anterior portions of the polyps are retractile within a distinct calyx portion. A canalicular system with relatively wide canals sends its ramifications throughout the axis.

5. *Anthothela*, Verrill, Bull. Mus. Comp. Zoöl., vol. xi. No. 1, 1883, p. 40; Proc. Nat. Mus., vol. ii. 1879, p. 199.

Briareum, Sars, Faun. litt. Norveg., p. 63.

This genus was established by Verrill for *Briareum grandiflorum*, Sars. The colonies form incrustations, or are upright and branched with a distinct axis formed of spindle-shaped spicules. The polyps are large, projecting, and not retractile, but when closed they terminate in eight lappets, which are formed from the bases of the incurved tentacles. The cœnenchyma of the cortex contains large nutritive canals, fine capillary sap-canals as in the Alcyonidæ, and a few larger longitudinal canals which also perforate the axis. The large polyps possess digestive cavities, which impinge on the axis.

6. *Paragorgia*, Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 190.

Briareum (*pars*), Blainville, Manuel d'Actinologie, p. 520.

This genus forms upright, branched, mainly cylindrical colonies, with irregularly distributed polyps having wart-like calyces, into which the anterior portion of the polyps may be withdrawn. The somewhat vaguely defined axis contains large longitudinal canals. Besides the normal polyps (autozooids) *Paragorgia nodosa*, Kor. and Dan., has also siphonozooids without tentacles.

7. *Briareum*, Blainville, Manuel d'Actinologie, p. 520.

Here the colonies form irregularly lobed upright masses. The axis, which is penetrated by canals, is but vaguely defined. The polyps, which are regularly distributed upon the stem, are without calyces and entirely retractile within the substance of the cœnenchyma.

Subfamily 2. SPONGIODERMINÆ.

Paragorgiaceæ, Kölliker, Verhandl. phys.-med. Ges. Würzburg, N. F., Bd. ii. p. 11.

8. *Titanideum*, Agassiz, MS.; Verrill, Bull. Mus. Comp. Zoöl., No. 3, January 1864, p. 39; Mem. Boston Soc. Nat. Hist., vol. i. pt. iv. 1869, p. 10.

This genus by the shape and habit of the polyps seems allied to the preceding genus (*Briareum*), but has a well-marked stem which is spongy and very spiculose, but firm and