not unfrequently broke up into fragments, for their texture and cohesiveness were often greatly injured; but at times Mr Murray had succeeded in removing the whole of the manganese from the exterior of the bone, so as to enable one to study its form.

In the catalogue of the dredgings which has been compiled for the use of the naturalists engaged in describing the animals collected during the voyage of the Challenger, the stations at which the dredge was put down are all designated numerically, and the latitude and longitude are recorded, so that the locality can be determined on the map; the date when the dredging took place, and the depth of the ocean at the spot are also given. I have extracted from this catalogue these important facts in connection with the description of the cetacean bones obtained at each station.

The stations are numerically arranged according to the dates when the dredgings were done, but instead of taking the first at which cetacean bones were observed, it will be more convenient to start with the description of the station where the largest number and the greatest variety of the bones of these animals were brought to the surface. I shall commence, therefore, with a description of the bones found at Station 286.

Station 286, lat. 33° 29′ S., long. 133° 22′ W., October 16, 1875, 2335 fathoms. This station was remarkably rich in cetacean remains. About ninety tympanic bullæ were recognised, and, in addition, there were various fragments coated and imbedded in peroxide of manganese, many of which appeared to be portions of tympanic bones. In the first place I made a rough classification of these bones according to their size, and found that they could be arranged into five groups.

The *first* group was represented by a single specimen nearly 6 inches long, and by a fragment of another, which had apparently been of the same magnitude. They were impregnated with manganese, and much corroded on the surface. The more perfect specimen had been cut in two, and one half sent for chemical analysis before I saw it; but from the half that remained I judged it to have been about the same size as the tympanic bone of the great Northern Rorqual (*Balænoptera sibbaldi*), stranded at Longniddry, which I described some years ago.[1] A section through this bone is figured by Mr Murray in his Report on deep-sea deposits (Pl. VII. fig. 2). On comparing it with the corresponding tympanic bone of this animal, they were seen to have a somewhat similar general configuration, but the corrosion of the surface of the deep-sea specimen prevented a close comparison being instituted. From the magnitude of the specimen, it is probable that it is the tympanic bulla of a great Southern Rorqual, perhaps the *Balænoptera antarctica*, or a closely-allied species.

The *second* group consisted of fifteen tympanic bullæ, varying in size from 3 inches to 4 inches, but these were divisible into two very distinct types.

In the one type, consisting of the somewhat larger specimens, were two admirably-preserved bones with the deposit of manganese so thin that the form of the bone was not

[1] Trans. Roy. Soc. Edin., Nov. 1870, vol. xxvi.