

following species under the genus:—*Prymnoa flabellum*, Ehb., *Primnoa gracilis*, Milne-Edw., and *Primnoa plumatilis*, Milne-Edw.

In 1870, in his Catalogue of Stony Corals, the name *Callogorgia* was changed by Gray into *Calligorgia*; a special genus, *Plumarella*, Gray, was founded for *Callogorgia penna* (*plumatilis*), and the genus *Calligorgia* was confined to *Gorgonia verticillata*, Pall., with which *Gorgonia verticillaris*, Esper., *Prymnoa flabellum*, Ehb., *Prymnoa verticillaris*, Ehb., and *Primnoa gracilis*, Milne-Edw., were placed as synonyms. The genus *Calligorgia* falls under the family of the Calligorgiadae, which contains very heterogeneous materials. In the diagnosis of the genus we again have the character that only three cells form a whorl, while in the diagnosis of the only species varieties are mentioned at one time with ten to twenty cells, at another time with four cells in a whorl. Studer in the Alcyonaria of the voyage of the "Gazelle," 1878 (*loc. cit.*), adopts the genus but also unites thereunder the genera *Xiphocella*, Gray, *Callicella*, Gray, and *Fanellia*, Gray, the latter founded on Verrill's description of an axis and placed by Gray in his family of the Primnoidea.

Studer's diagnosis runs:—Stem ramified, mostly in one plane, the club-shaped calyces are generally scattered on the stem, but on the branches they are in whorls of eight to ten. The calyx scales are more or less fan-shaped, warty, with ribs arranged fan-like, which on the upper edge project as spines.

The genus *Caligorgia* is here retained in Studer's sense, and as Dr. Gray intended to use the Greek *καλη* (*pulchra*) and not *καλλος* (*pulcher*), the spelling has been altered.

In *Caligorgia* the stem is upright, ramified mostly in one plane, but it is never dichotomous. The axis is horny, calcareous, rigid, whitish, and ascends from a flat calcareous base which spreads over foreign bodies. The axis is for the most part compressed in the same plane as that in which the branches expand, sometimes completely flattened. The main stem gives off smaller and larger branches on either side, the latter frequently of the stoutness of the main stem, these either remain simple or may again give off twigs. The branches and twigs always come off alternately on both sides of the stem, and mostly stand at sharp angles to their support.

Stem and branches are covered with polyp calyces, which are irregularly placed on the thicker parts of the stem and on the branches; on the thinner branches and twigs they are arranged in whorls, which appear to be always composed of more than three cells. The calyces are cylindrical to club-shaped, with a thickened mouth portion, and in repose and death are bent inwards towards the stem.

The coenenchyma contains two layers of spicules, an outer layer of larger, warty, mostly small, almost spindle-shaped and often bent spicules, which lie close together, and a lower layer of smaller, but similarly formed, calcareous bodies. The calyces are distinctly bilateral, their backs and sides are covered with tile-like, overlapping scales, which mostly form four longitudinal rows, the ventral part is naked, only the edge of the calyx