

*Colour*.—Violet.

*Habitat*.—Station 188, September 10, 1874, lat. 9° 59' S., long. 139° 42' E.; depth 28 fathoms; green mud.

Family SPONGELIDÆ, F. E. Schulze, 1878.

*Dysideidæ*, Gray, 1867, and Marshall, 1881.

*Arenosa*, Carter, 1875.

*Spongiadæ* (*e. p.*), and *Hirciniadæ* (*e. p.*), Hyatt, 1877.

Keratosa with flagellated chambers of more or less regularly roundish outlines, communicating by means of numerous pores in their walls with inhalent, by means of one wide mouth with exhalent, cavities; ground-mass transparent, without granules. Axis of fibres thin; fibres cored in most cases with foreign enclosures.

*Spongelia*, Nardo.

*Dysidea*, Johnston.

*Spongelia*, *Dysidea*, and *Psammascus*, Marshall.

Spongeliidæ with large flagellated chambers; outer surface provided with conuli.

*Spongelia spinifera*, F. E. Schulze.

*Spongelia spinifera*, F. E. Schulze, Zeitschr. f. wiss. Zool., Bd. xxxii. p. 152, 1878.

This species, established by F. E. Schulze in the year 1878 for some forms from the Adriatic, is characterised by him as follows:—"The conuli, 5 to 8 mm. high, situated at equal distances from one another, run out in simple thorn-like processes; among the simple ramified primary fibres no communicating secondary fibres are to be found, so that accordingly the skeleton forms no network." The chief character, since the size of the conuli is in other representatives of the genus variable, is thus the dendroid ramification of the skeletal fibres which do not anastomose with one another. In this chief character both the Challenger specimens, which I have determined as *Spongelia spinifera*, agree; but while one, differing from the Adriatic forms as regards its lower conuli, agrees with them in its mode of growth, being found like them in the form of a crust, the second specimen differs from them even in this latter point, presenting a laterally compressed leaf 25 mm. high, 20 mm. broad, and 5 mm. thick in the middle, and rather thinner near the border. The conuli of *both* the specimens do not exceed 4 mm. in height, and in accordance with this peculiarity I propose to establish for them an independent variety—*parviconulata*, while the designation *magniconulata* might be used for forms like the Adriatic *Spongelia spinifera*. No peculiarities of consequence were noticed with regard to the structure of