

only. The pinnules are usually from 0·6 to 1·2 cm. long, but a few are longer. As in other forms, a pinnule, by increase in importance and the development of a secondary series of pinnules on all sides, becomes one of the smaller branchlets. All the lower pinnules (2 cm. long) on the more important branchlets bear four to six secondary pinnules 0·3 to 1 cm., all springing from one side. Some of these bear two to four short processes also all on one side (the inner); most are simple, but one here and there may be forked (Pl. II. fig. 11). This peculiar subdivision of the pinnules is not met with in any other species known to me, but a more rudimentary condition of the same type of branching is seen in *Aphanipathes? barbadensis*, n. sp.

The spines are of medium length, subcylindrical, and hooked upwards. They are arranged in steep dextrorse spirals and also in longitudinal rows, five of which may be counted from one aspect of a pinnule. The members of a row are from one to two lengths apart, and the spines in some rows are longer and more hooked than those in others, recalling the condition in *Parantipathes larix* (Pl. XI. fig. 1).

*Habitat.*—West Indies (Scrivener), Brit. Mus.

*Parantipathes? columnaris* (Duch.).

*Arachnopathes columnaris*, Duchassaing, Rev. d. Zooph. et d. Spongiaires d. Antilles, 1870, p. 23.

*Antipathes columnaris*, Pourtalès, Cat. Mus. Comp. Zool., pt. viii., 1874, p. 46, pl. ix. fig. 8; Bull. Mus. Comp. Zool., 1878, p. 209; *ibid.*, 1880, p. 117, pl. iii. fig. 3.

“Ramis ramulisque inter se crassitie æqualibus, centralibus inter se crebre anastomosantibus, ac indè columnam centram reticulatim æmulantibus; ramulis exterioribus e columna nascentibus; pinnulis brevibus, tenue muricatis, nec nodoso-geniculatis” (Duch., *loc. cit.*).

Portalès, who has found this species abundant amongst the collections of the “Blake” Expeditions, gives the following additional particulars:—

The stem is simple, the branchlets in verticils close together, themselves verticillate and sometimes biverticillate, coalescing occasionally. The verticillate branchlets give this species a bottle-brush form. The spines are very small, triangular and blunt, somewhat longer at the tip of the pinnules (*cf.* Pourt., 71, pl. iii. fig. 3). The central reticulated column is hollow and the habitation of an Annelid, which seems to compel the corallum to form an abnormal growth of that shape. Height of the corallum 9 to 10 cm.

The polyps, according to the observations of Pourtalès, are small and difficult to see; they are of the sessile type, the tentacles appearing only as small knobs disposed in three pairs on the branchlets, but spread out on the stem. The polyps are rather abundant in the network forming the tube for the parasitic worm. Two of the specimens obtained were destitute of the parasite, and of the tube produced by it; their branchlets are more spiny, but the general shape is the same.