

of resemblance with the younger individuals of this type, as has been pointed out already. The three specimens obtained were unfortunately all much mutilated, especially as regards the cirri and pinnules; but the peculiarities of the calyx are very characteristic and serve to distinguish the type, though its precise relations to the other abyssal species must remain somewhat uncertain in the absence of properly preserved individuals.

A considerable portion of the first radials appears externally, and they are somewhat wider than the second radials, while their angles are considerably produced both upwards and inwards, so that the second radials are altogether prevented from coming into lateral contact. This is especially well shown in the southern form (Pl. XXXIII. fig. 2), but it is not so apparent in the larger individuals from the North Pacific, except in an inter-radial view of the calyx. Both this character and also the great length of the arm-joints, the later ones of which are almost dice-box-shaped, indicate that the type is an embryonic one, as is well seen on a comparison of figs. 1 and 2 on Pl. XXXIII. with the larvæ represented in figs. 3 to 6 on Pl. XIV. The extension of the first radials upwards and inwards, so as to keep the second radials from coming into lateral contact, is a larval character which is better developed in the fossil *Eugeniocrinus*, and reaches its maximum in the allied genus *Phyllocrinus*.

A few poorly developed sacculi are present in the individual from 2600 fathoms (Station 160), but I have not been able to find any indications of them in the two specimens from the greater depth in the North Pacific (Station 244, 2900 fathoms).

#### 5. The *Milberti*-group.

The first pair of pinnules comparatively small, and their component joints but little longer than wide; one or more of the second, third, and fourth pairs are longer and more massive, with stouter joints than their successors.

*Remarks.*—This is a somewhat heterogeneous group, and I have had considerable trouble in working out an arrangement of it which I can regard as even approximately satisfactory. The definition given above would almost include such forms as *Antedon angustipinna* (Pl. XXIX. figs. 2–4) and *Antedon tenuicirra* (Pl. XXX. figs. 5–7), which have been described in the *Tenella*-group; while *Antedon parvicirra*, which I have placed in the *Milberti*-group, though with some doubt, has many points of resemblance with *Antedon rosacea* and *Antedon dübeni*. Indeed *Antedon milberti* itself exhibits traces of the wall-sidedness of the radials and lower brachials which is so marked in the *Basicurva*-group. Then again, the ubiquitous *Antedon carinata* differs in many respects from *Antedon serripinna*, *Antedon milberti*, and the typical members of the group, so that another group may have to be established for it at some future time.

The special character which distinguishes the *Milberti*-group is the large size of one or more of the second, third, and fourth pairs of pinnules, which are borne respectively