# A NEW EDRIOASTER FROM THE UPPER ORDOVICIAN OF NORTHERN ILLINOIS

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An excellently preserved specimen of an edrioaster was collected by the writer from a shale seam in a small limestone quarry one and one-half miles east of Garden Prairie, McHenry County, Illinois. A considerable brachiopod and bryozoan faunule is associated with the specimen, but the bryozoan specimens lack internal structure. M. E. Chappars of Walker Museum, University of Chicago, has been kind enough to examine the associated fauna and he has established the age as Middle Richmond (Liberty-Whitewater).

The edrioaster belongs to that rare group of Edrioasteroidea in which all the ambulacra curve in the same direction. In the genera *Lebetodiscus* and *Ulrichidiscus* all ambulacra curve to the left, in *Cooperidiscus* and *Foerstediscus* all curve to the right. The ambulacra of the present specimen curve to the right and the interambulacral plates are arranged in mosaic as in *Foerstediscus*, rather than in imbricate pattern as in *Cooperidiscus*.

The genus *Foerstediscus* was established by Bassler in 1935 upon the species *F. grandis* Bassler from the Trenton of Woodford County, Kentucky. Two additional species were described by Bassler in 1936, *F. splendens* from the Decorah at St. Paul, Minnesota, and *F. parvus* from the Hull formation (Trenton) of Kirkfield, Ontario. The present specimen is distinguished from these species by its wider and less prominent ambulacra and by its narrower disc of attachment.

The particular value of the McHenry County specimen lies in the fact that the aboral surface and part of the interior of the theca are preserved. The aboral side of *Foerstediscus* has not been described. The frame consists of an outer row of small plates and an inner row of much larger plates which form an even border to the large tegmental area. The mouth is surrounded on the interior of the theca by five prominent plates, similar in appearance to the perignathic girdle of some echinoids. This circumoral ring is here recognized for the first time. Bather figured edrioaster specimens which exhibit five lobes on the inner part of the tegmen, but this is an entirely different structure.

R. E. Bassler has seen the specimen and has advised the writer concerning its structure and affinities. The specimen will be deposited in the United States National Museum.