

L.M. Longitudinal muscular fibres seen in section as a series of dark points.

G. Gastric cells.

The narrow dark zone between the longitudinal muscles and the membranous layer indicates possibly a circular muscular layer.

Fig. 8. Small portion of a vertical section of the cœnosarc, much enlarged, showing the histological structure of the vascular network. The vessels are seen cut open in almost their entire course. The walls of the deeper vessels are very thin, and these vessels are filled with transparent spherical globules. More superficially the walls of the vessels become thickened, and the cells composing their ectodermal layer are seen in several places to be in process of development into thread-cells. At the actual surface the cells of the ectoderm assume an elongate prismatic form. The vessels of the more superficial parts of the network are filled with the pigmented cells, mingled with transparent globules.

E. Superficial layer of the ectoderm.

M. Membranous layer of the cœnosarc canal.

C, C. Pigmented cells lying in the cavities of the canal.

B. Transparent globules filling the deeper ramifications.

T, T. Developing ovoid thread-cells.

T'. Developing thread-cells of the form peculiar to Hydrozoa.

S. Band of gelatinous tissue passing between the walls of two neighbouring vessels.

A, A. Spaces occupied in the recent condition by calcareous matter.

A'. Such a space in the superficial ectodermal layer.

O. Opening in a vessel cut at right angles to its course.

Fig. 9. Pigmented cells, of which the endoderm of the cœnosarc vessels is mainly composed, and which are abundant also within the body-cavities of the zooids. *a, d, d* Examples of the cells, showing various forms and arrangements of the pigmented granules and vesicles which compose their contents. *c* Cell showing a division of its contents into two. *b* Cell showing a further division of its contents into four.