

5th Family. LUCERNARIADÆ *Johnst.*, Brit. Zoöph., 2d edit., 1847, p. 244 (not *Huxley*, who, ten years later, applied the name Lucernariadæ to the whole order of Discophoræ). — Calycozoa *Leuck.*, Morphologie und Verwandtsch. der Wirbellosen Thiere, 1848. — Podactinaria *M.-Edw.* and *Haimé*, Brit. Foss. Corals, 1850.

This family bears the same relations to the Marsupialidæ as the Comatulidæ do to the Pentacrinidæ. The Lucernariadæ are pedunculated Discophoræ.

*Lucernaria* *Müll.* As characterized by the illustrious author of the Fauna danica, this genus still embraces several distinct types; all of which, however, agree in having eight bunches of tentacles, alternating, in some of the species, with short, simple tentacles. These simple tentacles resemble, in their appearance, the ocelli of the Marsupialidæ, as the fasciculated tentacles recall those of the genus *Chiropsalmus*, of the same family; thus showing, in another way, the homological relations which exist between the tentacles and the marginal organs of all Acalephs, described as ocelli and otolithes. Long associated with the Polyps, this family at last seems to be referred to its true position, by the side of the free-moving Haplostomeæ, to which they bear the same relation as the pedunculated Crinoids to the genus *Comatula*. Allman, who has correctly traced their homologies, refers them, however, to the Hydroids. As I have had no opportunity of comparing the American with the European species with which they have been identified, I must leave it doubtful whether they are the same or not. To the genus *Lucernaria* proper, I refer only the species in which two and two bunches of tentacles are approximated, without simple tentacles.

*L. quadricornis* *Müll.*, Zool. Dan., Pl. 39, figs. 1-6; *Sars*, Fauna littor., Pl. 3, figs. 1-7; *Johnston*, Brit. Zoöph., Pl. 15, figs. 3-7. — *L. fascicularis* *Flem.*, Wern. Soc. — *Scotland*, *Shetland* (*Fleming*); *German Ocean* (*O. F. Müller*); *Norway*: *Florøe* and *Kind Islands*, *Bergen* (*Sars*); *Donaghadee, Ireland* (*Templeton*); *Grand Manan, Nova Scotia* (*Stimpson*); *Chelsea Beach and Swampscott Beach, near Boston* (*Dr. A. A. Gould and L. Agassiz*); *Greenland* (*Fabricius*). The shortness of the arms and the thickness of the body of the American specimens incline me to the belief that they differ from those of Europe.