

pinnules or processes along it (the Virgularidæ); or a thin reniform shape (Renillidæ). Others differ from the preceding in having the polyps not retractile; and some of these have a slender stem and the polyps arranged along one side of it (the Pavonaridæ); and still others a terminal cluster of polyps (the Umbellularidæ).

The most of the species secrete a slender, horny axis, and have slender calcareous spicules among the tissues, somewhat like those of the Gorgonidæ.

In conclusion, it may here be stated that the reader will find very full illustrations of most of the forms of recent corals, and of their animals, with their natural colours, in the author's Report on Zoöphytes. It is with regret that he has to add, that owing to the special action of the Congressional Committee in charge of the publications of the Wilkes Exploring Expedition, only one hundred copies of this Report were published by the Government, and also of the others of the series, and that but few have been issued besides. The Atlas contains sixty-one folio plates, many of them coloured.

The works on "British Sea Anemones," by Mr. Philip Henry Gosse, contains figures and descriptions of a large number of species, and gives an excellent idea of the most of the forms of Actiniæ, and also presents well their colours. Professor A. E. Verrill has published, in the Memoirs of the Boston Society of Natural History, Vol. I., a "Review of the Polyps of the Eastern Coast of the United States," with a plate illustrating a few of the species.

IV. LIFE AND DEATH IN CONCURRENT PROGRESS IN CORAL ZOÖPHYTES.

The large, massive forms of stony corals would not exist, and the tree-shaped and other kinds would be of diminutive size, were it not for the fact that, in the living zoöphyte, death and life are going on together, *pari passu*. This condition of growth is favoured by the coral secretions; for these give a