

GREY OOZE and GREY MUD usually indicate an intermediate condition between Globigerina ooze and Red Clay ; or in some cases a fine-grained grey deposit, formed in deep water, chiefly of land débris. [The microzoic remains indicate a fauna in all respects similar to that of a Globigerina ooze].

In tropical and sub-tropical regions, in depths less than 2000 fathoms, the shells of Pteropods and other pelagic Mollusca are generally present in considerable numbers in the oceanic deposits. In depths less than 1500 fathoms, far from land, these molluscan remains appear to furnish fully one-half of the carbonate of lime, and they impart a distinct character to the sea-bottom. To calcareous deposits of this sort the name PTEROPOD OOZE has been applied. The Challenger met with typical examples of Pteropod ooze at depths of 1240 fathoms and 1415 fathoms in the South Atlantic, on the ridge between Tristan d'Acunha and Ascension Island.

The Stations enumerated refer to areas explored on several distinct expeditions, which are taken in the following order:—I. Challenger Expedition; II. "Porcupine" Expedition; III. "Knight-Errant" Expedition; IV. Arctic Seas, visited on the last British North-Polar Expedition, and the Austro-Hungarian North-Polar Expedition.

I. CHALLENGER EXPEDITION.

It may be useful at the outset to describe in a few sentences the general track of the Challenger cruise.

Leaving Portsmouth, the vessel proceeded down the coast of Spain and Portugal to Gibraltar, sailed thence for Madeira and the Canaries, and across the Atlantic to Sombero and Culebra, the outermost of the West Indian Islands; from this point northwards to Bermuda, and thence to Halifax, Nova Scotia.

Returning to Bermuda, the Atlantic was again crossed on a more northerly line than previously, by way of the Azores, as far as Madeira. From Madeira the vessel was turned southwards to the Cape de Verde Islands, and down the African coast to within about four degrees of the Equator; then in a more westerly direction, crossing the Line at about long. 31° W., to Pernambuco and Bahia, touching at St. Paul's Rocks and Fernando Noronha. From Bahia the South Atlantic was traversed to the Cape of Good Hope, stopping at the Island of Tristan d'Acunha on the way.

From the Cape to Melbourne the course taken was first to Kerguelen Island, and then still further south, reaching the Antarctic Circle at about long. 80° E.

After leaving Melbourne the Challenger proceeded to Sydney, thence to New Zealand, and by Cook Strait and the Kermadec Islands to Fiji; from Fiji through Torres Strait, and west of the Philippine Islands to Hong Kong. After a short stay at