

28 May 1998



**A Type Catalog of Fossil Invertebrates  
(Echinodermata)  
in the Yale Peabody Museum**

**Russell D. White**

(Received 4 September 1997)

**Abstract**

Type material for 126 nominal species of fossil echinoderms are in the Invertebrate Paleontology Collections of Yale University's Peabody Museum of Natural History. Primary types for 38 nominal species include 25 holotypes, 31 syntypes (representing 12 nominal species) and 1 neotype. Secondary types for 3 nominal species include 5 paratypes. Tertiary types of 76 nominal species include 403 hypotypes. Most types are from Crawfordsville (Indiana), New York State and Tennessee and have been described by W.B. Clark, R.T. Jackson, N.G. Lane, R.C. Moore, C. Schuchert, F. Springer and J.F. Van Sant.

**Key Words**

Type Catalog, Echinodermata, Yale Peabody Museum, Crawfordsville, New York State, Tennessee, W.B. Clark, R.T. Jackson, N.G. Lane, R.C. Moore, C. Schuchert, F. Springer, J.F. Van Sant.

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ISBN No. 0-912532-45-9

**Introduction**

This catalog lists all known fossil echinoderm types in the Invertebrate Paleontology Collections housed in Yale University's Peabody Museum of Natural History. This is the seventh in a series of type catalogs of fossil invertebrates and is a product of an ongoing computerization project to improve the accessibility of the type collections.

Nineteen type specimens are missing and cannot be located. The collections have been thoroughly searched by the curatorial staff in the 1960s and 1990s and it is believed that these specimens are permanently lost. The missing status of each specimen is footnoted after each record, respectively. Any information on the whereabouts of these specimens would be greatly appreciated.

**Organization**

Specimens are listed under the originally described binomen; genera and species within genera are indexed alphabetically. Each entry includes the catalog number used by the Division of Invertebrate Paleontology prefixed with the abbreviation YPM and the type status of the original designation, followed by all known references to that name. Any subsequent designations are listed under the original designation and are cross-referenced in the body of the text. Locality descriptions follow each entry or set of entries for each binomen. Errors and inconsistencies are footnoted at the end of each binomen.

The type designations used are holotype,



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The type designations used are holotype,

syntype and neotype for name bearers; paratype for secondary types; hypotype for all tertiary types. Name bearers and secondary types are defined as used in the *International Code of Zoological Nomenclature* (ICZN, 1985). Tertiary types or hypotypes are treated here as any described, figured or measured specimen used in a publication to augment the knowledge of a previously defined species, or any referred specimen that cannot be placed unequivocally in a known species (e.g., *Eucalyptocrinus* sp.).

Locality descriptions follow each entry or set of entries with identical locality data. The locality information includes the stratigraphy, geography, collector and date. Stratigraphy has been standardized using *Stratigraphic Nomenclature Databases for the United States, its Possessions and Territories* (MacLachlan et al., 1992).

## Catalog of Echinodermata

### *Abrotocrinus coreyi* (Meek and Worthen)

NEOTYPE YPM 27621

Van Sant, J.F. 1964. Univ. Kansas Paleont. Contrib. Echino., Art. 7, p.85, tbl.15(#1).<sup>†</sup>

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.32.

Ausich, W.I. 1983. Palaeogeog., Palaeoclim., Palaeoecol. v.44, p.277.

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.629.

HYPOTYPE YPM 27622

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.85, tbl.15(#4).<sup>††</sup>

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.32.

Ausich, W.I. 1983. Palaeogeog., Palaeoclim., Palaeoecol. v.44, p.277.

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.629.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

<sup>†</sup>Cited as 22754A on p.85.

<sup>††</sup>Cited as 22754B on p.85.

### *Abrotocrinus unicus* (Hall)

HYPOTYPE YPM 6443A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.85, tbl.16(#13).

Ausich, W.I. 1983. Palaeogeog., Palaeoclim., Palaeoecol. v.44, p.277.

Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.42.

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.627.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

### *Aganaster gregarius* Meek and Worthen

HYPOTYPE YPM 13182

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285.

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

Middle Devonian, Hamilton Grp. Near Georgetown, New York, USA.

HYPOTYPE YPM 26066-26072

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285.

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Near Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

HYPOTYPE YPM 26352

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285, tf.194a, tf.194d, pl.20,f.4 (upper left),5.

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

Middle Devonian, Hamilton Grp. Near Georgetown, New York, USA.

HYPOTYPE YPM 26353

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285, tf.194c.

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.<sup>†</sup>

Early Mississippian, Osagean, Borden Grp., Edwardsville Fm. Near Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

HYPOTYPE YPM 26863

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285, pl.20, f.4(upper right).

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

HYPOTYPE YPM 26864

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285, pl.20, f.4(lowermost).

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

Middle Devonian, Hamilton Grp. Near Georgetown, New York, USA.

HYPOTYPE YPM 26867

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.264.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.285, tf.194b.

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.558.

Early Mississippian, Osagean, Borden Grp., Edwardsville Fm. Near Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

<sup>†</sup>An accession number, 3414a, was used incorrectly in this paper as the catalog number for this specimen.

### ***Agelacrinites beecheri* Clarke**

SYNTYPE YPM 24803

Clarke, J.M. 1901. Bull. N. Y. St. Mus. n.49, p.195, tf.4,6.

Foerste, A.F. 1914. Bull. Denison Univ. Sci. Lab. v.17, pl.1, f.2.

=*Lepidodiscus squamosus* Meek and Worthen. Hypotype. Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.253, pl.48, f.7-13.

SYNTYPE YPM 24804

Clarke, J.M. 1901. Bull. N. Y. St. Mus. n.49, p.195, tf.5.

=*Lepidodiscus squamosus* Meek and Worthen. Hypotype. Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.253, tf.51a, pl.48, f.7-13.

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

### ***Agelacrinites buttsi* Clarke**

HOLOTYPE YPM 24805

Clarke, J.M. 1901. Bull. N. Y. St. Mus. n.49, p.196, tf.7.

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

### ***Agelacrinites hamiltonensis* Vanuxem**

HYPOTYPE YPM 28454<sup>†</sup>

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.212.

Middle Devonian, Hamilton Grp, Skaneateles Shale, Chenango Sandstone Mbr. Colgate University Campus quarry, Hamilton, Madison Co., New York, USA. Collector: Cooper, G.A.

<sup>†</sup> This is represented by one specimen and five gutta-percha casts.

### ***Alepidaster flexuous* (Miller and Dyer)**

HYPOTYPE YPM 25243, 25245, 26200

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.231.

Late Ordovician, Eden Fm. Near Cincinnati, Hamilton Co., Ohio, USA. Collector: Asherman, G.

***Alisocrinus tetrarmatus* Brower**

PARATYPE YPM 27028

Brower, J.C. 1973. Palaeontogr. Am. v.7, n.46, p.408, tf.29J,30C-F,H, pl.66, f.2.

Brower, J.C. 1974. Univ. Kans. Paleont. Contrib. Pap.72, p.15, tf.10.5.

Brower, J.C. 1976. Thal. Jugo., v.12, p.45, tf.3.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.35.

Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.52.

PARATYPE YPM 27029

Brower, J.C. 1973. Palaeontogr. Am. v.7, n.46, p.408, tf.29H,29P, pl.66, f.1.

Brower, J.C. 1976. Thal. Jugo., v.12, p.45, tf.3.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.35.

Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.52.

PARATYPE YPM 27030

Brower, J.C. 1973. Palaeontogr. Am. v.7, n.46, p.408.

Brower, J.C. 1976. Thal. Jugo., v.12, p.45, tf.3.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.35.

Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.52.

Late Ordovician, Girardeau Limestone. Along river bank below RR tracks, NW corner SW1/4NE1/4SE1/4sec28,T31N,R14E. Cape Girardeau Co., Missouri, USA. Collector: Gealy, J.R., 8/29/1953.

***Ambicocrinus arborescens* (Talbot)**See *Thysanocrinus arborescens* Talbot.***Ancylocidaris spenceri* Miller**

HOLOTYPE YPM 12815

Miller, A.K. 1929. Am. J. Sci. v.218, p.335, tf.1-3.<sup>†</sup>

Late Jurassic, Sundance Fm. Bull Lake Canyon, near Lander, Fremont Co., Wyoming, USA. Collector: Spencer, A.E.

<sup>†</sup>12815 originally reposed at Tulane University, has been given to Peabody Museum.

***Arachnoides placenta* (Linnaeus)**

HYPOTYPE YPM 33664

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.238, f.16A,B.

Recent. Taiwan Strait, near Hsinchu, northern Taiwan.

***Asteracanthion lincki* Muller and Troschel**

HOLOTYPE YPM 24757

Sears, J.H. 1905. The Essex Institute: Salem (Massachusetts) p.369, tf.202.

=*Asterias lincki*. Clark, W.B. and M.W. Twitchell. 1915. Mon. U.S. Geol. Surv. n.54, p.222.

Quaternary, Pleistocene. Richard Graham clay pit, 20 ft beneath surface, Lynn, Essex Co., Massachusetts, USA. Collector: Sears, J.H., 1903.

***Asterias lincki* (Muller and Troschel)**See *Asteracanthion lincki* Muller and Troschel.***Barycrinus asteriscus* Van Sant and Lane**

HOLOTYPE YPM 6452A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.73,tbl.7(#1), pl.1, f.13.

HYPOTYPE YPM 6452B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.73,tbl.7(#2).

HYPOTYPE YPM 6452C

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.73,tbl.7(#3).

HYPOTYPE YPM 6452D

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.73,tbl.7(#4), pl.1, f.4.

HYPOTYPE YPM 6452E

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.73,tbl.7(#5), pl.1, f.3.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm, Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

***Barycrinus hoveyi* (Hall)**

HYPOTYPE YPM 6451A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.74,tbl.8(#16).

HYPOTYPE YPM 6451B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.74,tbl.8(#17).

HYPOTYPE YPM 22751A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.74,tbl.8(#14).

HYPOTYPE YPM 22751B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.74,tbl.8(#15), pl.1, f.16.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bradley, F.H.

**Brachiocrinus nodosarius Hall**

See *Brachiocrinus (Herpetocrinus?) nodosarius* Hall.

**Brachiocrinus (Herpetocrinus?) nodosarius Hall**

HYPOTYPE YPM 24772

Talbot, M. 1905. Am. J. Sci. v.170, p.32, pl.4, f.7.

=*Brachiocrinus nodosarius*. Kirk, E. 1911. Proc. U.S. Nat. Mus. v.41, p.48.

=*Brachiocrinus nodosarius*. Goldring, W. 1923. Mem. New York State Mus. n.16, p.332.

=*Myelodactylus nodosarius*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.569.

=*Myelodactylus nodosarius*. Strimple, H.L. 1963. Bull. Ok. Geol. Surv. v.100, p.26.

HYPOTYPE YPM 24773

Talbot, M. 1905. Am. J. Sci. v.170, p.32, pl.4, f.8.

=*Brachiocrinus nodosarius*. Kirk, E. 1911. Proc. U.S. Nat. Mus. v.41, p.48.

=*Brachiocrinus nodosarius*. Goldring, W. 1923. Mem. New York State Mus. n.16, p.332.

=*Myelodactylus nodosarius*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.569.

=*Myelodactylus nodosarius*. Strimple, H.L. 1963. Bull. Ok. Geol. Surv. v.100, p.26.

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA.

**Carabocrinus geometricus Hudson**

HOLOTYPE YPM 26189

Hudson, G.H. 1905. Bull. N. Y. St. Mus. n.80, p.282, tf.7, pl.1, f.1,2.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.355.

Middle Ordovician, Chazy Grp. Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E.

**Cassidulus (Pygorhynchus) georgiensis Twitchell**

PARATYPE YPM 24756

Clark, W.B. and M.W. Twitchell. 1915. Mon. U.S. Geol. Surv. n.54, p.170.

Tertiary, Eocene. Alabama, USA.

**Cidaris sp.**

HYPOTYPE YPM 24944-24949

Conrad, T.A. 1852. Washington, D.C. (U.S.) Nat. Obs., p.212.

Beecher, C.E. 1900a. Am. J. Sci. v.159, p.177.<sup>†</sup>  
Cretaceous. Mount Lebanon, Lebanon.

<sup>†</sup>Incorrectly cited as paratype.

**Cincinnaticrinus pentagonus (Ulrich)**

See *Heterocrinus pentagonus* Ulrich.

**Clidochirus schucherti (Talbot)**

See *Ichthyocrinus schucherti* Talbot.

**Codaster lorae Dunbar**

SYNTYPE YPM 9729

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.119, pl.2, f.1.<sup>†</sup>

Early Devonian, Linden Grp, Birdsong Shale. Middle Birdsong, Parsons, glade exposure 2.5 mi NE of town on J.P. Rains farm, Decatur Co., Tennessee, USA. Collector: Dunbar, C.O., 1916.

SYNTYPE YPM 9730

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.119, pl.2, f.2.

Early Devonian, Linden Grp, Birdsong Shale.  
Middle part of the Birdsong, glade exposure, 1.5  
mi S of Allen's mill, Benton Co., Tennessee,  
USA. Collector: Dunbar, C.O., 1916.

***Cordylocrinus plumosus* (Hall)**

HYPOTYPE YPM 24778

Talbot, M. 1905. Am. J. Sci. v.170, p.28,  
pl.3, f.2.

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.275, pl.36, f.7.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.372.

Moore, R.C. and L.R. Laudon. 1943b. Geol.  
Soc. Am. Spec. Pap. 46, p.143, pl.14, f.3.

Webster, G.D. 1973. Geol. Soc. Am. Mem.  
137, p.83.

Brett, C.E. 1981. Lethaia, v.14, tbl.2, tf.8g.

Webster, G.D. 1986. Geol. Soc. Am. Micro.  
Pub. 16, p.102.

Webster, G.D. 1988. Geol. Soc. Am. Micro.  
Pub. 18, p.57.

HYPOTYPE YPM 24839

Talbot, M. 1905. Am. J. Sci. v.170, p.28,  
tf.3, pl.3, f.4(upper).

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.275.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.372.

Moore, R.C. and L.R. Laudon. 1943b. Geol.  
Soc. Am. Spec. Pap. 46, p.143.

Webster, G.D. 1973. Geol. Soc. Am. Mem.  
137, p.83.

Brett, C.E. 1981. Lethaia, v.14, tbl.2.

Webster, G.D. 1986. Geol. Soc. Am. Micro.  
Pub. 16, p.102.

Webster, G.D. 1988. Geol. Soc. Am. Micro.  
Pub. 18, p.57.

HYPOTYPE YPM 24840

Talbot, M. 1905. Am. J. Sci. v.170, p.28,  
pl.3, f.4(lower).

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.275.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.372.

Moore, R.C. and L.R. Laudon. 1943b. Geol.  
Soc. Am. Spec. Pap. 46, p.143.

Webster, G.D. 1973. Geol. Soc. Am. Mem.  
137, p.83.

Brett, C.E. 1981. Lethaia, v.14, tbl.2.

Webster, G.D. 1986. Geol. Soc. Am. Micro.  
Pub. 16, p.102.

Webster, G.D. 1988. Geol. Soc. Am. Micro.  
Pub. 18, p.57.

Early Devonian, Helderberg Grp, Coeymans  
Limestone, Deansboro Mbr. Base of Deansboro,  
upper third of Coeymans, lime quarry owned by  
John E. Salisbury, on E-facing hillside about 0.5  
mi W of Days Corners [Dayville], North Litchfield,  
Herkimer Co., New York, USA. Collector:  
Beecher, C.E. and Sarle, C.J., 1903.

***Ctenocrinus nobilissimus* (Hall)**

See *Melocrinus nobilissimus* (Hall) and  
*Mariacrinus beecheri* Talbot.

***Ctenocrinus paucidactylus* (Hall)**

See *Melocrinus pachydactylus* (Conrad).

***Cyathocrinites multibrachiatus* (Lyon  
and Casseday)**

HYPOTYPE YPM 6450B

Van Sant, J.F. 1964. Univ. Kans. Paleont.  
Contrib. Echino., Art. 7, p.80,tbl.12(#14).

Kammer, T.W. and W.I. Ausich. 1996. J.  
Paleont. v.70, n.5, p.857.

HYPOTYPE YPM 6450C

Van Sant, J.F. 1964. Univ. Kans. Paleont.  
Contrib. Echino., Art. 7, p.80,tbl.12(#15).

Kammer, T.W. and W.I. Ausich. 1996. J.  
Paleont. v.70, n.5, p.857.

HYPOTYPE YPM 6450D

Van Sant, J.F. 1964. Univ. Kans. Paleont.  
Contrib. Echino., Art. 7, p.80,tbl.12(#16).

Kammer, T.W. and W.I. Ausich. 1996. J.  
Paleont. v.70, n.5, p.857.

HYPOTYPE YPM 6450E

Van Sant, J.F. 1964. Univ. Kans. Paleont.  
Contrib. Echino., Art. 7, p.80,tbl.12(#17).

Kammer, T.W. and W.I. Ausich. 1996. J. Paleont. v.70, n.5, p.857.

HYPOTYPE YPM 27623

Van Sant, J.F. 1964. Univ. Kansas Paleont. Contrib. Echino., Art. 7, p.80,tbl.12(#13), pl.3, f.2.<sup>†</sup>

Kammer, T.W. and W.I. Ausich. 1996. J. Paleont. v.70, n.5, p.857.

HYPOTYPE YPM 27624

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.80, pl.2, f.2.<sup>†</sup>

Kammer, T.W. and W.I. Ausich. 1996. J. Paleont. v.70, n.5, p.857.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bradley, F.H.

<sup>†</sup>Cited as 6450A on p.81.

#### ***Cystaster stellatus* (Hall)**

HYPOTYPE YPM 28453

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.100, pl.12, f.21,22.<sup>†</sup>

Late Ordovician. Cincinnati, Hamilton Co., Ohio, USA.

<sup>†</sup>Incorrectly cited as old 2811.

#### ***Dendrocrinus minutus* Springer**

HOLOTYPE YPM 20498

Springer, F. 1928. Mem. Geol. Surv. Can. n.154, p.137, pl.4, f.6.<sup>†</sup>

Bassler, R.S. and M.W. Moodley. 1943. Geol. Soc. Am. Spec. Pap. 45, p.415.

Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1919.

<sup>†</sup>Locality data discrepancy between label and publication.

#### ***Devonaster eucharis* (Hall)**

HYPOTYPE YPM 9918

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.98.

Middle Devonian, Hamilton Grp. Near Hamilton, Madison Co., New York, USA.

HYPOTYPE YPM 26199

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.98.

Middle Devonian, Hamilton Grp. Near Hamilton, Madison Co., New York, USA. Collector: Beecher, C.E.

#### ***Dimerocrinites arborescens* (Talbot)**

See *Thysanocrinus arborescens* Talbot.

#### ***Dimerocrinus arborescens* (Talbot)**

See *Thysanocrinus arborescens* Talbot.

#### ***Dimerocrinus elegans* Springer**

HOLOTYPE YPM 20483

Springer, F. 1928. Mem. Geol. Surv. Can. n.154, p.138, pl.4, f.3

=*Dimerocrinites elegans*. Bassler, R.S. and M.W. Moodley. 1943. Geol. Soc. Am. Spec. Pap. 45, p.424.

=*Dimerocrinites elegans*. Bolton, T. and M.J. Copeland. 1972. Ontario Div. Mines Geol. Guidebook 4, p.55.

=*Dimerocrinites elegans*. Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.71.

Silurian, Jupiter Fm, Jupiter zone 9. Iron River, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

#### ***Dizygocrinus indianaensis* (Lyon and Casseday)**

HYPOTYPE YPM 27625

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.112,tbl.35(#16).<sup>†</sup>

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.112.

Ausich, W.I. and T.W. Kammer. 1992. J. Paleont. v.66, n.4, p.642.

HYPOTYPE YPM 27626

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.112,tbl.35(#17).<sup>††</sup>

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.112.

Ausich, W.I. and T.W. Kammer. 1992. J. Paleont. v.66, n.4, p.642.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

<sup>†</sup>Cited as 1978A on tbl.35,#16.

<sup>††</sup>Cited as 1978B on tbl.35,#17.

***Echinus syriacus* Conrad**

SYNTYPE YPM 17011

Conrad, T.A. 1852. Washington, D.C. (U.S.)  
Nat. Obs. p.212.Beecher, C.E. 1900a. Am. J. Sci. v.159, p.177.  
Cretaceous. Mount Lebanon, Lebanon.***Edrioaster priscus* (Miller and Gurley)**

HYPOTYPE YPM 28455

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21,  
p.302, pl.60, f.6.<sup>†</sup>

HYPOTYPE YPM 28456

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21,  
p.302, pl.60, f.1-3.<sup>†</sup>Middle Ordovician, Trenton Limestone. Lower  
Trenton, Curd's farm, Mercer Co., Kentucky,  
USA. Collector: Fischer, M.<sup>†</sup>Incorrectly cited as 2361.***Edriocrinus adnascens* Dunbar<sup>†</sup>**

HOLOTYPE YPM 9737

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv.  
n.21, pl.2, f.10.Dunbar, C.O. 1920. Trans. Conn. Acad.  
Arts Sci. v.23, p.120, pl.2, f.3.Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p. 443.Webster, G.D. 1986. Geol. Soc. Am. Micro.  
Pub. 16, p.135.Early Devonian, Linden Grp, Rockhouse Shale.  
Collected in place where trees are uprooted at 8  
and 12 ft above base of the Shale, Rockhouse,  
Horse Creek, about 5 mi W of Lowryville, bluff  
about 200 yds above club house, Hardin Co.,  
Tennessee, USA. Collector: Dunbar, C.O., 1916.HYPOTYPE YPM 9709<sup>††</sup>Dunbar, C.O. 1920. Trans. Conn. Acad.  
Arts Sci. v.23, p.120.Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.443.Webster, G.D. 1986. Geol. Soc. Am. Micro.  
Pub. 16, p.135.

Devonian. Tennessee, USA. Collector: Dunbar, C.O.

<sup>†</sup>This taxon may be a nomen nudum. Dunbar (1918)  
refers to *Edriocrinus adnascens* n.sp. in a faunal list  
on page 736, but does not illustrate or describe the  
taxon until 1919 and 1920, respectively.<sup>††</sup>A thorough search of the collections by the  
curatorial staff in the 1960s and 1990s could not  
locate this specimen. It is believed to be  
permanently lost.***Edriocrinus pocilliformis* Hall**

HYPOTYPE YPM 24766

Talbot, M. 1905. Am. J. Sci. v.170, p.23,  
pl.4, f.1.Ohern, D.W. 1913. Md. Geol. Surv., Lower  
Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.447.

Ehrenberg, Kurt. 1928. Palaeobiologica v.1, p.62.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.444.

HYPOTYPE YPM 24767

Talbot, M. 1905. Am. J. Sci. v.170, p.23,  
pl.4, f.2.Ohern, D.W. 1913. Md. Geol. Surv., Lower  
Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.447.

Ehrenberg, Kurt. 1928. Palaeobiologica v.1, p.62.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.444.

HYPOTYPE YPM 24768

Talbot, M. 1905. Am. J. Sci. v.170, p.23,  
pl.4, f.3.Ohern, D.W. 1913. Md. Geol. Surv., Lower  
Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.447.

Ehrenberg, Kurt. 1928. Palaeobiologica v.1, p.62.

Bassler, R.S. and M.W. Moodey. 1943.  
Geol. Soc. Am. Spec. Pap. 45, p.444.

**HYPOTYPE YPM 24769**

Talbot, M. 1905. Am. J. Sci. v.170, p.23, pl.4, f.4.

Ohern, D.W. 1913. Md. Geol. Surv., Lower Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.447, pl.58, f.9,10.

Ehrenberg, Kurt. 1928. Palaeobiologica. v.1, p.62, pl.7, f.9.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.444.

Early Devonian, Helderberg Grp, New Scotland Limestone. Albany Co., New York, USA.

Collector: Beecher, C.E.

**HYPOTYPE YPM 24770**

Talbot, M. 1905. Am. J. Sci. v.170, p.23, pl.4, f.5.

Ohern, D.W. 1913. Md. Geol. Surv., Lower Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.447.

Ehrenberg, Kurt. 1928. Palaeobiologica. v.1, p.62.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.444.

Early Devonian, Helderberg Grp. Lower Helderberg, Clarksville, Albany Co., New York, USA.

**HYPOTYPE YPM 24771**

Talbot, M. 1905. Am. J. Sci. v.170, p.23, pl.4, f.6.

Ohern, D.W. 1913. Md. Geol. Surv., Lower Devonian, p.257.

Springer, F. 1920. Smith. Inst. Pub. n.2501, p.448.

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.447, pl.58, f.11,12.

Ehrenberg, Kurt. 1928. Palaeobiologica. v.1, p.62.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.444.

Early Devonian, Helderberg Grp, New Scotland Limestone. Albany Co., New York, USA.  
Collector: Beecher, C.E.

***Edriocrinus pyramidatus* Dunbar<sup>†</sup>****HOLOTYPE YPM 6958**

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, pl.2, f.15.

Early Devonian, Linden Grp, Birdsong Shale. Higher portion of Birdsong, 4-9 ft below top, bluff on Big Sandy River, beneath the "steel bridge," about 1 mi W of Cashlee's store (formerly Pace PO). Henry Co., Tennessee, USA. Collector: Dunbar, C.O., 1917.

<sup>†</sup>Dunbar (1919) refers to this specimen in the explanation for plate 2, figure 15 as *Edriocrinus pyramidatus* (Springer, M.S.).

***Eifelaster follmanni* Schondorf****HOLOTYPE YPM 14796<sup>†</sup>**

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.133.

Early Devonian, Eifelian. At Landscheid, near Wittlich, West Germany.

<sup>†</sup>Collection data suggest that this specimen was loaned to W.K. Spencer in 1935 and never returned.

***Eucalyptocrinites milliganae* (Miller and Gurley)****HYPOTYPE YPM 17503**

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.71.

Middle Silurian, Brownsport Fm, Bath Springs 7.5 Quad. Green shale at roadside, approx. 50-60 ft above poorly exposed Dixon-Brownsport contact, N side of TN highway 114, 2.25 mi SE of Bath Springs Church, Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

***Eucalyptocrinites ventrivosus* (Wachsmuth and Springer)****HYPOTYPE YPM 17504**

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.71.

Middle Silurian, Brownsport Fm, Eagle Creek 7.5 Quad. 13-18 ft above road (Dixon-Brownsport-Decatur contacts not exposed), N side of US highway 64, 1.7 mi SE of junction of road leading S to Beckman Branch, Harding Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

***Eucalyptocrinus* sp.**

HYPOTYPE YPM 22762

Twenhofel, W.H. 1928. Mem. Geol. Surv. Can. n.154, p.139.

Silurian, Jupiter Fm, Jupiter zone 10. Jumpers, Anticosti Island, Quebec, Canada. Collector: Schuchert, Charles and Twenhofel, W.H., 6/1908.

***Eucladia(?) beecheri* Schuchert**

HOLOTYPE YPM 13188

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.278, pl.38, f.1.

Early Devonian, Helderberg Grp, Coeymans Limestone. Jerusalem Hill, near Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E., 9/1901.

***Foerstediscus grandis* Bassler**

HYPOTYPE YPM 28452

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.66, tf.11c, pl.3, f.6.<sup>†</sup>

Middle Ordovician, Trenton Limestone. Lower Trenton, Curd's farm, Mercer Co., Kentucky, USA. Collector: Fischer, M.

<sup>†</sup>Incorrectly cited as old 2361.***Fossulaster changi* Wang**

HOLOTYPE YPM 33657

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.234, f.11a,b, pl.5, f.1.

PARATYPE YPM 33646

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.234, f.11c,d, pl.5, f.2.

Tertiary, Miocene, Morgan Limestone. Murry Cliffs, between Morgan and Blanchetown, South Australia, Australia.

***Fossulaster durhami* Wang**

HOLOTYPE YPM 33645

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.233, f.8,9,10, pl.4, f.2.

Tertiary, Miocene, Morgan Limestone. Murry Cliffs, between Morgan and Blanchetown, South Australia, Australia.

***Fossulaster halli* Lambert and Thiery**

HYPOTYPE YPM 33649

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.231, f.6.

HYPOTYPE YPM 33650

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.231, f.7.

HYPOTYPE YPM 33658

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.231.

HYPOTYPE YPM 33659, 35154

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.231, pl.4, f.1.

Tertiary, Miocene, Gambier Limestone. Glenleg River at Nelson, southwestern Victoria, Australia.

***Hallaster cylindricus* (Billings)**

HYPOTYPE YPM

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.255.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.293, pl.21, f.5.<sup>††</sup>

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.555.

HYPOTYPE YPM 26351

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.255.

Spencer, W.K. 1925. Mon. Paleont. Soc. London, p.293, tf.201, pl.21, f.4.<sup>††</sup>

Owen, H.G. 1965. Mon. Paleont. Soc. London, p.555.

Early Devonian, Helderberg Grp, Coeymans Limestone. Jerusalem Hill, near Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E., 9/1901.

<sup>†</sup>Figure 4 (YPM 26351) and Figure 5 (YPM 13181) on pl.21 are views of two specimens, not views of a single specimen as stated in the plate explanation.<sup>††</sup>Accession number 2594 was used incorrectly as the official YPM number.***Hallaster forbesi* (Hall)**

HYPOTYPE YPM 13443

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.255.

Early Devonian, Helderberg Grp, Coeymans Limestone. Jerusalem Hill, near Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E., 9/1901.

**Hemaster beecheri Clark**

HOLOTYPE YPM 9857

Clark, W.B. 1915. Mon. U.S. Geol. Surv. n.54, p.96, pl.50, f.2a-2c.<sup>†</sup>

Late Cretaceous, Pierre Shale. Sage Creek, Pennington Co., South Dakota, USA.

<sup>†</sup>Incorrectly cited as 1863.

**Herpetocrinus (Myelodactylus) nodosarius (Hall)**

See *Myelodactylus nodosarius* (Hall).

**Heterocrinus pentagonus Ulrich**

SYNTYPE YPM 6426

Ulrich, E.O. 1882. J. Cincinnati Soc. Nat. Hist. v.5, n.3, p.176, pl.5, f.10.

=*Stenocrinus pentagonus*. Wachsmuth, Charles and Frank Springer. 1887. Proc. Acad. Nat. Sci. Phil. n.38, p.132.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.506.

=*Cincinnaticrinus pentagonus*. Paralectotype. Warn, J.M. and H.L. Strimple. 1977. Bull. Am. Paleont. v.72, p.55, pl.6, f.5.

SYNTYPE YPM 24801

Ulrich, E.O. 1882. J. Cincinnati Soc. Nat. Hist. v.5, n.3, p.176, pl.5, f.10a.

=*Stenocrinus pentagonus*. Wachsmuth, Charles and Frank Springer. 1887. Proc. Acad. Nat. Sci. Phil. n.38, p.132.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.506.

=*Cincinnaticrinus pentagonus*. Lectotype. Warn, J.M. and H.L. Strimple. 1977. Bull. Am. Paleont. v.72, p.55, pl.6, f.5.

SYNTYPE YPM 24802

Ulrich, E.O. 1882. J. Cincinnati Soc. Nat. Hist. v.5, n.3, p.176.

=*Stenocrinus pentagonus*. Wachsmuth, Charles and Frank Springer. 1887. Proc. Acad. Nat. Sci. Phil. n.38, p.132.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.506.

=*Cincinnaticrinus pentagonus*.

Paralectotype. Warn, J.M. and H.L. Strimple. 1977. Bull. Am. Paleont. v.72, p.55, pl.6, f.5.

Ordovician, Hudson River Grp. Oxford, Butler Co., Ohio, USA. Collector: Oeh, G.

**Histocrinus coreyi (Worthen)**

HYPOTYPE YPM 6445A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.93,tbl.21(#10), pl.4, f.8.

HYPOTYPE YPM 6445B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.93,tbl.21(#11).

HYPOTYPE YPM 6445C

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.93,tbl.21(#12).

HYPOTYPE YPM 6445D

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.93,tbl.21(#13).

HYPOTYPE YPM 6445E

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.93,tbl.21(#14), pl.4, f.9.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

**Holaster syriacus Conrad**

SYNTYPE YPM 17030

Conrad, T.A. 1852. Washington, D.C. (U.S.) Nat. Obs. p.212, pl.1, f.2.

Beecher, C.E. 1900a. Am. J. Sci. v.159, p.177.<sup>†</sup>

SYNTYPE YPM 17031 24850

Conrad, T.A. 1852. Washington, D.C. (U.S.) Nat. Obs. p.212.

Beecher, C.E. 1900a. Am. J. Sci. v.159, p.177.<sup>††</sup>

Cretaceous. Mount Lebanon, Lebanon.

<sup>†</sup>Incorrectly cited as holotype.

<sup>††</sup>Incorrectly cited as paratype.

***Homocrinus scoparius* Hall**

HYPOTYPE YPM 6960

Talbot, M. 1905. Am. J. Sci. v.170, p.19.

= *Lasiocrinus scoparius*. Kirk, E. 1914. Proc. U.S. Nat. Mus. v.41, p.474.= *Lasiocrinus scoparius*. Goldring, W. 1923. N. Y. St. Mus. Mem. 16, p.340.= *Lasiocrinus scoparius*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.531.= *Lasiocrinus scoparius*. Moore, R.C. and L.R. Laudon. 1943b. Geol. Soc. Am. Spec. Pap. 46, p.132.= *Lasiocrinus scoparius*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.161.

Early Devonian, Helderberg Grp, Coeymans Fm. Jerusalem Hill, Herkimer Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 24765

Talbot, M. 1905. Am. J. Sci. v.120, p.19, pl.3, f.3.

= *Lasiocrinus scoparius*. Kirk, E. 1914. Proc. U.S. Nat. Mus. v.41, p.474.= *Lasiocrinus scoparius*. Goldring, W. 1923. N. Y. St. Mus. Mem. 16, p.340.= *Lasiocrinus scoparius*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.531.= *Lasiocrinus scoparius*. Moore, R.C. and L.R. Laudon. 1943b. Geol. Soc. Am. Spec. Pap. 46, p.132.= *Lasiocrinus scoparius*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.161.

Early Devonian, Helderberg Grp, Coeymans Limestone. Jerusalem Hill, near Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E., 9/1901.

***Hudsonaster narrawayi* (Hudson)**

HYPOTYPE YPM 14770A

Sardeson, F.W. 1928. Pan-Am. Geol. v.49, p.99, pl.5, f.1.

HYPOTYPE YPM 14770B

Sardeson, F.W. 1928. Pan-Am. Geol. v.49, p.99, pl.5, f.4.

HYPOTYPE YPM 14770C

Sardeson, F.W. 1928. Pan-Am. Geol. v.49, p.99, pl.5, f.2,3.

Ordovician, Platteville Limestone. Upper half of Platteville Limestone, Johnson Street and 19th Avenue N.E., Minneapolis, Hennepin Co., Minnesota, USA. Collector: Sardeson, F.W.

HYPOTYPE YPM 14775

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.59, pl.2, f.1.

Sardeson, F.W. 1928. Pan-Am. Geol. v.49, p.106.

Middle Ordovician, Blackriverian. Near Kirkfield, Ontario, Canada. Collector: Townshend, ?.

***Hudsonaster narrawayi?* (Hudson)**

HYPOTYPE YPM 13178

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.59.

Sardeson, F.W. 1928. Pan-Am. Geol. v.49, p.106.

Middle Ordovician, Blackriverian. Near Curdsville, Daviess Co., Kentucky, USA. Collector: Fischer, M.

***Hudsonaster rugosus* (Billings)**

HYPOTYPE YPM 20046

Twenhofel, W.H. 1928. Mem. Geol. Surv. Can. n.154, p.141.

HYPOTYPE YPM 20491

Twenhofel, W.H. 1928. Mem. Geol. Surv. Can. n.154, p.141, pl.4, f.7.

Ordovician, English Head Fm, English Head zone 4. Cliff 0.5 mi E of Caplan River, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1919.

***Hyattechinus beecheri* Jackson**

HOLOTYPE YPM 323

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.297, pl.24, f.5-8, pl.25, f.5, pl.26, f.1.

Early Mississippian, Waverly Grp. Warren, Ackley Station, Warren, Warren Co., Pennsylvania, USA. Collector: Randall, F.A.

***Hyattechinus rarispinus* (Hall)**HYPOTYPE YPM 324<sup>†</sup>Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292.<sup>††</sup>

Mississippian, Waverly Grp. Meadville, Crawford Co., Pennsylvania, USA.

HYPOTYPE YPM 325

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292, pl.22, f.8, pl.23, f.3,4.

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 326<sup>†††</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292.

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E., 6/15/1872.

HYPOTYPE YPM 327

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292, pl.23, f.5.

Late Devonian, Chemung Fm. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 330

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292.<sup>††††</sup>

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E., 6/15/1872.

HYPOTYPE YPM 332

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292, pl.22, f.1,2, pl.23, f.1,2,7.<sup>†††††</sup>HYPOTYPE YPM 24874<sup>†††††††</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292, pl.22, f.3,4.

HYPOTYPE YPM 24875<sup>†††††††</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.292,295, pl.22, f.5,6, pl.23, f.6.

Early Mississippian, Waverly Grp. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

<sup>†</sup>This is represented by a gutta-percha cast.<sup>††</sup>This is a cast of the type specimen, AMNH 6392, at the American Museum of Natural History.<sup>†††</sup>This is represented by one specimen and a gutta-percha cast.<sup>††††</sup>The part and counterpart were individually published as YPM 330 and 331, but are now assigned one catalog number, YPM 330.<sup>†††††</sup>The part and counterpart were individually published as YPM 332 and 333, but are now assigned one catalog number, YPM 332.<sup>††††††</sup>The part and counterpart of these two individuals are on two slabs. Two and one gutta-percha casts are present for 24874 and 24875, respectively.***Hylodecrinus gibsoni* (White)**See *Pachylocrienus gibsoni* (White).***Hypselocrinus sansabensis* (Moore and Plummer)**See *Scytalocrinus sansabensis* Moore and Plummer.***Ichthyocrinus schucherti* Talbot**

HOLOTYPE YPM 24777

Talbot, M. 1905. Am. J. Sci. v.170, p.30, tf.4, pl.3, f.1.

= *Clidochirus schucherti*. Springer, F. 1920. Smith. Inst. Pub. n.2501, pl.37, f.12a,12b.= *Clidochirus schucherti*. Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.305, pl.38, f.1.= *Clidochirus schucherti*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.366.

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarksville, Albany Co., New York, USA. Collector: Schuchert, C.

***Iocrinus subcassatus* (Meek and Worthen)**HYPOTYPE YPM 17110A<sup>†</sup>Moore, R.C. 1962. Univ. Kans. Paleont. Contrib. Echino., art.5, p.40, pl.2, f.1.<sup>††</sup>

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.157.

Upper Ordovician, Hudson River Grp. Cincinnati, Hamilton Co., Ohio, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>††</sup>The IP ledgers for this specimen refer it to "Hudson River Group," whereas Moore (1962) refers it to Upper Ordovician.

#### ***Lasiocrinus scoparius* (Hall)**

See *Homocrinus scoparius* Hall.

#### ***Lebetodus discus dicksoni* (Billings)**

HYPOTYPE YPM 28451

Bell, B.M. 1976. Mem. N. Y. St. Mus. n.21, p.55, pl.1, f.7,8.<sup>†</sup>

Middle Ordovician, Trenton Limestone. Lower Trenton, Curd's farm, Mercer Co., Kentucky, USA. Collector: Fischer, M.

<sup>†</sup>Incorrectly cited as 2361.

#### ***Lecanocrinus pisiformis* (Roemer)**

HYPOTYPE YPM 17506

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.74, pl.12, f.18,20.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.163.

=*Nummicrinus pisiformis*. Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.219.

Middle Silurian, Brownsport Fm, Eagle Creek 7.5 Quad. 50 ft above road (Dixon-Brownsport-Decatur contacts not exposed), N side of US highway 64, 1.7 mi SE of junction with road leading S to Beckman Branch, Harding Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### ***Lepidasterella babcocki* Schuchert**

HOLOTYPE YPM 14792<sup>†</sup>

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.160.

Late Devonian, Chemung Fm. Near Ithaca, Tompkins Co., New York, USA. Collector: Babcock, G.W.

<sup>†</sup>This is represented by two plaster casts.

#### ***Lepidechinus rarispinus* Hall**

HYPOTYPE YPM 334

Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.221, pl.7, f.42.<sup>†</sup>

Late Devonian, Chemung Fm. Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

<sup>†</sup>The part and counterpart were individually published as YPM 334 and 335, but are now assigned one catalog number, YPM 334.

#### ***Lepidesthes colletti* White**

HYPOTYPE YPM 18649

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.425, pl.69, f.5.<sup>†</sup>

HYPOTYPE YPM 26552

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.425.<sup>†</sup>

Early Mississippian, Borden Grp, Edwardsville Fm. Indian Creek, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on p.427.

#### ***Lepidesthes coreyi* Meek and Worthen**

HYPOTYPE YPM 317

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.423, pl.68, f.21.

HYPOTYPE YPM 24784

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.423, pl.66, f.8, pl.68, f.18-20.<sup>†</sup>

Early Mississippian, Osagean, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on p.423.

#### ***Lepidesthes warrenensis* Cooper**

HOLOTYPE YPM 9926

Cooper, G.A. 1931. Am. J. Sci. v.222, p.532, tf.2a-b.

Kier, P.M. 1965. J. Paleont. v.39, n.3, p.441, tf.3C.

Early Mississippian, Waverly Grp. Vicinity of Warren, Warren Co., Pennsylvania, USA. Collector: Beecher, C.E.

#### ***Lepidesthes wortheni* Jackson**

HYPOTYPE YPM 318

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.416.

Early Mississippian, Osagean, Borden Grp., Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Marsh, O.C.

HYPOTYPE YPM 319

Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.207.

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.416, pl.67, f.13,14.

HYPOTYPE YPM 320

Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.207.

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.416.

St. Louis, Missouri, USA. Collector: Braun, F.A.

HYPOTYPE YPM 42978

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.416, pl.66, f.1, pl.67, f.8.<sup>†</sup>

Early Mississippian, Osagean, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on pl.66, f.1.

**Lepidodiscus squamosus Meek and Worthen**

See *Agelacrinites beecheri* Clarke.

**Lovenechinus missouriensis (Jackson)**

HYPOTYPE YPM 313

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.340.

Mississippian, Boone Fm. Corsicana, Barry Co., Missouri, USA. Collector: Hawkins, C.L.

HYPOTYPE YPM 314

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.340, pl.44, f.2.

Mississippian, Boone Fm. Corsicana, Missouri, USA. Collector: Marsh, O.C.

HYPOTYPE YPM 24780

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.337, pl.39, f.3, pl.41, f.3.<sup>†</sup>

Early Mississippian, Burlington Limestone. Webb City, Jasper Co., Missouri, USA. Collector: Braun, F.A.

HYPOTYPE YPM 42982<sup>††</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.337.

Mississippian, Boone Fm. Corsicana, Barry Co., Missouri, USA. Collector: Hawkins, C.L.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on p.340.

<sup>††</sup> A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

**Lyonicrinus bacca (Roemer)**

HYPOTYPE YPM 21629<sup>†</sup>, 21630<sup>†</sup>

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.72.

Silurian, Brownsport Fm. Western Tennessee, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

**Mariacrinus beecheri Talbot**

SYNTYPE YPM 24774

Talbot, M. 1905. Am. J. Sci. v.170, p.25, pl.1, f.3(upper).

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.114, pl.5, f.4.

=*Ctenocrinus nobilissimus*. Hypotype. Kirk, E. 1929. Am. J. Sci. v.218, p.342.

=*Ctenocrinus nobilissimus*. Hypotype. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.381.

SYNTYPE YPM 24775

Talbot, M. 1905. Am. J. Sci. v.170, p.25, pl.1, f.3(lower).

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.114, pl.5, f.5(left).

=*Ctenocrinus nobilissimus*. Hypotype. Kirk, E. 1929. Am. J. Sci. v.218, p.342.

=*Ctenocrinus nobilissimus*. Hypotype. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.381.

Early Devonian, Helderberg Grp, Coeymans Limestone, Deansboro Mbr. Base of Deansboro, upper third of Coeymans, lime quarry owned by John E. Salisbury, on E-facing hillside about 0.5 mi W of Days Corners [Dayville], North Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E. and Sarle, C.J., 1903.

***Marsupiocrinus tennesseensis* (Roemer)**

HYPOTYPE YPM 22074<sup>†</sup>

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.73.

=*Marsupiocrinus (Amarsupiocrinus) tennesseensis*. Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.197.

Middle Ordovician, Chazy Fm. S side of Shaleldon Lane, 1.8 mi SE of Chazy village, 0.3 mi E of intersection of US Rt 9 and Shaleldon Lane, top of Mbr B, 5 ft above C7083 and 14 ft above base of section, top of Mbr B, Clinton Co., New York, USA. Collector: Ross, J.R., 8/19/1959.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Marsupites* sp.**

HYPOTYPE YPM 30589<sup>†</sup>

Marsh, O.C. 1871. Am. J. Sci. v.101, p.195.

=*Uintacrinus socialis* Grinnell. Syntype. Grinnell, G.B. 1876. Am. J. Sci. v.162, p.81.

=*Uintacrinus socialis* Grinnell. Meek, F.B. 1876. Bull. U.S. Geol. Surv. v.2, n.4, p.378.

=*Uintacrinus socialis* Grinnell. Clark, W.B. 1893. Bull. U.S. Geol. Surv. n.97, p.21.

=*Uintacrinus socialis* Grinnell. Bather, F.A. 1896. Proc. Zool. Soc. London. v.1895, p.975.

=*Uintacrinus socialis* Grinnell. Springer, F. 1901. Mem. Mus. Comp. Zool. Harvard Coll. v.25, n.1, p.2.

=*Uintacrinus socialis* Grinnell. Clark, W.B. 1915. Mon. U.S. Geol. Surv. n.54, p.36.

Late Cretaceous, Colorado Grp., Niobrara Fm. Thin layer of yellow calcareous shale, conformably overlying a coal seam, and just above a thin layer of *Ostrea congesta*, near Brush Creek, about six miles from Green River, Uinta Moun-

tains, Uinta Co., Utah. Collector: Marsh, O.C. and party, 1870.

<sup>†</sup>A thorough search of the collection by the curatorial staff in the 1990s could not locate this specimen. It is believed to be permanently lost. Specimens of *Ostrea congesta* (YPM 32617) from the type locality of *Uintacrinus socialis* are present in the Peabody collections but YPM 30589 cannot be located. In 1970, two specimens of *U. socialis* were transferred to the Smithsonian Institution. Neither is the specimen from the Uinta Mountains, but one specimen (USNM 219466) may be from the "Cretaceous of Kansas," which Grinnell (1876) also used for part of the type series.

***Marsupiocrinus (Amarsupiocrinus) tennesseensis* (Roemer)**

See *Marsupiocrinus tennesseensis* (Roemer).

***Melocrinus nobilissimus* (Hall)**

HYPOTYPE YPM 24776

Talbot, M. 1905. Am. J. Sci. v.170, p.26, pl.5.

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.117, pl.7.<sup>†</sup>

=*Ctenocrinus nobilissimus*. Kirk, E. 1929. Am. J. Sci. v.218, p.342.

=*Ctenocrinus nobilissimus*. Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.381.

Early Devonian, Helderberg Grp, Coeymans Limestone, Deansboro Mbr. Base of Deansboro, upper third of Coeymans, lime quarry owned by John E. Salisbury, on E-facing hillside about 0.5 mi W of Days Corners [Dayville], North Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E. and Sarle, C.J., 1903.

<sup>†</sup>Incorrectly cited as accession number 2777.

***Melocrinus pachydactylus* (Conrad)**

HYPOTYPE YPM 6462

Talbot, M. 1905. Am. J. Sci. v.170, p.27, pl.1, f.1.

=*Melocrinus paucidactylus* (Hall). Hypotype. Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.122, pl.8, f.5.

=*Ctenocrinus paucidactylus* (Hall). Hypotype. Kirk, E. 1929. Am. J. Sci. v.218, p.342.

=*Ctenocrinus paucidactylus* (Hall). Hypotype.  
Bassler, R.S. and M.W. Moodey. 1943. Geol.  
Soc. Am. Spec. Pap. 45, p.381.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Brower, J.C. 1974. Univ. Kans.  
Paleont. Contrib. Pap. 72, p.42, tf.19.6.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Webster, G.D. 1986. Geol. Soc.  
Am. Micro. Pub. 16, p.108.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Webster, G.D. 1988. Geol. Soc.  
Am. Micro. Pub. 18, p.63.

#### HYPOTYPE YPM 24779

Talbot, M. 1905. Am. J. Sci. v.170, p.27.

=*Melocrinus paucidactylus* (Hall). Hypotype.  
Goldring, Winifred. 1923. Mem. N. Y. St.  
Mus. n.16, p.122, pl.9, f.10

=*Ctenocrinus paucidactylus* (Hall). Hypotype.  
Kirk, E. 1929. Am. J. Sci. v.218, p.342.

=*Ctenocrinus paucidactylus* (Hall). Hypotype.  
Bassler, R.S. and M.W. Moodey. 1943. Geol.  
Soc. Am. Spec. Pap. 45, p.381.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Brower, J.C. 1974. Univ. Kans.  
Paleont. Contrib. Pap. 72, p.42.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Webster, G.D. 1986. Geol. Soc.  
Am. Micro. Pub. 16, p.108.

=*Ctenocrinus paucidactylus* (Hall).  
Hypotype. Webster, G.D. 1988. Geol. Soc.  
Am. Micro. Pub. 18, p.63.

Early Devonian, Helderberg Grp, Coeymans Fm.  
Jerusalem Hill, Albany Co., New York, USA.  
Collector: Beecher, C.E.

#### *Melocrinus paucidactylus* (Hall)

See *Melocrinus pachydactylus* (Conrad).

#### *Melonechinus indianensis* (Miller and Gurley)

#### HYPOTYPE YPM 24781

Jackson, R.T. 1912. Mem. Boston Soc. Nat.  
Hist. v.7, p.369, pl.51, f.8.<sup>†</sup>

Late Mississippian, St. Louis Limestone.  
Greenville, Harrison Co., Indiana, USA. Collector:  
Braun, F.A.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on  
p.371.

#### *Melonechinus multiporus* (Norwood and Owen)

##### HYPOTYPE YPM 24783

Jackson, R.T. 1912. Mem. Boston Soc. Nat.  
Hist. v.7, p.379, pl.56, f.10.<sup>†</sup>

Spreng, A.C. and W.B. Howe. 1963. J. Paleont.  
v.37, n.4, p.932,tbl.1(#14).

St. Louis, Missouri, USA. Collector: Braun, F.A.

<sup>†</sup>Cited as reposed in the "F. Braun Collection" on  
pl.56, f.10.

#### *Melonechinus stewartii* (Safford)

##### HYPOTYPE YPM 24782<sup>†</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat.  
Hist. v.7, p.371, pl.54, f.1.<sup>††</sup>

Late Mississippian, St. Louis Limestone. Probably  
Lithostrotion bed, Middle Tennessee, USA.

<sup>†</sup>This is represented by a plaster cast.

<sup>††</sup>Cited as reposed in the "F. Braun Collection"  
on p.373.

#### *Melonites multiporus* Norwood and Owen

##### HYPOTYPE YPM 339

Jackson, R.T. and T.A. Jagger, Jr. 1896.  
Bull. Geol. Soc. Am. v.7, p.160.

Late Mississippian, Meramecian, St. Louis  
Limestone. St. Louis, Missouri, USA. Collector:  
Jackson, R.T.

##### HYPOTYPE YPM 340

Jackson, R.T. and T.A. Jagger, Jr. 1896.  
Bull. Geol. Soc. Am. v.7, p.144, pl.3, f.10.<sup>†</sup>

##### HYPOTYPE YPM 342

Jackson, R.T. and T.A. Jagger, Jr. 1896.  
Bull. Geol. Soc. Am. v.7, p.152, pl.3, f.16.

Late Mississippian, Meramecian, St. Louis  
Limestone. Near St. Louis, Missouri, USA.

<sup>†</sup>Cited as "diamond number 157, specimen C" on  
p. 144.

#### *Mesoblastus crenulatus* (Roemer)

##### HYPOTYPE YPM 24261

Macurda, D.B. 1967. J. Paleont. v.41, n.2, p.477, tf.3E,H, tf.4A,B,C,G,H, pl.60, f.9.<sup>†</sup>

Early Mississippian, Tournaisian. Tournay, Belgium.

<sup>†</sup>Incorrectly cited as 1033; no. 15 in text-fig. series.

***Mesopaleaster granti* (Spencer)**

HYPOTYPE YPM 14782

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.89, pl.9, f.3.

Early Silurian, Cataract Fm. Near reservoir in the city of Hamilton, Ontario, Canada. Collector: Grant, C.C.

***Mesopaleaster shafferi* (Hall)**

HYPOTYPE YPM 13180

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.77.

Late Ordovician, Maysvillian, Maysville Fm. Near hills back of Cincinnati, Hamilton Co., Ohio, USA. Collector: Oeh, G.

***Mesopaleaster (?) lanceolatus***

Schuchert

SYNTYPE YPM 14449

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.82.

SYNTYPE YPM 14780<sup>†</sup>

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.82.<sup>††</sup>

Late Ordovician, Utica Shale. Near Ithaca, Oneida Co., New York, USA. Collector: Valiant, W.S.

<sup>†</sup>This is represented by a part and counterpart and a cast and mold, respectively.

<sup>††</sup>Magnification for pl.4, f.3 is incorrect.

***Myelodactylus ammonis* (Bather)**

HYPOTYPE YPM 20068<sup>†</sup>, 22093<sup>†</sup>

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.78.

Silurian, Brownsport Fm. Western Tennessee, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

***Myelodactylus extensus* Springer**

HYPOTYPE YPM 17502

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.78, pl.12, f.17.

=*Myelodactylus extensus extensus*. Moore, R.C. 1962. Univ. Kans. Paleont. Contrib., Echino., Art. 5, p.42.

Strimple, H.L. 1963. Bull. Ok. Geol. Surv. v.100, p.27.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.179.

Middle Silurian, Brownsport Fm. Coquina, 42 ft above lemon-yellow limestone (Dixon-Brownsport contact?), 14 ft below Brownsport-Decatur contact, E of Sewell's Spring and Whiteoak School road, 0.3 mi N of Whiteoak School, Clifton, TN 7.5 Quad, Perry Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

HYPOTYPE YPM 20069<sup>†</sup>

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.78.

=*Myelodactylus extensus extensus*. Moore, R.C. 1962. Univ. Kans. Paleont. Contrib., Echino. Art. 5, p.42.

Strimple, H.L. 1963. Bull. Ok. Geol. Surv. v.100, p.27.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.179.

Silurian, Brownsport Fm. Western Tennessee, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Myelodactylus nodosarius* (Hall)**

HYPOTYPE YPM 24764

Springer, F. 1926a. Proc. U.S. Nat. Mus. v.67, art.9, p.20, pl.5, f.8.

Springer, F. 1926b. Pub. Smithsonian Inst. n.2871, p.87, pl.27, f.24.

=*Herpetocrinus* (*Myelodactylus*) *nodosarius*. Ehrenberg, Kurt. 1930. Palaeobiologica v.3, p.267, pl.15, f.7.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.569.

Moore, R.C. 1962. Univ. Kans. Paleont. Contrib. Echino., Art.5, p.43, pl.3, f.5c.<sup>†</sup>

Strimple, H.L. 1963. Bull. Ok. Geol. Surv. v.100, p.26.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.179.

See also *Brachiocrinus (Herpetocrinus) nodosarius* Hall.

Early Devonian, Helderberg Grp, New Scotland Limestone. Schoharie Co., New York, USA.

<sup>†</sup>The published locality description in the explanation for pl.5, f.8 was questioned by M.W. Moodey, who refers this specimen to Albany County, not Schoharie County.

***Nummicrinus pisiformis* (Roemer)**

See *Lecanocrinus pisiformis* (Roemer).

***Oligoporus danae* (Meek and Worthen)**

PARATYPE YPM 42981<sup>†</sup>

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.356, pl.50, f.8,9,<sup>††</sup>

Late Mississippian, St. Louis Limestone. Washington Co., Indiana, USA.

HYPOTYPE YPM 315

Jackson, R.T. and T.A. Jagger, Jr. 1896. Bull. Geol. Soc. Am. v.7, p.138.

Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.196, pl.6, f.32.

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.356.

HYPOTYPE YPM 316

Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.197, pl.6, f.33.

Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.356.

Early Mississippian, Keokuk Grp. Alton, Madison Co., Illinois, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>††</sup>Cited as reposed in the "F. Braun Collection" on p.359.

***Onychaster demissus* Miller**

HYPOTYPE YPM 13179<sup>†</sup>

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.274.

Middle Devonian, Hamilton Grp. Near Georgetown, New York, USA.

<sup>†</sup>Represented by one specimen and a plaster cast.

***Onychaster flexilis* (Meek and Worthen)**

HYPOTYPE YPM 26331, 26334

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.270.

Middle Devonian, Hamilton Grp. Near Georgetown, New York, USA.

***Pachylocrinus aequalis* (Hall)**

HYPOTYPE YPM 2413

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.87, tbl.17(#15).

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.619.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bradley, F.H.

HYPOTYPE YPM 6453A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.87, tbl.17(#16).

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.619.

HYPOTYPE YPM 6453B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.88, tbl.17(#17).

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.619.

HYPOTYPE YPM 6453C

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.88, tbl.17(#18).

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.619.

HYPOTYPE YPM 6453D

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.88, tbl.17(#19).

Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.619.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

***Pachylocriinus gibsoni* (White)**

HYPOTYPE YPM 24760

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.89,tbl.18(#4).

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.188.

=*Hylodecrinus gibsoni*. Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.633.

HYPOTYPE YPM 24761

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.89, tbl.18(#5), pl.4, f.11.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.188.

=*Hylodecrinus gibsoni*. Kammer, T.W. and W.I. Ausich. 1993. J. Paleont. v.67, n.4, p.633.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.

***Palaeocystites pulcher* Billings**

HYPOTYPE YPM 35699

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.41.

Middle Ordovician, Mingan Fm. Upper half of formation, Quarry Island, Mingan Islands, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

HYPOTYPE YPM 35700

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.41.

Ordovician, Mingan Fm. Eskimoe Island, Mingan Islands, Quebec, Canada. Collector: Twenhofel, W.H.

HYPOTYPE YPM 35702

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.41.

Ordovician, Mingan Fm. Lower 50 or 60 feet of the Mingan Fm on Quarry or Sea Cow islands or Clearwater Point, Gaspe Peninsula, Quebec, Canada. Collector: Twenhofel, W.H.

***Palaeosolaster(?) gyrum* (Clarke)**

SYNTYPE YPM 14394†, 14396†, 14397†

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.210.

Late Devonian, Portage Grp. At Earl's Quarry, near Ithaca, Tompkins Co., New York, USA.

†These specimens are represented by a plaster cast of a slab with all three specimens present.

***Paradichocrinus polydactylus* (Lyon and Casseday)**

HYPOTYPE YPM 6447A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.124, tbl.41(#7), pl.8, f.11.

Lane, N.G. 1973. Univ. Calif. Pub. Geol. Sci. v.99, p.60.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.193.

Broadhead, T.W. 1981. Palaeontogr. Abt. A, v.176, p.133.

HYPOTYPE YPM 6447B

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.124, tbl.41(#8).

Lane, N.G. 1973. Univ. Calif. Pub. Geol. Sci. v.99, p.60.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.193.

Broadhead, T.W. 1981. Palaeontogr. Abt. A, v.176, p.133.

HYPOTYPE YPM 6447C

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.124, tbl.41(#9).

Lane, N.G. 1973. Univ. Calif. Pub. Geol. Sci. v.99, p.60.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.193.

Broadhead, T.W. 1981. Palaeontogr. Abt. A, v.176, p.133.

HYPOTYPE YPM 24762

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.124, tbl.41(#10).†

- Lane, N.G. 1973. Univ. Calif. Pub. Geol. Sci. v.99, p.60.
- Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.193.
- Broadhead, T.W. 1981. Palaeontogr. Abt. A, v.176, p.133.
- HYPOTYPE** YPM 24763
- Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.124,tbl.41(#11).<sup>††</sup>
- Lane, N.G. 1973. Univ. Calif. Pub. Geol. Sci. v.99, p.60.
- Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.193.
- Broadhead, T.W. 1981. Palaeontogr. Abt. A, v.176, p.133.
- Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bassett, D.A., 1888.  
†Cited as 22754A on tbl.41,#10.
- †Cited as 22754B on tbl.41,#11.
- Parapisocrinus quinquelobus** (Bather)  
See *Pisocrinus quinquelobus* Bather.
- Periechocrinus latus** Springer
- HOLOTYPE** YPM 20481
- Springer, F. 1928. Mem. Geol. Surv. Can. n.154, p.138, pl.4, f.4,5.
- Bassler, R.S. and M.W. Mooday. 1943. Geol. Soc. Am. Spec. Pap. 45, p.599.
- Silurian, Chicotte Fm, Chicotte zone 1. Southwest Point, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1919.
- Periglyptocrinus** sp.
- HYPOTYPE** YPM 22761
- Twenhofel, W.H. 1928. Mem. Geol. Surv. Can. n.154, p.139.
- Ordovician, English Head Fm, English Head zone 3. English Head, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.
- Pholidechinus brauni** Jackson
- PARATYPE** YPM 42980<sup>†</sup>
- Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.299, pl.27, f.2, pl.28, f.1.<sup>††</sup>
- Early Mississippian, Osagean, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.
- HYPOTYPE** YPM 321
- Jackson, R.T. 1896. Bull. Geol. Soc. Am. v.7, p.213.
- Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.299, pl.27, f.4-6.
- HYPOTYPE** YPM 322
- Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.299.
- Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Marsh, O.C.
- †A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.
- ††Cited as reposedited in the "F. Braun Collection" on p.300.
- Pholidocidaris irregularis** (Meek and Worthen)
- HYPOTYPE** YPM 24785
- Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.434, pl.73, f.4,5, pl.75, f.2.<sup>†</sup>
- HYPOTYPE** YPM 42979<sup>††</sup>
- Jackson, R.T. 1912. Mem. Boston Soc. Nat. Hist. v.7, p.434, pl.74, f.1.<sup>†††</sup>
- Early Mississippian, Osagean, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.A.
- †Cited as reposedited in the "F. Braun Collection" on pl.75, f.2.
- ††A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.
- †††Cited as reposedited in the "F. Braun Collection" on p.435.
- Pisocrinus campana** Miller
- HYPOTYPE** YPM 17497
- Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.76, pl.12, f.12.

=*Pisocrinus (Pisocrinus) campana*.  
Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.209.

Middle Silurian, Brownsport Fm, Perryville 7.5 Quad. 38-40 ft above Dixon-Brownsport contact, just E of old Brownsport Furnace, N side of road leading from Cedar Grove Church to Mt. Carmel Church, 2 mi NW of Mt. Carmel Church, Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### HYPOTYPE YPM 17498

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.76.

Middle Silurian, Brownsport Fm, Clifton 7.5 Quad. 2-6 ft above Dixon-Brownsport contact, 0.3 mi E of junction of Beech Creek and Little Beech Creek, Wayne Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### HYPOTYPE YPM 20057

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.76, pl.12, f.13.

#### HYPOTYPE YPM 20072

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.76.

Middle Silurian, Brownsport Fm, Perryville 7.5 Quad. 38-40 ft above Dixon-Brownsport contact, just E of old Brownsport Furnace, N side of road leading from Cedar Grove Church to Mt. Carmel Church, 2 mi NW of Mt. Carmel Church, Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### *Pisocrinus quinquelobus* Bather

##### HYPOTYPE YPM 17500

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.77, pl.12, f.14.

=*Pisocrinus (Parapisocrinus) quinquelobus*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.208.

=*Parapisocrinus quinquelobus*. Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.237.

#### HYPOTYPE YPM 17501

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.77, pl.12, f.15,16.

=*Pisocrinus (Parapisocrinus) quinquelobus*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.208.

=*Parapisocrinus quinquelobus*. Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.237.

Middle Silurian, Brownsport Fm, Perryville 7.5 Quad. 38-40 ft above Dixon-Brownsport contact, just E of old Brownsport Furnace, N side of road leading from Cedar Grove Church to Mt. Carmel Church, 2 mi NW of Mt. Carmel Church, Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### *Pisocrinus tennesseensis* (Roemer)

##### HYPOTYPE YPM 17499

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.78, pl.12, f.10,11.

=*Pisocrinus (Parapisocrinus) tennesseensis*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.209.

Middle Silurian, Brownsport Fm, Perryville 7.5 Quad. 38-40 ft above Dixon-Brownsport contact, just E of old Brownsport Furnace, N side of road leading from Cedar Grove Church to Mt. Carmel Church, 2 mi NW of Mt. Carmel Church, Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

#### *Pisocrinus (Parapisocrinus) quinquelobus* Bather

See *Pisocrinus quinquelobus* Bather.

#### *Pisocrinus (Parapisocrinus) tennesseensis* (Roemer)

See *Pisocrinus tennesseensis* (Roemer).

#### *Pisocrinus (Pisocrinus) campana* (Miller)

See *Pisocrinus campana* Miller.

#### *Poteriocrinus magniventrus* Springer

##### SYNTYPE YPM 22752

Springer, F. 1911. Mem. Mus. Comp. Zool. Harvard Coll. v.25, n.3, p.155, pl.6, f.1.

=*Springerocrinus magniventrus*. Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.90, pl.4, f.13,14.

##### SYNTYPE YPM 27627

Springer, F. 1911. Mem. Mus. Comp. Zool. Harvard Coll. v.25, n.3, p.155, pl.5, f.2.

=*Springercrinus magniventrus*. Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.90.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Corey's Bluff, near Crawfordsville, Montgomery Co., Indiana, USA.

**SYNTYPE** YPM 30590<sup>†</sup>

Springer, F. 1911. Mem. Mus. Comp. Zool. Harvard Coll. v.25, n.3, p.155, pl.5, f.1a,1b.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

#### ***Protaster (?) stellifer* Ringueberg**

**HYPOTYPE** YPM 14450, 14781

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.228.

Middle Silurian, Clinton Grp, Rochester Shale. Near Rochester, Monroe Co., New York, USA. Collector: Sarle, C.J.

#### ***Prowillungaster major* Wang**

**HOLOTYPE** YPM 33662

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.229, f.5a,b, pl.2, f.1.

Tertiary, Miocene, Morgan Limestone. Murry Cliffs, between Morgan and Blanchetown, South Australia, Australia.

**PARATYPE** YPM 33648

Wang, C.C. 1994. J. J. Geol. Soc. China. v.37, n.2, p.229, pl.2, f.3.

Tertiary, Oligocene, Jan Juc Fm, Point Addis Limestone Mbr. Airey's Inlet, Victoria, Australia.

**PARATYPE** YPM 33652

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229, f.5c,d, pl.2, f.4.

Tertiary, Miocene, Mannum Fm. Early Miocene, Murry Cliffs, along Murry River, southeastern South Australia, Australia.

**PARATYPE** YPM 33653

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229, pl.3, f.2.

**PARATYPE** YPM 33654

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229, pl.3, f.1.

Tertiary, Oligocene, Jan Juc Fm, Point Addis Limestone Mbr. Airey's Inlet, Victoria, Australia.

**PARATYPE** YPM 33663

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229, pl.2, f.2.

Tertiary, Miocene, Morgan Limestone. Murry Cliffs, between Morgan and Blanchetown, South Australia, Australia.

**HOLOTYPE** YPM 33655

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229, f.5e, f, pl.3, f.3.

**PARATYPE** YPM 33656

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.229.

Tertiary, Miocene, Gambier Limestone. Marte, Mount Gambier village, South Australia, Australia.

#### ***Scaphechinus mirabilis* (Agassiz)**

**HYPOTYPE** YPM 33595

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.236, f.13.

Recent. Japan.

#### ***Scyphocrinites pratteni* (McChesney)**

See *Scyphocrinus pratteni* McChesney.

#### ***Scyphocrinus pratteni* McChesney**

**HYPOTYPE** YPM 6500

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, pl.1, f.10.

=*Scyphocrinites pratteni*. Bassler, R.S. and M.W. Moodey. Geol. Soc. Am. Spec. Pap. 45, p.675.

Early Devonian, Linden Grp, Olive Hill Fm, Ross Limestone Mbr. Near the bottom of the draw below the well, Smiths Fork (of Indian Creek), gullied pasture about 1 mi NE of the old "gov't still," Hardin Co., Tennessee, USA. Collector: Dunbar, C.O., 1916.

#### ***Scytalocrinus robustus* (Hall)**

**HYPOTYPE** YPM 6444A

Van Sant, J.F. 1964. Univ. Kans. Paleont. Contrib. Echino., Art. 7, p.97, pl.5, f.13.

Kammer, T.W. and W.I. Ausich. 1992. J. Paleont. v.66, n.3, p.468.

Early Mississippian, Osagean, Borden Grp, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Bradley, F.H.

***Scytalocrinus sansabensis* Moore and Plummer**

HYPOTYPE YPM 15238A<sup>†</sup>

Moore, R.C. and F.B. Plummer. 1939. Texas Univ. Pub. n.3945, p.131, pl.5, f.6a,6b.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.678.

Strimple, H.L. and W.T. Watkins. 1969. Palaeontogr. Am. v.6, p.197.

Moore, R.C. and H.L. Strimple. 1973. Univ. Kans. Paleont. Contrib. Art. 60, p.44.

=*Hypselocrinus sansabensis*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.155.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.155.

HYPOTYPE YPM 15238B<sup>†</sup>, 15238C<sup>†</sup>, 15238D<sup>†</sup>

Moore, R.C. and F.B. Plummer. 1939. Texas Univ. Pub. n.3945, p.131.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.678.

Strimple, H.L. and W.T. Watkins. 1969. Palaeontogr. Am. v.6, p.197.

Moore, R.C. and H.L. Strimple. 1973. Univ. Kans. Paleont. Contrib. Art. 60, p.44.

=*Hypselocrinus sansabensis*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.155.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.155.

HYPOTYPE YPM 15238E<sup>†</sup>

Moore, R.C. and F.B. Plummer. 1939. Texas Univ. Pub. n.3945, p.133.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.678.

Strimple, H.L. and W.T. Watkins. 1969. Palaeontogr. Am. v.6, p.197.

Moore, R.C. and H.L. Strimple. 1973. Univ. Kans. Paleont. Contrib. Art. 60, p.44.

=*Hypselocrinus sansabensis*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.155.

Webster, G.D. 1977. Geol. Soc. Am. Micro. Pub. 8, p.155.

Pennsylvanian, Bend Grp, Marble Falls Lime-stone. Base of upper Marble Falls, Rough Creek, 11 mi SE of San Saba, Burnet Co., Texas, USA. Collector: Schuchert, Charles et al., 1919.

<sup>†</sup>A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

***Springerocrinus magniventrus* (Springer)**  
See *Poteriocrinus magniventrus* Springer.

***Stenocrinus pentagonus* (Ulrich)**  
See *Heterocrinus pentagonus* Ulrich.

***Stromatocystites pentangularis* Pompeckj**

HYPOTYPE YPM 14768A, 14768B

Schuchert, Charles. 1919. Smith. Misc. Coll. v.70, n.1, p.1.

Middle Cambrian. Jince, Bohemia, Czech Republic.

***Stuertzaster marstoni* (Salter)**

HYPOTYPE YPM 14399

Schuchert, Charles. 1915. Bull. U.S. Nat. Mus. n.88, p.253.

Late Ordovician, Eden Fm. Near Cincinnati, Hamilton Co., Ohio, USA. Collector: Asherman, G.

***Syndetocrinus dartae* Kirk**

HOLOTYPE YPM 13650

Kirk, Edwin. 1933. Am. J. Sci. v.226, p.347, tf.1-4.

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.158.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.697.

Prokop, R.J. and V. Petr. 1989. Cas. pro Min. Geo. v.34, p.47.

Prokop, R.J. and V. Petr. 1990. Mus. Nat. Hist. Prague, p.16, 17, 62.

Middle Silurian, Niagaran, West Point Fm. Pointe l'Enfer, near Port Daniel, Gaspe Peninsula, Quebec, Canada. Collector: Dart, J.D.

See also *Syndetocrinus northropi* Kirk.

***Syndetocrinus northropi* Kirk**

HOLOTYPE YPM 13363

Kirk, Edwin. 1933. Am. J. Sci. v.226, p.351, tf.5-8.

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.158.

Bassler, R.S. and M.W. Moodey. 1943. Geol. Soc. Am. Spec. Pap. 45, p.697.

=*Syndetocrinus dartae* Kirk. Hypotype. Prokop, R.J. and V. Petr. 1989. Cas. pro Min. Geo. v.34, p.47.

=*Syndetocrinus dartae* Kirk. Hypotype. Prokop, R.J. and V. Petr. 1990. Mus. Nat. Hist. Prague, p.16, 17, 62.

Middle Silurian, Niagaran, Bouleaux Fm. Shaleore, E of Quarry at Pointe l'Enfer, Quebec, Canada. Collector: Northrop, S.A., 1927.

**cf. *Syndetocrinus***

HYPOTYPE YPM 13362, 14887, 30856, 30857

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.159, pl.11, f.1.

Middle Silurian, Niagaran, Bouleaux Fm. Shaleore, E of Quarry at Pointe l'Enfer, Quebec, Canada. Collector: Northrop, S.A., 1927.

***Tetracystis bifarius* Amsden**

HOLOTYPE YPM 17620

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.81, tf.28, pl.12, f.1-4.<sup>†</sup>

Middle Silurian, Brownsport Fm, Eagle Creek 7.5 Quad. 25-45 ft above road (Dixon-Brownsport contact not exposed), E side of TN highway 114, 2.25 mi S of Clifton, Wayne Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

<sup>†</sup>Incorrectly cited as YPM 17260.

***Thysanocrinus arborescens* Talbot**

HOLOTYPE YPM 26547

Talbot, M. 1905. Am. J. Sci. v.170, p.23, pl.1, f.2.

=*Dimerocrinoides arborescens* (Talbot).

Goldring, Winifred. 1923. Mem. N. Y. St. Mus. n.16, p.83, pl.1, f.1.

=*Dimerocrinoides arborescens*. Bassler, R.S. and M.W. Moody. 1943. Geol. Soc. Am. Spec. Pap. 45, p.424.

=*Dimerocrinoides arborescens*. Moore, R.C. and L.R. Laudon. 1943a. Am. J. Sci. v.241, pl.9, f.10.

=*Ambicocrinus arborescens*. Kirk, E. 1945. Am. J. Sci. v.243, p.353.

=*Ambicocrinus arborescens*. Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.48.

=*Ambicocrinus arborescens*. Webster, G.D. 1986. Geol. Soc. Am. Micro. Pub. 16, p.54.

Early Devonian, Helderberg Grp, Coeymans Limestone, Deansboro Mbr. Base of Deansboro, upper third of Coeymans, lime quarry owned by John E. Salisbury, on E-facing hillside about 0.5 mi W of Days Corners [Dayville], North Litchfield, Herkimer Co., New York, USA. Collector: Beecher, C.E. and Sarle, C.J., 1903.

***Trichinocrinus terranovicus* Moore and Laudon**

HOLOTYPE YPM 15973

Moore, R.C. and L.R. Laudon. 1943. Am. J. Sci. v.241, n.4, p.265, tf.1, pl.2, f.1, pl.2, f.1.

Webster, G.D. 1973. Geol. Soc. Am. Mem. 137, p.260.

Broadhead, T.W. 1987. Paleobio. v.13, n.2, p.183, tf.4b.

Donovan, S.K. 1988. C.R.C. Paul and A.B. Smith, eds., Echinoderm phylogeny and evolutionary biology, p.237.

Middle Ordovician, Table Head Grp. About 100 ft above base of the Table Head, big point 660 ft NW of W of W end of the Gravels and E of Lead Cove, Port au Port, western Newfoundland, Canada. Collector: Dunbar, C.O. (Jr.), 7/3/1933.

***Troosticrinus reinwardti* (Troost)**

HYPOTYPE YPM 17507

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.82.

Middle Silurian, Brownsport Fm, Eagle Creek 7.5 Quad. 13-18 ft above road (Dixon-Brownsport-Decatur contacts not exposed), N side of US

highway 64, 1.7 mi SE of junction of road leading S to Beckman Branch, Harding Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

**HYPOTYPE YPM 17508**

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.82, pl.12, f.5-7.

Middle Silurian, Brownsport Fm, Eagle Creek 7.5 Quad. 18-20 ft above road (Dixon-Brownsport-Decatur contacts not exposed), N side of US highway 64, 1.7 mi SE of junction of road leading S to Beckman Branch, Hardin Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

**HYPOTYPE YPM 17509<sup>†</sup>**

Amsden, T.W. 1949. Bull. Peabody Mus. Nat. Hist. (Yale Univ.). n.5, p.82, tf.29.

Middle Silurian, Brownsport Fm, Bath Springs 7.5 Quad. 65-90 ft above Dixon-Brownsport contact, S bank of Tennessee River, 0.5 mi W of Clifton, Hardin Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

<sup>†</sup>This is represented by a thin section of the specimen.

***Uintacrinus socialis* Grinnell**

**SYNTYPE YPM 30591-30594<sup>†</sup>**

Grinnell, G.B. 1876. Am. J. Sci. v.162, p.81, pl.4, f.2.

Meek, F.B. 1876. Bull. U.S. Geol. Surv. v.2, n.4, p.378.

Bather, F.A. 1896. Proc. Zool. Soc. London. v.1895, p.975, tf.1.

**SYNTYPE YPM 30592<sup>†</sup>**

Grinnell, G.B. 1876. Am. J. Sci. v.162, p.81, pl.4, f.1.

**SYNTYPE YPM 30593<sup>†</sup>**

Grinnell, G.B. 1876. Am. J. Sci. v.162, p.81, pl.4, f.2a.

**SYNTYPE YPM 30594<sup>†</sup>**

Grinnell, G.B. 1876. Am. J. Sci. v.162, p.81, pl.4, f.2b.

Late Cretaceous, Colorado Grp, Niobrara Fm. Trego Co., Kansas, USA. Collector: Mudge, B.F., 1876.

**HYPOTYPE YPM 24758<sup>†</sup>**

Beecher, C.E. 1900b. Am. J. Sci. v.159, p.267, pl.3, f.4.

Springer, F. 1901. Mem. Mus. Comp. Zool. Harvard Coll. v.25, n.1, p.3.

Clark, W.B. 1915. Mono. U.S. Geol. Surv. n.54, p.36.

Late Cretaceous, Colorado Grp, Niobrara Fm. Middle Niobrara chalk, on the side of a deeply eroded ravine, near Elkader, Logan Co., Kansas, USA.

<sup>†</sup>A thorough search of the collection by the curatorial staff in the 1990s could not locate these specimens. They are believed to be permanently lost. In 1970, two specimens of *U. socialis* were transferred to the Smithsonian Institution. One of these specimens (USNM 219466) may be from the "Cretaceous of Kansas" which Grinnell (1876) used for part of the type series; the other specimen Grinnell (1876) used to describe this species is from the Uinta Mountains.

<sup>††</sup>There are 220 individuals present on a series of slabs.

See also *Marsupites* sp.

**undet. Crinoidea**

**HYPOTYPE YPM 20118**

Boucot, A.J., G.J.F. MacDonald, C. Milton, and J.B. Thompson, Jr. 1958. Bull. Geol. Soc. Am. v.69, p.860, pl.3, f.4.

Devonian, Bernardston Fm. Weathered surface of crystalline Limestone blocks, quarried from W opening of 30 ft Limestone bed, about 150 ft above mtn base, E slope of N portion of West Mtn on "Williams Farm," 0.75 mi N of the "New England House," Bernardston, Franklin Co., Massachusetts, USA.

**undet. Cystoidea?**

**HYPOTYPE YPM 14391**

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.216, pl.3, f.11.

Early Cambrian, Kinzers Fm. Road metal quarry and walls of demolished tenement house on Noah L. Getz farm, on Harrisburg Pike, 1 mi N of Rohrerstown, and about 2.5 mi W of Lancaster, Lancaster Co., Pennsylvania, USA. Collector: Getz, N.L.

**Willungaster scutellaris Philip and Foster****HYPOTYPE** YPM 33647

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.227, f.2, pl.1, f.1.

**HYPOTYPE** YPM 33660

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.227, pl.1, f.2.

**HYPOTYPE** YPM 33661

Wang, C.C. 1994. J. Geol. Soc. China. v.37, n.2, p.227, pl.1, f.3.

Tertiary, Miocene, Port Vincent Limestone. Wood Bay, York Peninsula, South Australia, Australia.

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