

*Remarks.*—The faithful description and illustrations given by Perceval Wright of this sponge render its identification an easy task. Two fine specimens, both in an excellent state of preservation, are in the Challenger collection, a fortunate circumstance, considering the deplorable loss of the type which was sent to Weimar, never to return.

The tylote chiasters, which are very frequently sexradiate triaxons, are met with also in *Tethya maza*, Sk., *Tethya ingalli*, Bwk., and *Tethya japonica*; the remarkable cladose asters of the choanosome are more characteristic; but similar spicules occur in *Tethya ingalli*, Bwk., which is distinguished by its completely fibrous cortex. A similar representative spicule occurs in *Tethya maza*, but is distinguished by the form of the actines, which are cylindrical, shorter, and generally roughened. In *Tethya japonica* cladose asters are absent, and as far as I can make out unrepresented. The alliance of *Tethya maza*, *Tethya seychellensis*, *Tethya japonica*, and *Tethya ingalli* is unquestionably very close, and as regards the first three, I am inclined to regard them as varietal modifications of a single species.

The specimen of *Tethya seychellensis* from Samboangan has a very different external appearance to that from Station 186, a difference which depends on a difference in the size and form of the conules and condition of the oscule. The specimen from the latter station is 31 mm. by 26 mm. in length and breadth by 24 mm. in height; it is attached by a broad base, and presents a single oscule situated at the summit. The oscule is widely open, about 6 mm. in diameter, and surrounded by a membranous margin; it leads into a cloaca which receives some five or six somewhat large excurrent canals. The texture is loose. Most of the conules are very small, under 1 mm. in diameter, and they present a very interesting series of variations, which may serve to explain the differences of appearance presented by different specimens of *Tethya lynceurium*, differences so great that they seem at first sight of specific importance. Here these differences are united in perfect gradation in one and the same individual. In the simplest case the conules are small and conical, and marked by lateral rounded ridges which radiate from the summit, and pass continuously into similar ridges proceeding from adjacent conules, thus forming a network with polygonal, frequently triangular meshes (Pl. XLIV. fig. 7). Within these meshes the surface is depressed and occupied by a pore-sieve. The appearance thus produced is somewhat similar to, but not quite identical with, that so well represented by Schulze in his account of *Aphysilla aërophoba*, N.<sup>1</sup>

In the next stage the ridges about the sides of each conule have increased in breadth, and present a flattened upper surface. As this change commences from the conule and extends outwards, so the middle part of the ridges remains for some time unaffected and contrasts by its smooth rounded upper surface with the flat scar-like summit of the region nearer the conule; in other words, each conule is now surrounded with its own system of flattened ridges, but these remain connected with those of adjacent conules by a bridge of

<sup>1</sup> *Zeitschr. f. wiss. Zool.*, Bd. xxx. pl. xxii. figs. 4-6.