

The genus may be divided into two groups, which, however, are not sharply divided from one another. In the first the dorsal calyx scales are numerous, in several rows; in the second there are only two dorsal longitudinal rows, which come together at an angle so that the calyx appears provided with a dorsal keel; we may distinguish them as *Convexæ* and *Carinata*.

A. *Convexæ*.

1. *Primnoella magellanica*, Studer (Pl. XVII. fig. 2; Pl. XXI. fig. 10).

Primnoella magellanica, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, 1878, p. 644.

A fragment in the collection, representing the root portion of a colony with a stem 40 mm. long, may be referred to this species. The fragment in question exhibits, indeed, some deviations from that which afforded the basis for the first description, which are, however, elucidated by the fact that we are here dealing with the lower end of an evidently very old colony. The root portion in the present instance forms a short cone of calcareous matter, the flattened base of which has a diameter of 11 mm.; from its apex arises the (in this case) calcareous, brittle stem, which has a diameter of 2 mm., but which rapidly diminishes above and becomes more flexible. The calyces commence at a height of 5 mm., the first whorl consists of two not quite opposite polyps, the next of six, the third of eight. The calyces have a height of 2 mm. by a diameter of 1 mm. In individual places the whorls are not quite regularly placed, especially where, towards the end, new rows of polyps develop between the old ones. In the figure the internodes are made too long. The calyces of one whorl, when laid against the stem, always cover the base of the next whorl.

The scales of the calyces are very numerous and relatively small. In the length of the calyx ten to thirteen calyx scales may be counted. The scales are broad, flat, covered with small prominences, and overlap each other with their edges like roof-tiles. Towards the base of the calyx they become smaller and on the stem pass over into small, flat, oval plates. The operculum of the calyx is formed of eight pointed, triangular scales, the base of the triangle is covered with little prominences, the apex smooth, with a keel, which is produced into a short spine. The spicules of the operculum exhibit the usual arrangement, and when laid together, form a pointed cone over the mouth of the calyx.

Calyx scales as broad, or a little broader than high, unequilaterally quadrangular, the lower edge convex, more convex in the upper scales than in those nearer the base, irregularly toothed, the upper edge nearly smooth. Breadth 0.3 mm., height 0.31 mm., breadth 0.37 mm., length 0.36 mm., breadth 0.16 mm., height 0.16 mm. The latter from the base.