

of a greyish colour, perforated by worm tracks, and coated with manganese; these concretions contained a few Cocoliths and crystals of phillipsite.

Station 287, 2400 fathoms.—The deposit in the sounding tube was of a dark chocolate colour, and contained a considerable amount of manganese, along with crystals of phillipsite, palagonitic fragments, and small sharks' teeth.

Station 288, 2600 fathoms.—The sounding tube had sunk 18 inches into the deposit; it was of a red colour throughout, and contained an immense number of manganese particles, zeolitic crystals, and palagonitic fragments.

Station 289, 2550 fathoms.—The trawl brought up over a bushel<sup>1</sup> of manganese nodules, to some of which clay adhered, but at this station no specimen of the deposit was obtained, either in the bag of the trawl, in the tow-net attached to the trawl, nor in the sounding tube. This, together with the fact that the sounding tube and the iron-work of the trawl were scored with manganese, indicates that the nodules must have been very abundant. They were nearly all of large size, some being 6 or 7 cm. in diameter. Their surfaces were exceedingly irregular, and they easily broke into segments following the radii and the concentric layers. The nuclei were generally deeply imbedded, there being very few sharks' teeth or earbones with a slight coating of manganese as at Stations 285 and 286, indeed, only two sharks' teeth were noticed as nuclei of the nodules; there were, however, seven earbones forming nuclei. Some of the nuclei were formed of basic volcanic glass and palagonite. The internal concentric layers were, in some of the nodules, of a lighter colour than the external ones, as shown in Pl. III. fig. 7, representing one of the nodules from this station. Another nodule is represented in Pl. IX. fig. 3; the upper portion of the figure shows the manner in which the segments break away from the nodule. In the hollows between the rather large mammillæ a ramifying Rhizopod tube is shown, but on the whole the surfaces of the nodules from this station were remarkably free from organisms.

Station 290, 2250 fathoms.—The outside of the sounding tube was covered with black streaks of manganese; the leads and ironwork of the trawl were also covered with similar streaks, as if they had been rubbing on nodules at the bottom. In the bag of the trawl, however, there was only a single small nodule about the size of a marble, to which an egg-capsule was attached.

Station 292, 1600 fathoms.—The deposit at this station was a Globigerina Ooze of a dark brown colour from the presence of manganese peroxide. Some of the Foraminifera shells were covered with black specks of manganese, while numerous grains of manganese and some palagonitic fragments were also observed.

Station 293, 2025 fathoms.—The deposit was dark brown in colour from the presence of manganese grains, and in the bag of the trawl were about a dozen manganese nodules, to which several organisms were attached. Some of these nodules had nuclei of basic

<sup>1</sup> About 38 litres.