

The anterior hooks (Pl. XXVA. fig. 23) have about eight teeth, the largest occupying the middle, the first and especially the last (which seems to be partly adnate) being smaller. The posterior hooks are less, and have a more decided dorsal curve than the anterior; otherwise they are similar, having from seven to eight teeth.

The branchiæ are incomplete, but appear to number twenty-three or twenty-four. The absence of many posteriorly may have been accidental, but if otherwise, they are not continued so far backward as in *Sabellaria spinulosa*.

The contents of the alimentary canal consisted of sandy mud in which were fragments of minute Crustacea, a few Foraminifera, fragments of sponge-spicules, minute Algæ, and parasitic Nematoids. The latter had bluntly pointed heads and rounded tails. A few Gregarinæ were also present. In the posterior region of the canal peculiar areolar membranes exist, but their relationships are doubtful.

The complexity of the anterior region of the body in section is considerable. Externally it is covered by a very thin layer of cuticle, and a narrow stripe of hypoderm containing the pigment. The circular muscular coat is best marked dorsally, for ventrally, in a line with the roots of the dorsal hooks, it is merged into the intricate muscular mass occupying the entire area of the region. The general appearance of the centre of this region is somewhat like the tongue. Dorsally are the roots of the two great hooks, while, laterally, are the paleæ. The inner row has its concavity directed outward and backward, the dorsal end having paleæ circular on section, the ventral and outer flattened paleæ. Each of the latter organs has an outer chitinous investment and a brownish central region. The branchial processes have a somewhat rigid chitinous ring, which retains its shape on section, under the ciliated hypoderm, and an inner axis connected with the vascular supply. Considerable nerve-trunks are noticed in the branchial region under the ventral hypoderm.

The intricate muscular stroma of the cephalic region shows certain changes as the cerebral ganglia and the mouth appear. Thus, just in front of the ganglia, a conspicuous band of transverse fibres occurs in the central region. As soon as the ganglia are outlined, a powerful transverse muscular band occurs above and beneath them, the rest of the area consisting of a complex series of radiate and oblique fibres.

Behind the ganglia the intricacy of the muscular apparatus surrounding the buccal region is great, and the nerve-cords have now assumed a lateral position. When the mouth becomes enclosed the cords form two large rounded masses in section toward the inner and upper border of each longitudinal ventral muscle, and the dorsal muscles are indicated. Just before the cords unite in the first ganglion a peculiar fan-like muscular arrangement is caused on each side of the gullet by the fibres connected with the great thoracic bristles. The nerve-cords have not yet reached the hypoderm, but are invested by interwoven muscular fibres inferiorly, the ventral muscles externally, and the oblique internally.