

The species of this order spread from the tropics through the colder seas of the globe, and occur at various depths, down to thousands of feet.

The two following are the most striking external peculiarities of the polyps: the number of tentacles is always eight; and these tentacles are always fringed with papillæ, though the papillæ are sometimes mere warts. Some of the various forms of the polyps are shown in the figures on the following pages.

But besides these characteristics, there is also the following: the existence of only eight internal septa, and these septa *not in pairs*; consequently, the interior is divided into only eight compartments (octants), and with each a tentacle is connected. Hence in the Alcyonoids, as Prof. Verrill has observed, the areas externally, and the compartments within, are all *ambulacral*, or tentacular, which makes a wide distinction between them and the Actinoids (p. 11) in which only the alternate are tentacular.

The solid secretions of these polyps are of two kinds: Either (1), internal and calcareous; or (2), epidermic, from the base of the polyp. The latter make an axis to the stem or branch, which is either horny (like that in *Antipathus*, p. 42) or calcareous. A few species have no solid secretions.

All the species are incapable of locomotion on the base; yet there are some that sometimes occur floating in the open ocean.

The three following divisions of the Alcyonoids are those now generally recognized:—

1. The *Alcyonium* tribe, or ALCYONACEA.—One of the forms under this tribe is represented in the annexed figure. It is from the Feejees (like most of the zoöphytes figured by the author), and in the living state the polyps had the middle portion of the tentacles pale brown, with the fringe deep brown. In another more beautiful species of the genus, from the same region, the *Xenia florida* D. (made *Xenia Danaë* by Verrill, as it proved to be distinct from Lamarck's species to which the author referred it), the polyps are as large, but shorter, and the colour is a shade of lilac. These species differ from the larger