

*Off Madeira.*—The deposits about the Dezertas and Madeira (see Chart 4) were Volcanic Muds, with from 30 to 40 per cent. of carbonate of lime, consisting chiefly of pelagic Foraminifera, except in one instance in 670 fathoms, where there was a Calcareous Sand with 96 per cent. of carbonate of lime made up of fragments of shells, Corals, Polyzoa, &c. The mineral particles in the deposits were angular fragments of felspar, magnetite, lapilli, basaltic scoriæ, and volcanic glass.

*Madeira to Tenerife.*—One sounding in 1975 fathoms was taken between Madeira and Tenerife (see Charts 2 and 5); only a small quantity of material was obtained sufficient to indicate that the deposit was a Globigerina Ooze.

*Around the Canary Islands.*—A number of soundings were taken around and among the Canary Islands (see Chart 5). Like those off Madeira, the deposits were chiefly Volcanic Muds, the percentage of carbonate of lime varying from 10 to 45. The mineral particles were angular fragments of vesicular basalt, augite, sanidine, magnetite, olivine, and volcanic glass.

*Tenerife to Sombrero.*—The character of the deposits in the section from Tenerife to Sombrero (see Chart 6) presented marked differences. All the deposits in depths less than 2600 fathoms contained over 50 per cent. of carbonate of lime, and for these the names Globigerina and Pteropod Oozes have been adopted. Pteropod Ooze is confined to two deposits from depths of 1525 and 1420 fathoms, the former on the eastern, the latter on the western side of the section, in which very many Pteropod and Heteropod shells occurred; in 1420 fathoms the proportion of carbonate of lime was the greatest, being 80·69 per cent. In 1525 fathoms fragments of a large dead Alcyonarian Coral coated with manganese peroxide, and attached to large manganese nodules, were obtained in the dredge. Only a few fragments of Pteropods were found in the Globigerina Ooze ranging between 1890 and 2025 fathoms, the carbonate of lime in the Globigerina Ooze being made up chiefly of the dead shells of pelagic Foraminifera. The Pteropod Ooze, however, contained all the pelagic Foraminifera, together with Pteropod and Heteropod shells. In depths greater than 2600 fathoms, the quantity of carbonate of lime decreased as the depth increased, and below 3000 fathoms there were only a few traces in the deposit.

Siliceous organisms, such as spicules of Sponges, Radiolaria, and Diatoms, were not abundant; generally they did not appear to make up more than 1 or 2 per cent. of the whole deposit, with the exception of the two deposits at 1525 and 1420 fathoms, above referred to, where the proportion probably rises to from 6 to 20 per cent., owing to the large number of Sponge spicules.

The mineral particles, which were mostly of volcanic origin, seldom exceeded 0·10 mm. in diameter, and consisted of felspars, hornblende, augite, magnetite, glassy fragments, and palagonite. In the deposits from the eastern portion of the section there were numerous small rounded particles of quartz covered with limonite. These would appear to be mostly