

2. *Kinetoskias arborescens*, Daniellsen.
Kinetoskias arborescens, K. and D.
Bugula umbella, Smitt.
3. *Kinetoskias cyathus*, Wyv. Thoms. (sp.)
Naresia cyathus, Wyv. Thoms.
 † *Kinetoskias smittii*, K. and D.
4. *Kinetoskias pocillum*, Busk.

Of the above, two have come under my observation from the Challenger collection, viz. :—*Kinetoskias cyathus*, Wyv. Thoms., and *Kinetoskias pocillum*, Busk.¹

(1) *Kinetoskias cyathus*, Wyv. Thoms. (sp.) (Pl. VIII. fig. 1).

Naresia cyathus, Wyv. Thoms., Voyage of the Challenger, The Atlantic, vol. i. p. 142, 1877.

Character.—Zoëcia about 0"·045 by 0"·02; oblong, the outer border somewhat hollowed, and towards the lower part presenting a sort of step on which the avicularium is articulated, and furnished with a special muscle (Pl. VIII. fig. 1a). Aperture entire, or very nearly so. The upper and inner angle rounded off, and the external produced into a short pointed conical process. Posteriorly the zoëcium (fig. 1b) is very convex, and the surface perfectly smooth. The outline is much the same as in front; the outer border is acute, and the inner rounded. Oëcia of large size, attached to the middle of the summit of the zoëcium in front, and projecting forwards in the form of a wide shallow hood.

Avicularia about 0"·02 long, by 0"·006 wide, the mandible measuring 0"·01, and being much curved.

Habitat.—Station VI., lat. 36° 23' N., long. 11° 18' W., 1525 fathoms; Globigerina ooze. Station 325, lat. 36° 44' S., long. 46° 16' W., 2650 fathoms; blue mud.

Messrs. Koren and Daniellsen are inclined to consider that their *Kinetoskias smittii* is identical with *Kinetoskias cyathus*; but so far as I am able to judge from their detailed description and figures, this can hardly be the case. The form and size of the zoëcia, and of the avicularia and oëcia, undoubtedly appear to correspond with those of *Kinetoskias cyathus*; but the general aspect of the zoarium in the two cases is utterly dissimilar.

In this particular, however, it should be remarked that the natural size figure given in their pl. iii. does not at all correspond with the description in the text. But in *Kinetoskias cyathus* there are no transverse rugæ on the back of the zoëcium, and the avicularium in *Kinetoskias smittii* is apparently attached above the middle of the outer border, whilst in *Kinetoskias cyathus* it arises from a distinct step-like process very near the bottom.

¹ In the *Quart. Journ. Micr. Sci.*, N. S., vol. xxi. Jan. 1881, I have given an account of the structure of this very remarkable genus, the principal points connected with which had however already been noticed by Messrs. Koren and Daniellsen, and by Professor Smitt, who had left very little new to be said on the subject.