The first of these groups to be considered is one which has hitherto been entirely unknown to me except in fossil Comatulæ, and therefore consists entirely of new species discovered during the cruise of the Challenger. I will call it the *Basicurva*-group, for it is in *Antedon basicurva* that its principal distinctive characters are, on the whole, most clearly visible.

In all the species of this group not only the two outer radials, but also the lowest brachials of adjacent rays, come into very close mutual apposition, so that their sides are flattened against one another.¹

Fig. 2, A, represents a calyx of Antedon basicurva from which three rays have been entirely removed; and it then appears that the two lateral faces of each pair of outer



Fig. 2.—Antedon basicurva, × 3. A. Side view of the calyx and arm-bases after the removal of three rays, so as to show the sides and inner faces of the other two. The two outer radials, two lower brachials, and in a less degree also the third and fourth, have their outer sides flattened against one another. The genital pinnules have the third and fourth, and sometimes the fifth joints greatly expanded, but the following ones are smaller. B. The lower part of an arm from its inner side, to show the flattened inner faces of the first three brachials, including both the hypozygal and the epizygal of the third.

radials are quite smooth and flat, like those of the first radials at the bottom of the calyx, and they are in close apposition with those of the second and axillary radials in adjacent rays. In like manner the outer faces of the first brachials on adjacent rays come into close mutual contact and are very perceptibly flattened. The same is true of the second, and in a less degree also of the third brachials, all these three joints being somewhat compressed laterally, with flattened sides and sharp, straight, outer edges. The inner edges and sides of the second and third brachials present the same feature, as seen in fig. 2, B, so that the lower portions of the arms lose their usual rounded character

¹ This character is more or less distinct in some forms of Antedon milberti, but appears to be a varietal rather than a fundamental one (see p. 197).