

CORALS AND CORAL ISLANDS.

diverges from his system in uniting the non-coral making and coral-making species into one grand division, that of the Actinoids (on the ground of the close resemblance of the polyps), and also in separating from the latter the Cyathophylloid corals, for the reasons mentioned on page 5. Some of the figures of corals on former pages are here repeated in order to present together those of like relations.

1. *Species without internal Coral Secretions.* ACTINARIA of Verrill.

1. The *Actinia* tribe, or ACTINACEA, secrete no coral internally, and moreover have a muscular base, with some degree of locomotion by means of it. The Actiniæ of the frontispiece, and of pages 6, 9, are examples.

2. The *Zoanthus* tribe, or ZOANTHACEA. The species here included are like the Actiniæ in secreting no coral. But while they have a base, it is not muscular, and they are never capable of locomotion. The polyps have a thick or somewhat lea-



EPIZOANTHUS AMERICANUS, V., WITH EUPAGURUS PUBESCEUS, ST.

they exterior, and, as already observed (p. 19), have gills, or branchiæ. Some of the species are solitary polyps; but generally they form compound masses or zoöthomes, by budding; sometimes making simple lines of polyps over a supporting surface; at other times incrusting plates, or irregular masses. The preceding figure (from Verrill) represents a species found in American seas off the coast of New Jersey, in deep water, and also in Massachusetts Bay, which has a habit of fixing on a shell for its support and of always taking one containing a