

fused together irregularly, though occasionally also crossing one another in a regular manner, so that a network surrounding rectangular meshes becomes formed. It seems nowhere to show actually free cross spicules, yet very frequently the cavities of the amalgamated cross fibres remain independent of one another, so that often two or three hollow spaces lying close to one another, yet not connected, are cemented together by a common siliceous mass. In these siliceous tubes the uncommonly wide cavity of the axial cord is remarkable. It is often so wide that its diameter exceeds the thickness of the wall about six times. It is to be regretted that the single specimen is much bleached and macerated, so that it is not possible to say whether the almost complete absence of all free siliceous bodies should be looked upon as a peculiarity distinguishing this genus. To judge from the structure of the tissue, this sponge probably belongs to the same genus as *Farrea occa*, Bowerbank. Since, however, only fragments of the latter are known, it is still possible that they belong to the *Euplectella cucumer*, Owen, on whose roots they were found, so that provisionally *Farrea occa* and *Eurete simplicissima*, Semper, may be regarded as distinct from one another. An accurate examination of the tissue of *Euplectella cucumer* would throw light on this question. Detailed descriptions will shortly be given in the *Zeitschrift für wissenschaftliche Zoologie*."

The description here promised was given by W. Marshall in 1875.¹ Marshall first confirms the general description of Semper, and calls attention to the occurrence of transverse divisional walls close beneath the orifices of some tubes. These he designates by the name of *sieve-plates*, and is inclined to regard them as indicating the regular limit of every "individual" properly so called. Of free spicules Marshall, like Semper, found but a mere trace, and he therefore concluded that even the living sponge had *none*. This view has again been definitely expressed by Marshall² after re-examination of Semper's original specimen.

The sponge minutely described by Carter under the name of *Eurete farreopsis*³ was, like the majority of objects of this nature that have to be dealt with, much macerated, yet in some remnants of the dried soft parts, a number of free siliceous spicules could still be found. From Carter's minute description I make the following excerpt as being of very great importance:—"General form bush-like, composed of many tube-branches anastomosing clathrously. Branches short, thick, cylindrical, hollow, formed of a delicate, thin, reticulated wall, thickening from the growing margin towards the base or oldest part. Orifices of branches respectively circular at first, then expanded, afterwards funnel-shaped, becoming elliptical and contracted in the centre, where by the union of the approximated parts of the margin, two circular orifices are formed, which grow into two short, round, tubular branches in opposite direction, to divide again after the same

¹ *Zeitschr. f. wiss. Zool.*, Bd. xxv. p. 181.

² *Mittheil. K. Zool. Mus. Dresden*, ii. p. 272.

³ *Ann. and Mag. Nat. Hist.*, ser. 4, vol. xix. p. 122, 1877.