Ziphius cavirostris, Cuvier.

In November 1872 Dr Hector read before the Philosophical Society of Wellington, New Zealand, a memoir On the Whales and Dolphins of the New Zealand Seas.[1] In it he described and figured by the name of *Epiodon chathamiensis*, or goosebeak whale, a skull collected by Mr H. Travers at the Chatham Islands. He expresses the opinion that it is possible this animal may be identical with *Epiodon australis* from Buenos Ayres described by Burmeister, and states that except in the upward curve of the beak and the less development of the vomerine callosity, the skull resembles the *Petrorhynchus capensis* of Gray. He further mentions that the rostrum of an individual of this species, and having a less upward curve, found at Lyall Bay, near Wellington, is in the Colonial Museum.

In a memoir which I had previously read before the Royal Society of Edinburgh in May 1872,[2] I advanced facts and arguments to prove that the Cetacea which had been described by the several generic names of *Epiodon* and *Petrorhynchus* should be referred to the Cuvierian genus *Ziphius*, of which *Ziphius cavirostris* was the type species, and I further expressed the opinion that the exotic specimens which had been named *Ziphius indicus*, Van Beneden, *Petrorhynchus capensis*, Gray, and *Epiodon australe*, Burmeister, should be ranked, along with the several European specimens named in that memoir, as examples of the *Ziphius cavirostris*.

When a box arrived from the Challenger in 1875 containing a skull and lower jaw marked *Epiodon chathamiensis*, Hector,[3] which had been presented to the collection by the Colonial Museum, Wellington, I examined it with great interest, and compared it with the cranium of the *Ziphius cavirostris* from the Shetland Islands in the Anatomical Museum of the University of Edinburgh. The skull was, unfortunately, not perfect, as the occipital and sphenoid bones, in the region of the basis cranii and foramen magnum, the pterygoid bones and temporals were broken away, but the beak, the great prænasal fossa, the anterior nares and the summit of the cranium, which are the most distinctive parts of the skull, were preserved. There is no need for me to give a detailed description of this cranium, but it will be sufficient for my present purpose if I compare what there is of it with the skull of the Shetland specimen, described at length in my memoir, and point out wherein they correspond or disagree.

The skull, like the Shetland specimen, was evidently from an old animal, as the cranial sutures were to a large extent obliterated, the bones were massive and weighty, and the teeth were shed from the mandible, their sockets, as in the Shetland specimen, being occupied by a growth of bone. Owing to the occipital end of the skull having been so much injured, I am unable to give the entire length of the cranium, but several other measurements showed that it was on a somewhat larger scale than the Shetland skull.

[1] Trans. New Zealand Institute, vol. v.

[2] On the Occurrence of *Ziphius cavirostris* in the Shetland Seas, and a comparison of its Skull with that of Sowerby's Whale (*Mesoplodon sowerbyi*), Trans. Roy. Soc. Edin., vol. xxvi.

[3] Dr Hector writes to me that this specimen was got near Wellington. He has now had a good many specimens through his hands. This Cetacean, he says, is common in the New Zealand seas, though rarely captured or cast ashore.