Stylocordyla stipitata, Carter, sp. (Pl. XLIII. figs. 6, 7, 8, 9).

1873. Stylocordyla borealis,<sup>1</sup> Wyville Thomson, The Depths of the Sea, p. 113, fig. 13.

1876. Polymastia stipitata, Carter, Ann. and Mag. Nat. Hist., November 1876, p. 393.

1880. Stylorhiza stipitata, Schmidt, Spong. Meerb. von Mexico, pt. ii. p. 79, pl. x. fig. 5.

(See also Vosmaer, The Sponges of the "Willem Barents" Expedition, 1880 and 1881, p. 11.)<sup>2</sup>

There are three small specimens (Pl. XLIII. figs. 7, 8, 9) of this sponge from Station 147, one (Pl. XLIII. fig. 6) from Station 49, and one from off Bahia; two of the specimens have oval heads only about 4 mm. in longest diameter, while the two largest specimens have heads more of the typical shape, as described by Carter for adult specimens; even the latter are, however, very small as compared with Carter's types in the British Museum, the largest head (from Station 147) being only about 11 mm. long by about 4 mm. in diameter at the widest part, where there is a whorl of projecting spicules.

The external form of this sponge is very variable. Schulze,<sup>3</sup> as well as Carter,<sup>4</sup> has already noticed that the head in young forms is more or less round; we have to notice below a variety in which the head is globular even in the adult. We have detected no important difference in spiculation between Mr. Carter's types and the Challenger specimens.

It appears to us highly probable that Lovén's Hyalonema boreale<sup>5</sup> is really the same species as Carter's Polymastia stipitata, in spite of the fact that the larger oxeote spicules in the former sponge are described as having a central inflation, a character which may perhaps be considered as abnormal, for Lovén had only two specimens for examination. Still we are not as yet convinced of this identity.

The geographical distribution of this sponge is a very wide and remarkable one, as will be seen by the list of localities below, and its bathymetrical range is no less extraordinary.

Localities.—Station 49, May 20, 1873; lat. 43° 3' N., long. 63° 39' W.; south of Halifax, Nova Scotia; depth, 85 fathoms; bottom, gravel, stones; bottom temperature, 35°0. One specimen.

Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; between Marion and Crozet Islands; depth, 1600 fathoms; bottom, Diatom ooze; bottom temperature, 34° 2. Three specimens.

Off Bahia; depth, 7 to 20 fathoms. One very small specimen with nearly globular head.

<sup>1</sup> Lovén's species (vide infra) with which Sir Wyville Thomson identified Carter's Polymastia stipitata.

<sup>2</sup> As we are not convinced of the correctness of Vosmaer's views as to the synonymy of this species as here given, we prefer to make use of the specific name given by Mr. Carter, with whose types we identify our specimens.

<sup>3</sup> Exploration of the Faröe Channel, p. 71, Proc. Roy. Soc. Edin., 1881-1882.

<sup>4</sup> Loc. cit., p. 393.

<sup>5</sup> Öfversigt k. Vetensk.-Akad. Förhandl., 1868 (pub. 1869) p. 105, pl. ii., see also translation of this paper in Ann. and Mag. Nat. Hist., ser. 4, vol. ii. p. 81, pl. vi.