

Antedon cubensis, which has pinnules on the second and following brachials, does not correspond to the characters of the smaller specimen which he called by this name, as it has a complete basal ring, and there are no pinnules on any of the arm-joints which are preserved; while another reason is that the dredgings of the "Blake" in the years 1877-79 have led to the discovery of eight examples of *Atelecrinus balanoides*, all of them better preserved than the single individual which was referred by Pourtalès to *Antedon cubensis*.

The first specimen of *Atelecrinus balanoides* known to science was dredged by the Challenger in 1873; but its cirri had disappeared, together with the whole of the arms above the fifth brachials (Pl. VI. fig. 7). The Pacific species (*Atelecrinus wyvillii*) was not much better (Pl. VI. fig. 5), and it was not till I received the "Blake" collection in 1880 that I was able fully to realise the singular peculiarities of the type represented by the two Challenger specimens which are figured on Pl. VI.

The distinctive characters of *Atelecrinus balanoides* are (1) the transversely oblong shape of the second radials, which are but slightly incised to receive the bluntly angular proximal edges of the axillaries; and (2) the outline of the lower part of the calyx, which slopes uniformly downwards from the radials on to the centro-dorsal, without the basals being specially prominent at the interradian angles as they are in *Atelecrinus cubensis*.

The difference is very much of the same kind as that between the basals of *Pentacrinus wyville-thomsoni* and *Pentacrinus mülleri* respectively.

The nine individuals of *Atelecrinus balanoides* which I have examined, all agree very well in their general characters, but differ considerably in the relative proportions of the two outer radials and of the lowest brachials respectively. In all of them which have enough of the arms preserved, the first pinnule is on the twelfth brachial, except in one arm of one individual, in which the tenth joint bears the first pinnule.

2. *Atelecrinus wyvillii*, n. sp. (Pl. VI. figs. 4, 5).

1882. *Atelecrinus wyvillii*, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1882, vol. xvi. p. 492.

Description of an Individual.—Centro-dorsal acorn-shaped, 4 mm. high by 3 mm. wide. The double rows of cirrus-sockets are well separated from one another by intervening spaces, and do not reach the dorsal pole. Four, or rarely five, sockets in each row, the ends of which stand out prominently and give a serrate appearance to the lateral edge of the plate. The upper portion is uniformly smooth, without any interradian ridges; but the edge is marked by five slight incisions situated interradianly.

The basals are nearly uniform in height throughout their whole width, but are somewhat arched in form. The apex of each arch is interradian, and the interval between it and the notched edge of the centro-dorsal below is only occupied by perisome. Hence the basal ring is really only in contact with the centro-dorsal at its five lowest points,