

No observations for current could be obtained, except in the ordinary way, viz., by difference between the dead reckoning and observed position of the ship.

On the 20th October, at Station 136, the velocity of the wind was on an average 14 miles per hour.

Between the Tristan plateau and the south of Africa, there is a wide and deep depression, where depths of 2550 and 2650 fathoms were obtained. The deposits at these depths contained 35 and 26 per cent. of carbonate of lime, consisting of pelagic Foraminifera and their broken parts. The mineral particles were rather abundant, making up 50 per cent. of the whole deposit at the greater depth, and consisted of rounded and angular fragments of quartz, orthoclase, hornblende, tourmaline, and augite. These mineral fragments, some of which were fully one millimetre in diameter, indicate that these soundings are within the area which is occasionally affected with Antarctic ice. The two soundings in 2325 and 1250 fathoms contained 47 and 50 per cent. of carbonate of lime; the mineral particles seldom exceeded 0·07 mm. in diameter, and consisted of quartz, glauconite, felspar, augite, and magnetite. About 5 per cent. of these deposits were made up of Radiolarians, Diatoms, and Sponge spicules.

A dredging at 2100 fathoms, near the edge of the Tristan plateau, was unproductive, the bottom appearing to be hard or rocky. A trawling in 2550 fathoms yielded two small Starfish, a bivalve Mollusc, and a few Crustaceans.

The tow-nets did not yield such a variety of forms as in the sections across the tropical portions of the Atlantic.

The Holothuriodea.—Dr. Hjalmar Théel, of Upsala, gives the following summary of his Report on the Holothuriodea collected by the Expedition, the first part of which has been published:—¹

“The Holothurians are very widely distributed in the sea, and representatives of them are found from the shores down to the greatest depths all over the bottom of the ocean. Before the Challenger Expedition set out, our knowledge was limited almost exclusively to such forms as live on, or in the neighbourhood of, the shores; but from the investigations of the Expedition, not only has our knowledge of the shallow water forms been considerably increased, but the obscurity which involved the abyssal fauna has been greatly dispelled. It seems to be a fact that only a comparatively small number of Holothurians nearly related to the true shallow water forms are met with in the deep sea. The majority of Holothurians dredged from the bottom of the ocean present such important peculiarities, and differ so strikingly from the shallow water forms, that it has been necessary to arrange them in a new order, *Elasipoda*, equivalent to the orders *Apoda* and *Pedata*, already known. This summary is intended to show how far our knowledge of the Holothurians has been increased by the Challenger Expedition, which

¹ Report on the Holothuriodea,—the *Elasipoda*, by Hjalmar Théel, Zool. Chall. Exp., part xiii., 1881.