

296-327), and, agreeing with him thoroughly upon the matter, I see no reason to repeat here what has already been quite sufficiently discussed. I refer the reader to the passages in question in the Monograph, and can only express my astonishment that Hæckel having made out the existence of the correlations above mentioned in such a brilliant manner, did not give them any application in his system.

It was, however, the right way, and if the following out of these principles amount to nothing with reference to the Asconidæ, it only proves, either that the Ascones are not to be divided into many genera at all, or that our knowledge of this group is insufficient. I think both suppositions have some truth in them. At all events, there is at present no possibility of giving a detailed system of this Order. The exterior shape is in this group—perhaps with exception of the forms provided with solid peduncle—really without any significance, at least it is quite unfit for the establishment of genera. The *Wagnerella* of Mereschkowsky,¹ proved to be a Protozoon², and, except the still doubtful *Mæbiusspongia parasitica*, Duncan,³ there are in the Family only two groups which admit of a generic distinction, the distinction consisting in the differences of the embryonic development, characterised in some cases by Parenchymula, in others by Amphiblastula. Unfortunately the embryology of most of the Asconidæ is still surrounded by the mist of uncertainty, and it is only to five species (*Ascetta primordialis*, *Ascetta blanca*, *Ascetta clathrus*, *Ascandra lieberkühnii*, and *Ascandra contorta*,) that the foregoing remark can be applied. Therefore, till zoology shall have been enriched by more extended investigations upon this matter, I propose to unite provisionally all the Asconidæ under the same generic name, and, following the law of priority, I propose the name—

Leucosolenia, Bowerbank⁴.

The necessity for such a temporary measure is by no means satisfactory, but still it is always better to confess frankly that our knowledge is imperfect, and that there remains much still to be done, than to allow ourselves to be led astray by the assurance, however flattering, that everything is already completed and the question exhausted.

We have every reason to consider ourselves much more advanced with respect to the HETEROCELA. There are to be found characters of undoubted generic significance, *i.e.*, characters of sufficient constancy, and allowing numerous modifications, either in the direction of a further development, or in the direction of different variations. The nature of the spicules proclaimed by Prof. Hæckel as furnishing good generic characters, satisfies only the second condition, and therefore they are unfit for generic distinctions, apart from the consideration that in a group of such a low organisation as Calcarea a generic character

¹ *Ann. and Mag. Nat. Hist.*, ser. 5, vol. i. p. 70, 1878.

² *Journ. Roy. Micr. Soc.*, vol. iii. p. 377, 1880.

³ Paul Mayer, *Zool. Ans.*, No. 32, p. 357, 1879.

⁴ *Phil. Trans.*, London, vol. clii. p. 1093, 1862.