Though Gordius has no jaws and not the slightest traces of biting or masticating organs, the round mouth-opening can be very distinctly seen in my specimen, when viewed in full face, -a small circular pore, like a black spot in the centre of the fingerlike anterior tip. It is not situated towards the ventral side as in Grenacher's Philippine specimens, in which the head-end is very obtuse and bluntly flattened terminally. The lumen or chamber of the gullet, viewed from the dorsum, appears as a hair-like tube in optical section and is surrounded by a pale fibrous matrix, with striations passing forwards, the tissue becoming denser immediately posterior to this lighter anterior area. Microscopic sections show the gullet to be a minute tube with a simple epithelial wall. The body becomes gradually thicker posteriorly, and the tail end in the male Gordius aquaticus is split, the two halves separating like two cotyledons with an internal rounded projection between them. In Gordius varius, according to Kingsley's drawing, given by Packard, the terminal cleft is trifid and much more marked than in other species. Gordius ornatus, according to Grenacher (and shewn in his fig. 1, Taf. xxiii), exhibits a simple blunt termination with a centrally situated cloacal aperture. My specimen is apparently a female; yet the posterior end shows a slight indication of bifidity, a central depression being discernible: but no terminal aperture can be made out.

There are no traces of eyes or other sense organs; nor have glands, a water-vascular system, or definite nerve structures been determined beyond question in our common species. The various species differ greatly in the details of their anatomical features. Thus, in *Gordius aquaticus* the external cuticle, save for a few corrugations near the head end, is smooth. As the creature curls about, irregular creases, usually transverse, appear: but in *Gordius ornatus* remarkable protruding sense-organs are described by Grenacher. These structures have the character of cuticular mounds, and when highly magnified, are seen to consist of a bundle of stout threads, projecting like tendrils with a circle of papillæ around them. The tail region in *Gordius aquaticus* is