

may start directly from the peristome (B_2 on Fig. 6, B), or come off from one of the large furrows which supply the posterior and the two lateral rays (A_1 on Fig. 6, B). The furrow on the right or western side of the disk supplies the radii E and D, as in the species with a radial mouth (Fig. 6, A); but it is longer and has a larger curve than in these forms, as the D ray is exactly behind the mouth (Fig. 6, B), and the corresponding posterior furrow thus extends round three-fifths of the disk instead of round but one half of it. The shape of the peristome in a species with interradial mouth is well seen in *Actinometra regalis* (Pl. LXVIII. fig. 1); while the origin of the primary ambulacra is also seen in *Actinometra belli*, though the peristome of this specimen is so much contracted that the position of the mouth on the disk is only indicated by the point of convergence of the ambulacra (Pl. LXIV. fig. 2).

I was led to think at one time that the situation of the mouth, whether radial or interradial, might serve as a character of specific value. But wider experience has

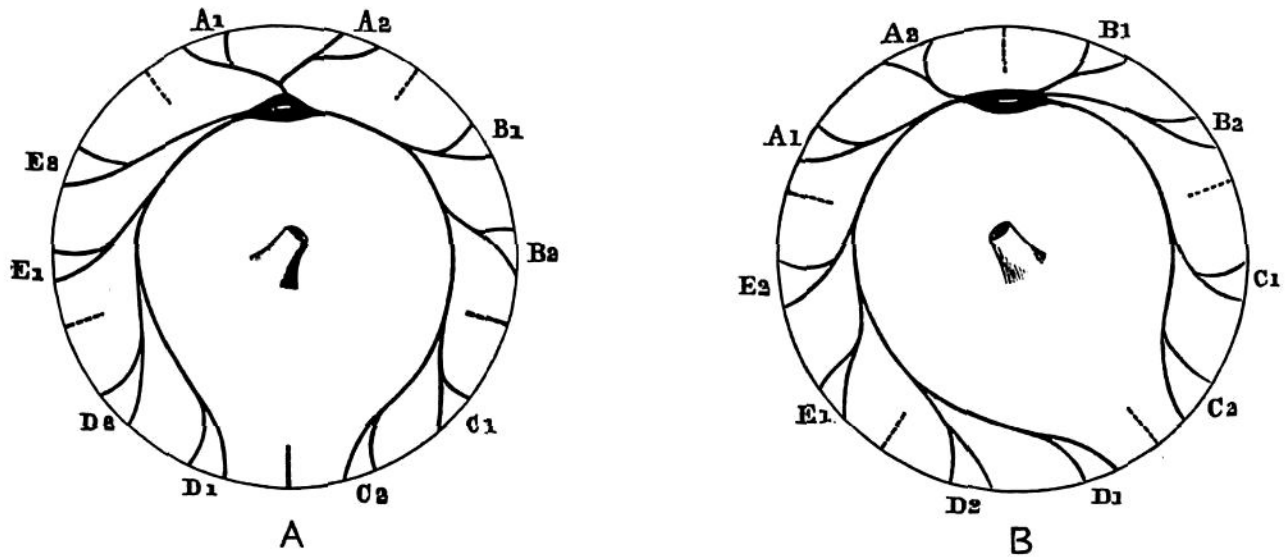


FIG. 6.—Diagrams showing the different positions of the mouth in *Actinometra*; A, with a radial mouth; B, with an interradial mouth. The dotted lines mark the interambulacral regions of the disk. $A_1, A_2, \dots, E_1, E_2$ the five pairs of secondary ambulacra.

shown me that too much reliance must not be placed upon it. For although the mouth generally has a constant position in any given species, it sometimes happens that some individuals of the species have an interradial mouth and others a radial one. Thus, for example, the mouth is radial in nearly all the specimens of *Actinometra pectinata* which I have seen, as it almost invariably is in the *Solaris*-group; but it is interradial in the three individuals dredged by the Challenger, one in Torres Strait, and two at Samboangan. On the other hand the mouth is interradial in the examples of *Actinometra lineata* which were dredged at Bahia, but in another individual which I have seen from Barbados its position is radial.

There is another character which very commonly presents itself in *Actinometra*, and seems to be correlated with the excentric position of the mouth. I refer to the very