

The shells of the more delicate species, and young shells of pelagic Foraminifera, are also more abundant in these deposits than in a Globigerina ooze. It must be remembered that the name "Pteropod ooze" is not intended to indicate that the deposit is chiefly composed of the shells of these Molluscs, but, as their presence in any great abundance in a deposit is characteristic and has an important bearing on geographical and bathymetrical distribution, it is desirable to emphasise the fact. It may here be pointed out that there is a very considerable difference between a Globigerina ooze or a Pteropod ooze situated near continental shores, and deposits bearing the same names situated towards the centre of oceanic areas, both with respect to the general character of the mineral particles and the variety of the remains of organisms.

*Diatom Ooze.*—This ooze is of a pale straw colour, and is composed principally of the frustules of Diatoms. When dry it is a dirty white siliceous flour, soft to the touch, taking the impression of the fingers, and contains gritty particles which can be recognised by the touch. It contains on an average about 25 per cent. of carbonate of lime, in the form of small *Globigerina* shells, fragments of Echinoderms, and other organisms. The residue is pale white and slightly plastic; minerals and fragments of rocks are in some cases abundant; these are volcanic, or, more frequently, fragments and minerals coming from continental rocks and transported by glaciers. The fine washings consist essentially of particles of Diatoms along with argillaceous and other amorphous matter. It is estimated that the frustules of Diatoms and skeletons of siliceous organisms make up more than 50 per cent. of this deposit.

*Radiolarian Ooze.*—It was stated, when describing a Globigerina ooze, that Radiolarians were seldom, if ever, quite absent from marine deposits. In some regions they make up a considerable portion of a Globigerina ooze, and are also found in Diatom ooze and in the terrigenous deposits of the deeper water surrounding the land. In some regions of the Pacific, the skeletons of these organisms make up the principal part of the deposits, and these have been named "Radiolarian ooze." The colour is reddish or deep brown, due to the presence of the oxides of iron and manganese. The mineral particles consist of fragments of pumice, lapilli, and volcanic minerals, rarely exceeding 0.07 mm. in diameter. There is not a trace of carbonate of lime in the form of shells in some samples of Radiolarian ooze, but other specimens contain 20 per cent. derived from the shells of pelagic Foraminifera. The clayey matter and mineral particles in this ooze are the same as those found in the red clays.

*Red Clay.*—Of all the deep-sea deposits this is the one which is distributed over the largest areas in the modern oceans. It might be said that it exists everywhere in the abysmal regions of the ocean basins, for the residue in the organic deposits (*Globigerina*, Pteropod, and Radiolarian oozes) is neither more nor less than red clay. However, this deposit only appears in its characteristic form in those areas where the terrigenous minerals and calcareous and siliceous organisms disappear to a greater or less extent from