Finally, the pleuralia include isolated two-toothed, very rarely three-toothed, anchor forms with a strong shaft bearing barbs. These occur more abundantly towards the base, and seem to be wholly absent from the upper end of the sponge-body. The inner portion of these spicules, which vary greatly in length, is smooth, and ends in a simple uniform point. On the outer portion inconspicuous tubercles first appear, these are succeeded by larger forms, which finally pass into strongly developed spines pointed backwards and slightly recurved. In the portion of the anchor shaft which is surrounded by barbs the diameter of the spicule rod decreases gradually outwards. Just in front of the end which bears two simple anchor teeth the barbs disappear, and the diameter again increases on to the thickened end with its slightly arched apex. From the latter the two strong roundish (about 1 mm. in length) anchor-teeth originate laterally in a distal plane. They extend opposite one another—smooth and slightly curved—and are directed obliquely outwards and backwards. In abnormal cases three similar anchor teeth occur, forming equal angles with one another, or the number may be reduced to one.

The basalia forming the numerous slender tufts¹—about 2 mm. in thickness—which project from the lower rounded end of the sponge, are for the most part of great length, and may in the larger specimens, as Wyville Thomson has shown, measure several decimetres. They are, on the whole, stronger than the pleuralia, and form in spirit or dried specimens a thick feltwork, between the fibres of which, portions of the substratum and all kinds of foreign bodies are included (Pl. XLIII. fig. 1). In their upper portions all the fibres are smooth, while externally they exhibit, for the most part, perhaps without exception, the curved barbs described above in connection with the shaft of the pleural anchors. Like the pleural anchors, further, they pass by a smooth cylindrical neck to a thickened terminal portion with two more or less large recurved anchor teeth.

The marginalia surrounding the circular margin of the oscular aperture form a closed wreath—a few spicules in breadth—and consisting either of long, strongly developed uncinates like those which occurred among the pleuralia, or of perfectly smooth, internally pointed, externally narrowed spicules of various calibre, which probably end in a point or in a spinose portion with terminal knob.

While on the internal surface of the gastral cavity of the Hyalonematids no spicules projected except the pinules, in this form numerous uncinates occur in the neighbourhood of the marginal fringe, arranged in tufts directed inwards and upwards, and projecting freely for about half their entire length into the lumen of the gastral cavity (Pl. XLIII. fig. 2).

Oscar Schmidt has, in his Spongien des Meerbusens von Mexico (p. 65), maintained that the Pheronema figured by Saville Kent (Monthly Micr. Journ., 1870, pl. lxiii. fig. 1) is not Wyville Thomson's Pheronema carpenteri, but Pheronema annæ, Leidy. With this opinion I cannot agree. The basalia do indeed protrude as in Pheronema annæ, but the same occurs in Pheronema carpenteri, though to a less marked degree. Besides, as Saville Kent notes, the specimen was much macerated, so that the individual bundles of basalia were naturally isolated.