

The stellate condition of the centro-dorsal just described in *Actinometra paucicirra* is sometimes reached by that of *Actinometra parvicirra* before the cirrus-sockets are entirely obliterated. In one specimen of this variable type which was obtained by the Challenger, the mature cirri have disappeared and are replaced by a few rudimentary stumps, while the sides of the plate are so deeply hollowed by their sockets that its outline is rather stellate than pentagonal. But it is still distinctly above the level of the radials (Pl. LXI. fig. 3).

The six examples of the large *Actinometra nobilis* which were dredged in the Philippines also exhibit a considerable amount of variation in the characters of the centro-dorsal (Pl. LXV. figs. 1-6). In the least modified form it is a rounded pentagonal plate distinctly above the level of the calyx, with traces of about ten cirrus-sockets, one of which contains a very rudimentary stump, and a well-marked process at each of its angles (fig. 2). In another specimen it is distinctly sunk below the level of the radials, with which it remains united externally by the interrarial processes at its angles; but its sides are bevelled away, and most of them bear indistinct cirrus-sockets, in one of which a small stump is visible (fig. 3). In the other four examples, however, the centro-dorsal shows little or no trace of cirri, and is distinctly concave on its dorsal surface; while it is completely enclosed by the radial pentagon, united to it by the interrarial processes at its angles, but separated from it by very distinct clefts along its sides. Its shape, however, is more pentagonal than stellate (Pl. LXV. figs. 1, 4-6).

These clefts are rather deeper in *Actinometra littoralis*, though the centro-dorsal retains its distinctly pentagonal form, and is about flush with the radials, with which it is in contact by its lower angles (Pl. LXVII. fig. 1). On the other hand, in *Actinometra divaricata* the centro-dorsal is very markedly stellate, and remains above the level of the radials, the surface of which falls away considerably towards the sides of the centro-dorsal, but not so much so as to give rise to definite clefts (Pl. LXIII. fig. 6).

In the Challenger specimen of *Actinometra typica*, however, in the original type of *Phanogenia*, and in others which I have seen, the centro-dorsal is both stellate and sunk below the radials, so that there are very distinct clefts between the latter and its incurved sides; and no one would think from its present appearance that it had ever been a cirrus-bearing joint (Pl. LVII. fig. 1). But in Lovén's specimen the metamorphosis was less complete, for a few cirrus-stumps are figured as still attached to the stellate centro-dorsal, which is slightly above the level of the radials. The facts stated above, however, concerning *Actinometra paucicirra*, *Actinometra nobilis*, and other forms, entitle us to assume that cirri were really present in the young *Phanogenia*, so that the genus ceases to have the extremely anomalous character which Lovén not unnaturally attributed to it.

These clefts which occur at the sides of the centro-dorsal in *Actinometra typica* and similar species must not be supposed to place the cavity of the calyx in communication