

the deposits likewise changed. A sounding in 2440 fathoms gave 10 per cent. of carbonate of lime. All the other soundings were on the plateau surrounding Tristan da Cunha, and extending north to the Island of Ascension, and ranged from 2200 to 1240 fathoms. The percentage of carbonate of lime ranged from 66 to 95 per cent., the proportion being greater the less the depth. In depths less than 1500 fathoms the deposits appeared to be very largely, if not mainly, made up of the dead shells of pelagic Molluscs, such as Pteropods, Heteropods, and pelagic Gasteropods, and these deposits have in consequence been called "Pteropod ooze." In depths of 2000 fathoms these shells were almost completely removed from the deposits, which then consisted chiefly of pelagic Foraminifera.

It is not improbable that very much shallower depths occur on this plateau, cones probably rising nearly to the surface, similar to those recently discovered by the telegraph ship "Dacia" off the west coast of Africa. It would have been very interesting had the Expedition had time to take a series of soundings close to the places where the shallowest depths were obtained, as much interest is attached to the deposits forming in shallower water far removed from coasts.

The various trawlings and dredgings were on the whole productive and successful. Those in 1900 and 2650 fathoms off the River Plate yielded a greater number of individuals and species than those in the shallower water in the centre of the Atlantic.

A detailed description is here given of the deposit from 1990 fathoms on this plateau:—

Station 338, 21st March 1876; lat. 21° 15' S., long. 14° 2' W.; 1990 fathoms; surface temperature 76°·5, bottom temperature 36°·3.

GLOBIGERINA OOZE, with a reddish tinge when wet, and a slight rose colour when dry, granular, pulverulent.

CARBONATE OF CALCIUM, 90·38 per cent., consists of Coccoliths and Rhabdoliths, pelagic and other Foraminifera, Ostracodes, fragments of Echinoderms and Pteropods.

RESIDUE, 9·62 per cent., colour reddish brown, consists of—

*Mineral particles* [2·00 per cent.], *m. di.* 0·05 mm., fragments of felspar, hornblende, magnetic particles, and a few small grains of manganese.

*Siliceous Organisms* [2·00 per cent.], Radiolarians, a few Diatoms, and one or two imperfect casts of Foraminifera.

*Fine Washings* [5·62 per cent.], argillaceous matter with minute mineral particles and small fragments of Diatoms and Radiolarians.

*Remarks.*—A dredge was used. The tow-net at the weights did not seem to have touched the bottom, as there was no ooze or undoubted bottom-living organisms in it. The tow-nets attached to the dredge itself each contained a little of the ooze, or rather a large number of pelagic Foraminifera, all dead. These shells were all quite empty and transparent, containing neither sarcode nor clayey matter; *Hastigerina* and *Orbulina*