

interradius 1, but this when magnified about 20 diameters reveals a striated surface as if belonging to a sea-urchin.

VERTICAL SECTION.

XI. The last item of evidence to be here given from the oral skeleton is derived from the sequence and form of outline of the vertical section given in text figure 1.

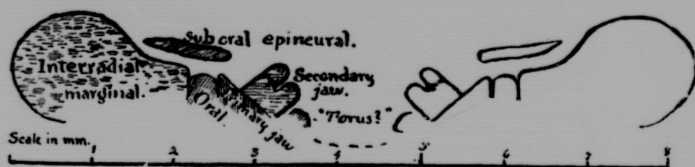


FIG. 1. Outlines from vertical section of *P. narrawayi* passing in through one interradius to center and out by one of the interradii next the opposite radius. Slight offsets have been made to include suboral epineurals and secondary jaws.

It is not a difficult matter to account for these plates, their form and position, if the outline is that of the true oral surface. If, however, this outline is of the aboral surface of the oral skeleton, we are face to face with an apparently insuperable difficulty. How are we to explain the presence of the deep concavity on the now aboral inner face of the marginal—the large paired plates which now become *supra-orals*—the beveled *interior* faces of the mouth plates—and the function of the “secondary jaws.” Are we to suppose that the circumgastric ring of ten *radially situated* pieces (our first epineurals) rested against or over the borders of the stomach and served for “internal massage” or for a compress to aid in the emptying of the stomach cavity? Was the ring of ten double-headed internal “crushers of the oesophagus” an essential adjunct of this new and wonderful mechanism? Those against an oral aspect must explain this apparently senseless arrangement of heretofore wholly unknown plates. Should further study establish their view we may properly expect that the biological story told by these plates will be one of intense interest.

THE ABORAL SKELETON.

The balance of Dr. Raymond's evidence is contained in the paragraph commencing on p. 106, line 44, of his criticism and is derived from the plates marked (x) and (y) in our plate VIII, fig. 1. I agree with him that for these “a place cannot be found in the structure of the specimen” (p. 106, lines 45-46). He