

## CHAPTER IX.

Kerguelen Island—Proceedings of the Expedition—History of previous Exploration—Geology, Meteorology, Zoology and Botany of the Island—The Spheniscidae.

THE island of Kerguelen is throughout mountainous, made up of a series of steep-sided valleys separated by ridges and mountain masses, which rise to very considerable heights. Mount Ross, the highest, is 6120 feet in altitude, Mount Richards 4000 feet, Mount Crozier 3250, Mount Wyville Thomson 3160, Mount Hooker 2600, and Mount Moseley 2400.

The island thus, when viewed from the sea at a distance, presents a remarkable jagged outline of sharp peaks, which is most striking when observed from the south. The valleys run down everywhere to the sea, broadening out as they approach it. The whole coast is broken up by deep sounds or fjords, which resemble closely in form the fjords of Norway and other parts of the world. They are long channel-like excavations of the coast line, occupied by arms of the sea, often shallower at the mouths than nearer to the upper extremities, and bounded on either hand by perpendicular cliffs.

Christmas Harbour, almost on the extreme north of the island, is a small example of one of the Kerguelen fjords; it is a deep inlet with dark frowning cliffs on either hand at its entrance. The land on either side runs out into long narrow promontories, separating the harbour from another similar fjord on the south and from a bay on the north. The promontories thus formed are high and bounded throughout almost their entire extent by sheer-precipices on either hand. On the northern side only of Christmas Harbour, somewhat above its mouth, does the land rise in a steep broken slope, which can be ascended directly from the sea. (See Frontispiece of Christmas Harbour.)

At the seaward termination of the southern promontory is the well-known arched rock of Christmas Harbour, a roughly rectangular oblong mass, evidently at some former period directly continuous with the rest of the promontory, but now separated from it, except at its very base, by a chasm, and perforated so as to form an arch. Above the high cliffs on the south side of the harbour towers a huge and imposing mass of black-looking rock with perpendicular faces, named Mount Havergal; this overhangs somewhat towards the harbour from the weathering out of soft strata beneath it, and looks as if it might fall and fill the upper part of the harbour. On the north side rises a flat-topped rocky mass 1215 feet in height, called Table Mountain.

At the head of the harbour is a sandy beach and small stretch of flat land, such as exists at the heads of all the fjords, and beyond this the land rises in a series of steps, separated by short cliffs towards the bases of Table Mountain and Mount Havergal. The