

Switzerland; though both the other two genera range back as far as the inferior Oolite, *Antedon* being much the more common. But the distinctions between them, so far as can be made out in the calyx alone, are much less sharp than in recent Comatulæ. Many of the Jurassic species combine in a singular degree various characters which are of considerable value for the generic determination of recent Comatulæ.

Besides their tendency to combine the characters of recent generic types, the Jurassic Comatulæ are remarkable for their large size, as are also the Cretaceous species. The centro-dorsal may reach from 9 to 13 mm. in diameter, which is greater than that of nearly every recent species except *Antedon eschrichti*; while this type and *Actinometra robusta* are almost the only living Comatulæ with arm-bases anything like as massive as those of the fossil species. Some of the Cretaceous forms must have been very large. Thus the united centro-dorsal and radials of *Antedon campichei* from the Neocomian of Switzerland may reach 15 mm. in height and over 20 mm. wide; while several centro-dorsals of *Antedon* from the Upper Chalk are almost equally gigantic.

The Eocene fossils are of moderate size; but the Miocene *Antedon rhodanicus* has a centro-dorsal 13 mm. in diameter, while the three species described by Forbes from the Coralline Crag of Sutton are all considerably smaller.

Of the remaining Comatulidæ neither *Promachocrinus* nor *Thaumatocrinus* has yet been found fossil; and though specimens have been described from the Maestricht Chalk with a complete basal ring,¹ I should hesitate at present to refer them to *Atelecrinus*.

¹ *Zeitschr. d. deutsch. geol. Gesellsch.*, Jahrg. 1878, p. 66.