IV. DEPTHS AND DEPOSITS OF THE OCEAN 163

in the surface waters, and where there is abundant secretion of



FIG. 136.—PTEROPOD OOZE. "Valdivia" Station 208, Indian Ocean, lat. 6° 54' N., long. 93° 28'.8 E., 162 fathoms (magnified). silica by the plankton organisms. Over wide areas invery deep water, however, neither calcareous nor siliceous remains predominate; the basis of the deposit then becomes Red clay, consisting of clayey matter derived from the decomposition of volcanic materials; quartz particles, so abundant in terrigenous deposits, are rare or absent.

The pelagic deposits are subdivided into the following types, viz. :---

Pteropod Ooze.- In Pteropod ooze.

usually far from continental land, on oceanic ridges and cones,

especially within coral reef regions where warm water with small annual range occupies surface, almost the every surface organism which secretes a hard shell or skeleton is represented in the deposit, the dead shells of pteropods and heteropods being characteristic, and the deposit is hence called Pteropod ooze (see Fig. 136). About 35 species of pteropods and 32 species of heteropods, as well as pelagic gasteropods (see pp. 172-



FIG. 137.—GLOBIGERINA OOZE. "Valdivia" Station 45. Atlantic, lat. 2° 56'.4 N., long. 11° 40'.5 W., 2728 fathoms (magnified).

173), are known to live in the surface waters of the tropics, and