

lapping of their horizontal rays the squares of the skin. The outermost tip of the exterior ray frequently bears the small rosette above described.

The most important peculiarities of the new form have been summarised by Murie in the following brief diagnosis;—"Hexactinellid sponge characterised by its dendritic or shrubby contour, occasionally attaining a height of 3 feet or possibly more. Branches forking or dichotomous, with continuous whorled series of spicular tufts from base to apices. Skeleton only known; basework composed of relatively stoutish glassy fibres of coalesced sexradiate and spinomucronate spicula, disposed in tolerably compact trabeculæ. Main direction of fibre longitudinal to axis in parallel, straightish, or slightly bent lines, where continued into exterior whorls; in crossing fibres more irregular, as are the very numerous excretory canals. Oscula and pores of moderate size distributed all over the free surfaces. Flesh-spicula abundant, and of scopuline, acerate, and rosette shapes. A dermal veil of slender interwoven Hexactinellid spicula probably clothes the major portion, or possibly the entire sponge."

In a postscript Murie finally calls attention to the fact that his *Dendrospongia steerei* may be identical with the *Sclerothamnus clausii*, Marshall, described a year before by Marshall,¹ so that the latter name must be accepted as the earlier.

To the memoir by Murie, Carter has added an appendix in which he expresses the opinion that the fragment from the basal tuft of *Euplectella cucumer*, which was at first referred by Bowerbank to *Farrea occa*, and later by Carter to *Farrea densa* as distinct from *Farrea occa*, and which was found to be rich in "scopuline spicules," is most probably to be referred to *Sclerothamnus clausii*.

Sclerothamnus clausii, Marshall (Pl. XCVIII.).

Of this remarkable bushy branched species, which differs essentially in external appearance from all known Hexactinellida, only two skeletal fragments belonging to a dead specimen were trawled by the Challenger Expedition in the neighbourhood of Timor (Station 194A, lat. 4° 31' 0" S., long. 129° 57' 20" E.), from a depth of 360 fathoms on volcanic mud. These are small, irregularly rounded, somewhat bent, and slightly knee-shaped branches of the thickness of one's finger, and from 12 to 15 cm. in length. The outer portion has been destroyed by abrasion or otherwise. The tolerably compact fibrous framework exhibits, in longitudinal section, strands of fibres for the most part longitudinally directed, or arched towards the exterior, and laterally curved. They terminate freely on the outer surface, while between them other fibres extend approximately at right angles. The entire disposition of the dictyonal framework, and especially the above-mentioned direction of the fibres, corresponds exactly with the structure of the framework described by Murie, and represented in a figure which has been copied here

¹ *Zeitschr. f. wiss. Zool.*, Bd. xxv., Suppl.