

had been exact pairs, and that the numerous petrous bones all belonged to the same animals as the tympanic bullæ, it would follow that the remains of at least forty-five whales were brought from the bottom of the ocean in this single station by one haul of the dredge; but as the bones were not in pairs, the remains of a much larger number of whales were obtained in this station. It may further be noted that a recognisable proportion of these animals were Ziphioids, and many of them belonged to the genus *Mesoplodon*, so that the central part of the South Pacific Ocean is obviously a favourite habitat of this family of cetaceans.

Station 131, lat. 29° 35' S., long. 28° 9' W., October 6, 1873, 2275 fathoms. A tympanic bulla 2½ inches long, very slightly discoloured with manganese. This bulla closely corresponds with that of the *Ziphius cavirostris* from Shetland, so that I have no hesitation in associating it with that genus, and most probably with that species. I have figured it in Plate II. fig. 10, alongside of the Shetland *Ziphius*, so that the two may be compared with each other. The South Atlantic Ocean is, therefore, a habitat for this cetacean, a fact which is of interest in its bearings on the determination of the zoological position of the *Epiodon australe*, Burmeister, from Buenos Ayres, and of the *Petrorhynchus capensis*, Gray, from the Cape of Good Hope, both of which I have referred (p. 27) to *Ziphius cavirostris*.

Station 143, lat 36° 48' S., long. 190° 24' E., December 19, 1873, 1900 fathoms. A small fragment of bone was brought up by the dredge, about the size of a boy's playing marble. It consisted of cancellated tissue, and was coated and impregnated with manganese, and had foraminifera attached to it. It was too small a piece for one to say what bone it had formed a portion of, but it was probably from a cetacean.

Station 160, lat. 42° 42' S., long. 134° 10' E., March 13, 1874, 2600 fathoms. Several tympanic bullæ were found. One is figured by Mr Murray in transverse section, and surrounded by manganese (Pl. VIII. fig. 11). It possessed the bilobed form, but the lobes were more nearly equal in size than in *Mesoplodon*, so that one could not definitely pronounce it to belong to that genus. Two others had the *Mesoplodon* characters, but the one had the internal posterior lobe more massive and the outer surface more concave in its posterior half than the other. In one the furrow between the two lobes was somewhat narrower than in *Mesoplodon layardi*. Another tympanic bone was *Delphinus*. A petrous bone was apparently that of a *Globiocephalus* (Mr Murray's Pl. VIII. fig. 10). A nodulated mass of bone, not so big as a cricket ball, was covered by botryoidal deposits of peroxide of manganese, and penetrated by deposits of manganese and iron, so that it was dense and of stony hardness. There were also three small fragments of bone, one a flat bone.

Station 274, lat. 7° 25' S., long. 152° 15' W., September 11, 1875, 2750 fathoms. A tympano-periotic bone from a *Globiocephalus*, figured by Mr Murray (Pl. VIII. figs. 4, 5); another from one of the *Delphinidæ* (Mr Murray's, Pl. VIII. figs. 12, 13).