

the corallum, and in the upper portion of the corallum has a diameter of 3 to 1.5 mm. The spines on the more slender branchlets are sometimes arranged in irregular and very steep spirals, which take a course of 4 or 5 cm. to complete one revolution of the axis, but, more usually, such a spiral arrangement is not marked. The spines are short, thick, and subcylindrical, having a blunt apex. They are usually crowded, about one length apart, and are arranged in regular longitudinal rows, six or seven of which may be counted from one aspect. In such cases a subregular spiral arrangement may be seen much closer than that previously referred to. In some portions of the corallum nearly all the spines are smooth but one here and there has a rough granulose apex (Pl. XI. fig. 13). In other portions all the spines are covered with irregular wart-like prominences (Pl. XI. fig. 14). In the Copenhagen specimen, already referred to, the base is very thick and gives rise at once to a number of spreading branches, as in a willow. These bear a number of very elongate branches, which arise from one side only and are generally close together. These, in turn, may bear another series of two to four branchlets of similar diameter, and usually on one side only. The height of the corallum is 1.1 m. The branchlets all ultimately take a subvertical direction. The spines are somewhat tuberculate in the newer portions of the colony; below they are arranged in relatively distant longitudinal rows. Lacaze Duthiers has examined the polyps of this species; they are large, and arranged in a single row on the upper surface of the branchlets.

*Habitat.*—Persian Gulf (Brit. Mus.); Indian Ocean (Esper); ?Mediterranean (Lamarck).

*Antipathes? lentipinna*, n. sp. (Pl. XI. fig. 19).

Corallum shrub-like, irregularly branched; stem and main branches relatively stout and black. Branchlets and pinnules slender and light brown. This species has a general resemblance to *Antipathes virgata*, Esper, but its branches are more spreading. A specimen in the British Museum is 1.37 m. in height. The stem and main branches are thick; the latter give rise to a large number of elongate slender branchlets, often 60 cm. in length. These bear a number of filiform pinnules, from 8 to 15 cm. in length, which are generally collected together near the upper portion of the branchlet, and are usually confined to one side. They are sometimes very numerous, and often occur with considerable regularity at intervals of 4 to 10 mm. The sclerenchyma is thick and black in the stronger portions of the corallum, but thin and golden brown elsewhere. The sclerenchyma of the elongate branchlets is sufficiently thick to retain its circular outline when dry, but that of the pinnules is merely membranous, and collapses under such conditions. The spines are arranged with considerable regularity on the sclerobasic axis in a spiral, which may be either dextrorse or sinistrorse. They are arranged very regularly in longi-