

long, and in their configuration resembled the petrous bone of *Mesoplodon*, and, without doubt, belonged to the bullæ of this animal already referred to as found in the same station. Others were of the same magnitude as the petrosal in the genus *Delphinus*, and very similar in form, whilst two specimens were smaller than those of the common porpoise. In all, the manganese had been deposited in the canals and foramina in the bones, and had given a coating more or less thick, in different instances, to the entire bone. Mr Murray has figured three specimens in Plate VIII. figs. 8, 9, 9*a*, 14 and 14*a*.

Fourteen specimens also occurred which consisted not only of the petrous, but of a portion of the elongated "mastoid" element continuous with it. These varied considerably in size, the largest being 3.6 inches long, and the smallest 2.5 inches, and the latter is figured by Mr Murray in Pl. VIII. fig. 3. They were all deeply impregnated with manganese, which had filled up the hollows and foramina, and coated the entire bone, so that it was difficult to obtain an exact idea of its form. It is not unlikely that these may have been the petro-mastoid elements belonging to the tympanic bullæ of some of the Baleen whales already stated to have been found in this station.

In addition to these ear-bones, numerous fragments of other bones were also present, all, with one exception, being deeply impregnated with manganese. The most noticeable of these was an elongated bar of bone 8.1 inches in length, which Professor Flower and I concurred in regarding as the beak of a Ziphioid whale. Sections of the beak were made by Mr Murray which confirmed the accuracy of this opinion. The beak and sections through it are figured by Mr Murray (Pl. X. fig. 1, *a*, *b*). Three other, but much smaller, fragments of bone, which also seemed to be portions of the beaks of Ziphioids were also present.

A number of fragments of flat bones, most of which were portions of the brain case, though one or two might have been bits of the shaft of a rib, occurred. The largest, figured by Mr Murray (Pl. X. fig. 2, *a*), was marked on its inner surface by a groove for a venous blood sinus.

An irregular mass of spongy bone, 4 inches by 8, by 3, consisting apparently of a portion of the expanded wing of a superior maxilla, was present. It was noticeable, not only from its size, but from the paucity of manganese deposit as compared with the other bones. Another smaller portion of similar spongy texture was surrounded with nodulated masses of manganese; this is figured by Mr Murray (Pl. X. fig. 3). A third mass, 5 inches by 5, having its surfaces concavo-convex, was covered by, and deeply impregnated with, manganese and iron deposition, so that it had quite a mineral appearance. It was also apparently a part of the expanded wing of the superior maxilla. Further, there were between one and two hundred smaller fragments, looking on the exterior like nodules of manganese, which, when broken through, exhibited evidence of bone structure. In one the fracture had displayed the helicoidal turn of the cochlea.

If we were to suppose that the eighty-nine tympanic bullæ obtained in this station