

latter, indeed, is formed by the edge of the mantle itself, while the open inhalent siphon in *Malletia* is formed by the internal fold of the mantle, just like the exhalent siphon to which it is attached.

At the base of the inhalent siphon, where the retractor muscle of the siphons is inserted, there exists, ventrally, and at the left side only, a long extensile tentacle (*j*).

In *Malletia obtusa*, Sars (*Yoldia*), G. O. Sars has already noted the presence of pallial tentacles;<sup>1</sup> but, according to his description, each lobe of the mantle bears one ("tentaculis singulis").

Brooks was the first to point out that this appendage was not paired in *Yoldia*,<sup>2</sup> but he speaks of it as existing on the right side. I have examined *Yoldia isonota* on this point, and have ascertained that this tentacle is situated sometimes on the left lobe of the mantle, sometimes on the right, but that it is never paired. This may possibly be the case in *Malletia*, but I cannot say so positively, as I had only one specimen for examination.

Does there exist among other Pelecypods any organ comparable to this tentacle in *Malletia* and *Yoldia*? I have nowhere discovered any notice of similiar structure. I may therefore call attention to an organ which I observed in *Macoma balthica*, L. sp. (*Tellina*), but not in all the species bearing the name of *Tellina*, during my first stay at the Marine Zoological Laboratory in Wimereux (1884),<sup>3</sup> and which I have seen again since. As this arrangement has never been described, to my knowledge, I represent it here (Pl. I. fig. 9, *j*).

It is an organ in the form of a tuft, composed of a considerable number of small, short, cylindrical tentacles radiating from the same point; it is situated at the base of the inhalent siphon, on the retractor muscle of the siphons; and is always present on each half of the mantle, the left as well as the right.

The situation of these tufts in *Tellina balthica* resembles that of the tentacle in *Yoldia* and *Malletia*. The innervation is also similar; the nerve springing from the visceral ganglion, and taking its course to the margin of the mantle, gives rise to a cord which terminates in a ganglionic swelling at the base of the tuft in *Tellina*, or exhibits this swelling on its course at the base of the tentacle, in *Yoldia*<sup>4</sup> and *Malletia*.

As to the use of these tufts, Brooks attributes a sensory function to the tentacle in *Yoldia*. There can, indeed, be no doubt about this point, either with regard to *Yoldia* or *Tellina* and *Malletia*, when we find a ganglionic swelling, in which a nerve terminates, at the base of the organs in question.

<sup>1</sup> On some Remarkable Forms of Animal Life, i. (1872) p. 25, pl. iii. fig. 20, c.

<sup>2</sup> On an organ of special sense in Lamellibranchiate genus *Yoldia*, *Proc. Am. Ass. Adv. Sci.* for 1874, t. xxiii. (1875) part i. p. 81.

<sup>3</sup> It gives me pleasure to thank Professor A. Giard, director of this laboratory, for the cordial and hospitable manner in which he has repeatedly welcomed me there.

<sup>4</sup> Brooks, *loc. cit.*, p. 82.