

## VI.—DESCRIPTION OF THE SPECIMENS.

### Class CRINOIDEA.

#### Order NEOCRINOIDEA.

Family COMATULIDÆ, d'Orbigny, 1852; *emend.* P. H. Carpenter, 1888.

Crinoids with the calyx closed below by the enlarged top joint of the larval stem, which develops cirri and generally separates from the stem joints below it, so that the calyx is free. The basals may form a more or less complete ring on the exterior of the calyx, or be only represented by an internal rosette. Five or ten rays, either simple or more or less divided. The first axillary is the second, or (very rarely) the first joint above the calyx-radials. Definite interradial plates usually absent.

The mouth central, except in one genus.

*Remarks.*—The family Comatulidæ, which was established by d'Orbigny<sup>1</sup> in 1852, is practically equivalent to a group which was proposed more than twenty years previously by de Blainville,<sup>2</sup> under the name of the “Astérenocrinides libres.” So far as I am aware, de Blainville was the first author to make any definite separation of the Feather-stars from the remaining Stellerids.

He divided this order into three families, the Asteridea, the Asterophydea, and the Asterenocrinidea, which last Miller had previously called Crinoidea.

De Blainville further subdivided the Asterenocrinidea into two sections, the first of which was “les Astérenocrinides libres.” He defined it as having a “corps libre, et sans tige qui servirait à le fixer”; and he referred to it the single genus *Comatula*, Lamarck.

In the great work of Goldfuss,<sup>3</sup> which was published a few years later, there is, however, no special separation of the genus *Comatula* from the other Stellerids, and it simply appears as the first genus in his order “Asterites liberi,” altogether separate from the Stalked Crinoids, which are classed as the Stilasteritæ, though the resemblance between them and *Comatula* did not escape the notice of Goldfuss. He gave an account of the anatomy of two recent species, and referred to the genus some fossils from Solenhofen;

<sup>1</sup> Cours élémentaire de Géologie et de Paléontologie stratigraphique, 1852, t. ii. fasc. i. p. 138.

<sup>2</sup> Dict. d. Sci. Nat., 1830, t. lx. p. 229.

<sup>3</sup> Petrefacta Germaniæ, Düsseldorf, 1826-35, vol. i. p. 201.