

Keyes, Missouri Geol. Surv., 4, 1894, p. 132, pl. 18, fig. 2,
Figure 2 presents the basal view of the theca,
copied from the Illinois report.

Jaekel, Zeitsch. d. deutsch. geol. Gesellsch., 52, 1900, p. 676.
Comarocystites obconicus, Meek and Worthen.

Meek and Worthen, Proc. Acad. Nat. Sci., Philadelphia,
1865, p. 144. Geol. Surv., Illinois, 3, 1868, p. 294,
pl. 1, figs. 2a, b.

The total length of the theca of the specimen represented by figure 2a probably did not exceed 20 millimeters. The appearance of the figure suggests that the plates on the left side of the theca were of enormous thickness, compared with their width. This appearance is due, however, to the growth of calcite in the interior of the theca, the actual thickness of the plates thus represented varying from about 1.5 millimeters, towards the bottom to almost 2 millimeters at the top of the theca. Figure 2b represents the left side of another specimen with the stereom protuberance, formerly supporting the left pair of arms, at the top.

Keyes, Missouri Geol. Surv., 1, 1894, p. 132, pl. 18, fig. 1.
Figure 1 is a republication of figure 2a of the Illinois report.

26. *The zoological position of Comarocystites.*—In 1896, Haeckel separated from the remaining *Cystidea* those forms in which no radial branching of the food-groove system, either trimerous or pseudo-pentamerous, can be detected spreading over the upper surface of the theca. These forms he distinguished as a co-ordinate group under the name *Amphoridea*. Among the *Amphoridea* were placed not only the asymmetric and bisymmetric forms but also those in which the arms branch off radially from the top of the theca, without, however, being attached dorsally, for at least a part of their length, to the upper surface of the theca. To these *Amphoridea* with radially arranged arms he applied the term *Palaeocystida*, and evidently regarded them as ancestral to the true *Cystidea*, especially to the *Glyptocystidae*. Among these *Palaeocystida*, he placed the genus *Comarocystites*.

Bather (Echinoderma, 1900) retained the group *Amphoridea*, but as one of the subdivision of the *Cystidea*, characterized by the absence of radial symmetry in both food-grooves and thecal plates. *Comarocystites*, however, is referred by him to the *Rhombifera*. In the *Rhombifera*, as defined by Bather, radial symmetry affects the food-grooves, and the stereom and stroma are arranged in folds and