

middle and taper gradually towards both ends. (b) *Microsclera*; (1) large isochelæ (Pl. XXI. fig. 14) with curved shaft and five prominent claw-like teeth at each end; the shaft is considerably expanded laterally near each end, but contracts again before the points of attachment of the teeth. Length of spicule about 0·085 mm. The chelate spicules are especially abundant in the dermal membrane and around the embryos. (2) Slender sigmata, often contort, measuring about 0·055 by 0·016 mm.; these spicules are comparatively scarce. (3) The spear-like spicules (*vide* woodcut annexed); these are densely packed in a single layer around the stalk, each with its apex projecting vertically outwards.

Only one perfect specimen of this sponge and one damaged one are in the collection; in both of these the stalk is encrusted by a thin, yellow, velvet-like layer of the densely packed, spear-like spicules. At first we thought that these spicules belonged to some foreign encrusting sponge, and hence no mention of them was made in our Preliminary Report, but subsequent examination has convinced us that they are proper to the species; the fact of their occurring in both specimens being strong evidence in favour of this view.

An interesting point about the sponge is the position in which the embryos develop. In the specimen which we cut open, a number of round yellow bodies were found, each enclosed in a membranous capsule around which the chelate spicules were lying in very great numbers. These embryos were placed in a zone of tissue occupying about the centre of the spherical head, and lying immediately above the expanded termination of the stalk, between the bands of spiculo-fibre which radiate from it; this being obviously the position of greatest security.

*Locality*.—Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; between Prince Edward Island and Crozet Island; depth, 1600 fathoms; bottom, Diatom ooze; bottom temperature, 34°·2. Two specimens.

Genus *Desmacidon*, Bowerbank (Pls. XXIII., XXIV., XXX., XLVII.).

1842. *Halichondria (pars)*, Johnston, British Sponges, p. 88.

1864. *Desmacidon*, Bowerbank, Mon. Brit. Spong., vol. i., p. 200.

Form various. Distinct spiculo-fibre, with a large amount of uniting spongin, may or may not be present. Megasclera diactinal, oxea or strongyla; microsclera isochelæ, and, at any rate usually, sigmata.

The genus is usually made much more comprehensive than the above diagnosis would permit. It has thus become unwieldy and artificial, including forms which are much too dissimilar to be placed together. It was founded by Bowerbank, who gives the following generic diagnosis (*loc. cit.*)—"Skeleton fibrous, irregularly reticulated,

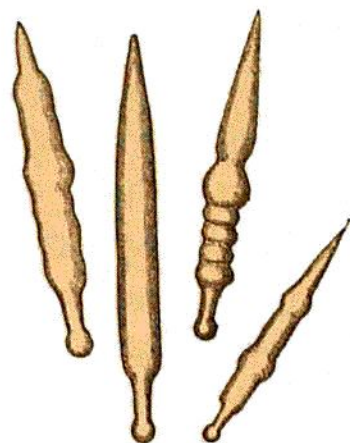


FIG. 6.—*Meliiderma stipitata*.  
Spicules encrusting the stem.  
× 400.