

Bowerbank's original diagnosis is, as usual, based entirely on the arrangement of the skeleton. It is unnecessary to quote it at length (*vide loc. cit.*). The type of the genus is *Phakellia ventilabrum*, Johnston, sp.

We have thought it desirable in this case to make use of external form as a generic character, otherwise we know of no character which would serve to separate the genus *Phakellia* from the genus *Axinella*.

*Phakellia ventilabrum*, Johnston, sp., var. *connexiva*, nov. (Pl. XXXV. figs. 3, 3a).

1842. *Halichondria ventilabrum*, Johnston, British Sponges, p. 107.<sup>1</sup>

1864. *Phakellia ventilabrum*, Bowerbank, Mon. Brit. Spong., vol. i. p. 186; vol. ii. p. 122, vol. iii. pl. xxii. figs. 1-7.

1866. *Phakellia robusta*, Bowerbank, Mon. Brit. Spong., vol. ii. p. 120; vol. iii. p. 54. pl. xxi. figs. 13-17.

There are from Station 122 a number of fine, frondose specimens which we propose to consider as a variety of the above species. In external form they are distinguished from the types of the species by their greater size, altogether more robust growth and strong venation. The specimens are in the form of broad, flattened, erect lamellæ (Pl. XXXV. fig. 3), reaching as much as 200 mm. in height, with very strong, projecting veins caused by the presence of stout bands of spiculo-fibre ramifying and anastomosing from the base upwards. The surface is strongly hispid and in spirit the specimens are of a brownish-yellow colour, in part due to the presence of a considerable amount of sand adhering to them.

The spiculation consists of smooth styli and stout "vermicular" spicules, the former measuring about 1.5 to 1.8 by 0.034 to 0.04 mm., and the latter about 0.65 to 0.72 by 0.035 mm. In spiculation the species *Phakellia ventilabrum* is practically identical with *Axinella erecta*, but is separated from the latter by the very different external form; we also agree with Schmidt<sup>2</sup> in considering Bowerbank's *Phakellia robusta* merely as a variety of *Phakellia ventilabrum*.<sup>3</sup>

*Localities*.—Station 122c, September 10, 1873; lat. 9° 10' S., long. 34° 49' W.; east of Brazil; depth, 400 fathoms; bottom, red mud. A number of large pieces.

Station 317, February 8, 1876; lat. 48° 37' S., long. 55° 17' W.; north-east of the Falkland Islands; depth, 1035 fathoms; bottom, hard ground (gravel); bottom temperature, 35°·7. One piece, of much more delicate appearance than the foregoing; almost white, and translucent, a condition which is, however, largely due to maceration, probably owing to the time occupied in raising the specimen from such a depth.

*Habitat*.—British seas (Bowerbank, Johnston, &c.); Ireland (Johnston); Shetlands (Bowerbank); between Scotland and Faröe Islands (Carter); south-west coast of

<sup>1</sup> See also Johnston, *loc. cit.*, for list of synonyms previous to his time.

<sup>2</sup> Spong. Atlant. Gebiet., p. 62.

<sup>3</sup> Details as to the minute anatomy of *Phakellia ventilabrum*, var. *connexiva*, will be found in the Introduction.