; metapophyses were present in all of these vertebræ. The ventral surface of the bodies was keeled.

Sacrum.—In the adult male from the Messier Channel the 1st and 2nd sacral vertebræ were completely fused together, the laminæ of the 2nd were fused with those of the 3rd, but the spines were not, and between their bodies the intervertebral disc was partially present. The 3rd sacral vertebra was fused with the 1st caudal by the pair of processes situated below the articular processes. The greatest breadth of the base of the 1st sacral vertebra was 48 mm. and the length of its body was 32 mm. The 2nd and 3rd were smaller bones, especially in breadth; they were all fully ossified In *Arctocephalus gazella* fusion of the sacral vertebræ had not taken place.

The *caudal* vertebræ diminished in size from the 1st to the 11th. The 1st, 2nd, and 3rd possessed laminæ and spines, the 4th had a neural groove, but the rest consisted only of the bodies, and the two terminal segments of the tail were only 6 and 4 mm. long respectively.

Ribs.—There were fifteen pairs of ribs, of which nine articulated with the sides of the sternum. The head of the 1st rib articulated only with the body of the 1st dorsal vertebra, but from the 2nd rib backwards to the 12th, both inclusive, the head articulated with the bodies of two vertebræ. The three most posterior ribs again articulated, each