

prominent, with numerous fusiform spicules, sometimes bent or twisted; the base of the tentacles furnished with a row of from six to eight long spine-like spicules; tentacles imperfectly retractile, with minute spicules.

1. *Acanella arbuscula* (Johnston) (Pl. IX. fig. 1).

Mopsea arbusculum, Yate Johnston, Proc. Zool. Soc. Lond., 1862, p. 245, pl. xxxi. figs. 1, 1a;
Ann. and Mag. Nat. Hist., ser. 3, vol. xi. p. 299, April 1863.

Acanella arbuscula, Gray, Cat. Lithophytes Brit. Mus., 1870, p. 16 (woodcut).

Several specimens of what we take to be this species were dredged off Station 3, south of the Canaries. The axis is branched. The branches arising for the most part in the one plane from the horny nodes; two generally from the same node. The base is provided with broad, calcareous, root-like processes, for anchoring in the mud. The cœnenchyma is thin, with numerous fusiform spicules. The polyps show a tendency to a uniserial arrangement. The polyps are almost sessile, with well-developed fusiform spicules, some eight of which project and form a calyx around the base of the nearly completely retractile tentacles. One specimen measures about 20 cm. in height, is more or less fan-shaped, the broad expanse measuring about 15 cm.

There is no trace of any anastomosing of the twigs, as mentioned by Yate Johnston to be the case in the specimen described by him. The species seem very closely related to *Acanella normani*, Verrill (*Acanella arbuscula*, Norman), but the spicules do not appear to be "minutely spinulate" as described by Verrill.

The colour in spirit is a dull brown, but the tentacles are of a much darker hue, and when withdrawn give the appearance of black tips to the polyps. The spicules on the outside of the polyps, and those forming the calycine fringe, measure 3·6–0·1; 3–0·09; 2–0·05 mm. The smaller forms in the cœnenchyma and tentacles measure from 0·13–0·02; 0·3–0·05; 0·6–0·03 mm.

Habitat.—Station 3, south-west of the Canaries; depth, 1525 fathoms; bottom, hard ground.

2. *Acanella eburnea* (Pourtales) (Pl. IX. fig. 2).

Mopsea eburnea, Pourtales, Bull. Mus. Comp. Zoöl., vol. i. p. 132, 1868.

Isidella eburnea, Gray, Cat. Lithophytes Brit. Mus., 1870, p. 15.

Acanella eburnea, Verrill, *loc. cit.*, vol. xi. p. 16, 1883.

A much-rubbed specimen of this species occurs in a collection made off Sombrero Island. The cœnenchyma on the axis is thin. The echinulate spicules seem very characteristic of the species. This may be *Acanella spiculosa*, Verrill (*loc. cit.*, p. 17), but contrary to his usual habit, Verrill gives no measurements of the spicules of this species or of *Acanella eburnea*, though he makes the specific differences depend in some measure on their relative size.