

very thin cœnenchyma. The polyps form whorls on the stem at intervals of 3 to 4 mm. The first whorls, which arise high up on the stem, contain only two opposite polyps, the next three, then four, sometimes five. The calyces themselves are high, cup-shaped, 1.5 to 2 mm. long. The calyx scales are large, from the dorsal side only two longitudinal rows are visible, which form seven to eight transverse rows. The ventral scales consist only of one row of very thin, transparent little plates, whose edges are covered by the side edges of the lateral scales. The opercular scales are large, arched, pointed, the two ventral ones are the smallest. When laid together they form a sharp cone.

Calyx scales four-cornered, broader than high, those of the uppermost row with strongly convex upper and lower edges, which are strongly toothed. Height to breadth, 0.3–0.3; 0.2–0.33; 0.2–0.3; 0.2–0.25 mm. Opercular scales; dorsal 0.27–0.13 mm.; lateral 0.2–0.08 mm.; ventral 0.12–0.05 mm. Cœnenchyma spicules, irregularly polygonal or oval little plates, 0.15–0.2; 0.2–0.12 mm.

*Habitat.*—Station 23, off Sombrero, West Indies; depth, 450 fathoms; bottom, Pteropod ooze. One specimen.

Station 122A–C, off Pernambuco; depth, 120 to 400 fathoms; bottom, red mud. Four specimens.

[Lat. 22° 21' S., long. 154° 17' 5" E.; depth, 550 fathoms; bottom, Globigerina ooze ("Gazelle").]

*Primnoella grandisquamis*, n. sp. (Pl. XVII. fig. 4; Pl. XXI. fig. 13).

A long stem, flexible in all directions, the root of which is wanting, bears whorls of four to six polyps, which surround the stem at tolerable intervals from one another. The calyces are covered with two dorsal rows of large scales. The spicules of the operculum are, in contrast to those of the foregoing species, small, and not prominent in the bent-in calyces. The stem has a length of 39 mm., but the upper and lower ends are wanting. The axis is of thread-like thinness, only 0.5 mm. in diameter when covered with the cœnenchyma, it is entirely horny and movable in every direction, in fluid it has a tendency to roll together spirally. The polyps form whorls of four, five, or six around the stem; the whorls are tolerably far apart from one another, so that from the calycine apices of one whorl to the bases of the next there is an interval of 1.5 to 2 mm. The calyces themselves have a tolerably uniform thickness throughout their length, only somewhat thicker towards the mouth. Their length reaches 1.5 mm., their diameter up to 0.7 mm. Whorls of new young polyp buds are often visible in the internodes. The scales of the calyx are very large, transversely elongated. Dorsally only two longitudinal rows are recognisable, of which the lateral edges of one row always overlap those of the other. There are seven transverse rows