

brarterial foramen." The inferior transverse processes of the more anterior vertebræ were almost horizontal, but the more posterior had this process sloping downwards and outwards, and but slightly projecting; in the seventh it was reduced to a mere tubercle. On each side of the body of the seventh vertebra was a distinct articular surface for the head of the first rib (Pl. I. fig. 3).

In the union of the anterior three vertebræ into a single bone, this specimen agrees with the *Mesoplodon layardi* described by Dr von Haast, and it differs from *Mesoplodon grayi* and *Mesoplodon australis* described by Professor Flower, and from *Mesoplodon sowerbyi*, in all of which only the atlas and axis are fused together. It may be taken, therefore, as a piece of evidence, which is of value as far as it goes, in favour of the opinion expressed in this Report, that Dr von Haast's specimen from Saltwater Creek is of the same species as this one from the Falkland Islands.

In the *dorsal vertebræ* the bodies increased in size from before backwards. The first had a pair of slight tubercles projecting from its inferior surface in series with, but smaller than, the inferior transverse processes of the seventh cervical vertebra. A mesial ridge appeared on the inferior surface of the body of the sixth dorsal, which was more strongly marked in the hinder members of the series. In all, the laminae and spines were complete, and became more massive from before backwards. The spine of the first, comparatively slender, was directed slightly forwards, that of the second was almost vertical, whilst those situated behind the second inclined a little backwards. Articular surfaces for the heads of the second, third, fourth, fifth, and sixth ribs were very distinct on the posterior border of the side of the bodies of the anterior five dorsal vertebræ, situated close to the place of origin of the pedicle. In the second, third, fourth, and fifth vertebræ a larger proportion of this articular surface was on the pedicle than on the body as compared with the first and sixth dorsal vertebræ. The articular surface for the head of the seventh rib was partly on the posterior border of the side of the body of the sixth, and partly on the anterior border of the seventh vertebra, its articulation with the seventh being better marked on the right than on the left side. The articular surface on the anterior part of the side of the body of the seventh vertebra was on a slightly projecting process, which was in series and obviously homologous with the much more strongly projecting processes from the side of the bodies of the eighth and ninth dorsal vertebræ. The anterior seven dorsal vertebræ had each a pair of broad transverse processes springing from the pedicles, close to the anterior articular processes, for articulation with the tubercles of the anterior seven pairs of ribs. These transverse processes projected forwards and somewhat downwards in the more anterior dorsal vertebræ, but in the sixth and seventh outwards and downwards. The long axis of the articular surface for the tubercle of the rib also changed in its direction, for on the transverse processes of the first and second it was almost vertical, further back it became oblique, but on the seventh dorsal it was horizontal and antero-posterior. The long axis of these articular