

When I re-described *Actinometra solaris* in 1882, I added a diagnosis¹ of the form which had been long known in the catalogues of the Godeffroy Museum as *Actinometra robusta*, Lütken, MS. The chief character distinguishing it from *Actinometra solaris*, apart from its generally more robust nature, seemed to me to be the entire absence of any expanded keels on the lower joints of its second and third pairs of pinnules. The examination of the "Alert" collection has shown, however, that this distinction will no longer hold good. The "Alert" dredged large specimens at Prince of Wales Channel, Port Molle, and Port Curtis, which are indistinguishable from *Actinometra robusta* in almost every other character but those of the lower pinnules. All of them have three, and that from Port Molle as many as five pinnules with keeled basal joints; and for reasons which will appear immediately, we have, I think, no other course open to us but to refer them all, together with *Actinometra robusta*, to one and the same type, *Actinometra solaris*. When describing the Comatulæ obtained by the "Alert," Bell proposed, in the following terms,² to establish a new species, *Actinometra intermedia*:—"As Mr. Carpenter has pointed out, it appears to be possible, in part at any rate, to distinguish *A. solaris* from *A. robusta* by the character of the keels, which, in the former, are so strikingly developed on the basal joints of the second pinnule. Basing myself on the theory that the keel is constantly present on the basal joints of the second pinnule of *A. solaris*, and that it is never found on those of *A. robusta*, I venture to think that, in the case of *A. intermedia*, we have to do with a form in which constantly the keels are never as well developed as in *A. solaris*, and never so slightly as in *A. robusta*, while at the same time there are considerable differences in the extent of the development of the keel, not only within the limits of the species, but even of the individual."

I have made a careful examination of the half dozen specimens which Bell referred to *Actinometra intermedia*, and I find it impossible to differentiate them from *Actinometra solaris*. They present a great amount of variation in the carination of the basal pinnules, but not more so than I have found in a number of specimens collected by the Challenger in Torres Strait, which I now refer to *Actinometra solaris*, though, like Bell, I formerly considered them as representing a new species (which I called *Actinometra strotæ*), intermediate between *Actinometra solaris* and *Actinometra robusta*. The Challenger specimens from Booby Island and Albany Island, and Bell's *Actinometra intermedia* from the latter locality, agree in every respect except colour. The lower pinnules are sometimes almost as slightly keeled as in the *robusta*-form (Pl. LIII. figs. 3-6); while, on the other hand, they may have all the characters of the pinnules in the typical *Actinometra solaris* (Pl. LIII. figs. 9-12), and the development of the keel is not constant in any individual specimen. They all agree, however, in having from eighteen to twenty cirrus-joints, and in the indistinct nature of the medio-dorsal ridge;

¹ *Journ. Linn. Soc. Lond. (Zool.)*, 1882, vol. xvi. p. 517.

² "Alert" Report, p. 166.