

abounding in the deposits from shallower waters near shore. The number of species of pelagic shells found in the deposits decreases in proportion as the colder waters of the polar regions are approached, till in the Globigerina Ooze of the Norwegian Sea only two species of pelagic Foraminifera are present.

Everywhere a general, if fluctuating, decrease in the quantity of carbonate of lime in the deposits is indicated with increasing depth, till in the greatest depths of the ocean hardly a trace of calcareous shells can be detected in the Red Clays or Radiolarian Oozes. This absence of carbonate of lime from the deeper deposits evidently does not in any way depend on the conditions at the surface of the ocean, for the tow-nets showed that the calcareous organisms were as abundant over the areas where none of these dead shells were found in the deposits as over those areas where they made up the principal part of the deposit in shallower depths. However, in latitudes where these shells are less numerous at the surface, the dead shells are removed from the deposits in lesser depths than in latitudes where they are more abundant. In like manner, on approaching the coasts, excepting always those shores which are fringed by coral reefs, a similar decrease in the percentage of carbonate of lime is observed, in this case, however, due to the preponderance of land debris in terrigenous deposits.

Glauconitic grains, glauconitic casts of the calcareous organisms, glauconitic and phosphatic nodules, have been found in a large number of samples of deposits from the deeper water along a great many continental shores, associated with mineral particles derived from the disintegration of continental rocks. As in the case of the Challenger explorations, these materials have been found only in exceptional circumstances towards the central regions of the great ocean basins, as for instance where the sea is occasionally affected by floating ice or by winds blowing directly from desert lands.

In the deepest water of the Indian Ocean, and in portions of the Pacific Ocean, Radiolarian Ooze, Red Clay, zeolitic and manganiferous deposits have been discovered in quite similar positions and conditions to those that were investigated by the Challenger naturalists in the Pacific, and the same may be said of Globigerina Ooze, Diatom Ooze, Pteropod Ooze, and the several varieties of terrigenous deposits in other regions.