Family II. ASCONEMATIDÆ.

Lyssacina of sack-, tube-, beaker-, or mushroom-like form, fixed either directly or by means of a round stalk. The body-wall, which is not perforated, forms a thin soft plate or a compact mass, which represents either the thick wall of a beaker, or the arched plate of a mushroom-like body. In the latter case the gastral surface has become the convex outer side.

Both dermal and gastral surfaces are densely and uniformly beset with hexact and pentact pinuli, in which the freely projecting fir-tree-like ray is prominently developed, while the parenchymal ray is usually small or entirely atrophied. The four transverse rays, which are cruciately disposed, lie embedded in the bounding skin, and the whole spicules are accordingly designated autodermalia and autogastralia. Below these pentact hypodermalia and hypogastralia occur.

The rosettes which lie scattered between the diact or hexact principalia are for the most part discohexasters.

Subfamily 1. ASCONEMATINÆ.

Sessile sack-, cup-, or tube-like Asconematidæ, with a thin, flabby, pliable wall.

Genus 1. Asconema, Saville Kent.

- 1870. S. Kent, Monthly Micr. Journ., Nov., p. 241 (Asconema setubalense).
- 1871. Gwyn Jeffreys, Proc. Roy. Inst., N. 54, p. 258.
- 1872. Gray, Ann. and Mag. Nat. Hist., vol. ix. p. 442.
- 1873. Thomson, Depths of the Sea, p. 429.
- 1874. Carter, Ann. and Mag. Nat. Hist., vol. xii, p. 349.
- 1874. Gray, Ann. and Mag. Nat. Hist., vol. xiii. p. 284.
- 1875. Marshall, Zeitschr. f. wiss. Zool., Bd. xxv., Suppl., p. 142.
- 1876. Marshall, Zeitschr. f. wiss. Zool., Bd. xxvii. p. 113.
- 1880. Norman, Ann. and Mag. Nat. Hist., vol. vi. p. 430.
- 1880. O. Schmidt, Spongien des Meerbusens von Mexico, ii. p. 65.
- 1881. Milne-Edwards, Comptes rendus, xciii. p. 876.
- 1885. Filhol, La vie au fond des mers, p. 288.

History.—Among the marine Sponges preserved in the Lisbon Museum of Natural History, Saville Kent detected in 1870,¹ on the occasion of the "Norna" expedition, some large, but only partially preserved cup- or sack-shaped specimens of "felt-like consistence, composed of an interlacement of long filiform siliceous fibres or spicules, and, interspersed among these, hexradiate spicula of various sizes and minute multiradiate ones with capitate extremities." For these specimens he erected a special genus, Asconema, and characterised the single representative species, Asconema setubalense, in the following ¹Monthly Micr. Journ., p. 245, 1870.