

and extends along the anterior palpi. Just behind the lanceolate cirrus on each side is a tuft of beautifully pinnate bristles (Pl. XXVA. fig. 18). The pinnæ slant very regularly in a distal direction; while a few transverse markings occur in the shaft inferiorly.

Dorsally the mottled brownish cephalic bars or markings are continued evenly backward in the median line a considerable distance, so that there is no separation of the cephalic region on this surface. Laterally, however, a branchial appendage indicates a distinction, and on each side, below the latter, are three processes, viz., a dorsal, ventral, and median, the two former being more filiform than the latter. The separation is completed by a fold which, on each side, runs inward ventrally to the mouth. These lateral appendages probably indicate a segment, and the tuft of bristles on each side of the mouth may be the ventral bristles pertaining to it, though in such a case the lateral palpi at the mouth must have passed forward into the buccal segment. The fact, however, that these bristles differ very decidedly from the following series would show that there is no necessity for strictly connecting them with the first body-segment.

The next three segments are well defined, each bearing the usual pair of branchiæ, the dorsal tuft of strong bristles and the lateral lappet, with its ventral group of more slender bristles.

The dorsal bristles (Pl. XXVA. fig. 19) form a linear series of stout flattened oar-shaped organs, widening gradually from the base upward to the tip, the latter, however, being drawn to a short point. The edge of the thin flattened region at the extremity (a modification of the ordinary wings) is hispid with minute spines, which extend for some distance downward on the blade. Between each of these is a minute bristle (Pl. XXVA. fig. 20) more decidedly resembling an oar, and with proportionally longer spines on the tip. The shaft is distinctly narrowed beneath the terminal region or blade.

The ventral tuft of bristles, though smaller, conforms to the same type; the tip, however, is much more tapered (Pl. XXVA. fig. 21), and furnished with longer spines than the corresponding series in the dorsal tuft. In the same way, the more slender intermediate bristles assume a pennate aspect, somewhat after the manner of the ventral buccal tuft, but more finely spiked. A complete series of gradations is thus clearly seen in these bristles, from the boldly pennate ventral, to the less pennate intermediate ventral forms, then to the boldly hispid oar-shaped kinds, and finally to the stout dorsal series, where all that remains of the pennate arrangement is a slightly hispid tip, only detected by careful examination.

The posterior region of the body follows the last mentioned, and in it the dorsal bristles are absent. A ridge for hooks extends from the base of the branchiæ in front downward to the ventral surface, the process beyond terminating in a filiform cirrus, followed by a tuft of long delicate, tapering bristles with regular spinous rows. In each tuft there are a few more finely spinose than the rest, both forms being shown in Pl. XXVA. fig. 22, *a*, *b*. These bristles continue to the posterior end of the animal.