

cent. comes from pelagic Foraminifera, 6 per cent. from Coccoliths, and 2 per cent. from other calcareous Foraminifera, fragments of Echinids, and Ostracodes. *Pulvinulina menardii* and *Pulvinulina tumida* were the predominant forms, but *Globigerina sacculifera*, *Globigerina dubia*, and *Globigerina conglobata*, and *Sphæroidina dehiscens* were also very abundant. It is worthy of notice that the majority of the shells were very large, and the more delicate surface forms, as *Hastigerina* and *Candeina*, appeared to be quite absent. The smaller fragments were almost wholly made up of broken pieces of larger shells. The small specimens and primordial chambers, so common in shallower deep-sea soundings, were nearly absent. In the same way Rhabdoliths were not complete, if present at all, and the Coccoliths were very minute. The typical *Globigerina bulloides* did not appear to be present. The Foraminifera here were, as has been stated, thick-shelled and of large size, and it was precisely in this region that the largest specimens of pelagic Foraminifera were obtained on the surface by means of the tow-net. Many of the shells were broken and appeared to be in a crumbling condition.

The mineral particles in the soundings along the African coast sometimes reached 0·7 mm. in diameter, but in Mid-Atlantic they seldom exceeded 0·06 mm. Quartz and glauconite were present only in the deposits near the African continent. In the other deposits the mineral particles consisted of fragments of felspars (sanidine), magnetite, hornblende, and volcanic rocks. Radiolaria, Diatoms, Sponge spicules, and arenaceous Foraminifera never made up more than 2 per cent.

The deposits in this section were of a grey or reddish colour, except in a few of the soundings near the African coast, where they were of a dark slate colour, owing, apparently, to the presence of fine mud or river detritus.

*Off St. Paul's Rocks.*—The soundings close to St. Paul's Rocks (see Chart 13) showed either a hard and rocky bottom, or a *Globigerina* Ooze containing numerous fragments of the rocks of the island, and olivine, enstatite, serpentine, magnetic grains, and actinolite. The deposits from 1900 and 2275 fathoms, at a considerable distance on either side of St. Paul's Rocks, were *Globigerina* Oozes with 84 and 72 per cent. of carbonate of lime respectively, chiefly made up of remains of pelagic Foraminifera, while Pteropods, though present in considerable numbers in the *Globigerina* Oozes in lesser depths in the immediate vicinity of the islands, appeared to be entirely absent. In those depths also the mineral particles, which make up from 15 to 30 per cent. of the whole deposit near the islands, were few and small, not exceeding 1 per cent. and 0·07 mm. in diameter. The mineral particles from 1900 fathoms were similar in character to those found nearer the islands, and had evidently mostly come from St. Paul's Rocks.

*St. Paul's Rocks to Fernando Noronha.*—Between St. Paul's Rocks and Fernando Noronha (see Chart 12) there is a deep depression, the greatest depth recorded being 2475 fathoms. At this depth there was 36 per cent. of carbonate of lime in the deposit, while at the depths of 2275 and 2200 fathoms there were respectively 72 and 81 per