

the command of Captain Sir Leopold M'Clintock, and took depths between the Færoe Islands and Iceland, and thence to Greenland and Labrador. The soundings were taken first by cod-line and an iron sinker of about 1 cwt., the line and sinker being cut off at each operation; and the sounding was then usually repeated with the 'Bull-dog' sounding-machine, with which large samples of the bottom were procured. A diary of this voyage was kept by Dr. Wallich, Naturalist to the Expedition, and was afterwards published by him as part of the extremely important memoir on the North Atlantic sea-bed, to which I have already referred. Some further questions having arisen as to the best line to be taken by an Atlantic telegraph cable, Captain Hoskyn, R.N., was despatched in the 'Porcupine' to examine the curious dip from 550 to 1,750 fathoms, described by Captain Dayman in 1857 as occurring about 170 miles west of Valentia. One important result of this cruise was the discovery of the 'Porcupine' Bank, about 120 miles west from Galway Bay, with a minimum depth of 82 fathoms.

Towards the latter part of the year 1868 H.M.S. 'Gannet,' Commander W. Chimmo, R.N., was ordered by the Admiralty to define during her homeward voyage from the West India Station the northern limits of the Gulf Stream, and to take deep soundings and temperatures. Thirteen soundings were taken with the Brooke's machine over an area of upwards of 10,000 square miles from Sable Island (lat. 43° 20' N., long. 60° W.), at depths varying from 80 to 2,700 fathoms.

For many years past the American Government