

diameter, and consists of three calcareous internodes with two very small horny nodes. The calcareous internodes have a somewhat glassy appearance, are bent or curved on themselves, and slightly quadrangular in section, solid, smooth; towards the apparent summit the section is circular. The cœnenchyma is thin, and densely covered with oblong warty spicules, which become larger at the base of the polyp. The polyps are large, projecting at right angles from the axis, thick, measuring when dry 5 mm. in height and 2.5 mm. in diameter. The non-retractile tentacles are folded over on each other in a somewhat irregular manner; large, club-shaped, spinulate spicules cover the body of the polyp, while small, oblong spicules densely cover the outer portions of the tentacles.

The spicules measure 2.0-0.5; 1.2-0.16; 0.9-0.2; 0.2-0.04; 0.2-0.03; 0.03-0.12 mm. The small ones are found in the tentacles.

The form of the spicules seems to necessitate the formation of a new genus for this deep-sea form, which with its solid axis approaches to the unbranched forms of the genus *Acanella*.

*Habitat*.—Station 241, between Yokohama and the Sandwich Islands; depth, 2300 fathoms; bottom, red clay.

#### Subfamily 2. MOPSEINÆ.

The ramified colony bears polyps, which project above the cœnenchyma and are cup- or club-shaped or cylindrical. The tentacles are not retractile, but when in a state of repose fold themselves together over the mouth-opening. The axis consists of alternating horny and calcareous joints (nodes and internodes); the branches arise mostly from the calcareous joints, but sometimes on their upper edge, so that their horny base comes into contact with the horny joint of the stem. The spicules thickly fill the cœnenchyma, the polyp bodies and the tentacles of the latter. These are generally longish scales, with sharply indented and toothed edges. The scales are placed in contact through their dentated edges, which interlock on opposite sides. In the polyps they are placed transversely and are bent so as to correspond to the contour of the polyp wall; their edges do not overlap one another on opposite sides. In the tentacles they form as a rule three longitudinal rows.

The subfamily, of which *Mopsea*, Lamouroux, may be regarded as the typical genus, includes three genera, of which the first, *Primnoisis*, shows affinities to *Dasygorgia*.

1. *Primnoisis*, n. gen.—Colony ramified in several planes, polyps large, arising at wide intervals. Spicules of the calyx large.
2. *Mopsea*, Lamx.—Colony ramified in one plane, polyps small, club-shaped, standing in close spirals. Spicules of the calyx small.