probable that this was dredged from deepish water outside the reef. The cœnenchyma is the least protected by spicules of all the species of the genus so far described.

The spicules are but feebly developed, and measure 0·77–0·05; 0·73–0·07; 0·2–0·03; 0·12–0·02 mm.

Habitat.—Reefs, Kandavu, Fiji.

5. *Ceratoisis palmæ*, n. sp.

This species is established for a few fragments of a *Ceratoisis*, brought up from a great depth off Palma, one of the Canary Island Group.

The axis is apparently unbranched, and consists of a series of calcareous internodes of about 15 mm. in length, by 1 mm. in breadth, with short horny nodes. The internodes are smooth and hollow.

The polyps are, as far as can be judged from the few present, scattered at long intervals on the axis; they are about 3 mm. in height, and about 1·5 mm. broad.

The cœnenchyma on the axis is thin, membranous, of a dark brownish or yellowish colour.

The spicules on the cœnenchyma are either long, slender, spiny spindles, or short and fusiform. Those of the polyps are large stout spindles, tightly packed; the blunt ends of some five or six project beyond the retracted tentacles, forming a fringe; the polyp spicules are also echinulate.

In some respects this form resembles *Acanella simplex*, Verrill, but the hollow axis and the form of the spicules will easily distinguish it.

The spicules measure 3·0–0·15; 2·0–0·15; 0·4–0·05 mm. in the cœnenchyma, and in the polyps from 2·5–0·5; 2·0–0·15; 0·15–0·05 mm.

Habitat.—Station 85, July 19, 1873; off Palma; lat. 20° 42′ N., long. 18° 6′ W.; depth 1125 fathoms; bottom, volcanic mud.

Genus 2. *Acanella*, Gray.

Acanella, Gray; Cat. Lithophytes Brit. Mus., 1870, p. 16.
„ Verrill (*emend.*), Bull. Mus. Comp. Zoöl., vol. xi. No. 1, p. 21, 1883.

This genus was established by Gray for *Mopsea arbusculum*, Yate Johnston, a branched form. It was emended by Verrill so as to include species with unbranched stems.

Axis simple or variously branched; internodal regions long, calcareous, solid; nodal regions short, horny. The branches when present arise from the horny nodes in twos or threes. Base with root-like projections clinging to rocks or anchoring in the mud. The basal calcareous internodes are much shorter than those towards the summit. The cœnenchyma is thin, with fusiform spiny spicules greatly varying in size. Polyps