

6° 36' E., depth, 650 fathoms, 6°·6 C., clay bottom; lat. 70° 36' N., long. 32° 35' E., 127 fathoms, 1°·9 C., clay bottom; lat. 72° 57' N., long. 14° 32' E., depth, 447 fathoms, 0°·8 C., clay bottom; lat. 75° 12' N., long. 3° 2' E., depth, 1200 fathoms, —1°·6 C., biloculina clay; lat. 72° 53' N., long. 21° 51' E., depth, 223 fathoms, 1°·5 C., clay bottom (Hansen). Jan Mayen, 191 to 216 fathoms (Marenzeller). The species, so far as known at present, ranges through the Arctic and North Atlantic Oceans, from about lat. 75° to 50° N., and from long. 32° E. to 60° W., and from 78 to 1913 fathoms in depth.

*Remarks.*—The history of this sponge, which is a veritable “Comedy of Errors,” will be found in the report (xxii.) cited above. The claims of *Theneca* as the rightful generic designation, therein advocated, are now generally recognised. Soon after the appearance of that report,—this is doubtless what is meant by Vosmaer’s expression “about the same time,”—Vosmaer independently adopted the genus *Theneca*; but while I had consented to recognise two species, *Theneca wallichii*, Wright, and *Theneca muricata*, Bwk., Vosmaer could only accept one, and that the latter. Later writers (Carter, xxiv.; Marenzeller, xxvii.) recognise two species; Carter after an examination of a large number of specimens. The study of the material brought home by the Challenger, and a renewed examination of Dr. Norman’s specimens, which include several obtained by Sir Wyville Thomson in the “Porcupine” expedition, lead me to doubt the correctness of my earlier views; and I am now inclined to admit the identity of *Theneca muricata*, Bwk., and *Theneca wallichii*, Wright. But which of these two specific names should be retained? Bowerbank admits in the fullest manner the insufficiency of his MS. descriptions, for he states that Gray, in suggesting the genus *Theneca*, knew nothing of the sponge on which it was founded beyond illustrations of a “single connective spicule” (Bowerbank, v.). As to this I have reason to believe that Bowerbank was in error. Wright’s (vii.) was certainly the first clear and complete description of the sponge; and the identification of *Theneca muricata* with *Theneca wallichii* would not have been possible but for Bowerbank’s subsequent publication in full of the characters of the former (Bowerbank, xiii.). This was in my mind when I wrote my paper on *Theneca wallichii*, Wright, and had to choose a name for the sponge of which I was then describing the anatomy.

It will be seen that material still remains for a very pretty controversy on this important question.

The reference to *Stelletta echinoides*, O. Sch. (xvi.), as given by Vosmaer (xxiii.), must I think be erroneous; at all events I am unable to verify it.

Vosmaer definitely assigns *Halyplysema echinoides*, Haeckel (xvii.), to *Theneca muricata*, Bwk. That there is a general resemblance between the former and young examples of the latter cannot be doubted, it has been noticed and commented on by Haeckel himself; but the similarity extends no further, for the asters of *Halyplysema*