

by the fourth to ninth brachials. This feature is well shown in *Antedon anceps*, *Antedon milberti*, and *Antedon variipinna* (Pl. XXXV. figs. 2, 4; Pl. XXXVI. figs. 1, 4-6), and also in some species described by Bell in the "Alert" Report; while it reappears in a more marked degree in some of the multibrachiate species of *Antedon* (Pl. XLVIII. figs. 2, 3). In some cases, as in *Antedon milberti*, the second, third and fourth pairs are all of greater size than the pinnules above and below them, sometimes the second and sometimes the third being slightly the largest. In *Antedon anceps* and in *Antedon variipinna* the pinnules of the fifth or sixth brachials (or both) are considerably longer and stouter than their fellows (Pl. XXXV. fig. 2; Pl. XXXVI. figs. 1, 4-6); and in Bell's species *Antedon carpenteri* and *Antedon pumila*, the large pinnule is on the fourth brachial. But in *Antedon carinata* and *Antedon parvicirra* the third and the following pairs of pinnules are much more equal in size. At the end of the group I have placed two abnormal species in which the pinnule on the third brachial is absent, though in other respects they conform pretty well to the general type.

All the members of the *Milberti*-group are limited to the Pacific and the Eastern Archipelago, with the exception of *Antedon carinata*, which also extends into the Indian Ocean, Red Sea, and the Western Atlantic. It was dredged off St. Lucia, in 278 fathoms, by Captain Cole of the telegraph steamer "Investigator"; but all the remaining members of the group are confined to the littoral zone. Most of them have been obtained at depths of 20 fathoms or less; but *Antedon variipinna* occurs at 36 fathoms in the Arafura Sea.

The general relations of the various members of the *Milberti*-group are shown in the following table:—

A. A pinnule on the third brachial.

I. Second pair of pinnules the largest.

a. Cirrus-joints short.

1. Twenty-five cirrus-joints; the first brachials much incised, *pinniformis*, Carpenter.

2. Barely twenty cirrus-joints; the first brachials not incised.
Second pinnule serrate, *serripinna*, Carpenter.

Second pinnule with large processes on the lower joints, *carpenteri*, Bell.

b. Twelve long cirrus-joints, *pumila*, Bell.

II. Second and third, and sometimes the fourth, pairs of pinnules about equal.

a. Twenty-five to forty cirrus-joints.

Radials and lower brachials tubercular; the lower pinnules rounded, 1. *milberti*, Müll., sp.

Radials and lower brachials smooth; the lower pinnules carinate, *levissima*, Grube, sp.

b. Forty-five cirrus-joints; syzygial interval seven to ten joints, *tessellata*,¹ Müll., sp.

c. Sixty cirrus-joints; syzygial interval three to seven joints, *perispinosa*, Carpenter.

¹I only know this type from the description of it which is given by Müller; but it is the only species recorded in the list given on pp. 53-55 which I have not personally examined.