

a rule much larger than in the case of any other collection of deep-sea deposits, and they covered such a wide area in all the principal ocean basins that they must be regarded as fairly representative of all the deposits now forming on the floor of the ocean. The detailed study of these large samples has thrown so much light on the subject that it has been possible to interpret with great certainty the nature of the deposit in those regions where only a relatively small quantity of the mud, ooze, or clay has been obtained by other expeditions. Indeed, the number of samples of deposits that have been sent to us from British and foreign ships and expeditions, which we have examined in the manner set forth in the following tables, greatly exceed those collected by the Challenger; in all, these have amounted to many thousands, and will be made use of in verifying all general conclusions.¹ In this way we have had an opportunity of examining personally deposits from nearly every region of the great ocean basins, and from nearly all the enclosed or partially enclosed seas. An investigation, extending over so wide a field and occupying so long a time, necessarily involved a great amount of labour and patience, but led in the long run to a great familiarity with and knowledge of deep-sea deposits as a whole, and their distribution in existing seas.

e. LEADING CHARACTERISTICS OF DEPOSITS FROM DIFFERENT LOCALITIES.

After a careful examination of a deep-sea deposit, following the method explained in the foregoing pages, it is even possible to state with a very considerable degree of certainty the region of the ocean in which it was formed, as well as to state approximately the depth and distance from land at which it was procured by the sounding tube, dredge, or trawl. Indeed, we frequently requested our assistants to select for us a sample

¹ In addition to the Challenger collections, the following among other collections have passed through our hands:—The very large and important collection made by the U.S.S. "Tuscarora" throughout the basin of the great Pacific Ocean in 1873-78; a collection by the U.S.S. "Gettysburg" in the Atlantic in 1876; a large and important collection made by the U.S.S. "Blake" in the Caribbean Sea, Gulf of Mexico, and along the eastern coasts of America, 1877-82; a very extensive collection from the steamships "Silvertown," "International," "Dacia," and "Buccaneer," belonging to the India-rubber, Gutta-percha, and Telegraph Works' Company, Silvertown, 1884-86, along the western coasts of Africa, around the Cape Verde and Canary Islands, and about the West Indies; several large collections from the ships of the Telegraph Construction and Maintenance Company in 1879-85, along the eastern coasts of Africa, in the Indian Ocean, and in the Pacific Eastern Seas, and in the South and North Atlantic; many valuable and important collections received through the Hydrographer of the Admiralty, from Her Majesty's surveying ships "Sylvia," Red Sea, 1886; "Seine," Indian Ocean, 1885; "Egeria," Indian Ocean, 1887, and South Pacific, 1887-89; "Myrmidon," Coral Sea, 1887; "Rambler," Indian and Pacific Oceans, 1888-90; "Valorous," North Atlantic, 1870-75; "Investigator," Bay of Bengal and Indian Ocean, 1886-89; "Alert," South Pacific, 1880; "Flying Fish," Indian Ocean, 1887; "Stork," Indian Ocean, 1888; "Triton," Faroe Channel and North Sea, 1882-84; "Bulldog," North Atlantic, 1860; "Porcupine," North Atlantic, 1869-70; "Lightning," North Atlantic, 1868; "Nassau," Indian Ocean, 1876; "Argus," North Atlantic, 1879; "Swallow" and "Dove," Yellow Sea, 1865-66; "Dart," Pacific Ocean, 1857. We have also received specimens, or have been permitted to examine them at different times, from the Norwegian North Atlantic Expedition, Nares' North Polar Expedition, Ross's Antarctic Expedition, "Talisman" Expedition, "Gazelle" Expedition, "Hassler" Expedition, and the U.S. Fish Commission, as well as from other sources.