

and of the cœnenchyma are stout and covered with strong prominences, which in the calyx scales are merged into ribs radiating from the nucleus to the upper edge, and there running out into spines. The operculum, formed out of eight scales, constitutes, when closed, a low, blunt cone. The cœnenchyma is thin, with two layers of calcareous scales. The growth is apical.

This genus exhibits in the form of the calyces and scales a relationship to *Thouarella*, from which, however, it is distinguished by the mode of ramification. This latter exhibits already the condition of *Plumarella*, in which, however, the calyces come off only from two sides of the twigs. The new genus may therefore be considered as a connecting link between *Thouarella* and *Plumarella*.

*Amphilaphis regularis*, n. sp. (Pl. XV. figs. 1, 1a; Pl. XXI. fig. 7).

The main stem gives off large branches on two sides, which bear parallel-running lateral twigs, as well as simple twigs.

The polyyps, placed on the stem, branches and twigs, form irregular short spirals of fours, which arise at different heights from the four sides. The club-shaped calyces have a length of 1.5 to 2 mm., and contain seven or eight transverse rows of scales, which are arranged in seven longitudinal rows, of which the ventral row is formed of somewhat differently constructed thin scales. The operculum closes the calyx completely and consists of eight triangular calcareous scales, which vary slightly in size, and form when closed a blunt low cone. The calyx scales are thick, covered with large, rough prominences, and with teeth on their edges. The scales of the cœnenchyma are three-cornered, toothed on one side, and overlap each other with their lateral edges. They are slightly smaller than the calyx scales.

One large colony has grown up from a flat calcareous base on a *Lophohelia* and rises to a height of 25 cm., with a lateral expansion of 13 cm. The main stem is flattened; its larger diameter reaches at the base 4 mm., at a height of 60 mm., where it is broken off, 1.5 mm. Its axis is hard, brittle, of a yellow-brown colour, the cœnenchyma appears to have died off, the axis is covered with foreign bodies (*Palythoa*). Branches arise from both sides, at different heights, beginning at the base of the main stem, and, at their origin, attain to nearly the thickness of the main stem. They are flattened in the same plane as the main stem, the axis is at the commencement hard and inflexible, but becomes in its further course thin and flexible, and causes the summit to hang over to one side like the twigs of a weeping willow. The branches give off twigs in the lower part, again in the same plane as the stem gives off the branches; these develop simple lateral twigs according to the same law. The simple terminal twigs, coming off from their branches at angles of 45°, attain a length of 40 to 50 mm., and are always much thinner than their parent twig.