

club-shaped sponge in the mud. The chambers are not exactly thimble-shaped, nor sharply marked off from one another, but form irregular diverticula of the membrana reticularis.

Family HYALONEMATIDÆ, Gray.

Both dermal and gastral membranes contain numerous pentact pinuli.

Subfamily 1. HYALONEMATINÆ, F. E. S.

The compressed usually cup- or goblet-shaped body bears on the upper surface a more or less sharply contoured round excurrent (oscular) region, and is only exceptionally split laterally.

Genus 1. *Hyalonema*, Gray.

At the lower pole of the funnel-shaped or more spherical body, there is a long, narrow, sharply defined root-tuft, in which the spicules are at their lower end equipped with a four-toothed anchor structure. No uncinates. The slender marginalia are superiorly pointed diacts with toothed distal ray.

Subgenus 1. *Hyalonema*, s. str.

The superior aperture of the gastral cavity is covered by a sieve network which extends from the annular rim with its cuff-like fringe of fine marginalia, either flatly over the whole gastral aperture, or sunk into a funnel-shaped depression.

Species 1. *Hyalonema sieboldii*, Gray.

The almost cylindrical, inferiorly rounded, superiorly truncate body shows at its inferior pole a twisted tuft of long spicules, almost as thick as a little finger. The terminal sieve-plate exhibits a cruciate zone of imperforate skin, lying above the four crossed radial septa, and bears in the middle a central cone.

The upper portion of the root-tuft is surrounded by an encrustation of *Palythoa fatua*, Max Schultze, and other commensal Anthozoa are seated on the external skin. The parenchyma contains small oxyhexacts with straight, and others with curved toothed rays. The larger amphidiscs have broad arched umbels with eight rather broad paddle-shaped rays. Japan.