

presence of "anchorate" microsclera (chelæ),¹ while Schmidt's typical species of the genus, *Vomerula tenella*,² does not possess these; on the other hand, the genus differs from *Hamacantha*, Gray, in a point unnoticed by Vosmaer, viz., the possession of well-marked stylote megasclera, and on this account the two genera *Hamacantha* and *Vomerula* may at present remain separate. This difference is, however, perhaps not so important as would at first sight appear, as the so-called oxete of *Hamacantha johnsoni* is frequently slightly blunted at one (or both) ends, and therefore seems to be possibly derived from a stylote spicule or to have given rise to that of *Vomerula*; (this tendency to bluntness is indicated, but perhaps too strongly, in Bowerbank's original figure).³ On the other hand, there is one preparation in the Bowerbank collection, from a species identified by him with *Hamacantha johnsoni*, in which the oxete spicules are well pointed at both ends, with no noticeable tendency to blunting. This greatly supports us in distinguishing two genera of the subfamily.

Vomerula esperioides, Ridley and Dendy (Pl. XII. fig. 1; Pl. XVII. figs. 2, 4, 12).

1886. *Vomerula esperioides*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 337.

Sponge (Pl. XII. fig. 1) large, erect, forming tall, thick, leaf-like expansions, attached by the base, reaching about 250 mm. in height by about 50 mm. or more in breadth and 25 mm. in thickness. *Colour* in spirit pale yellow. *Texture* tough and strong, owing to the very coarse fibres of the skeleton; but the interior is cavernous. *Surface* uneven, with numerous small prominences (conuli) caused by the projecting ends of the underlying fibres of the skeleton. Supported upon, and stretched tightly between these prominences is a thin transparent *dermal membrane*, covering over the large, irregular, subdermal cavities. The dermal membrane (Pl. XVII. fig. 12) contains very numerous round *pores*, 0.07 mm. in diameter, which lead from the exterior into the subdermal cavities; the boundaries of these pores are supported by numerous small sigmata arranged around them. The dermal membrane is further supported by a reticulation of fine fibres, yet easily visible to the naked eye, which gives a highly characteristic appearance to the surface. The *oscula* are placed on the summits of small, conical, bladder-like papillæ (Pl. XII. fig. 1), bounded only by the dermal membrane, in which there are here no pores. Over these papillæ the dermal reticulation of fine fibres is absent and its place is taken by a single layer of closely placed spicules, in which the styli are mostly arranged longitudinally and more or less parallel with one another.

¹ Bronn's Klass u. Ordn. d. Thierreichs, Porifera, p. 352.

² Spong. Meerb. von Mex., 1880, p. 82.

³ Mon. Brit. Spong., vol. i. pl. xviii. fig. 293.