Megaptera lalandi (Fischer).

The vertebræ of the humpbacked whale (*Megaptera lalandi*) belonging to the collection consisted of the atlas, axis, and third and fourth cervical vertebræ. They were from an animal captured in the New Zealand seas, probably in Queen Charlotte Sound.

The atlas was a distinct bone, but the axis and third and fourth vertebræ were ankylosed into one block. The bones had evidently been exposed on the beach for some time, as they were rubbed and weathered, and had many small pebbles in their grooves and foramina. The transverse diameter of the atlas was 26 inches, its supero-inferior 14½ inches. The spine was stunted. The transverse processes were massive and undivided. The groove for the sub-occipital nerve was converted into a foramen by a bridge of bone. The occipital articular surface was divided into two facets by a mesial notch and furrow. The axis had a transverse diameter of 32½ inches, a supero-inferior of 13½ inches. The spine was massive, and both it and the right lamina were fused with the corresponding parts of the third cervical. The transverse processes each possessed a superior and inferior division continued into each other externally by a broad plate of bone, so that the "vertebrarterial" foramen was completely bounded by bone. A broad stunted process, representing a rudimentary odontoid projected from the anterior surface of the bone, and was received into a corresponding hollow on the posterior surface of the atlas. The superior transverse process of the third vertebra was a slender plate of bone 4 inches long; the inferior transverse process was much stronger, and 7 inches in length. The superior transverse process of the fourth vertebra was 8¼ inches long, but the inferior was only 5 inches, both were strong bars of bones. Neither in the third nor fourth vertebræ did the superior and inferior transverse processes meet externally so as to complete the boundary of a foramen. The body of the axis was 15½ inches in its greatest transverse diameter by 9 inches in its greatest supero-inferior. The body of the fourth cervical was 10 inches by 7¾, and as it was not so rounded at the sides as in *Balænoptera*, its shape approached the quadrangular. The fusion between the bodies of the second, third, and fourth vertebræ was not complete, but restricted to the sides of their anterior and posterior surfaces, so that intervertebral discs had obviously been present in the recent state between the greater part of the surfaces of the bodies. The left laminæ of the third and fourth vertebræ were fused with each other, but not those of the right side.

The presence of a large Rorqual in the seas of the Southern Hemisphere was determined by Cuvier, from a skeleton brought to Paris by Delalande from the Cape of Good Hope, and was named by him *Rorqual du Cap*. Fischer subsequently called it *Balæna lalandii*, but it was recognised by Schlegel that it possessed affinities to the long-finned Rorqual of the Northern Hemisphere, *Megaptera longimana*. Dr J. E. Gray considered