

which has budded from the surface of a large and partially dead basal calicle, from which also the chief mass of the colony has developed, a tetrameral arrangement is distinctly visible owing to a cruciate arrangement of four larger septa; the wall is simple, extremely thin, and very slightly and irregularly developed; the innermost terminations of the septa exteriorly give rise to a false columella, the larger septa lower down meeting quite at a point; the dissepiments are extremely abundant and vesiculate, coming high up so as to leave but a very small part of the septa free exteriorly, except at the centre, where a distinctly marked depression is visible; these dissepiments, in transverse section, are seen to be more or less distinctly arranged in concentric circles, especially towards the centre where, in the single specimen of the species which was obtained, two distinct nearly solid, sub-infundibuliform tabulæ are present, which seem to take their origin from the concentration and coalescence of the dissepiments, and in which the course of the larger septa is clearly visible.

From the consideration of this form, *Moseleya latistellata*, and its comparison on the one hand with a typical Astræid like *Prionastræa favosa*, and on the other hand with a Cyathophyllid like the compound form of *Cyathophyllum helianthoides*, or like *Cyathophyllum regium*, it results that the essential difference from the Astræid, and the essential similarity to the Cyathophyllid, is to be found in the abundant development of vesiculate endotheca coming high up in the calicle so as to leave a very small portion of the septa free exteriorly, except at the centre of the fossa, the dissepiments towards the centre being arranged in more or less concentric circles, giving rise to or replaced by tabulæ in which the course of the septa is traceable: characters which are, with but slight modifications, the distinguishing features of forms of the family Cyathophyllidæ.

Section II. MADREPORARIA FUNGIDA.

This section is taken as defined by Professor Duncan,¹ by whom it is divided into the following five families.

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| Family | I. PLESIOFUNGIDÆ. |
| „ | II. LOPHOSERIDÆ. |
| „ | III. FUNGIDÆ. |
| „ | IV. ANABACIADÆ. |
| „ | V. PLESIOPORITIDÆ. |

Of these the first three are represented in the collection.

¹ Revision, p. 132.