

If a species which was collected by Dr. Döderlein in Japan should be included in this genus, the generic diagnosis must be amended. In its general structure the form in question agrees with Gray's description. It consists of a simple rod-like stem with a horny axis. The cortex at the end of the stem is unfortunately wanting, so that it is not possible to decide whether the form was club-shaped or not. The cœnenchyma is thin with a rough surface, on which the spine-like points of the spicules everywhere project. The polyp calyces are disposed in thick spirals round the stem, and form inconspicuous conical warts arising at right angles from it; their oral apertures are surrounded by a circlet of spicules. The opercular rays lie horizontally over the mouth. The spicules in the cœnenchyma form a deep layer of warty curved spindles, and above this a layer of spinose discs, each with a smooth terminal apex and basal spiny processes, the apices of which project all over from out of the cœnenchyma, and they form around the margin of each calyx a circlet of spines.

10. *Placogorgia*, Wright and Studer, Archiv f. Naturgesch., Jahrg. liii. Bd. i. p. 56.

The colony is branched with a thick cœnenchyma, and with low truncated conical polyp calyces arising at right angles from the axis. The spicules on the calyces are broad, warty discs, often with branched thorny and spiny processes, somewhat resembling those of *Paramuricea*. The warty discs overlap one another on their margins. The tentacular opercula lie horizontally, and consist each of three spicules, two lateral and one median. They are not in contact by their lateral margins.

11. *Echinomuricea*, Verrill, Proc. Essex Inst., vol. vi. p. 45; Amer. Journ. Sci. and Arts, vol. xlvii. p. 285, 1869.

The colony is simple or branched; the stem and branches are thickly beset with the polyp calyces. These are short, cylindrical or conical, truncated terminally, and with horizontally disposed tentacular opercula. The calyces are covered with spicules of a peculiar form overlapping one another; these consist of long flat needles, which give off several root-like processes from their expanded ends. The apices of the needles project.

12. *Echinogorgia*, Kölliker, Icones histiologicæ, pt. ii. p. 136, 1865.

The colony is branched. The polyp calyces, which arise on all sides from the stem and branches, are small and wart-like. The tentacular opercula are but feebly developed, forming low cones. The spicules are in part spiny spindles, and in part spiny clubs and discs.