PLATE VIII.

Fig. 1. Shows the structure of the soft parts of *Astylus subviridis*. A single cyclo-system, divided in half, together with portions of the branch on which it rests, is represented in the figure. At the lower part of the figure the large cœnosarcal canals occupying the axis of the branch are seen passing right and left. These place the cyclo-system in connection with the other adjacent cyclo-systems on the branches of the coral. The gastrozooid, which is devoid of tentacles, is seen resting retracted at the bottom of its sac (A).

The base of the gastrozooid is rounded and basin-shaped. Large canals spring from the margin of the basin to join the cœnosarcal meshwork, and carry into the general circulation the products of digestion, but none such arise from the direct under surface of the zooid.

G Z. Cavity of the upper chamber of the sac of the gastrozooid.

G Z. Cavity of the lower chamber of the sac of the gastrozooid.

Z. The gastrozooid.

O. The mouth appearing as a crucial slit with symmetrically arranged elongate gastric cells.

B. Tongue-like process of the wall of the gastropore which projects forwards horizontally over the summit of the retracted gastrozooid at a point where there is a sudden constriction of the pore. The projection of the tongue forms the opening of the constriction into a horseshoe-shaped aperture.

D Z, D Z. Dactylozooids retracted into their pores, and doubled down into the mouth of the sac of the gastrozooid.

P, P. Mouths of the sacs of the dactylozooids, occupying in the recent condition the dactylopores. These mouths are in this species elongate in outline, and simulate the interseptal spaces of Anthozoan corals.

G, G. Male gonophores in special sacs, and springing from branches of the cœnosarcal network.

C. Deep axial cœnosarcal canals of the branches of the coral on which the cyclo-systems rest.

S, S. Superficial networks of finer canals lying immediately beneath the superficial external layer of the ectoderm.

R, R. Radially disposed offsets of the cœnosarcal network springing from the sac of the gastrozooid.

X, X. Inter-radial spaces (*cf.* Pl. VI. R R, X X).