

developed. This genus stands very near to *Mopsea*; the spicules closely resemble those of *Mopsea dichotoma*, but, apart from the different habit of the colony, the polyps show a totally different form, and most of the branches arise from the middle of the calcareous joints.

As yet only one species can with certainty be referred to this genus. Perhaps also the *Mopsea costata* from the London clay, cited by Milne-Edwards and Haime,¹ belongs to it.

Acanthoisis flabellum, n. sp. (Pl. VIII. figs. 1, 1a, 1b; Pl. IX. fig. 12).

The colony is expanded like a fan, and plumosely branched. The main stem gives off larger branches and smaller twigs alternately on two sides, which come off nearly at right angles. The small twigs generally remain simple, the larger branches bend round after a short course and run parallel to, or at sharp angles with the main stem, themselves again branching further just like the latter, bearing partly larger twigs, which again give off lateral twigs, and partly small unbranched twigs that stand out at right angles. Twigs of the fifth order may thus be developed. Only in individual places do two branches anastomose with one another, most of them are free. Superficially regarded, we have a number of radiating branches diverging in one plane, which are provided with two rows of twigs like a feather. The main stem has a diameter of 1.5 mm. at the base and a length of 95 mm., the larger branches attain a length of 80 to 90 mm., the smaller branches 5 to 10 mm. The entire height of the colony reaches 110 mm., the greatest breadth 100 mm.

The polyps are placed on the stem and branches in short spirals, four or five in a spiral; only on the thin, somewhat flattened, terminal twigs are the polyps placed on both sides of the axis. A short process of the cœnenchyma forms the end of each twig. The polyps are shaped like truncated cones. They arise with broad bases and diminish slightly in size towards the mouth, which appears to be evenly truncated, since the tentacles are folded in at right angles over the oral cavity. The polyps stand up straight from their axis; only on the point of the twig are they placed obliquely to the stem. Their height reaches 0.4 mm. and the diameter at the base 0.5 mm.

The axis consists of alternating joints of thick calcareous substance and intervening masses of horn. In the thicker parts of the stem the calcareous joints are twice as long as the horny joints, 3 mm.; in the branches and especially in the terminal twigs they become considerably longer than the horny joints, which have a much smaller diameter than the calcareous joints. The latter have a spindle-like form. The last joint is always calcareous. In the stem the calcareous joints are whitish, in the twigs they assume a reddish-yellow colour. The branches arise from each calcareous joint to the number of two, at different heights, from each side. Sometimes the first horny joint of the higher

¹ Monogr. British Fossil Corals, p. 42, pl. vii. fig. 3.