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## DOES THE TYPE OF PROTOPALÆASTER NARRAWAYI PRESENT AN ORAL OR ABORAL ASPECT.

(PLATES VIII-IX, FIGURE 1).

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During my first study of this type, careful search was made for items of evidence for both sides of this question and these items were classified and recorded. The evidence was so long and so overwhelmingly in favor of an oral aspect that it was decided not to burden my paper [A]\* with it. In the last paragraph, however, I mentioned three of the most important adverse items, anticipated criticism, and promised a defence of my position. Dr. Raymond uses these items, with others, in favor of an aboral aspect [B]. I propose here to weigh carefully his evidence and present some items which are decidedly against his view.

## INFERO-MARGINALS.

- I. The vertical radial outlines of the interradial shown in [A] plate II, fig. 4, and in our present text figure 1; together with the transverse vertical outlines seen in [A] plate III, fig. 5; show a markedly convex surface without the slightest degree of summit flattening and such outlines prove conclusively that no interradial supero-marginal ever developed in contact with the exposed surface of these plates.
- II. On the orad margins of each of these plates there are three concavities—the central one the most pronounced. They suggest comparison with the hollows or depressions in the plates of Goniasteridae and Linckiidae into which the jaws of the pedicellariae rest when open. Dr. W. K. Fisher writes me that he believes "The impressions are intended to receive the epineural plates," and that they are, therefore, oral surface features.

<sup>\*</sup>Papers to which reference is made are indicated by capital letters in bracl ets. A list of these is placed at end of this article.