

recognise the retention of the genus *Mopsea* only for *Mopsea encrinula*.¹ Kölliker in his *Icones Histiologicæ* apparently did not examine the typical *Mopsea encrinula*, and only had Gray's *Mopsella dichotoma* and Ehrenberg's *Mopsea erythræa*, before him, which he united with a new species under *Mopsea*. He refers *Mopsea* to the Melithæidæ and is therein followed by Klunzinger, who again only had *Mopsea erythræa*, Ehrenberg, before him.

It seems strange that de Blainville² should not allude to this genus, though he visited Caen in 1829 to examine the types of Lamouroux' species.

The Challenger material contains both the species upon which Lamouroux founded his genus, and supported thereby it is possible to restore the genus to its old condition. The two forms which belong thereto are true Isidæ; the calcareous joints of their axis consist of concentric lamellæ with deposits of calcareous crystalline bodies. They retain their essential form after treatment with acids. Together with the two new genera *Primnoisis* and *Acanthoisis* they form a well-defined subfamily of the Isidæ, that of the Mopseinæ, which are closely connected with one another through the form of the polyps and of the spicules.

1. *Mopsea dichotoma* (Linné) (Pl. IX. fig. 10).

Isis dichotoma, Linn., Syst. Nat., Ed. x. p. 799.

„ „ Lamk., Hist. anim. sans vert., t. ii. p. 302.

Mopsea dichotoma, Lamx., Hist. polyp. flexibles, p. 467.

„ „ Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 197.

Non Mopsella dichotoma, Gray, Proc. Zool. Soc. Lond., 1857.

Nec Mopsella dichotoma, Verrill, Bull. Mus. Comp. Zoöl., 1864, p. 38.

Nec „ „ Kölliker, Icon. Histiol., p. 142, pl. xix. fig. 41.

Stem upright, ramified; the main stem, rising from a calcareous disk-like base, gives off slender branches on two sides at different heights, which again develop lateral twigs in similar manner. These are long and rod-like, and, arising at acute angles, soon turn upwards and rise parallel to one another to about the same height. In this way twigs are formed up to the fifth order. Since the twigs, arising from the stem or branches, soon attain to nearly the same thickness, and the latter, at the origin of each branch, is somewhat bent out of its straight course in the opposite manner, there arises the appearance of a continuous dichotomy. The main stem, in the largest specimen, has a diameter of 2 mm. at the base, and a height of 165 mm. The rod-like, unbranched, terminal branches, may develop to a length of 95 mm.

On the lower part of the stem the coenenchyma is thin and allows the jointed axis to show through, on the branches and twigs it becomes thicker and filled with polyps. These, as Lamouroux has already asserted, are different on the thicker parts of the stem and on the branches. On the thin branches they are projecting, club-shaped, with

¹ Proc. Zool. Soc. Lond., 1857, p. 283.

² Manuel d'Actinologie, 1834.