

CLASSIFICATION.

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I. *History of the Classification of the Asteroidea.*

The earliest attempt to classify the Asteroidea was made by Linck¹ in 1733, who published the first monograph devoted to starfishes, entitled: *De Stellis marinis liber singularis*. It is a work worthy of honour, and one which I hold in reverential estimation. Linck divided the "*Stellæ marinæ*" into two sections, named "*Stellæ fissæ*" and "*Stellæ integræ*"—the former characterised by the presence of an open channel or ambulacral furrow along the actinal surface of each of the lobes or rays of the body, the latter by the absence of these open channels. The *Stellæ fissæ* correspond to the Asteroidea of the present nomenclature; the *Stellæ integræ* comprise the Ophiuroidea and the Comatulæ. Linck divided the *Stellæ fissæ*, or section equivalent to the Asteroidea, into three classes, which were based on the number of the rays; the first class embraced forms with less than five rays (all, by the way, abnormal or monstrous forms), the second forms with five rays, and the third all those with more than five rays. The classes were subdivided into genera, those included in the first and third being distinguished by the number of their rays. In the second class, however, the genera were characterised by the general form. This class contained seven genera, four of which are still maintained, viz., *Pentagonaster*, *Pentaceros*, *Astropecten*, and *Palmipes*.

It will be seen from the above that the basis of Linck's classification is purely artificial, the number of rays being the determining factor.

In 1766 Linné,² in the 12th edition of his *Systema Naturæ*, grouped all the Asteroidea, Ophiuroidea, and Comatulæ known to him in one genus, *Asterias*, which he

¹ *De Stellis marinis liber singularis*, Lipsiæ, 1733.

² *Systema Naturæ*, Editio Duodecima, Reformata, Holmiæ, 1766.