

Order CRYPTOZONIA, Sladen, 1888.

Family LINCKIIDÆ, Perrier, 1875, *emend.*

The family Linckiidæ, if the genera *Chætaster* and *Metrodira* be excepted, is one which presents great solidarity in its morphological facies. The two genera just named differ, however, so greatly in their general character from the other forms included in the family that I have placed them in distinct subfamilies. The plan of their structure is more in consonance with that of the Linckiidæ as a whole than with that of any other family, but the details of their structure place them as very divergent members of the family, and warrant, in my estimation, the course I have taken for bringing into prominence their aberrant and transitional character.

Viguiér¹ first referred *Chætaster* to this family, but he removed *Fromia*, *Ferdina*, and *Metrodira* to his family Goniasteridæ. This latter step I am unable to approve, and I agree with Perrier in ranking these genera under the Linckiidæ.

It has seemed to me useful to reinstate some of the genera recognised by Gray, which have been absorbed by subsequent writers on what appear to me insufficient grounds.

Synopsis of the Genera included in the Family LINCKIIDÆ.

- A. Abactinal plates with internal supplementary plates. Abactinal plates with paxilliform tabula CHÆTASTERINÆ.
 - a. A single genus *Chætaster.*
- B. Abactinal plates devoid of internal supplementary plates; not forming paxilliform tabula.
 - a. Abactinal and marginal plates granulose and not bearing spines . . . LINCKIINÆ.
 - α. Devoid of superambulacral plates.
 - α. Adambulacral armature in two or more series. Papulæ on the actinal surface. Marginal plates larger than the others. Abactinal plates comparatively small *Fromia.*
 - β. Adambulacral armature in a single series. No papulæ on actinal surface. Marginal plates not larger than the others. Abactinal plates large and more or less convex *Ferdina.*
 - b. With superambulacral plates.
 - α. Abactinal plates in regular longitudinal series. Adambulacral armature in two unequal series; the outermost large and spiniform. Papulæ on the actinal surface.
 - i. Abactinal and marginal plates granulose or bearing squamiform papillæ.
 - 1. Papular areas not confluent laterally. Madreporiform body simple *Ophidiaster.*

¹ *Archives de Zool. expér.*, 1878, t. vii. p. 147.