

C. Style of one of the dactylozooids, seen in section.

B. Large canals of the cœnosarc, occurring in the pseudosepta or intervals between the dactylopores.

S. Surface layer of the ectoderm. The main mass of tissue is composed of the finer ramifications of the cœnosarc meshwork.

Fig. 13. Small portion of the cœnosarc meshwork of *Sporadopora dichotoma*, greatly magnified in order to show the histological structure; as seen in osmic acid preparations.

C. Channel of the canal.

En, En. Endoderm layer.

M M. Membranous layer.

E E. Ectoderm.

T. Nematocysts in process of development.

Fig. 14. Two pigmented cells of the endoderm of the same, highly magnified.

PLATE XII.

Shows the structure of the cœnosteca of several species of Stylasteridæ.

Figs. 1-4. *Stenohelia profunda*. Off St Thomas, Danish West Indies. 450 fathoms.

Figs. 1, 2. Specimens drawn of the natural size to show the mode of branching.

Fig. 3. A specimen enlarged to show the arrangement of the cyclo-systems. *a* Two cyclo-systems of the same, to show the mode in which the young terminal cyclo-systems bud out from the adult axial systems, and the arrangement of the ampullæ around one of the latter.

Fig. 4. Diagrammatic longitudinal section through two calices such as shown in the foregoing figure. At the base of the tube of the young cyclo-system is seen the minute style. The ampullæ are laid open.

Figs. 5, 6. *Conopora tenuis*. Off the Kermadec Islands. 650 fathoms.

Fig. 5. A specimen drawn of the natural size. *a* The same enlarged. The stem is deformed, being enlarged, and hollowed out by a cavity occupied in the recent state by a parasitic Annelid. *b* Mouth of one of the cyclo-systems much enlarged.

Fig. 6. Diagrammatic longitudinal section through one of the cyclo-systems to show its two chambers, the form of the gastropore and its connections with the dactylopores.

Fig. 7. *Cryptohelia pudica*. Lat. 25° 45' N., long. 20° 12' W. 1525 fathoms.