

as to whether it is really a sponge. Flemming¹ and F. E. Schulze² have expressed such doubts; and Marshall³ feels more inclined to regard it as an alga than a sponge. Amongst the Challenger specimens I find two forms which are well-marked representatives of the species *Ianthella flabelliformis*, and which are also distinct sponges with the canal system after the type of that of *Aplysilla* or *Darwinella*. The genus *Ianthella*, like *Darwinella*, is indeed a very good one, its chief generic character, viz., the presence of true cells between the horny laminæ of the skeletal fibres, being of an absolute nature, but it must be added that with respect to the conjectural family Darwinellidæ, this genus narrows the diagnosis of the family as given by Vosmaer (On *Velinea gracilis*, p. 477), the skeleton of its representatives being represented by fibres anastomosing with one another.

Family SPONGELIDÆ.

In the family Spongeliidæ (I retain this name since the only one having the priority over it is derived from the still doubtful genus *Dysidea*) six genera have been hitherto distinguished, namely:—

Velinea.

We owe this curious genus to Dr. Vosmaer,⁴ who places it in his family of Spongeliidæ, notwithstanding that its skeletal fibres are, at least in many instances, obviously heterogeneous, but in accordance with its skeleton being represented by a network of anastomosing fibres; his Aplysillidæ, on the other hand, being characterised by a skeleton of tree-like shape. We have, however, learned that this latter character is not admissible. The skeleton of *Ianthella* is composed of anastomosing fibres, yet these latter are heterogeneous, and the whole internal organisation constructed upon the type of true Darwinellidæ. The fact is that *Velinea* is a connecting link between this latter family and Spongeliidæ, and as such it is indeed a very interesting form, but, as an independent genus, belongs to those which from a systematic point of view are very ambiguous.

Spongelia, Dysidea, Psammascus.

In the year 1834 Nardo⁵ subdivided his previous genus *Aplysina* into two subgenera, "*Aplysinæ velariæ*" and "*Aplysinæ spongelicæ*." In the year 1842 Johnston⁶ created the genus *Dysidea* for his *Dysidea fragilis*, which, according both to O. Schmidt⁷ and

¹ *Loc. cit.*, p. 6.

² *Zeitschr. f. wiss. Zool.*, Bd. xxx. p. 381.

³ *Jahresb. d. zool. Stat. Neapel*, 1881, p. 161.

⁴ *Mittheil. zool. Stat. Neapel*, Bd. iv. Heft. 4, p. 437.

⁶ *Isis*, 1834, p. 714.

⁵ *British Sponges, &c.*, p. 185.

⁷ *Spong.-Fauna des atlantisch. Gebietes*, p. 27.