At many stations representative of different regions and depths of the ocean, very complete lists of Diatoms, Radiolaria, Foraminifera, and Pteropods, are furnished both from the collections taken in the surface-nets, and from the deposits at the bottom. Had it not been for the space they occupy, similar lists might have been inserted from many more The lists of Diatoms have, in the great majority of cases, been supplied to me by Mr. Thomas Comber from an examination of the surface gatherings and the samples of deep-sea deposits. The lists of Foraminifera have been prepared from an examination of my own preparations, and from collections selected from the desposits by Mr. Frederick Pearcey, assistant to the naturalists on board the Challenger, and for several years an assistant in the Challenger Office, but I have also made use of a manuscript note-book which The lists of Radiolaria from the belonged to the late Mr. H. B. Brady. surface waters and from the deposits have been supplied to me by Professor Haeckel and Dr. Dreyer from a study of the Challenger collections.

The station summaries are preceded by a historical introduction in which I have endeavoured to trace, and with the aid of a series of maps to illustrate, the gradual development of our knowledge concerning the ocean from the dawn of history down to the time of the Challenger Expedition. For assistance and advice in this portion of the work I desire to acknowledge my indebtedness to the late Professor W. Robertson Smith, to Dr. J. Sutherland Black, Mr. George Murray, and especially to my colleague Professor A. Renard, in collaboration with whom notes concerning the progress of knowledge bearing on Oceanography were collected seven or eight years ago for our joint work on Deep-Sea Deposits; many of these notes have been made use of in writing the Historical Introduction to these volumes.

The station summaries are followed by lists setting forth the geographical and bathymetrical distribution of the animals captured in the various trawlings and dredgings. Many theoretical considerations are suggested by these lists and the observations set forth in the body of the work, but for various reasons I have in this place merely indicated in the concluding paragraphs the nature of some of these interesting speculations.

This summary account of the observations and scientific results of the Challenger Expedition is brought to a close by a complete index of the genera, sub-genera, species, and varieties of marine organisms captured at