

branches at distances of from 2·5 to 7·5 cm., which are chiefly confined to one side of the stem. These, in turn, give rise to a smaller series of branches, nearly all of which are somewhat curved or arched. Probably the whole stem, primary and secondary branches, have a central ligneous axis, and thus offer a mode of branching which is not characteristic of the species. The curved secondary branches bear a number of slender, elongate, and perfectly straight rigid branchlets on their upper surfaces. These are usually 6 to 8 mm. apart, and form an acute angle (about 40° to 45°) with the branches from which they arise. The branchlets again bear on their upper (inner) surfaces a series of similar secondary branchlets or pinnules, which in turn occasionally bear a third series of a similar type. The latter two series of slender branchlets are generally directed vertically. The ultimate branchlets are usually collected into subtriangular fan-like clusters, which remain comparatively isolated from each other. The whole corallum extends chiefly in one plane, and there is no indication of fusions or adherences at any point, indeed the branchlets rarely overlap each other.

The spines are subcylindrical, of medium length, and usually have a blunt apex. They are usually inserted at an acute angle, and the whole spine from the apex to near the base is covered with rough sharp protuberances. In this respect the spines approach those of *Aphanipathes alata*, but they have not such a sharp apex. The spines do not show any apparent spiral arrangement, but are arranged in longitudinal rows, five or six of which may be counted from one aspect of a pinnule. The members of a row are one to one and a quarter lengths apart (Pl. XI. figs. 12, 12a). The specimen being dry, I have not been able to study the polyps, but these are indicated on the branchlets as a linear series of small rounded protuberances, about seven or eight to a centimetre.

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

Aphanipathes? pennacea (Pallas) (Pl. XI. fig. 23.)

- Antipathes pennacea*, Pallas, Elenchus Zooph., p. 209; Lamouroux, Polyp. flex., p. 379; Encyclop. méthod., p. 71; Dana, Zooph., p. 582; Milne-Edwards, Coralliaires, t. i. p. 318.
? *Antipathes pluma*, Gray, Proc. Zool. Soc. Lond., 1857, p. 291.

“A. ramosa subincurva, ramis pennatis, pinnulis setaceis creberrimis hispidis” (Pallas, *op. cit.*).

Gray gives the following short description of his *Antipathes pluma*:—“Coral fan-like, branched, forked; branchlets pinnate, simple, in two opposite diverging series; spinules very closely crowded.” He gives no locality. I have not been able to find any specimen in the British Museum bearing the name *Antipathes pluma* on the label, but an unnamed specimen from St. Helena may be the one referred to. A comparison of this and other specimens in the British Museum, with a specimen of *Antipathes*