

obtained to the east of Madagascar, and next in those from the neighbourhood of the Cocos Islands. I take this opportunity of expressing my thanks to Captain Rabbe for the liberality with which he placed all this valuable material at my disposal.

D. On my voyage from Aden to Bombay, and thence to Ceylon (1881), and especially on my return journey from Ceylon, between the Maldivé Islands and Socotra (1882), I carried on a number of experiments with a surface net, which yielded a rich fauna of pelagic animals, and among them many new species of Radiolaria, for observation. On several nights when the smooth surface of the Indian Ocean, unrippled by any wind, shone with the most lovely phosphorescent light, I drew up water from the surface with a bucket, and obtained a rich booty. A number of other new species of Radiolaria from very various parts of the Indian Ocean I obtained from the alimentary canal of pelagic animals, such as Medusæ, Salpæ, Crustacea, &c. Although the total number of Radiolaria known to me from the Indian Ocean is much less than from the Atlantic and Pacific, there are several new genera and numerous species among them, which show that a careful study of this fauna will be of wide interest.

231. *Fauna of the Atlantic Ocean.*—The Atlantic Ocean in all parts, of which the pelagic fauna has been examined, has shown the same constant presence of Radiolaria, and in certain parts of its abyssal deposits a larger or smaller quantity of different types belonging to this class; on the whole, however, its Radiolarian fauna is inferior to that of the Pacific, and probably also to that of the Indian Ocean, both in quantity and quality. Pure Radiolarian ooze, such as is so extensively found on the floor of the Pacific, and in certain places in that of the Indian Ocean, has not yet been found in the Atlantic (see § 237). The red clay, too, of the deep Atlantic does not seem to be so rich in Radiolaria as that of the Pacific; nevertheless, the number of species peculiar to the Atlantic is very large, and at certain points the abundance of species as well as of individuals seems to be scarcely less than in the Pacific. This is especially true of the eastern equatorial zone not far from Sierra Leone, Stations 347 to 352 (see note A); also of the South Atlantic between Buenos Ayres and Tristan da Cunha, Stations 324, 325, 331 to 333 (see note B); and, lastly, in the North Atlantic in the Gulf Stream and near the Canary Islands (see note C). The fauna of the latter agrees for the most part with that of the Mediterranean (see note D). In addition to the material collected by the Challenger, other deep-sea investigations have furnished bottom-deposits from different parts of the ocean, which have proved very rich in Radiolaria (see note E). Furthermore, since the island of Barbados consists for the most part of fossil Radiolarian ooze, it is very probable that at certain parts of the tropical Atlantic true Radiolarian ooze, like that of the Pacific and Indian Oceans, will eventually be found in depths between 2000 and 3000 fathoms, perhaps over a considerable area.

A. The tropical zone of the eastern Atlantic seems to be especially rich in peculiar Radiolaria of different species. This is shown by numerous preparations from the surface, and from various depths (between lat. 3° S. and 11° N., and long. 14° W. to 18° W.), which were made towards the