STATION 157.

Density at 60° F:-

Surface, . . . 1.02509 | 100 fathoms, . . . 1.02537 50 fathoms, . . . 1.02507 | Bottom, 1.02561

Depth, 1950 fathoms; deposit, Diatom Ooze, containing 19.29 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 6.30 a.m. shortened and furled sails and proceeded under steam to trawl and sound. At 8 a.m. put over trawl, and at 9 a.m. sounded in 1950 fathoms. A small quantity of Diatom Ooze came up on the sounding tube. Several temperatures were taken down to 500 fathoms. Samples of water were taken from depths of 50 and 100 fathoms. The carbonic acid was determined in the bottom water, and amounted to 44.3 milligrammes per litre. The tow-nets, which were dragged at the surface of the sea and a few fathoms beneath, came up nearly filled with a slimy mass consisting almost entirely of Diatoms; besides the Diatoms there were many pelagic Foraminifera, Radiolarians, a few Copepods, Cypridinidæ, Hyperidæ, and Pteropods. At 2 p.m. commenced heaving in trawl, which came up at 4 p.m. with a large quantity of Diatom Ooze, many large and small stones, and numerous animals. This was one of the most successful hauls of the expedition. A few of the usual seabirds were observed during the day.¹ The wind fell to a calm during the afternoon. There was a brilliant sunset, and at 11.45 p.m. a fine aurora australis, stretching in four concentric arcs over the S.E. to W. horizon.

Distance at noon from Cape Otway, 1721 miles. Made good 137 miles. Amount of current for the past three days 55 miles, direction N. 19° E.

The following species are recorded in the Zoological Reports from the trawl at this Station:—

Animals from Trawl.

Monaxonida (Ridley and Dendy, Zool. pt. 59).

Cladorhiza moruliformis, n.sp. One specimen; obtained at no other locality.

HEXACTINELLIDA (Schulze, Zool. pt. 53).

Holascus polejaevii, n.g., n.sp. One specimen; obtained at no other locality.

Balanella pipetta, n.g., n.sp. One specimen; obtained at no other locality. Only species of the genus.

PENNATULIDA (Kölliker, Zool. pt. 2).

Umbellula carpenteri, n.sp. Several specimens; obtained also at Station 156.

¹ The following species of birds were noticed while amongst the Antarctic ice:—Oceanites oceanicus, Thalassaca glacialoides, Thalassaca (Aeipetes) antarctica, Ossifraga gigantea, Pagodroma nivea, Daption capensis, Prion desolutus, Diomedea (Phabetria) fuliginosa, Stercorarius antarcticus.