CHAPTER III.

TENERIFFE TO SOMBRERO.

The First Deep-sea Section.—*Leiosoma limicolum.*—A Grove of Deep-sea Coral.—*Poliopogon amadou.*—Red Clay.—Phosphorescence.—Surface Fauna.—Blind Crustaceans.—Fishes' Nests.—The Paucity of the Higher Forms of Life.—Deep-sea Annelids.—The Structure and Mode of Formation of Globigerina Ooze.—The Habits of the Living *Globigerina.*—*Orbulina universa.*—*Pulvinulina.*—"Coccoliths" and "Rhabdoliths."—The Origin and Extension of the "Red Clay."—Radiolarian Ooze.—The Use of the Tow-net.—The Vertical Distribution of Temperature throughout the Section.—Specific Gravities.

APPENDIX A.—Table of Temperatures observed between Teneriffe and Sombrero Island.

APPENDIX B.—Table of Specific Gravities observed between Teneriffe and Sombrero Island.

ALTHOUGH important observations had been taken and many interesting additions had been made to our knowledge of the fauna of the deep sea during the earlier part of the voyage, the regular work of the expedition can only be said to have commenced with the section across the Atlantic from Teneriffe to Sombrero. It had taken all our time, up to our departure from the Canary Islands, to put the machinery into working order, to settle the direction and scope of the parts to be assigned to the various members of the staff, and to devise among us a satisfactory routine of work. At Santa Cruz the old journals were closed, and the numbering of the stations and the other entries were commenced afresh with some alterations, the result of additional experience. As this first ocean section may be taken as a fair sample of the occupation of our working days for now upward of two years, I will give a detailed account of our proceedings, even at the risk of making this chapter somewhat technical.