

The polyps, all with the ventral side pressed or applied towards the stem, are cylindrical, slightly expanded only at the mouth, 0·7 mm. long on the thinner twigs, 1 mm. on the branches; they are placed on the branches and twigs in two alternating rows, at moderate intervals, up to 1·5 mm., from one another. The scales are dorsal and lateral, arranged in seven to eight transverse rows and five longitudinal rows; the ventral side is destitute of scales. The obliquely truncated calyx mouth is protected by eight thin, triangular, opercular scales, of which the ventral ones are only a little shorter than the dorsal ones.

The calyx scales are generally roundish or nearly square, with a central nucleus, from which the small prominences extend outwards only a little beyond the half radius of the scale. The upper edge of the scale is finely toothed, fine striæ radiate from the nucleus to the edges. Length to breadth in mm.—0·12–0·17; 0·2–0·2; 0·12–0·13. The opercular scales are triangular, toothed lamellæ, truncated at the end, 0·2–0·18; 0·2–0·16 mm. In the cœnenchyma two layers of calcareous scales may be distinguished, which, in the stem, may be readily separated from one another. The upper layer consists of longish, oval lamellæ, which overlap one another with their lateral edges. On the side which comes under the edge of the overlapping scale they are provided with relatively strong teeth. The prominences on these scales are very small, in addition the fine radial striation may here also be recognised. Length to breadth in mm.—0·14–0·17; 0·1–0·17; 0·22–0·11; 0·2–0·13; the lower layer consists of very thin oval or irregularly toothed spicules, on which the prominences are only very weakly and sparsely developed. Length to breadth, 0·1–0·1; 0·11–0·07 mm.

In this species the new polyps are budded off from the inside of the base of an old polyp, and in process of time, owing to the lengthening of the internode between two polyps, they move away from the mother polyp. Thus the growth may here be designated as intercalary.

Habitat.—Station 307, off Port Grappler, Patagonia; depth, 140 fathoms; bottom, blue mud.

Genus 7. *Caligorgia*, Gray (*emend.* Studer).

Callogorgia, Gray, Proc. Zool. Soc. Lond., 1857, p. 286; *Ibid.*, 1859, p. 484.

Calligorgia, Gray, Cat. Lithophytes Brit. Mus., 1870, p. 35.

Calligorgia, Studer, Monatsber. d. k. preuss. Akad. d. Wiss, Berlin, 1878, p. 645.

The genus *Callogorgia* was founded by Gray in the year 1857 for *Gorgonia verticillata*, Pallas. The diagnosis runs:—"Coral forked, fan-shaped; branchlets pinnate. Axis continued, stony, compressed. Bark thin, white, formed of flat angular imbedded granules. Cells in whorls of three, cylindrical, incurved, covered with small imbricate scales." The character of three cells in a whorl does not suit the single species which Gray arranged under this genus. In the year 1859 Gray (*loc. cit.*) further arranged the