

The genus was formed for the reception of a single species from deep water, *Abyssascidia wyvillii*.

*Abyssascidia wyvillii*, Herdman (Pl. XXVII.).

*Abyssascidia wyvillii*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879-80, p. 470.

*External Appearance.*—The body is irregularly oblong in shape, rather pointed at the anterior, and rounded at the posterior, end. It is attached to a small manganese nodule by the lower (ventral) surface in front of the middle. The lateral edges are rudely parallel. The body is flattened dorso-ventrally, so that the branchial aperture being anterior, the atrial is on the upper surface, three-quarters of the way to the posterior end, and rather to the right of the middle. In consequence of this, more of the left than of the right side enters into the formation of the upper surface. The branchial aperture is at the edge, slightly to the right of the anterior end, and has twelve or fourteen lobes; the atrial has eight or nine lobes, both apertures are sessile.

The surface is smooth. The colour is a very light grey, almost transparent.

Length of the body, 6 cm.; breadth of the body, 4 cm.

*The Test* is thick; it is rather solid, but not hard, and is transparent. No vessels are visible. The test contains only small fusiform cells in the hyaline matrix; there are no bladder cells.

*The Mantle* is very thin, the endostyle and viscera being seen distinctly through it. A few large distant muscle bands run round the right edge, and extend over the left side nearly as far as the endostyle. The atrial siphon is prominent, and provided with fine muscle bands; the branchial is also muscular, but not projecting.

*The Branchial Sac* is large, and fills the whole mantle cavity; it is not plicated, and its structure is simple. Every alternate transverse vessel is slightly wider than the intermediate ones, and here and there the stigmata extend from one larger vessel to the next, cutting through the intermediate smaller one. The internal longitudinal bars widen slightly at each intersection with a transverse vessel, but bear no papillæ. Tusk-shaped ducts, to which horizontal membranes are attached, connect the transverse vessels with the swellings on the internal longitudinal bars. The stigmata are rather wide and irregular; there are about three in a mesh, which is generally nearly square.

*The Dorsal Lamina* is reduced to a series of conical languets, which are blunt, comparatively short, and irregular in size.

*The Tentacles* are few, distant, small, and filiform; there are two at each side of the anterior end of the endostyle, and a few others in the usual circle, but separated by nearly their own length from each other.

*The Dorsal Tubercle* is carrot-shaped, tapers posteriorly, and has no visible aperture.

*The Nerve Ganglion* is elongated. It is placed at a considerable distance from the dorsal tubercle.