

CHAPTER IX.

HEARD ISLAND.

Diatoms on the Sea Surface. Macdonald Island. Whisky Bay, Heard Island. Coast-line composed of Glaciers. Structure of the Glaciers. Terminal and Lateral Moraines. Glacier Stream. Rocks cut by Natural Sand Blast. Lava Flow and Denuded Crater. Scanty Vegetation. Range in Elevation of Arctic and Southern Plants Compared. Mode of Hunting Sea Elephants. Habits of these Animals. Sealers Inhabiting Heard Island. Birds of the Island.

February 2nd, 1874.—We sailed from Christmas Harbour, whither we had gone at the termination of our survey to erect a cairn with instructions for the Transit of Venus Expedition, on February 2nd, and made for the Macdonald Group, which lies about 240 miles to the south-east of Kerguelen's Land. The channel between the two groups is extremely variable in depth, bottom being found at times in less than 100 fathoms, and at others no bottom being obtained in from 220 to 425 fathoms:

The sea surface was full of Diatoms, which filled the towing net in large masses. These masses were found by Mr. O'Meara to be composed mainly of various species of *Chaetoceros*, with spines of extraordinary length, aggregated in small masses of a jelly-like substance. Occurring with these species of *Chaetoceros*, were representatives of five other genera of Diatoms, three of which were of new species.*

Heard Island, February 6th, 1874.—On February 6th, after beating about for several days in fog, and lying becalmed during one day, we sighted the northernmost island of the Macdonald Group. It was alternately brightened up by sunshine, and hidden in the drifting scud and mist. It consists of a small main rocky mass, and two outliers with a very irregular outline and weather-beaten appearance.

The main mass is Macdonald Island, and gives the name to

* Rev. E. O'Meara, M.A., "On the Diatomaceous Gatherings made at Kerguelen's Land, by H. N. Moseley." Linn. Journ., Botany, Vol. XV., pp. 56, 57.