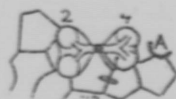


distinctly flattened, the area facing diagonally upward thus producing a strongly angular outline a short distance above mid-height on the right side of the theca. The arrangement of the thecal plates on this specimen is indicated by diagram No. 5. A part of the thecal plates are missing, the specimen being imperfect, but all of the basal plates are preserved, and, of these, seven appear to be in direct contact with the top of the column. These are indicated in the diagram by the heavy basal margin.

In most other respects, than those cited above, *Comarocystites shumardi* closely resembles *Comarocystites punctatus*. The transverse apical food-groove (Figures 1 A, B, C, and diagram No. 6) branches at each end dichotomously, along the adoral side of the nodular stereom protuberance which supports the right or left pair of arms. Only the facets for the attachment of these arms are preserved, the arms themselves not being retained in any specimen at hand.

The mouth or entrance into the theca consists of a small opening located at mid-length along the transverse apical food-groove, at the proximal end of the suture between plates *a*, *a*, in the diagram. The food-groove is covered by a double series of covering-plates. Two peristomial plates typically are in contact with the posterior margin of the transverse apical food groove, and of these the right peristomial plate is distinctly the larger (Diagram No. 5). From the center of the latter, the linear hydropore ridge (Figure 1C on plate IV, also diagrams 5 and 6) extends diagonally downward and toward the right, toward the center of the plate adjoining it on that side. One specimen shows a minute pore immediately beyond the upper left hand end of the hydropore ridge. There is no evidence of this being a constant feature.

The anal pyramid is not preserved in any specimen at hand but the circular opening into which this pyramid fitted (Figure 1B on plate IV) is preserved in several specimens, and this shows a diameter of 3 millimeters in a specimen 25 millimeters in height. This circular opening is surrounded by five thecal plates occupying the same position as in *Comarocystites punctatus*.



Text figure No. 6. Diagram of a few of the thecal plates at the apical end of the specimen represented by figure 1C on plate IV; the numbering and lettering as in text figure No. 4. The transverse apical food groove, branching at each end, where the facets of the two pairs of arms are located, the location of the mouth, the anus, and the linear hydropore also are indicated. Special attention is called to the monopolizing of the space posterior to the transverse food-groove by the plate marked *rp*. In other specimens there is room for smaller plates on the left.