

out the internal organisation of the Porifera and applied it to systematic purposes. Prof. Schulze¹ characterises his family of Spongeliidæ primarily by the structure of the soft parts; in Dr. Marshall's diagnosis of Dysideidæ not a single word is devoted to this character. Does he regard it as devoid of any systematic importance? This seems to be the case, but the grounds for this opinion are not to be found in Dr. Marshall's paper, and without this the paper in question is of very doubtful profit for systematic knowledge, and this is the case with *every paper on the Keratosa based on specimens insufficiently preserved for anatomical examination*. Such papers, if from the pen of authors of talent, may still contain something of general interest, and this is in a high degree the case with regard to Dr. Marshall's memoir on Dysideidæ and Phoriospongiæ, but just on that account it is the more to be regretted that from a systematic point of view this memoir only renders the systematic chaos relating to the group Keratosa still more impenetrable.

In the *Bemerkungen über die neue Gray'sche Hornschwammgattung Ianthella*² by Dr. Flemming, spongiological literature has been enriched with a new and very valuable contribution to our knowledge of the properties of the horny skeleton. Dr. Flemming has stated—and, as I before remarked, I can but confirm his statements—that the fibres of *Ianthella flabelliformis* and *Ianthella basta* contain true cells between the laminae of their walls. The specimens of both (?) the species obtained and examined by Dr. Flemming were dried, and thus he has not been able to decide the question as to whether *Ianthella* is really to be referred to *Porifera*. He believes, however, that, if so, a very isolated place in the group is to be assigned to this sponge (“Es scheint mir zunächst nicht viel übrig zu bleiben, als sie bei den Spongien, aber auf einem sehr isolirten Platze einstweilen stehen zu lassen”).³ Dr. Flemming's suggestion is to be regarded as quite natural, if we remember that his paper on *Ianthella* appeared in the year 1871, *i.e.*, five years before the important discovery of spongoblasts by F. E. Schulze; but at present one may perhaps form another opinion as to the systematic importance of the peculiarity in question. The gist of the matter consists in the fact that each horny fibre is the product of cellular elements; and whether the spongoblasts, after having accomplished one part of the work, recede before the developing fibre in order to partake in its further growth, or remain in their former places in order to be buried in the horny substance secreted by younger spongoblasts, seems to me to be of secondary significance. Dr. Flemming demands for *Ianthella* a quite isolated place amongst the Keratosa; again, Gray, Carter, and Hyatt, on the ground of characters of undoubtedly less value, of characters to which in other instances we should apply only a generic if not a specific significance, are inclined to regard it as the representative of an independent family. For my own part, I must confess frankly that the systematic importance of the peculiarity we are speaking of is rather ambiguous. For though, as before

¹ *Zeitschr. f. wiss. Zool.*, vol. xxxii, p. 153.

² *Würzburg Verhandl.*, N. F., Bd. ii.

³ *Loc. cit.*, p. 7; comp. also p. 6.