

successful exploration of the deep sea had not been invented. Thanks to the rapid development of many branches of science, and the introduction of numerous instrumental improvements, thoroughly trustworthy results can now be obtained in the most profound depths.

In the Narrative of the Cruise of the Challenger the proceedings of the ship at sea, the methods employed in deep-sea investigations, the general character of the observations, the excursions of the naturalists on land, the surveying operations of the naval officers, and the other events of the voyage have been duly chronicled. In the Physical and Chemical Reports the continuous magnetic and meteorologic observations and the researches into the temperature, the specific gravity, and the chemical composition of sea-water, are published with abundant illustration. In the extensive series of biological memoirs the new and rare organisms discovered by the Expedition are described and figured in great detail. A special volume has been devoted to a discussion of the composition and distribution of Deep-Sea Deposits. A very large part of the Challenger Report thus consists of Special Memoirs, containing a great accumulation of facts, and many important generalisations in nearly all the branches of Oceanography.

The area covered by the ocean is so vast, and the positions at which complete sets of observations have been made are relatively so few, that it is frequently hazardous, from the information in our possession, to frame general statements with reference to the conditions prevailing over wide areas of the deep sea. Even when such statements are prepared by those who have a competent knowledge of all the known observations on the subject, they do not necessarily supply the information desired by students engaged in the study of Oceanological problems. Particular observations are usually of more value to the scientific man engaged in a new research than any general statements.

The Naturalist frequently wishes to know what observations exist with reference to the physical surroundings and biological associations of some animal in which he is interested. The general student or the chemist and geologist, desirous, it may be, of investigating the composition of sea-water or of deep-sea deposits, often asks for similar information from a particular locality and depth, and he finds it difficult to gather any very