Megaliocrinus johnsoni, a New Camerate Crinoid Species from Middle Pennsylvanian Rocks of Illinois

H. L. Strimple

University of Iowa
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The steinkern of a camerate crinoid found in rocks of Middle Pennsylvanian age is of considerable interest in that very few genera or species have been reported. Megaliocrinus johnsoni, new species, is from the Cherokee Group, exposed in the Collinson quarry near Milan, Rock Island County, Illinois. Internal nerve canals radiating from the chambered organ are preserved as ridges.

SYSTEMATIC DESCRIPTIONS
Family PARAGARARICRINIDAE Moore and Laudon, 1942
Genus MEGALIOCRINUS Moore and Laudon, 1942
MEGALIOCRINUS JOHNSTONI Strimple, new species

FIGURE 1 a-c

Diagnosis: calyx large, subglobose; sutures in basal circele obscured; five large radials are in contact all around except in the posterior, where a large primanal comprises the sixth plate in the circele; primanal followed by three large plates which are subsequently followed by three plates in the next circele; primibrach I auxiliary and separated by a single interbrachial in all interrays except the posterior. The calyx has an estimated width of 36.0 mm, height 13.0 mm.

Discussion: the basal circele is obscured by canals and an irregular median portion (shown as elevations on the steinkern) marking the position of the chambered organ (nerve center) and paths of radiating nervous system.

The species is more advanced than species of the genus of Morrowan age to have the circele leading

Species name is in honor of Keith Johnson.
Holotype: SUI 37949, repositioned Geology Department Repository, The University of Iowa, Iowa City, Iowa.
Occurrence: Cherokee Group, Desmoinesian Stage, Middle Pennsylvanian, Collinson quarry (NW ¼ sec. 25, T. 17 N., R. 2 W.) near Milan, Rock Island County, Illinois.

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1 The University of Iowa, Iowa City, Iowa.

Figure 1. *Megaliocrinus johnsoni*, n. sp., from Cherokee rocks of Illinois. a. Diagram of part of calyx from base, showing proximal outline of chambered organ (which covers the basal cirlet), major radiating nerve canals and primanal (anal X) above followed by secondary analcs, all of which are designated by diagonal lines. Radial plates and primanal surround the rest of the basal cirlet and are followed directly above by axillary first primibrachs. b. Steinkern (internal cast) tilted slightly to the left with many sutures accentuated by ink. c. Unretouched photograph, approx. X2.