most of which bear one or two pinnules at right angles. The branchlets are 1 to 2 cm. apart and from 1 to 3 cm. long. They are quite irregularly arranged and may spring from any portion of the circumference. The sclerenchyma in such terminal portions of a colony is from 0.5 to 0.7 mm. thick.

The zooids vary very much in size, a feature which evidently depends on age. They are arranged at irregular intervals along the sclerobasic axis, usually from one to two diameters apart, and not so strictly confined to one aspect of a branch as in many other forms. The zooids are about 1 mm. in diameter and rarely project above 0.5 mm. beyond the surface of the coenenchyma. The mouth is usually, but not invariably, elongated in the sagittal axis; the whole surface of the peristome is dome-shaped, but there is usually no special elevation of it on which the mouth opens. The tentacles are subcylindrical and arranged in pairs. Those which terminate the sagittal axis are usually rather longer and thicker than the others (1 to 1.5 mm.). They are also inserted at a lower level, and in spirit specimens almost always stand out horizontally. The two lateral pairs are short and thick, and in adult zooids are usually bent inwards towards In young specimens they project vertically. Owing to the fact that in this genus new zooids may be added at any point, as dilations of the coelentera of adult zooids, the size of the various individuals on a branch is most variable. Although large and small zooids are arranged alternately in some instances, the usual arrangement is by no means so regular (Pl. IV. figs. 8, 9).

Habitat.—Mediterranean (Esper); in 135 fathoms, Naples Zool. Stat. West Indies.—Off Alligator Reef in 110 fathoms; off Sand Key in 125 fathoms; off Coffin's Patches in 195 fathoms; off Bahia Honda in 324 fathoms (Pourtalès).

Leiopathes? lenta (Pourt.).

Antipathes lenta, Pourtalès, Illustr. Cat. Mus. Comp. Zoöl., No. iv. 1871, p. 55; op. cit. No. viii., 1874, p. 47; Bull. Mus. Comp. Zoöl., 1880, pl. iii. fig. 4.

The following is a summary of the description given by Pourtalès:—

Mode of branching, unknown. Pinnules, very long and slender, like thin horse-hair, not regularly pinnate; spines in number intermediate between those of *Parantipathes larix* and *Antipathella subpinnata*, as figured by Lacaze Duthiers, but somewhat longer and straighter than in either. (? See description of figure.)

Polyps of same type as in *Leiopathes glaberrima*, but very much smaller and more distant; longitudinal and transverse diameter more disproportionate than in *Aphanipathes humilis*, and the tentacles show more tendency to arrange themselves in two parallel rows. Alternate large and small polyps, though not regular, are quite noticeable, and the disproportion in size is very great. Only a few branchlets were obtained, some ten to twelve centimetres long without much diminution in diameter.