

- S. Digestive cavity of the zooid lined with elongate gastric cells.
- M. Longitudinal muscular layer of the zooid. As in *Astylus subviridis*, numerous canals pass off from the margin of the rounded base of the zooid, but none from the under surface of base itself.
- D Z, D Z. Dactylozooids.
- P. P. Mouths of the sacs of the dactylozooids.
- L, L. Peculiar protective laminæ, or lids, folded in this genus in front of the openings of the cyclo-systems. In the case of the left-hand system of the figure the ramifications of the superficial network of the cœnosarc, prolonged into the body of the lid, are shown, and also the nematophores with which the lid is provided. In the other system represented, the superficial layer of the cœnosarc is shown intact. The downward prolongation of the base of the lid which should pass between the sac of the gastrozooid and its main upward canals, is omitted for clearness' sake.
- N, N. Nematophores. One of these is situate at the outer margin of the cyclo-system in each interval between the sacs of the dactylozooids.
- G. Female gonophore contained, with two others in earlier stages, in a special brood-sac as yet not far advanced in development.
- G'. Brood-sac in full development containing ova and embryos in all stages of development.
- Ov, Ov'. Fertilised ova in advancing stages of development and cell multiplication.
- P 1. Early stages of planula embryo. The thin ectoderm appears as just differentiated.
- P 2. Planula fully advanced with more fully developed and thickened ectoderm.
- P 3. Fully developed planula with highly differentiated ectoderm containing nematocysts, &c.

PLATE X.

Shows certain details of structure of the soft parts of *Sporadopora dichotoma* and of *Astylus subviridis*.

Fig. 1. Section transverse to the longitudinal axis of a gastrozooid of *Sporadopora dichotoma*, taken at a point above the junction of the tentacles with the body of the zooid. Hence the tentacles appear in this section as isolated structures.

S. Digestive cavity.

G. Large gastric cells with their nuclei.

M. Muscular layer and basement membrane at this region of the zooid comparatively little developed. Shows longitudinal fibres cut across.