

striction in the proboscis, which I observed in the longitudinal sections of the only specimen of *Carinina* that had retained its proboscis.

I cannot affirm that this constriction was natural, *i.e.*, that it would also be found in fresh specimens. Since, however, I have formerly described (VII) similar constrictions in the proboscis of *Carinella* and *Valencinia*, there are many *a priori* grounds for also accepting its normal occurrence in *Carinina*. At the same time it more or less coincides with the change in the character of the epithelium just noticed.

The epithelium of the proboscis of certain Schizonemertea was known to be characterised by the presence of nematocysts. In a former publication (VII) I showed that the observation of Max Müller, who first noticed urticating elements in *Cerebratulus urticans*, might be extended to nearly all Schizonemertea, although the size of these elements is generally considerably below that of the type species just mentioned. Müller has given good figures of the shape of the elements in his species; of the others no figures have hitherto been given, and fig. 2 of Pl. XV. is intended to show the situation of packets of urticating elements, batteries, as they might be called, in a transverse section of the anterior part of the proboscis, rather than to furnish particulars concerning the histology of these nematocysts. They are seen to be situated close to the free surface of the cells, and to be of different sizes on the dorsal and on the ventral surface of the proboscis. Three batteries are figured lying free in the lumen of the proboscis; when seen from the side they have the aspect of a brush with close hairs seen in the same way, when seen from above they appear to be more or less circular, and each of the elements composing the battery is then found to be represented by a fine dot instead of by a straight line, as was the case in the side view.

In the spirit specimens of *Cerebratulus* more than these general facts could not be ascertained. I may add that fresh specimens from the Mediterranean showed that each of the elements out of which such a battery is composed has a spindle-shaped form, being more or less pointed at both ends and somewhat bulging in the middle, and that from one of the pointed ends—which in its natural position is directed away from the proboscidian epithelium—the fine urticating thread may be observed to issue. This thread is, in most cases, comparatively short. While in *Cerebratulus urticans* there is hardly any doubt that each urticating element may act independently of the others, it is not improbable that in some species, as the one here described, they remain connected in batteries by whose joint action, when the proboscis is projected, delicate animals may be wounded or paralysed upon extrusion of the proboscis, and may thus fall an easy prey to the proprietor of this formidable weapon.

As to the more detailed histology of this epithelium, I wish to withhold further remarks till I am enabled to publish the observations on the fresh specimens examined at Naples. Similarly the curious and very adhesive epithelium of the foremost portion of the Hoplonemertean proboscis which I have formerly described (IV, V), which was well