

usually two and nowhere more than four in the type specimen. The lower pinnules are also different in the two cases. Those of the type have spiny projections at the distal ends of the overlapping joints which are almost entirely absent in the Challenger specimen, and the length of the first pinnule is both relatively and absolutely much greater in the former than in the latter.

In many respects this species comes very near to some forms of *Antedon rosacea*; and it may be that a larger acquaintance with the variations of the two types will lead to their union. I do not think this possible at present, however, as they seem to be pretty clearly distinguished by the characters of the arm-joints. In the type specimen of *Antedon dübeni* there are a few triangular joints immediately above the second syzygy (Pl. XXXVII. fig. 2), but in that dredged by the Challenger these joints are shortly quadrate, though the length gradually becomes equal to the width, as is the case in the type, and the sutures are so little inclined that the outline of the joints is tolerably square, becoming more elongated, however, in the outer part of the arms. This character distinguishes *Antedon dübeni* from the British form of *Antedon rosacea*, in which the joints are subtriangular, or, at any rate, have much-inclined sutures till some way out on the arms; though they are more nearly square in the Mediterranean form. But in all the numerous varieties of *Antedon rosacea* the syzygial interval consists very regularly of two joints; and this seems to be also the case in the type of *Antedon dübeni* (Pl. XXXVII. fig. 2), so far as can be judged from the first forty brachials, the remainder having been lost, though Böhlische mentions one to four joints as the length of the syzygial interval; while in the Challenger specimen the number varies from two to six joints.

For the present, therefore, I would regard *Antedon dübeni* as distinct from *Antedon rosacea*. The latter species has not yet been identified on the coast of the United States, and one must hesitate therefore before giving the South American coast as a locality for a type which is found as far north as the Shetlands, though it does seem to extend to Madeira and the Canaries, and possibly to the Gulf of Guinea; but I am not yet clear as to the latter point; and it is not improbable that Greeff's example from this locality may turn out to be identical with *Antedon dübeni*.

8. *Antedon lineata*, n. sp. (Pl. XIII. figs. 4, 5).

Specific formula— $A. \frac{b}{b}$.

Description of an Individual.—Centro-dorsal almost completely covered by some twenty-five cirri with about thirty short joints. The lower joints are rather stout and the fifth slightly the longest, while all of them overlap slightly on the dorsal side, and gradually acquire a faint dorsal keel with a forward projecting spine.

First radials partially visible; the second and third both rather high in the middle