

regarded as a permanent larval form. The absence of the pinnules from the lower parts of the arms points to the same conclusion, as has been explained elsewhere.¹

I have only been able to examine the disk in the two Challenger specimens, and in one of these it is not very well preserved. But they both agree in the slightly excentric position of the mouth, and in the large size of the peristome, so that the anal tube is pushed backwards behind the centre about as much as the mouth is in front of it (Pl. VI. figs. 4, 6).

Unlike the two Endocyclic Comatulæ with five rays and a rosette (*Antedon* and *Eudiocrinus*), *Atelecrinus* is not a littoral type at all, nor does it extend upwards above 200 fathoms. On the other hand it is not known to occur below 610 fathoms; so that bathymetrically it falls very far short of the archaic *Thaumatoocrinus* (1800 fathoms). Apart from this last type, however, the geographical range of *Atelecrinus*, although fairly extensive, is the least so of the five-rayed Comatulæ. In the Caribbean Sea and the East Atlantic it ranges from 24° N. to 9° S.; while it also occurs in the Pacific near Fiji in 19° S. If the fossil calyx mentioned by Schlüter² as having persistent basals also belong to this genus, it will date back to the Cretaceous period.

The three existing species of *Atelecrinus* may be distinguished from one another as follows:—

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| I. Second radials transversely oblong and but little incised. Basals not specially prominent at the angles of the calyx, | 1. <i>balanoides</i> , n. sp. |
| II. Second radials markedly incised and about as long as wide. | |
| A. Basals separated from the centro-dorsal at its interrarial angles, | 2. <i>wyvillii</i> , n. sp. |
| B. Basals produced outwards at the interrarial angles, | 3. <i>cubensis</i> , Pourtalès, sp. |

1. *Atelecrinus balanoides*, n. sp. (Pl. VI. figs. 6, 7).

1879. *Antedon cubensis*, Pourtalès (*pars*), Bull. Mus. Comp. Zool., 1879, vol. v. No. 9, p. 214.

1881. *Atelecrinus balanoides*, P. H. Carpenter, Bull. Mus. Comp. Zool., 1881, vol. ix. No. 4, p. 16, pl. i. figs. 1-6.

1882. *Atelecrinus balanoides*, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1882, vol. xvi. p. 489.

Centro-dorsal acorn-shaped, reaching 5 mm. high by nearly 35 mm. in diameter. It bears five vertical double rows of cirrus sockets, the upper ends of which are separated by more or less distinct interrarial ridges. Four to six sockets in each row, the dorsal pole, though rough, being free from functional sockets. The ends of their horseshoe-shaped rims slant downwards and outwards, but are much more prominent in some individuals than in others.

The cirri have three or four quite short, almost triangular basal joints. The next is two or three times as long as wide, and its successors are much elongated, reaching 2.5 mm., with a slight tendency to overlap one another on the ventral side of the cirrus.

¹ Bull. Mus. Comp. Zool., 1882, vol. ix. No. 4, pp. 14, 15.

² Zeitschr. d. deutsch. geol. Gesellsch., 1878, p. 66.