

“On February 6, after beating about for several days in fog, and lying becalmed during one day, we sighted the northernmost island of the Macdonald Group, which 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 the group. It is bounded on all sides by cliffs, which are high towards the eastward, but lower towards the westward. There was no snow on the island, and on one stretch of sloping flat land, a covering of vegetation could be made out similar to that of Heard Island. One of the outliers is in the form of a pinnacle, projecting straight up from the sea.

“We anchored at Heard Island, in Corinthian or Whisky Bay, as it is named by the sealers, in the afternoon, and I landed at once with Captain Nares and Mr Buchanan. Heard Island is in about lat.  $53^{\circ} 10' S.$ , long.  $73^{\circ} 30' E.$ , therefore in about the same latitude as the eastern entrance of the Straits of Magellan, and in a corresponding latitude, in the southern hemisphere, to our city of Lincoln in the northern, and it is in nearly the same longitude as Bombay. It is about twenty-five miles in extreme length, and six in extreme breadth, and has an area of about eighty square miles, with an elongate form, stretching in a direction about N.W. by W., and S.E. by E. The southernmost extremity turns eastward, and runs out into a long narrow promontory.

“Whisky Bay is near the northernmost extremity of the island. To the south-east of the ship, as she lay in the small bay, were seen a succession of glaciers descending right down to the beach, and separated by lateral moraines from one another; six of these glaciers were visible from the anchorage, forming by their terminations the coast-line eastwards. They rose with a gentle slope, with the usual rounded undulating surface upwards towards the interior of the island, but their origin was hid in the mist and cloud; and Big Ben, the great mountain of the island, said to be 7000 feet in height, was not seen by us at all.

“One of the glaciers, that nearest to the ship, instead of abutting on the sea-shore directly with its end, as did the others, presented towards its lower extremity its side to the action of the waves, and ending somewhat inland, formed a well-marked but scanty terminal moraine.

“To the sea-shore this glacier presented a vertical wall of ice, resting directly upon the black volcanic sand composing the beach. This wall exhibited a very instructive longitudinal section of the glacier mass, in which the series of curved bands produced by differential motion were most plainly marked, and visible from the distance of the anchorage.

“The ice composing the wall or cliff was evidently being constantly bulged outwards by internal pressure, and masses were thus being split off to fall on the beach, and be melted, or floated off by the tide. The ice splits off along the lines of the longitudinal crevasses, and falls in slabs of the whole height of the cliff; a freshly fallen slab, a longitudinal slice of the glacier, was lying on the beach. Some stones which were dredged in 150 fathoms between Kerguelen Island and Heard Island, Mr Buchanan<sup>1</sup> believed to have been recently dropped by floating ice from Heard Island. The stones in question were as yet not penetrated by the water. The other glaciers in sight cut the shore line at right angles, and thus had no terminal moraines, the stones brought down by them being washed away by the sea. These glaciers showed all the familiar phenomena of those of Europe with exact similarity. There are here the same systems of crevasses, more marked in some regions than others, and dying out towards the termination of the glacier, where the surface is smooth and generally rounded. The crevasses were of the usual deep-blue colour, and the ridges separating

<sup>1</sup> *Proc. Roy. Soc. Lond.*, vol. xxiv., 1876, p. 609.