

siliceous organisms made up 5 to 10 per cent. Two or three rounded nodules of pumice, 1 to 3 centimetres in diameter, were obtained from 1050 fathoms.

*Meangis Island to Admiralty Islands.*—In this section (see Chart 31 and Diagram 15) the deposits presented some points of considerable interest. At 500 fathoms, near Meangis Island, the deposit was a Blue Mud with 34 per cent. of carbonate of lime, made up principally of pelagic Foraminifera, and over 20 per cent. of mineral particles, including felspars, quartz, augite, hornblende, magnetite, and pumice. In the trawl were many fragments of trachytic tufa. The deposit from 2550 fathoms was a Red Clay containing no carbonate of lime, and comparatively few mineral particles, which were volcanic, the great mass of the material being made up of fine amorphous and clayey matter. The trawl brought up from this depth several fragments of pumice about the size of a hen's egg; these all contain porphyritic minerals, and are in some cases slightly impregnated with manganese. At 1675 and 2000 fathoms were found Globigerina Oozes with 49 and 35 per cent. of carbonate of lime respectively. Mineral particles were few and small, and consisted of felspars, pumice, augite, and magnetite. Fewer Coccoliths and Rhabdoliths were present in the greater depth. The trawl brought up from 2000 fathoms a considerable number of pumice stones varying in size from that of a marble to that of a hen's egg. The surfaces of most of these were impregnated with manganese.

At 2000 fathoms nearer the coast of New Guinea the deposit was a Blue Mud containing 13 per cent. of carbonate of lime, chiefly derived from remains of surface Foraminifera. The mineral particles were exceedingly few and small, and consisted of fragments of felspar, augite, volcanic glass, and quartz. Two or three small pellets of pumice and several worm tubes were obtained in the sounding tube. The deposit in 1070 fathoms, between New Guinea and the Admiralty Islands, was a Blue Mud with a reddish surface layer, and contained 17 per cent. of carbonate of lime. No difference could be detected in composition between the two layers. Mineral particles made up 10 per cent., but the mass of the deposit was fine amorphous clayey material. The trawl brought up a large quantity of mud, large pieces of pumice, fragments of wood and fruits, Pteropod and *Ianthina* shells, and nearly two hundred specimens of deep-sea animals; the net was covered with a branching Rhizopod. The pieces of pumice varied in size from that of a pea to that of a hen's egg, and were slightly impregnated with manganese, and overgrown by *Serpula* and *Hyperammia vagans*. Siliceous organisms made up 4 per cent.

*Humboldt Bay, New Guinea.*—The deposit in 37 fathoms was a Blue Mud containing 29 per cent. of carbonate of lime, derived from pelagic and other Molluscs, bottom-living and pelagic Foraminifera, Ostracodes, fragments of Echinoderms, and calcareous Algae. The mineral particles with a mean diameter over 0.05 mm. are estimated to make up 20 per cent., while the fine washings largely consist of smaller mineral particles. A few green casts of Foraminifera remained after treatment with dilute acid.

*Off Admiralty Islands.*—From 16 to 25 fathoms in Nares Harbour (see Chart 34)