

## CHAPTER V.

Bermuda to the Azores—The Ophiuroidea—The Azores—The Azores to Madeira—Madeira to the Cape Verde Islands  
—Saint Vincent and San Iago.

## BERMUDA TO THE AZORES.

THE second visit of the Challenger to Bermuda lasted from the 31st May till the 13th June, and during this time as well as during the visit in April, the Members of the Expedition were hospitably received by the Governor, Sir Henry Lefroy, the naval and military officers stationed on the island, and the inhabitants; every one being interested in the objects of the Expedition, and anxious to render assistance.

The ship left Bermuda for the Azores at 6 A.M. on the 13th June, obtaining the usual observations on the passage across, and maintaining as nearly as practicable the great circle route. On the 1st July at daylight the summit of Pico Island was seen, and at 9 A.M. Fayal. At 4.45 P.M. the ship anchored in Horta Bay.

On this section sixteen soundings, twelve serial temperature soundings, two dredgings, and seven trawlings were obtained (see Sheet 6).

The wind during the passage was from the southward nearly the whole time, with moderately smooth water, and on no occasion did it exceed a force of 7. The weather was on the whole fine, with occasional passing showers; but the atmosphere was very damp and oppressive, the mean daily relative humidity being seldom under 95.

No accident occurred either in taking soundings or temperatures, nor was any dredging rope lost, but the trawl came up fouled twice. On the 16th June, at Station 60, the trawl had evidently not reached the bottom, as it had no mud in the cod or on the leaden weights attached to the trawl irons; and on the 27th, at Station 71, the trawl-net and 25 fathoms of rope were twisted round the beam when it arrived at the surface.

The soundings in this section show that all indications of the existence of the Bermuda peak cease in a northeasterly direction at a distance of 90 miles from its summit; that the Azores stand on a bank which rises gradually, though not uniformly, from the bed of the ocean, at a distance of 500 miles from Fayal; and that between the bases of the Bermuda and Azores elevations the bottom is fairly level, the mean depth being 2700 fathoms (see Diagram 3).

The temperature of the water at the bottom was again remarkably uniform, when the depth exceeded 1800 fathoms, the mean result being  $36^{\circ}\cdot3$  and the extremes  $36^{\circ}\cdot5$  and  $36^{\circ}\cdot2$ , or a range of merely  $0^{\circ}\cdot3$ .

The mean temperature of the surface water was  $74^{\circ}$  at Bermuda, decreasing gradually to  $69^{\circ}$  at the Azores.