

irregular reticulation of very loose spiculo-fibre, the meshes of which are about one spicule in breadth.

*Spicules*.—(a) *Megasclera*; stout, slightly curved oxea (Pl. XIII. fig. 5), tapering not very suddenly to a fairly sharp point at each end; size 0.42 by 0.018 mm. (b) *Microsclera*; sigmata (Pl. XIII. fig. 10) are present in great abundance, and attain to a great length and a high degree of curvature, being folded once on themselves, so as to resemble little whip-lashes (whence the specific name), the greatest length from curve to curve of these spicules is about 0.06 mm., thickness about 0.0021 mm., the real length is concealed by the curvature, and is, of course, much greater than that given. In addition to these long sigmata there are also present numerous smaller ones of the usual shape, possibly young forms of the others, size 0.044 by 0.0025 mm., &c. These smaller sigmata are especially abundant in the dermal membrane.

Only two small specimens of this sponge were obtained. The most characteristic features about it are the size and shape of the microsclera, which, taken together, are quite sufficient to distinguish it from any other *Gellius*.

Vosmaer mentions under "*Gellius vagabundus* (O. S.)," in The Sponges of the "Willem Barents" Expedition, 1880 and 1881, p. 29 (*sep*), a variety of that species possessing oxea and sigmata, similar in form to those of our species. His specimen, though containing a few styli, is obviously a true *Gellius* (*Gellius vagabundus* being *Desmacella* for us), and it is not improbably referable to *Gellius flagelliger*. It was obtained by the "Willem Barents" expedition of 1880, and hence probably in the Arctic Sea, though the exact locality is unknown. Having regard to the want of definite characters in this species, other than the form of the sigmata, we cannot further insist on the strong resemblance which this form bears to our species, as its locality is so far removed from that of *Gellius flagellifer*.

*Locality*.—Off Marion Island, 50 to 75 fathoms. Two small specimens.

*Gellius calyx*, Ridley and Dendy (Pl. VIII. figs. 6, 6a; Pl. XIII. figs. 2, 9).

1886. *Gellius calyx*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 334.

Sponge (Pl. VIII. fig. 6) consisting of a pyriform body attached by the narrow end to a long slender stalk, which is very slightly expanded at the base; body hollow, with a single large rounded opening at the summit (Pl. VIII. fig. 6a). The whole sponge closely resembling, in size and shape, the flower of a crocus. Length of stalk 50 mm. Mean diameter of stalk 2 mm. Length of body 33 mm., greater breadth of body 10 mm. Diameter of mouth 4 mm. *Colour* in spirit pale greyish-yellow. *Texture* of the body very soft, fragile and crumbling; of the stem hard and stringy. The fibres of the stalk appear to spread out on reaching the body, so that the lowest part of the latter is firm and dense. *Surface* minutely hirsute, even, but with numerous minute holes, probably