

better to separate the present form. It differs from both species in the length of its calicles in the young condition, and in its very regular distichous gemmation, also in the absence of a columella, and in the nature of the striation of the surface. I follow Professor Duncan in placing together the genera *Amphihelia* and *Diplohelia*, but include both under *Lophohelia*. Professor Duncan combines *Amphihelia* and *Diplohelia*, and places *Lophohelia* far away because of its dissepiments. Count Pourtalès combines *Lophohelia* and *Amphihelia*, and separates with some doubt *Diplohelia*. Two of the specimens are attached to bundles of Hyalonema spicules, which they spread over with their bases and cement together.

Height of the largest branching specimen, 75 mm. Diameter of the mouths of the calicles, 2 to 2.5 mm.

Station 23, off Sombrero Island, Danish West Indies. 450 fathoms.

*Lophohelia arbuscula*, n. sp. (Pl. VIII. figs. 9, 10).

The corallum is small, arborescent in form, formed by alternate gemmation. The surface of the cœnenchym is perfectly smooth, polished, and glistening. There are no costæ. The septa are very slightly exsert. There are six systems and three cycles, the primary and secondary septa being complete. In some calicles there is a columella.

The single fragment only which is figured was obtained. The coral is closely like some small specimens of *Lophohelia ramea* in Professor Duncan's collection, but differs in the complete smoothness and polish of the cœnenchym. The specimen is dead and somewhat altered by decomposition; but, after examining it with the microscope, I do not think that the polish of the cœnenchym has a *post-mortem* appearance, or that the surface has altered its texture.

Extreme height of the specimen, 50 mm. Average breadth of the calicles, 2.5 mm.

Station 194, off Banda Island, East Indies. 200 or 360 fathoms.

*Lophohelia tenuis*, n. sp. (Pl. VIII. figs. 11-14).

The corallum is small and delicate, formed by distichous marginal gemmation. There is little or no cœnenchym, the calicles being clearly differentiated, elongate, and attenuated at their bases. The surfaces of the calicles are marked with longitudinal very fine ridges composed of rows of distinct rounded granules (very badly shown in the figure), with which in places the general surface is also covered. The costæ are very slightly exsert. There are six systems and three cycles; the free margins of the septa are finely serrate.

Only a fragment of this coral was obtained. It seems to be well distinguished by its extremely small size and the peculiar rows of granules upon its surface. It is most unfortunate that the figure I have to offer of them is so imperfect.