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**Bulletin of the Illinois State Museum of Natural History,  
Issues 3-7**

**#Illinois State Museum**

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**Title: Bulletin of the Illinois State Museum of Natural History, Issues 3-7**

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BULLETIN NO. 3

8176.

OF THE

ILLINOIS STATE MUSEUM

OF

NATURAL HISTORY.

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DESCRIPTION OF SOME NEW SPECIES OF INVERTEBRATES  
FROM THE PALAEOZOIC ROCKS OF ILLINOIS AND  
ADJACENT STATES

BY S. A. MILLER AND WM. F. E. GURLEY.

8 plates

SPRINGFIELD, ILLINOIS,  
December 1, 1893.

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SPRINGFIELD, ILL.  
H. W. ROKKER, STATE PRINTER AND BINDER,  
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*Secretary.*

WILLIAM F. E. GURLEY,  
*State Geologist and Curator.*



## SUBKINGDOM ECHINODERMATA.

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### CLASS ECHINIDA.

### ORDER PERISCHOECHINIDA.

### FAMILY PALAECHINIDÆ.

#### MELONITES INDIANENSIS, n. sp.

#### *Plate I, Fig. 1, apical view.*

Our specimen is injured, in a few places, though it is not easy to trace the outlines of the plates in the ambulacral depressions, and hence they are not distinguished in the illustration. The central basal part is destroyed and the oral plates are gone.

The form is strikingly melon-like, notwithstanding the depressions at the poles. The vertical height is two and fifteen-hundredths inches, and the transverse diameter is two and sixty-five-hundredths inches. The surface of the plates is covered with tubercles that formed the bases of spines. And some of the spines may be seen scattered over parts of the ambulacral depressions. The spines are minute, elongate, tapering, cylindrical in section, swollen a little at the basal extremity, and about one-tenth of an inch in length.

The interambulacral areas are lance-elliptical in outline, abruptly elevated from the ambulacral depressions, sharply rounded at the apical pole, more gently rounded toward the middle, while the middle part is only slightly convex. There are six ranges of plates at the middle part, a little higher only five, a little higher only four, and then there are only three, which grow smaller and terminate each interambulacral area by abutting a genital plate. There are from twenty to thirty tubercles on the larger plates.