

whole organ is striated transversely. When more highly magnified (Pl. XXIII A. fig. 14) the striæ are observed to become oblique in direction just below the pale terminal region. As a rule the inferior bristles are the shorter, and there is not much difference in size between those of the fifth tuft and the last. When the Annelid is placed on its dorsum, both these and the dorsal bristles are included in what appears to be the ventral area, but of course the flaccidity of the body causes some exceptional features in this respect.

The oral aperture is in the form of a considerable anterior slit, having dorsally six madder-brown branchiæ with pale tips, arranged along the dorsal arch of the aperture. Ventrally are the two great foliaceous lamellar tentacles with a deep inferior groove. Two parasitic forms (*Trophoniphila bradii*, n. sp.¹) adhered to the bases of the branchiæ, their smooth yellowish bodies (ovisacs) projecting into the mouth, while the anterior end was imbedded in the tissues. In shape each is somewhat fusiform or elongate-ovoid (Pl. XXXVI A. fig. 4), the anterior end being more pointed than the posterior, indeed, in some views the aspect is slightly clavate. One had a brownish globular anterior region with two papillæ and a process which was attached to the base of the branchia. The other had only a brownish mucronate surface. The chitinous body formed a chamber for the reception of the eggs. Levinson² describes a species in *Brada villosa*, H. Rathke, but this has a much larger anterior region, which is also reflexed. There are also two ovisacs, which are attached a short distance in front of the posterior end. It thus differs considerably from *Trophoniphila*, which indeed is nearer the larval form of Levinson's species.

The œsophagus (Pl. XXXVI A. fig. 5, *a*) is somewhat dusky anteriorly, passes backward with a curve to the left, and is continuous with the stomachal region, though there is no definite boundary-line. The intestine is remarkably elongated, probably nearly four times the length of the animal, an unusual feature in the Annelids. The greater part of this is formed by the anterior or smaller gut (Pl. XXXVI A. fig. 5, *b*, *b'*), the large intestine (*d*) being rather shorter. The junction between the two parts is marked by a somewhat constricted region in the anterior gut, which is thus boldly defined from the larger intestine. A slight diminution (*e*) again occurs a little in front of the anus (*f*).

The foregoing alimentary canal is coiled in a complex manner in the perivisceral chamber, and from the margin of the canal a mesentery (*c*, *c'*) composed of a beautiful network of blood-vessels passes off. These blood-vessels are of considerable size, and must perform important functions. They seem to be more slender at their junction with the canal immediately behind the attachment of the fimbriated termination of the proboscis. A little further backward, again, they form remarkably flattened expansions, so that the apertures in the meshwork are less than the tubular parts. Under a lens the edges of these fine vascular twigs are studded with minute processes like microscopic beads,

¹ After Prof. G. S. Brady, of Durham University, author of many valuable memoirs on the Ostracoda and Copepoda.

² *Vidensk. Meddel. f. d. nat. Foren. i Kjøbenhavn*, 1877, p. 371, woodcuts C-E.