Gellius glacialis, var. nivea, nov. (Pl. VIII. fig. 8; Pl. XIII. figs. 4, 12).

Sponge (Pl. VIII. fig. 8) incrusting, amorphous, in the form of a small round cushion, filling up the angle between the branches of a Polyzoon. Diameter about 12 mm. thickness about 8 mm. *Colour* in the dry state white; appearance like fleecy snow, whence the varietal name. *Texture* brittle. *Surface* even, but rough, owing to the dermal membrane being absent. *Oscula* and *pores* unknown.

Skeleton.—A very loose reticulation of oxeote spicules, not united together into distinct fibres. This reticulation is very like that of *Gellius flagellifer*, nobis, but in that species it is just possible to speak of spiculo-fibre, while here the reticulation is so loose that the term is no longer admissible; there is, however, but little real difference in this respect between the two.

Spicules.—(a) Megasclera; oxea (Pl. XIII. fig. 4), tapering rather suddenly to a sharp point at each end. Slightly curved and measuring 0.53 by 0.02 mm. (b) Microsclera are present in the form of numerous sigmata (Pl. XIII. fig. 12) of the usual shape, but attaining a very great size, up to 0.145 by 0.0063 mm. Smaller ones are also present, probably young forms of the others.

It will be seen that both in the arrangement and form of the megasclera and in the great size of the sigmata this variety of the species comes very near to *Gellius flagellifer*, nobis; it is, however, easily distinguished by the very different shape and superior thickness of the large sigmata. The sponge has unfortunately been dried, so that the skeleton is the only part the structure of which can be satisfactorily made out. Judging from its small size it is probably a young form.

Locality.—Station 145, December 27, 1873; lat. 46° 43' 0" S., long. 38° 4' 30" E.; Prince Edward Island; depth, 140 fathoms; bottom, volcanic sand. One small specimen.

## Gellius flagellifer, Ridley and Dendy (Pl. XIII. figs. 5, 10).

1886. Gellius flagellifer, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 333. Sponge massive, sessile, roughly triangular in shape,<sup>1</sup> the side of the triangle measuring a little over 25 mm. in length; thickness of the sponge from the centre of one triangular surface to the centre of the other 16 mm. *Colour* in spirit pale greyishyellow. *Texture* soft, brittle. *Surface* even but slightly rough, probably owing to the dermal membrane having been in most parts rubbed off. *Dermal membrane* thin and transparent, with numerous scattered *pores* about 0.07 mm. in diameter. Only one distinct osculum visible at one side. A second specimen, very likely only a fragment, is cylindrical, 29 mm. long by 8 mm. in diameter.

Skeleton.—There is a dermal network of spiculo-fibre indistinguishable from the spiculo-fibre forming the skeleton at large. The deeper skeleton is composed of a loose,

<sup>1</sup> Perhaps a young specimen, incipiently lobose.