

Of the numerous species of *Hyalonema* no one form was represented in two oceans. In the Atlantic *Hyalonema toxeres* was found near St. Thomas, *Hyalonema (Stylocalyx) thomsoni* west of the Azores, *Hyalonema lusitanicum* to the south-west of Portugal and west of the Straits of Gibraltar, as also at an undefined locality in the middle of the South Atlantic. The two species of *Hyalonema* found in the South Indian Ocean were *Hyalonema conus* to the south-west of Australia, and *Hyalonema (Stylocalyx) clavigerum* to the west of the Crozets Islands.

Of the species of *Pheronema* the Challenger found *Pheronema carpenteri* in the Atlantic to the north-east of Bahia, and *Pheronema globosum* and *Pheronema giganteum* in the Pacific, off Little Ki Island in the Malay Archipelago. *Poliopogon amadou* occurred in the Atlantic, south-west of the Canary Islands, and *Poliopogon gigas* in the Pacific, between the Raoul and Kermadec Islands. *Semperella schultzei* finally was obtained both at the well-known locality near the Philippine Island, Zebu, and also in the Malayan Archipelago off Little Ki Island.

As to the Farreidæ, *Farrea occa* occurred both in the Atlantic off the island of St. Thomas, and also in the Pacific at the Philippine and off the Kermadec Islands, while *Farrea clavigera* was only found in the Pacific near the Banda Islands. Undefined species of this remarkable, and apparently widely distributed genus, were found in all the three oceans at various localities.

Five species of *Eurete* were found in the Pacific, four of them off Little Ki Island and one at the Philippines, but in the Indian Ocean no Euretid was found, and in the Atlantic only the single species *Lefroyella decora* off the Bermudas. *Aphrocallistes bocagei* occurred at several localities in the Atlantic, *Aphrocallistes ramosus* only in the Pacific at the Philippines. *Chonelasma* was represented in all the three oceans, by *Chonelasma lamella* both in the South Indian Ocean (near the Crozets Islands) and in the Pacific (off Kermadec), by *Chonelasma hamatum* only in the Pacific at the last named locality. Some undefined fragments of *Chonelasma* occurred at different localities in the Atlantic.

Of Tretodictydæ the Challenger found in the Pacific *Hexactinella lata*, *Cyrtaulon solutus*, *Fieldingia lagettoides*, and *Sclerothamnus clausii*, all near the Little Ki Island, and in the South Indian Ocean an undefined *Hexactinella* fragment near the Crozets.

The Mæandrospongidæ found in the Atlantic were *Dactylocalyx patella* off the Bermudas, and near the Spanish Coast, and *Myliusia callocyathus* off the West India Island of St. Thomas. The Pacific yielded *Myliusia callocyathus* off Little Ki Island and near the Bandas, and likewise *Aulocystis zittelii*.

In regard to the proportionate richness of the two temperate and the tropical zones, it is necessary first of all to note the absolute number of localities yielding Hexactinellida in these three regions. The number of species in each zone must then be noted as in the following tables (VI., VII.), and these statistics collated with the total number of dredgings and trawlings in the respective regions.