

Genus 3. *Corticella*, n. gen.

Corticidæ containing polyactinose in addition to tetractinose asters.

Type—*Corticella stelligera* (O. Schmidt) (p. 281).

Genus 4. *Rhachella*, n. gen.

Corticidæ (?) characterised by polycladose calthrope.

Type—*Rhachella complicata* (Carter) (p. 281).

Family III. THROMBIDÆ, Sollas.

Thrombidæ, Sollas, Encyclopædia Britannica, vol. xxii. p. 428, 1887.

Microsclerophora with trichotriænes, and sometimes a peculiar form of amphiaser. The ectosome is thin and not sharply defined from the choanosome. The mesoderm is a dense collenchyma, containing numerous large granular cells in addition to collencytes. The chamber-system is diplodal.

Genus I. *Thrombus*, Sollas.

Thrombus, Sollas, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 179, 1886.

With the characters of the family.

Type—*Thrombus challengerii*, Sollas (p. 275).

Great interest attaches to the suborder Microsclerophora; the family Placinidæ evidently lies near the root of the Tetractinellida and of the Spintharophorous Monaxonida also, while it is not separated by a very wide interval from the still more primitive Myxospongiæ; were *Oscarella lobularis* to acquire tetractinose asters it would of necessity be included in the Placinidæ. The fact that in my preliminary report I included in the Placinidæ the new genus *Epallax*, which on fuller consideration I now assign to the Axinellidæ, shows how nearly these families are related, and how closely the Spintharophora and Tetractinellida approach each other.

Order II. LITHISTIDA, O. Schmidt.

Lithistidæ, O. Schmidt, Spong. Atlant. Gebiet., p. 21, 1870.

„ Carter, Ann. and Mag. Nat. Hist., ser. 4. vol. xii. p. 437, 1873.

Subfamily *Lithistina*, Carter, *op. cit.*, ser. 4, vol. xvi. p. 185, 1875.

Order *Lithistidæ*, Zittel, Abhandl. d. k. baier. Akad. d. Wiss., Bd. i. p. 67, 1878.

Suborder *Lithistina*, Vosmaer, Bronn's Klass. u. Ord. d. Thierreichs, Porifera, Bd. ii. p. 281, 1887.

Tetractinellida provided with a consistent skeleton by the zygosis of modified spicules or desmas.