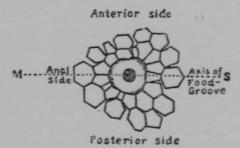
position, and outline usually is absent among those thecal plates not bordering on the transverse apical food-groove or on the anal pyramid. However, certain tendencies may be observed even among these other thecal plates. For instance, the plate directly below the middle of the anal pyramid (Plate II, fig. 2; also text diagrams), but not in contact with the latter, is pentagonal in form, and has its upper angle inserted between the two plates forming the lower border of the pyramid. Directly beneath this pentagonal plate is a series of hexagonal plates which, instead of forming a strictly vertical row, are arranged along a line which curves moderately toward the front on approaching the base of the theca. Parallel to this series of plates, on its anterior side, are similar series of hexa-



Text figure No. 3. The two lower series of thecal plates of the specimen represented by text figure No. 2, and by figure 2 on plate II; drawn as though viewed from the lower side and oriented as indicated in the diagram. The vertical projection of the plane passing through the anal pyramid and parallel to the transverse apical food-groove is indicated by the dotted line. The dotted parts surrounding the top of the column indicate the extent to which the basal part of the lowest series of plates rises above a line drawn strictly horizontal around the top of the column. The dotted area at the center represents the lumen. Fifteen plates occur in the basal series of thecal plates in the specimen diagrammed, but the number varies greatly in different specimens.

gonal plates, causing the anterior side of the theca to present the appearance of diagonally intersecting rows, with the angles of the thecal plates directed toward the top of the specimen. On the posterior side of the theca, a similar tendency toward the arrangement of plates in rows causes one of the sides of the hexagonal plates, rather than one of its angles, to face the top of the specimen.

12. The arrangement of the basal thecal plates.—The outline and arrangement of the basal thecal plates, where in contact with the stem or column, varies from 11 to 15 (Text diagram No. 3) in different specimens. The line of contact between the basal thecal plates and the top of the column is not strictly horizontal, but rises and falls in an irregular manner, varying