

At 6 P.M. the surveying and exploring parties returned, and the ship worked to windward under easy sail between the two islands during the night.

On the 27th the weather in the morning was thick and cloudy, so that it was unadvisable to proceed towards the land or to send exploring parties on shore; the day was therefore devoted to dredging, which proved very satisfactory. The islands were occasionally seen through the mist, thus enabling the position of the soundings to be fixed. In the afternoon they were both seen for a short time. The dredgings between the island showed that the bottom, in depths less than 100 fathoms, was covered with great masses of Polyzoa, the dredges and swabs being filled and covered with them; Mr. George Busk records sixteen species from this locality, eight of which are new. There were also numerous animals belonging to all the marine invertebrate groups. In 130 and 310 fathoms there was a volcanic mud containing 15 to 20 per cent. of carbonate of lime, shells, many Diatoms, and many volcanic minerals and lapilli of vitreous basaltic rocks.

#### MARION ISLAND TO THE CROZET ISLANDS.

At 6 P.M. on the 27th December, sail was made for the Crozet Islands, and the 28th December, the day after leaving Marion Island, was bright and sunny, with a smooth sea, moderate northerly wind, and a high and steady barometer.

On the 29th the weather still continued fine, but was misty, the mist at times amounting to a light fog. Advantage was taken of this fine weather to sound and trawl in 1375 fathoms; serial temperature soundings were also obtained (see Sheet 18). Four Penguins appeared on the water close to the ship while dredging was going on, and stopped in the vicinity for some time.

On the 30th, the weather still continuing fine, a sounding and trawling were obtained in 1600 fathoms with excellent results (see Sheet 18). At 10 P.M. Hog Island of the Crozet group was seen. During the night a large cetacean came close to the ship but soon disappeared.

The trawlings at the two Stations on this section, in depths of 1375 and 1600 fathoms, were probably the most productive of the cruise; between one and two hundred animals, belonging to nearly all the marine groups, were taken at each of the hauls, and with few exceptions they belonged to genera and species discovered for the first time by the Expedition. In the memoirs already published, 7 new genera and 35 new species are described from the trawling in 1375 fathoms, and 9 new genera and 29 new species from 1600 fathoms; among these, 12 species are common to both Stations. It is probable that these new species do not represent more than one-third of the whole number discovered, but this cannot be said with certainty till all the specialists have completed their reports.

The deposit at 1375 fathoms was a Globigerina ooze, containing 81 per cent. of carbonate of lime, the residue being almost wholly remains of Diatoms and Radiolarians. At 1600 fathoms there was only 35 per cent. of carbonate of lime, 40 per cent. of Diatom