

*Spicules*.—(a) *Megasclera*; large, smooth, fairly stout oxea, rather gradually and sharply pointed at each end, and with a slight bend in the centre; size, about 0·7 by 0·03 mm. (b) *Microsclera*; (1) large, stout, very strongly curved, sharply pointed, simple and contort sigmata, very abundant, measuring about 0·07 by 0·0063 mm.; (2) smooth, sharp-pointed toxa, with very obtuse central angle, unusually large, measuring about 0·18 by 0·0063 mm.; exceedingly abundant all through the sponge, more especially so lining the subdermal cavities.

Vosmaer's *Gellius arcoferus*,<sup>1</sup> an Arctic form, certainly comes very near to this species, especially if, as Dr. Vosmaer suggests, the real form is that of a fan; it differs, however, in the proportions of the sigmata and toxa, *inter se*, the former being very much smaller as compared with the latter than in *Gellius flabelliformis*; this much we can deduce from the figures, but as to the actual sizes of the spicules in *Gellius arcoferus*, we are unfortunately able to say nothing, for Dr. Vosmaer gives no measurements.

*Gellius angulatus*, Bowerbank, also approaches *Gellius flabelliformis* in spiculation, being also possessed of toxa, but differs in external form and in the very much smaller size of the microsclera.

*Locality*.—Station 320, February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; off the mouth of the Rio de la Plata; depth, 600 fathoms; bottom, green sand; bottom temperature, 37°·2. One large piece and several small ones.

*Gellius* sp. (Pl. XIII. fig. 3).

Sponge consisting of a pear-shaped body, tapering to a point at one end, which has a fibrous appearance, and where possibly a stalk has been attached. Body solid. Length 29 mm., greatest breadth 12 mm. *Colour* in spirit pale greyish-yellow. *Texture* very soft and fragile. *Surface* even, slightly hirsute. *Oscula* small and scattered. *Dermal membrane* thin and delicate.

*Skeleton*.—Arranged much as in the body of *Gellius calyx*, altogether very loose.

*Spicules*.—(a) *Megasclera*, of one kind only, viz., oxeote (Pl. XIII. fig. 3), slightly curved and rounded off at each end; size 0·6 by 0·022 mm. (b) *Microsclera*; (1) small sigmata, size 0·019 by 0·0015, mm.; (2) very long, thin, hair-like spicules, apparently not arranged in bundles; size 0·7 by 0·003 mm.

Again we have only one specimen of the sponge present, and that possibly imperfect. As it comes from the same station and agrees in several particulars with *Gellius calyx* it is very likely a close ally of the latter; this hypothesis will be strengthened if the examination of more specimens shows that the fine hair-like spicules are also really proper to *Gellius calyx*. In the form of the oxeote spicules and the presence of hair-like ones, together with the sigmata, the species in question agrees pretty closely

<sup>1</sup> Sponges of the "Willem Barents" Expedition, 1880 and 1881, p. 29, pl. iv. figs. 18, 19; pl. v. figs. 87-90.