towards the outer end, before which, however, they become again enlarged and end in a bidentate crescent-shaped anchor. The two teeth of the latter rise from the gently bow-shaped, rounded and thickened terminal portion (Pl. XLV. fig. 9), and end in simple conical points. The distance of these two terminal points, *i.e.*, the total breadth of the anchor, is about 0.5 mm.

## Genus 3. Poliopogon, Wyville Thomson (Pls. XLVII.-L.).

Literature and History.—In his preliminary account of part of the Challenger Expedition¹ Wyville Thomson described a large sponge—Poliopogon amadou—which was found to the south of the Canary Islands at a depth of 1525 fathoms. This he regarded as type of a new genus—Poliopogon. This sponge forms an oblique and upward directed, semi-involute plate, with sharp upper and lateral margins, having the general shape of a tree fungus. From the transversely truncated base a strong beard of long siliceous fibres projects, and these fibres bear on their extremities two widely extended anchor teeth, which serve for fixing the sponge. An uniserial fringe of fine, straight, parallel, projecting siliceous spicules adorns the sharp free side and upper margins. The concave inner and the convex outer surfaces are covered by a fine network with quadrate meshes. "The sponge when brought up was of a delicate cream colour; it was necessary to steep it in fresh water to free it from salt, and the colour changed to a leaden grey."

Character of the Genus.—The body has the form either of a thick-walled goblet, or of an ear-shaped involute plate. It exhibits a broad basal tuft, and an oscular fringe of marginalia, but no laterally projecting pleuralia. The parenchyma contains small, extremely rough or spinose, oxyhexacts and uncinates, and in one species even small smooth oxydiacts of varying size and in varying abundance. The two teeth of the basal anchors are disposed approximately at right angles to the long, almost smooth shaft. The marginalia end externally in club-shaped thickenings.

## 1. Poliopogon amadou, n. sp. (Pls. XLIX., L.).

South-west from the Canary Islands (Station 3, lat. 25° 24′ N., long. 20° 14′ W.), from a depth of 1525 fathoms and hard ground, a beautiful *Poliopogon* form was dredged. This type, which was in 1877 figured and shortly described under the above title in Wyville Thomson's Atlantic, has not the cup shape characteristic of most other Hyalonematidæ, but exhibits rather the form of an ear, or that of a leaf rolled up into a semi-funnel (Pl. XLIX.). There is thus no gastral cavity but only a concave gastral, and a convex external surface, both of which are quite smooth, without radially projecting