

are mostly simple and solitary, and the greater number belong to the Turbinolidæ: nearly all the genera pass back to Tertiary, and a few to Mesozoic times. Upon the whole, the corals must undoubtedly be regarded as affording evidence of a certain relation between the deep-sea fauna of the present day and the fauna of shallower water during the deposition of at all events some portions of the Tertiary series.

Attached Alcyonarians, and especially genera allied to *Mopsea* and *Primnoa*, are extremely abundant in the cooler seas at depths from 500 to 1000 fathoms, sometimes occurring in such quantity as to hamper and clog the trawl, and affording charming exhibitions of elegance of form and beauty of coloring. Certain forms of the Pennatulidæ go down to great depths: the genus *Umbellula*, which we at first regarded as of extreme rarity, turned up every now and then, usually in nearly the deepest hauls, represented by two or three nearly allied species.

Among the Echinodermata the stalked crinoids of the deep-sea fauna are most interesting, but they are comparatively few in number. The large forms belonging to the Pentacrinidæ, although they are very local, appear to be more common than has been hitherto supposed at depths of from three to five hundred fathoms. Five or six new species have been added to the meagre list, but most of these are from the South-western Pacific, and do not enter into the Atlantic fauna. The Apicrinidæ, represented by the genera *Rhizocrinus*, *Bathycrinus*, and *Hyocrinus*, which are of so great interest as the last survivors of a large and important order, are rare prizes at much greater depths. Representatives of all the three genera were dredged in deep water in the South Atlantic.

Ophiuridea, many of them referable with the common sand brittle-star to the genus *Ophioglypha*, and many others to the closely allied genus *Ophiomusium*, came up from the greatest depths, and, particularly in the North Atlantic, formed a prominent feature in the fauna. Asteridea, principally represented