

has articulated distichals and palmars, but the first two brachials united by syzygy (Pl. LVIII. fig. 1), so that its formula is— $a.2.2.\frac{br}{2}$.

6. Whenever any arm-division, distichal, palmar, or any other consists of three joints, the first two are articulated by ligaments, the second bearing a pinnule, and the third (axillary) is a syzygy, just as in the first three brachials of *Antedon eschrichti* (Pl. XXIV. fig. 11) and *Actinometra meridionalis* (Pl. LVI. fig. 1). When, however, there are only two joints, and the second (axillary) is a syzygy, the first has a pinnule, just as in the arm-bases of *Actinometra fimbriata* (Pl. LXII. fig. 3).

Examples.—*Antedon variipinna* (Pl. XLVIII. fig. 5) and *Antedon porrecta* (Pl. LII. fig. 3); *Actinometra parvicirra* (Pl. LXI. fig. 1) and *Actinometra sentosa* (Pl. LXVI. fig. 4).

7. The hypozygal of a syzygy is always united to the preceding joint by a muscular articulation.

The method of formulation which I have devised in accordance with the above rules is as follows:—

Like Professor Bell I use R to denote the syzygial union of the two outer radials; and I assume in accordance with Rules 3 to 5 that the first syzygy on the arm is in the third brachial, unless otherwise stated. If it is in the second brachial I put $2br$ at the end of the formula; and if the first two brachials are united by syzygy $\frac{br}{2}$ is used. In like manner, and in accordance with Rule 5, $2d$ and $2p$ would indicate that there are two distichals or two palmars, of which the axillary is a syzygy; and $\frac{d}{2}$ or $\frac{p}{2}$ that the two distichal or two palmar joints are themselves united by syzygy.

The figures 1 or 2 alone would indicate that there is either only a single axillary joint, or that the axillary is the second joint and bifascially united to its predecessor; and a 3 would denote three joints of which the axillary is a syzygy.¹ If one figure occurs alone in a formula it indicates the presence of distichals only; two figures that palmars occur as well; and so on, an additional figure or letter (p' , p'' , p''') being added for each fresh division, e.g., *Actinometra alternans*, 3, 2, 3, 2, *Actinometra sentosa* 3.2 (p . p' . br).

This may be tabulated as follows:—

Character.	Symbol used.	
	Distichal.	Palmar.
One axillary joint,	1	1
Two joints united by syzygy,	$\frac{d}{2}$	$\frac{p}{2}$
Two articulated joints,	2	2
Two joints, the axillary a syzygy,	$2d$	$2p$
Three joints, the axillary a syzygy,	3	3

¹ It would of course be more consistent to write $3d$ or $3p$; but the syzygial nature of the third (axillary) joint is such a constant character (Rule 6) that until an exception is met with, I prefer to use the figure alone for the sake of brevity.