

III.—DESCRIPTION OF THE SPECIES.

Group KERATOSA, Grant, 1861.

Ceraospongia, O. Schmidt, 1862.

Euspongia, Duchassaing de Fonbressin and Michelotti, 1864.

Ceratina and *Psammonemata* (*e. p.*), Carter, 1875.

Porifera with horny skeleton devoid of proper spicules.

Family DARWINELLIDÆ, Merejkowsky, 1878.

Aplysinidæ (*e. p.*), F. E. Schulze, 1878.

Aplysillinæ, v. Lendenfeld, 1883.

Aplysillidæ, Vosmaer, 1884.

Keratosa with large pouch-shaped flagellated chambers communicating by means of numerous pores on their walls with inhalent cavities, by means of one wide mouth with exhalent cavities; ground-mass without granules, transparent; axis of fibres thick.

Ianthella, Gray.

Verongia (*e. p.*), Ehlers.

Darwinellidæ, the fibres of whose skeleton contain true cells.

Ianthella flabelliformis, Pallas, sp. (Pl. I.; Pl. II. figs. 1-7).

Spongia flabelliformis, Pallas, Elenchus Zoophytorum, p. 380.

Ianthella flabelliformis, Gray, Proc. Zool. Soc. Lond., p. 49, 1869.

Verongia flabelliformis, Ehlers, Die Esper'schen Spongien, p. 11.

This species is represented in the Challenger Collection by two specimens both from the Eastern Coast of Australia; one of them may be seen drawn of natural size on Pl. I. Their shape, in accordance with the specific name of the animal, is that of a thin leaf terminating in a short stem; which latter in both cases is of irregularly cylindrical outline and about 25 mm. long by 12 mm. broad.

The Skeleton.—The constituent elements of the leaf-like part of the skeleton admit