

Opercular scales; dorsal scales 0.48 mm. high, 0.2 mm. broad; ventral 0.29 mm. high, 0.12 mm. broad at the base.

Scales of the cœnenchyma irregularly polygonal or oval; height to breadth—0.12–0.1; 0.12–0.06; 0.12–0.1; 0.22–0.15; 0.16–0.14; 0.16–0.16 mm.

*Habitat.*—Station 320, off Monte Video; depth, 600 fathoms; bottom, green sand. [Magellan Straits, 42 fathoms; rock ("Gazelle").]

2. *Primnoella murrayi*, n. sp. (Pl. XVIII. figs. 3, 3a; Pl. XXI. fig. 11).

In habit resembling the foregoing, but may be distinguished at the first glance by the fact that each dorsal calyx scale bears a blunt spine. The slender little stem rises from a flat, expanded root, which has grown amidst a colony of Polyzoa, its apex is broken off at a height of 50 mm. The axis is relatively stout at the base, 0.5 mm., but soon diminishes to the thinness of a thread, yet it remains brittle and is but little flexible throughout its entire course. It exhibits eight longitudinal furrows, corresponding to the boundaries of the eight longitudinal canals, its colour is horny yellow. On the stem the polyps form close whorls of six to eight, the first whorl with eight polyps commences at 9.5 mm. above the root. The calyces, 3 mm. long and 1 mm. in diameter, appear somewhat thickened towards the oral region and are uniformly bent towards the stem. The internodes between the whorls are in this case visible, in that the apices of the cells do not reach the base of the next whorl. The calyces are covered with large scales, which lie over one another in eight to nine rows. Three longitudinal rows of dorsal scales are visible. The broad dorsal scales, covered with little prominences, after the first third of the calyx, become strongly convex and develop a median keel which is produced into a grooved spine, and when the calyx is bent stands out towards the circumference. Towards the mouth of the calyx the spines increase slightly in size. The ventral scales are small, smooth and flat, separated in the ventral line by a membranous interspace. The opercular scales are short and broad, lancet-shaped, and cover the mouth like a flap. The mouth appears truncated. The ventral opercular scales are not covered by the lateral ones.

Calyx scales strongly convex, the lateral edges drawn out, in the three or four upper rows the upper edge runs out into a blunt point, sometimes slightly serrate at the end; the lower edge is strongly convex, with unsymmetrically distributed teeth. Uppermost row, length to breadth, 0.6–0.54 mm.; second row 0.4–0.55 mm. Lower row without spines, 0.4–0.54 mm. Opercular scales; dorsal scales, broad, triangular 0.45–0.53 mm.; lateral scales, 0.54–0.17 mm.; ventral scales 0.25–0.09 mm. Spicules of the cœnenchyma, unequal four-sided or three-sided plates, 0.4–0.3 and 0.4–0.2 mm.

*Habitat.*—Station 320, off Monte Video; depth, 600 fathoms; bottom, green mud.