

same locality as on the 18th of February; the dredge again brought up more of the black Coral fragments coated with manganese. In 2300 and 2400 fathoms farther south a Globigerina Ooze with 64 and 58 per cent. of carbonate of lime was obtained; there were no Pteropod or Heteropod shells in these deposits. The mineral particles were chiefly volcanic, with a mean diameter of 0.07 mm., but here also small rounded grains of quartz were found, which, with similar particles observed in the sounding from 2675 fathoms to the north-west of Madeira, appear to be wind-borne fragments, carried from Africa by the Harmattan winds. Soundings in 2075 and 1795 fathoms gave a Globigerina Ooze with 60 and 57 per cent. of carbonate of lime. About 1 per cent. of these deposits was made up of Radiolaria and fragments of other siliceous organisms, the remainder being composed of volcanic minerals, a few grains of quartz, and clayey matter.

The mineral particles throughout this section were of volcanic origin, decreasing in size and quantity after leaving Madeira, and increasing in both respects as St. Vincent was approached.

*Off Cape Verde Islands.*—The deposits in the vicinity of the Cape Verde Islands (see Chart 11) from 200 down to a depth of 1150 fathoms were Volcanic Muds, with a varying proportion of carbonate of lime, from 8 to 56 per cent., in which Pteropod and Heteropod shells were abundant. In the harbour of St. Vincent the deposit in depths of 7 to 50 fathoms was a Calcareous Sand, with 87 to 94 per cent. of carbonate of lime, chiefly made up of Foraminifera shells and calcareous Algæ. In some places the shells of *Amphistegina lessonii* made up fully two-thirds of the whole deposit; *Polystomella*, *Discorbina*, and *Orbiculina* were also abundant. The mineral particles in these deposits decreased in size and abundance with distance from the land.

*Cape Verdes to St. Paul's Rocks.*—The line of this section runs south-east from St. Vincent towards Cape Palmas on the Guinea coast; thereafter it bends round and runs nearly due west to St. Paul's Rocks (see Chart 12).

The deposits at the two depths, 2575 and 2500 fathoms, near the African coast, contained respectively 30 and 6 per cent. of carbonate of lime, the small percentage in the latter being due to the abundance of continental débris, but at all the other stations the deposit was a Globigerina Ooze with over 50 per cent.; at 1850 fathoms in Mid-Atlantic the amount reached 90 per cent. In all the deposits the carbonate of lime consisted chiefly of pelagic Foraminifera and Coccoliths, with a few fragments of Echinoderms and other organisms; Rhabdoliths also were present in considerable quantity except at Stations 101 and 102. An analysis of the mud from the dredge at Station 102 (2450 fathoms) gave 83 per cent. of carbonate of lime, while the specimen from the sounding tube gave only 66.27 per cent. A careful examination of a large quantity of this deposit showed that nearly the whole of the carbonate of lime present came from the dead shells of surface organisms. It is estimated that of the 83 per cent. of carbonate of lime, 75 per