CONTRIBUTIONS FROM THE MUSEUM OF PALEONTOLOGY (Continuation of Contributions from the Museum of Geology) UNIVERSITY OF MICHIGAN

Vol. III, No. 4, pp. 77-79 (1 pl.)

NOVEMBER 10, 1928

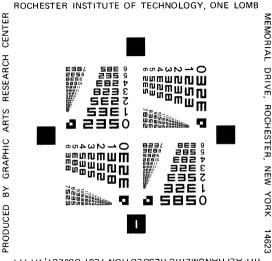
CYSTOIDS FROM THE TRENTON ROCKS OF MICHIGAN

BY RUSSELL C. HUSSEY



UNIVERSITY OF MICHIGAN ANN ARBOR

| 3 5 6 0123456 | 34 56 | 654321 |
|---|---|-------------------------|
| | AIIM SCANNER TEST CHART # 2 | A4 Page 5 543210 |
| 4 PT 6 PT 8 PT | Spectra ABCDEFGHIJKLMNOPQRSTUVWXYZabcdelghijkImnopqrstuvwyz;``,/\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijkImnopqrstuvwxyz;``,./?\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijkImnopqrstuvwxyz;:``,./?\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijkImnopqrstuvwxyz;:``,./?\$0123456789 | |
| 4 pt 6 PT 8 PT | Times Roman ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;:'',./?\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;:'',./?\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;:'',./?\$0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;:'',./?\$0123456789 | |
| ^{4 рт} 6 РТ 8 РТ | Century Schoolbook Bold ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 | |
| 4 PT 6 PT | News Gothic Bold Reversed ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz;",./?\$0123456789 | |
| 4 PT 6 PT 8 PT | Bodoni Italic ABCDEFGHIJKLMN007QRSTUFWXYZabcdefghijklmnopqrstuwwxyz;;",./?80123456789 ABCDEFGHIJKLMN0PQRSTUFWXYZabcdefghijklmnopqrstuwwxyz;;",./?80123456789 ABCDEFGHIJKLMN0PQRSTUFWXYZabcdefghijklmnopqrstuwwxyz;:",./?80123456789 ABCDEFGHIJKLMN0PQRSTUFWXYZabcdefghijklmnopqrstuwwxyz;:",./?80123456789 | |
| ₄ ^{ρτ} 6 ΡΤ 8 ΡΤ | Greek and Math Symbols ABGAESOHIKAMNOIIPPSTYDXVZaβyδεξθηκλημυσφορτωχψ{ $\leq \pm ", / \leq \pm = \neq^{\circ} > < > < > < > < > < > < > < > < > < > $ | |
| 0123456 | White Black Isolated Characters | 654321 |
| | | A4 Page 6543210 |
| MESH | | |
| 65 | | |
| 85 | | |
| 100 | | |
| 110 | | |
| 133 | | |
| 150 | | |
| | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | / | |



RIT ALPHANUMERIC RESOLUTION TEST OBJECT, RT-171

(Continuation of Contributions from the Museum of Geology)

UNIVERSITY OF MICHIGAN

Editor: EUGENE S. MCCARTNEY

The series of contributions from the Museum of Paleontology was inaugurated to provide a medium for the publication of papers based entirely or principally upon the collections in the Museum. When the number of pages issued is sufficient to make a volume, a title-page and a table of contents will be sent to libraries on the mailing list, and also to individuals upon request. Communications with reference to exchange or purchase of copies should be directed to the Librarian, General Library, University of Michigan.

VOLUME I

The Stratigraphy and Fauna of the Hackberry Stage of the Upper Devonian, by Carroll Lane Fenton and Mildred Adams Fenton. Pages xi + 260, 45 plates, 9 text figures and 1 map. Cloth. \$2.75 net.

VOLUME II

- 1. A Possible Explanation of Fenestration in the Primitive Reptilian Skull, with Notes on the Temporal Region of the Genus *Dimetrodon*, by E. C. Case. Pages 1-12, with 5 illustrations. Price, \$.30.
- Occurrence of the Collingwood Formation in Michigan, by R. Ruedemann and G. M. Ehlers. Pages 13-18. Price, \$.15.
 Silurian Cephalopods of Northern Michigan, by Aug. F.
- Silurian Cephalopods of Northern Michigan, by Aug. F. Foerste. Pages 19–104, with 17 plates and 2 text figures. Price, \$1.00.
- 4. A Specimen of *Stylemys nebrascensis* Leidy, with the Skull Preserved, by E. C. Case. Pages 87-91, with 7 text figures. Price, \$.20.
- Note on a New Species of the Eocene Crocodilian Allograthosuchus, A. wartheni, by E. C. Case. Pages 93-97, with 1 plate and 1 text figure. Price, \$.20.
- Two New Crinoids from the Devonian of Michigan, by G. M. Ehlers. Pages 99-104, with 1 plate. Price, \$.20.
 New Brachiopods from the Warsaw Formation of Wayne
- New Brachiopods from the Warsaw Formation of Wayne County, Kentucky, by G. M. Ehlers and M. S. Chang. Pages 105-111, with 1 plate. Price, \$.20.
- 8. The Richmond Formation of Michigan, by R. C. Hussey. Pages 113-187 with 11 plates, 12 text figures and 1 map. Price, \$.75.

(Continued on inside of back cover)

CYSTOIDS FROM THE TRENTON ROCKS OF MICHIGAN

By RUSSELL C. HUSSEY

THE cystoids described and illustrated in this paper were collected during the summer of 1927 from an outcrop of Trenton limestone exposed along the Escanaba River, three miles north of the city of Escanaba, Michigan. The rock at this locality is very fossiliferous but well-preserved specimens of cystoids are exceedingly rare.

Class CYSTOIDEA VON BUCH GENUS PLEUROCYSTITES BILLINGS PLEUROCYSTITES SQUAMOSUS Billings (Plate I, Figs. 1, 3)

Description. — The specimen shows only the antanal side, the anal side being embedded in the hard limestone matrix. The calyx has been somewhat distorted by crushing but nearly all the plates are well shown and the sutures can easily be traced. The column is round, tapering distally, with the projecting edges of the segments vertically striated; the segments are separated from each other by deep grooves which become shallow distally where the segments are also thicker. The surface of the plates is granular. On a few plates there are traces of concentric lines running parallel with the margin. Basal pectinorhomb narrow, about 1.5 mm. wide and 5 mm. long, with the longer axis running in the same direction as the length of the calyx. The longer axes of the two upper pectinorhombs are transverse to the length of the calvx. The chief distinction between Pleurocystites filitextus and P. squamosus is in the plates on the anal side. In the former the anal area is covered with forty or fifty plates; in the latter the area is covered with several hundred very small plates.

Horizon and Locality. — Specimen found by E. C. Case. Trenton limestone, Escanaba River, three miles north of Escanaba, Mich., Loc. 8, Zone 2. Expedition of 1927. No. 10346, Museum of Paleontology, University of Michigan.

PLEUROCYSTITES SQUAMOSUS Billings

(Plate I, Figs. 2, 6)

Description. — This specimen shows the great size of the anal area which was originally covered by a great number of very small plates; these plates have been crushed inward and a number of them still adhere to the inner surface of the plates on the antanal side.

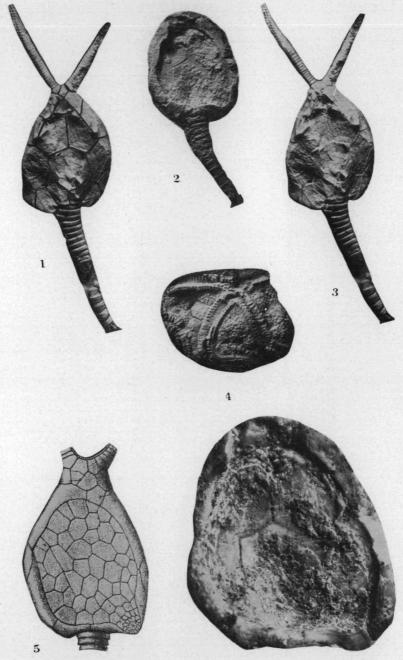
Horizon and Locality. — Specimen found by the author. Trenton limestone, Escanaba River, three miles north of Escanaba, Mich., Loc. 8, Zone 2. Expedition of 1927. No. 10348, Museum of Paleontology, University of Michigan.

GENUS EDRIOASTER BILLINGS EDRIOASTER BIGSBYI Billings

(Plate I, Fig. 4)

Description. — The specimen is partly embedded in the hard limestone matrix and has been somewhat distorted by crushing. Diameter of body as exposed 35 mm. Ambulacural areas covered by quadrangular plates which alternate with each other in the center of the area. Interambulacural plates covered with blunt tubercles.

Horizon and Locality. — Specimen found by E. C. Case. Trenton limestone. Escanaba River, three miles north of Escanaba, Mich., Loc. 8, Zone 2. Expedition of 1927. No. 10347, Museum of Paleontology, University of Michigan.



EXPLANATION OF PLATE I

FIGURES

- 1, 3. Pleurocystites squamosus Billings
 - 1. Antanal side, with sutures inked. Natural size
 - 3. The same specimen shown in Figure 1, but without the sutures inked. Natural size
 - 5. Pleurocystites filitextus Billings. After Jaekel.
- 2, 6. Pleurocystites squamosus Billings

 - Anal side showing the great size of the anal area. Natural size
 The same specimen shown in Figure 2 enlarged a little over two times, showing some of the very small plates originally covering the anal area
 - 4. Edrioaster bigsbyi (Billings). Natural size

(Continued from inside of front cover)

- 9. Devonian Cephalopods from Alpena in Michigan, by Aug-F. Foerste. Pages 189–208, with 5 plates. Price, \$.35.
- 10. The Vertebral Column of *Coelophysis* Cope, by E. C. Case. Pages 209-222, with 1 plate and 9 text figures. Price, \$.25.
- 11. A New Species of Trionychid Turtle, *Amyda nelsoni*, from the Eocene Beds of Southwestern Wyoming, by E. C. Case. Pages 223-226, with 1 plate and 3 text figures. Price, \$.20.
- 12. A Complete Phytosaur Pelvis from the Triassic Beds of Western Texas, by E. C. Case. Pages 227–229, with 1 plate. Price, \$.20.
- Discovery of a Hamilton Fauna in Southeastern Michigan, by G. M. Ehlers and Mary E. Cooley. Pages 231-236. Price, \$.15.
- 14. Anisotrypa waynensis, a New Bryozoan from the Warsaw Formation of Kentucky, by Charles F. Deiss, Jr. Pages 237-239, with 2 plates. Price, \$.20.

VOLUME III

- 1. Indications of a Cotylosaur and of a New Form of Fish from the Triassic Beds of Texas, with Remarks on the Shinarump Conglomerate, by E. C. Case. Pages 1-14, with 1 plate. Price, \$.25.
- 2. Fossil Fishes from the Triassic of Texas, by Aldred S. Warthin, Jr. Pages 15–18, with 1 plate. Price, \$.20.
- 3. Contributions to the Geology of Foxe Land, Baffin Island, by Laurence M. Gould, Aug. F. Foerste and Russell C. Hussey. Pages 19-76, with 17 plates, 1 text figure and 1 map. Price, \$.75.
- 4. Cystoids from the Trenton Rocks of Michigan, by Russell C. Hussey. Pages 77-79, with 1 plate. Price, \$.20.