

established. In form and distribution they appear more closely related to *Cirripathes* than to any other genus of which the polyps are known. Haeckel, in explanation of his figure, says:—"Ein verzweigter Korallenstock, dessen sechszählige kleine Personen (mit sechs einfachen Tentakeln) zerstreut in der dünnen Rinde des Stockes sitzen; seine Axe wird durch ein schwarzes, glasähnliches Skelet gebildet." In the figure referred to, the basal expansion of the sclerenchyma is relatively large; the stem is only simple for a short distance, and then becomes subdivided at near the same point into four branches. Two are short and dichotomous, the other two longer, flexuose, not spreading, and branched dichotomously. The secondary branches in these cases bear two or three short branchlets at irregular intervals. The whole corallum only shows a slight taper from base to apex. The polyps are from  $\frac{1}{2}$  to 3 diameters apart, arranged in two or three irregular rows. Lamarck's reference to the cortex is of no value here, having been written at a time when *Antipathes* was supposed to be a genus of Gorgonidæ. Lamarck distinctly refers to the presence of spines, and I am at a loss to know why Milne-Edwards included this species in his genus *Hyalopathes*, one of the characters of which is a *smooth* axis. I have not seen the species, but there seems every probability that the sclerenchyma, in spite of its being glossy, has the essential Antipatharian characters.

*Habitat*.—East Indies? (Lamarck); Tur, Red Sea (Haeckel).

[*Antipathes*] *picea*, Pourt.

*Antipathes picea*, Pourtalès, Bull. Mus. Comp. Zoöl., 1880, p. 115, pl. iii. figs. 9 and 29.

Corallum branching, flabellate; branches with four rows of pinnules, two of which remain generally small and simple; the other two develop more and give a pinnate appearance to the branches. The larger branchlets are again beset with small pinnules on one side. Spines subtriangular, about as high as broad near the apex of a pinnule.

Polyps small, with large spherical buccal knobs and flattened tentacles, with slightly incised border; when strongly contracted they appear globular. They are thickly beset with bundles of nematocysts. The polyps are rare on the thicker branches, and have distant and rudimentary tentacles; on the main stem very few buccal knobs are found, and these are destitute of tentacles. Height of the corallum 20 to 25 cm.

The polyps of this species, judging from the figure given by Pourtalès, appear to resemble those of *Cladopathes plumosa*, but it is not known if the zooids are dimorphic. The spines near the tip of a pinnule recall the form and arrangement of those of *Antipathella subpinnata* (E. & S.) in similar situations. The distinct crenations of the tentacles, should they not be due to batteries of nematocysts, may prove to be an approach to the pinnate condition in *Dendrobrachia*.

*Habitat*.—Off Grenada, in 201 fathoms; off Barbadoes, in 7 to 45 fathoms (Pourtalès)