

the cirrus-joints to be also unprovided with *definite* spines, though they have the same sharply carinate appearance as those of *Antedon irregularis*.

The first radials of these individuals are also mostly concealed, as is the case in *Antedon irregularis*, though in the type of *Antedon decipiens* from the Arafura Sea they are "quite distinct" as described and figured by Bell;¹ but they are much less distinct in the white individuals from Prince of Wales Channel. In all the specimens from this latter locality, therefore, the first radials resemble those of *Antedon irregularis* rather than the radials of *Antedon decipiens*; but some of them had spiny cirri as in the type of *Antedon decipiens*, while in the others the joints are only sharply carinate as in *Antedon irregularis*. The arms and pinnules of all these specimens, however, are most like those of *Antedon decipiens*.

It would seem impossible, therefore, to make any distinction between the two species in the characters of either the arms, the radials, or the cirri; and this conclusion is confirmed by the following considerations. The two individuals from the Arrou Islands, which I formerly referred to a new species, *Antedon dubia*, have about thirty-five cirrus-joints, with the later ones carinate as in *Antedon irregularis* (Pl. XXXVI. fig. 1; Pl. XLIX. fig. 1). But they have relatively large and conspicuous first radials with a sculptured surface (Pl. XXXVI. fig. 1), exactly as in Bell's figured specimen of *Antedon decipiens*, which, like these, has no palmars. The arm-bases of the smaller individual from the Arrou Islands resemble those of *Antedon decipiens*, while those of the larger one show more of the characters of *Antedon irregularis*. On the other hand, *Antedon variipinna* and *Antedon crenulata* both have palmar series and thirty or more spiny cirrus-joints, while the first radials are fairly distinct, those of *Antedon crenulata* being more or less sculptured. Neither species has specially rounded arm-bases, like those of *Antedon irregularis*, though the general outline of the joints is the same in all the types.

The variations in the characters of all these different forms may be conveniently expressed by letters as follows:—

Number of cirrus-joints,	. . . . .	30 to 35,	A.	25,	a.
Characters of cirrus-joints,	. . . . .	Distinctly spiny,	B.	Sharply carinate,	b.
First radials,	. . . . .	Distinct,	C.	Mostly concealed,	c.
Palmar series,	. . . . .	Present,	D.	Absent,	d.
Arm-bases,	. . . . .	Much rounded,	E.	Less rounded,	e.
Arms,	. . . . .	Serrate,	F.	Fairly smooth,	f.

¹ "Alert" Report, pl. xi. fig. B.