

*pari passu* with the increase by growth of the sponge. In this way the simple structure of *Oscarella lobularis*, O. Schmidt, and *Placina monolopha*, F. E. Schulze, may be explained.

The inner sinuses of the folds or lobes of the spongophare are continuous with the original cavity of the paragaster; they and the remains of the paragaster are now known as "excurrent" canals; the outer sinuses, known as "incurrent" canals, are open to the exterior; their open ends are known as "pores."

*Eurypylous Chamber-System.*—The flagellated chambers continue as in the Rhagon to communicate directly with the excurrent canals through the apopyles, which are not continued into special tubes; and in all such cases, where several chambers open directly into a common excurrent canal, we shall speak of the chamber-system as "eurypylous."

The extreme simplicity which characterises the folding of the spongophare in *Placina* is not to be met with in any other genus of Tetractinellida, but it is closely approached in the case of certain species of *Tetilla* and *Thenea*. In *Tetilla pedifera*, Sollas (Pl. XLI. fig. 7), the spongophare retains the primitive simplicity of structure

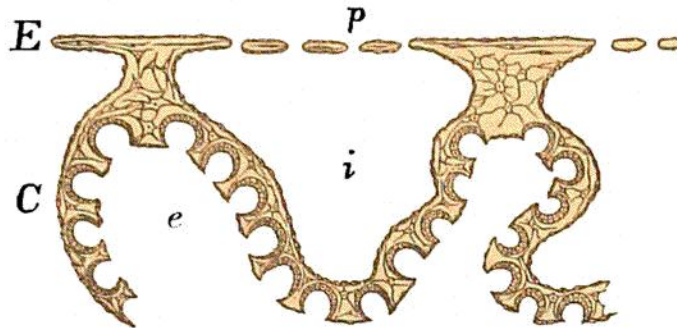


FIG. III.—Diagram of a transverse section through the outer region of *Tetilla pedifera*. E, ectosome; C, choanosome; e, excurrent canal; i, incurrent canal; p, pores.

it possesses in the Rhagon almost throughout the whole sponge; but it is folded to a far greater extent and in a far less regular manner than in *Placina monolopha*. This indeed follows as a necessary consequence of its immensely greater size, particularly in thickness. Furthermore, concrescence occurs wherever the folds are brought in contact, and this makes the nature of the folding more difficult to analyse.

*Ectosome and Choanosome.*—An additional and important modification is to be found in the presence of an investing membrane which surrounds the whole of the free surface of the sponge; it roofs over the incurrent canals which now communicate with the exterior through groups of small apertures which traverse it, and which are called "pores," though evidently not quite homologous with the apertures so designated in *Placina*; and it is confluent with the lobes of the folded spongophare where these lie immediately beneath it.

This investing skin may be distinguished as the *ectosome*, the rest of the sponge as the *choanosome*, the latter name framed in allusion to its being the region to which the choanocytes lining the flagellated chambers are restricted.