

freshened somewhat. The trade was finally lost on the 30th parallel, and then a westerly breeze was experienced for two days, but after that the wind hung persistently to the northward, so that the coast of Spain was made in the latitude of Vigo on the 20th May, and the ship put in there to replenish the stock of fuel.

On the 3rd May, in lat. $26^{\circ} 21' N.$, long. $33^{\circ} 37' W.$, a sounding was obtained in 2965 fathoms, the bottom being a red clay containing in the surface layers 12 per cent. of carbonate of lime, which consisted of a few shells of the larger pelagic Foraminifera and their broken fragments. The mineral particles did not exceed 0.1 mm. in diameter, and consisted of a few grains of felspar, quartz, hornblende, magnetite, volcanic glass, and manganese peroxide. The principal part of the deposit consisted of flocculent clayey matter with exceedingly minute fragments of minerals, Radiolarians and Diatoms.

On the 6th May, in lat. $32^{\circ} 41' N.$, long. $36^{\circ} 6' W.$, another sounding was obtained in 1675 fathoms, the deposit being a Globigerina ooze containing 91 per cent. of carbonate of lime, which consisted of pelagic Foraminifera, Coccoliths, Rhabdoliths, and a few fragments of Pteropods and Echinoderms. The residue, after the removal of the carbonate of lime by weak acid, resembled in most respects the red clay found at greater depths in the same region of the Atlantic.

The Challenger left Vigo on the 21st May, experiencing N.W. winds across the Bay of Biscay, and reached Spithead at 9 P.M. on the 24th May. On the 25th the ship proceeded to Sheerness, was carefully swung to ascertain the errors of the compass and dipping needle, and the difference between her magnetic character after the voyage and that recorded previous to starting three and a half years before. Finally the crew was paid off at Chatham on the 6th June 1876.

Sir C. Wyville Thomson says:—"Writing now after the Commission has come to a close, I think I am justified in saying that the objects of the Expedition have been fully and faithfully carried out. The instructions of the Lords Commissioners of the Admiralty, founded upon the recommendations of a committee of the Royal Society, were followed so far as circumstances would permit. We always kept in view that to explore the conditions of the deep sea was the primary object of our mission, and throughout the voyage we took every possible opportunity of making a deep-sea observation. We dredged from time to time in shallow water in the most remote regions, and we have in this way acquired many undescribed animal forms; and collections of land animals and plants were likewise made on every available occasion; but I rather discouraged such work, which in our case could only be done imperfectly, if it seemed likely to divert our attention from our special object.

"Between our departure from Sheerness on the 7th December 1872, and our arrival at Spithead on the 24th May 1876, we traversed a distance of 68,890 nautical miles, and at intervals as nearly uniform as possible, we established 362 observing Stations."

The accompanying synoptical table of the voyage may prove useful for reference.