Fig. 3. View of a group of zooids as seen in the contracted condition. One gastrozooid and three of the surrounding dactylozooids are shown. The gastrozooid here has five tentacles. The surface of the decalcified coral is here represented as seen when viewed from above, with the microscope focused somewhat into the depths of the structure. A deep focus is necessary in order to reach the far-retracted zooids. The deeper reticulations of the cœnosarc are thus brought into view.

M Z. Gastrozooid.

Z, Z. Dactylozooids.

Fig. 4. View of the inferior surface of the superficial living lamina, from a specimen decalcified in chromic acid and viewed by reflected light. The figure shows the ramifications of the canals and vessels of the cœnosarc and their connections with the zooids of one complete group or system.

G Z. Under surface of gastrozooid.

D Z. One of the seven surrounding dactylozooids.

C. Canal.

B, B. Branches of this canal.

B′, B′. Secondary branches, from which and from B B arises a complicated network of finer vessels.

Fig. 5. Enlarged view of a tentacle of a dactylozooid.

K. Spherical head of the tentacle filled with thread-cells of various sizes.

E. Ectodermal layer.

R C. Ramified cells or nuclei of the endodermal layer.

M. Membranous layer.

P. Pigmented cells within the cavity of the tentacle.

C. Body cavity continuous with that of the tentacle.

Fig. 6. Diagram showing the arrangement of the muscular fibres in a gastrozooid. The longitudinal muscles are gathered into bundles, which pass outwards for insertion on to the radially disposed vessels of the cœnosarc. Other fibres, less densely placed, occupy the interspaces between these bundles.

O. Mouth of the gastrozooid

A, A. Radially disposed vascular offsets from the base of the gastrozooid.

L M. Longitudinal muscular bundles.

C M. Circular muscular fibres.

Fig. 7. Transverse section of a gastrozooid.

E. Ectodermal layer, containing thread-cells in various stages of development.

M. Membranous layer.