

in 1841 near Zanzibar, and is the type specimen on which Milne-Edwards' description was based.

The generic diagnosis given by Milne-Edwards is very descriptive and terse:—
 “Polypiéroide arborescent, dont l'axe est occupé par une cavité cylindrique commune, au lieu d'une tige sclérobasiqne, comme si le tissu épithéliqne avait avorté.”

The natural relationship was, however, less happily indicated, inasmuch as the genus was ranked along with *Briareum*, *Solanderia*, and *Paragorgia* under the Briaracæ. Verrill was the first to point out its relationship with *Telesto*.¹ Hitherto only one species—*Cælogorgia palmosa* (Val.) (*Lobularia palmosa*, Val.)—has been discovered, and its distribution appears to be limited to the Mozambique Channel between Mozambique and Zanzibar.

Cælogorgia palmosa (Val.) (Pl. XLIII. figs. 1–8).

Lobularia palmosa, Val., MSS. Coll. du Mus. Jardin des Plantes, Paris.

Cælogorgia palmosa (Val.), Milne-Edwards, Hist. Nat. des Coralliaires, tom. i. p. 191; Hickson, Phil. Trans. for 1883, p. 695.

The colony consist of a stem which rises from a broadened base, attached by stolon-like processes. The stem gives off, mainly on two sides, usually in alternate succession, at obtuse or right angles, large branches or twigs. These may again bear twigs, or may be beset with the club-shaped polyps which arise in spirals at wide intervals. The polyps are not retractile; their tentacles, furnished with spicules, lie down side by side over the oral disc. The apex of the stem, like that of each branch, bears a terminal polyp, the digestive cavity of which is continued as a tube of uniform width throughout the entire stem. The wall of the main axis contains spicules, it tapers from the base to the apex, and is penetrated by canals, which communicate by fine processes with one another. From these canals the branch canals arise. These exhibit the same characters as those of the main axis, and their cavities are never in direct connection with the inner cylinder of the latter. From the canalicular network of the branches the polyps arise, which in structure resemble the terminal polyp, but have but short digestive cavities. New branches and polyps arise in similar manner as buds from the œsophageal portion of the terminal polyps. In the formation of a branch the polyp bud grows in length and then develops lateral polyps on its walls. The polyp bud, however, remains short without forming lateral polyps. We may therefore, as in *Telesto*, regard the stems as consisting of axial polyps of the first order, the branches of polyps of the second or the third. The axial polyps appear, as far as the examination of the one colony is concerned, to be sterile, while the secondary polyps produce generative elements. There is therefore a sort of alternation of generations. The whole colony is rigid and brittle, only in the twigs does it exhibit a slight elasticity.

¹ Mem. Boston Soc., vol. i. p. 5, 1866.