

- Z. Gastrozoid with twelve tentacles, disposed in a single whorl, and an almost hemispherical hypostome. Large canals spring from the base of the zoid, and form communications with the basal canals of adjacent zoid cyclo-systems.
- D Z, D Z'. Dactylozooids in their sheaths seen from behind within the adjacent zoid cyclo-systems.
- G, G, G. Gonophores. The sac of one of these is cut open to show the ovoid male generative masses and their spadices lying within.

PLATE VII.

Shows the structure of *Stylaster densicaulis* as seen in the decalcified condition. The cylindrical masses formed by three cyclo-systems of zooids are shown cut open, so as to demonstrate the arrangements of the zooids and cœnosarcal ramifications within them. The positions of the two additional cyclo-systems are indicated by outline. In the centrally placed cyclo-system the entire ramifications of the cœnosarcal canals are shown.

In the system displayed on the left side of the figure, the wall of the sac of the gastrozoid, and the superficial network beneath it, are removed, in order to show the connections of the bases of the dactylozooids with the deeper canals.

In the system shown on the right in the figure, the details of the connection of the base of the gastrozoid with the cœnosarcal canals only are given.

The gonophores are seen through the superficial networks existing in the walls of the ampulla.

Z, Z. Gastrozooids situate one at the base of each cyclo-system.

D Z, D Z'. Dactylozooids. G G. Male gonophores.

N, N. Nematophores.

A. Reflection of the surface layer of the ectoderm forming the sac of the gastrozoid and lining the gastropore. The sac-wall is very thin and transparent. Curved lines crossing the dactylozooids transversely about their middles, in the central cyclo-system shown in the figure, mark the lower and innermost margins of the dactylozooid sacs, where these become continuous with the sac of the gastrozoid. In the cyclo-system shown on the left in the figure, the sac of the gastrozoid and the portions of the sacs of the dactylozooids fronting the gastropore are represented as removed, together with the superficial network of the cœnosarc immediately beneath them, in order to display the connections of the deeper systems of large main canals which connects the zooids of the cyclo-system directly with one another.

B, B. Spaces in this deeper system of main canals.