

16. *Antedon abyssicola*, n. sp. (Pl. XXXIII. figs. 1, 2).

Specific formula— $A. \frac{ab}{a}$.

Centro-dorsal subconical, bearing about fifteen cirri. These have eight to ten joints, of which the second is longer than wide and the following joints much elongated, the fourth being about the longest; the remainder diminish to the penultimate, which is not much longer than wide and has a very faint opposing spine.

Three radials visible; the first and second about equal in length, the angles of the former extending inwards and upwards for some distance, so that the second radials are not united laterally. They are somewhat incised by the hinder angles of the rhombic axillaries, the distal edges of which are much curved. Ten arms; the first brachials quite separated and more or less incised by the proximal angles of the irregularly quadrate second brachials. The following joints are square till the second syzygy or even slightly longer than wide; the later joints obliquely quadrate and much longer than wide, gradually becoming almost dice-box-shaped. Syzygies in the third, eighth, and twelfth or thirteenth brachials, and then at intervals of two to four, usually three, joints.¹

All the pinnules are much broken, but they seem to have been slender and delicate on the arm-bases.

Disk and ambulacra naked; sacculi small and rare.

Colour in spirit,—white.

Disk about 3 mm.; spread perhaps 5 cm.

Localities.—Station 160, March 13, 1874; lat. 42° 42' S., long. 134° 10' E.; 2600 fathoms; red clay; bottom temperature, 33°·9 F. One specimen.

Station 244, June 28, 1875; lat. 35° 22' N., long. 169° 53' E.; 2900 fathoms; red clay; bottom temperature, 35°·3 F. Two specimens.

Remarks.—This little species is one of very considerable interest, apart altogether from the peculiarities of its calyx, for it is the only *Comatula* yet found at a greater depth than 2000 fathoms. *Bathycrinus*, and perhaps also *Hyocrinus*, extend down to 2400 fathoms; *Promachocrinus* and *Thaumatocrinus* occur at 1800 fathoms, but with the exception of *Antedon abyssicola* no other *Comatulæ* have been found below 1600 fathoms, at which depth (Station 147) *Antedon abyssorum*, *Antedon bispinosa* and *Antedon remota* were obtained. *Antedon abyssicola* has been dredged, however, at two stations, one (Station 160) shortly before the Challenger reached Melbourne, where the depth was 2600 fathoms, and the other in the deepest part of the North Pacific at 2900 fathoms (Station 244). *Antedon abyssicola* thus resembles *Antedon alternata* in occurring at widely separated localities in the abyssal region, and it has some points

¹ In fig. 1 the tenth and fourteenth, and in fig. 2 the sixth brachials are wrongly drawn as syzygial joints.