Family I. BRIAREIDÆ.

Briareacea, Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 188. Paragorgiaces, Kölliker, Vorhand. phys.-med. Gesch. Würzburg, Bd. ii. p. 11.

Scleraxonia in which the connechyma consists of a polyp-bearing cortex and a medullary substance of closely packed spicules; these are either developed on the surfaces of an upright shrubby-colony, or the latter is relegated to the interior of a cylindrical stem over which is spread the former. In the latter case a more or less well-defined axis is formed which may be penetrated by nutritive canals, or may be quite without them. The Briareidæ thus fall into two subdivisions, Briareinæ and Spongioderminæ.

Subfamily 1. BRIAREINÆ.

Central mass with nutritive canals.

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1	nllonning	(STOT
	Leucoella,	uray.

2. Solenocaulon, Gray.

3. Semperina, Kölliker.

Suberia, Studer.
Anthothela, Verrill.
Paragorgia, Milne-Edwards.

7. Briareum, Blainville.

Subfamily 2. SPONGIODERMINÆ.

Central mass without nutritive canals.

8. Titanideum, Agassiz.

9. Iciligorgia, Ridley.

10. Spongioderma, Kölliker.

Subfamily 1. BRIAREINÆ.

1. Leucoella, Gray, Ann. and Mag. Nat. Hist., ser. 4, vol. v. p. 405; Ridley, Rep. Zool. Coll. H.M.S. "Alert," Alcyonaria, p. 355.

The most primitive form of this subfamily is probably that of Leucoella, Gray. But of this unfortunately we have only a very incomplete description, so that the relations of the nutritive canals are not clearly known. According to Gray's diagnosis this genus must be very nearly allied to Solenocaulon.

2. Solenocaulon, Gray, Proc. Zool. Soc. Lond., 1862, p. 34, pl. xxxvi. fig. 1; Gray, Ann. and Mag. Nat. Hist., ser. 3, 1862, p. 147. Solenogorgia, Genth, Zeitschr. f. wiss. Zool., Bd. xvii. p. 429, 1867.

Solenocaulon, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, October 1875, p. 668.

In Solenocaulon the colony consists of an upright, often laterally flattened stem portion, which bears polyps chiefly on its margins and on one face. The polyp tentacles,