

which under a moderate power (Pl. XXXVIA. fig. 6) show externally a translucent investment of connective tissue, and internally a highly refractive globular body often split into two or more divisions, and resembling a fatty mass. A distinct capsule surrounds the refractive body. The abundance of these on the vessels indicates their functional value. The walls of the vessels are further provided with granular cells and granules frequently arranged in longitudinal masses like glands. The whole structure appears to unite in providing for the lymphatic and circulatory functions. Certain parts of the narrow anterior region of the alimentary canal also present a somewhat reticulated appearance, probably from the arrangement of the glands in the wall.

From the dorsal region of the buccal chamber the proboscidian sheath, a tube externally somewhat resembling the former, proceeds backward to be attached to the alimentary canal about its anterior third. This tube did not appear to have any communication with the canal, but the tissues were so soft that the slightest interference caused rupture, and thus several points escaped notice. Externally this tube is of a dark madder-brown colour, and curiously ridged longitudinally, the free edges of the ridges being fimbriated. So far as could be made out in the softened specimen, the apparatus terminated posteriorly by becoming attached to the wall of the alimentary canal, after a course of about an inch and a half, the terminal ridge being provided with a number of long fimbriæ (Pl. XXXVIA. fig. 7). Internally are two slender white processes, which probably represent the proboscis. In section the external sheath presents a hyaline layer, apparently structureless, though generally marked by transverse wrinkles. Immediately within is a thick stratum of rounded cells and granules, bounded internally by another hyaline coat similar to the former. The rounded cells are slightly coherent, and contain brownish pigment. The central area is occupied by masses of granules and sections of the slender whitish tubes. The latter have a firm external layer and a granular central region.

The minute structure of the œsophagus differs quite from the foregoing. Externally is a coat composed chiefly of longitudinal fibres, followed by a firm circular muscular layer, which adjoins the lining of cylindrical epithelium. The latter consists of long fibre-like granular cells defined internally by a granular limiting membrane. This region of the canal also possesses the mesenteric vessels with the large refractive bodies in their walls.

The whole alimentary canal was filled with a whitish pulp consisting of a vast variety of Diatoms and their debris and a considerable number of Foraminifera, chiefly *Globigerinæ*. The great length of the alimentary canal is peculiar, and cannot altogether be associated with a diet mainly composed of vegetable organisms (Diatoms), for the system is no longer in the phytivorous than in the carnivorous Eunicidæ and Nereidæ.

Below the œsophageal region anteriorly is a series of transverse glandular processes, three or four in number, and symmetrically arranged, which probably represent the reproductive organs. The upper surface of these organs is papillose, and they are