

SUPPLEMENT TO CATALOGUE OF TYPE FOSSILS
IN THE GEOLOGICAL MUSEUM AT THE
OHIO STATE UNIVERSITY.

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In 1924 a catalogue of the type fossils contained in the Geological Museum at the Ohio State University was published.* Since that date the collections have been increased by the addition of 106 types, and it now seems advisable to bring out this supplement to the catalogue of 1924. The plan of the supplement is the same as for the catalogue, both being patterned after the catalogue compiled by Dr. Charles Schuchert for the fossil invertebrates in the United States National Museum.†

For each entry the following information is given: (1) accession number; (2) name of species; (3) kind of type and number of specimens included in the entry; (4) formation; (5) locality; (6) author and place of publication. If the species name has been changed from that under which it was originally described, it is listed in the catalogue under both the original and the present names, with suitable cross references. Under the original name is listed the reference or references to the original description, and the cross reference is indicated by “=” the name under which the species is now known. Under the present name is listed the reference to the publication in which the change of name was made, and the cross reference is indicated by “see” the name under which the species was originally described. In the case where a type specimen has been described or figured under two or more names antedating the present name, a cross reference between these names is indicated by “*same as*” the other now discarded name. A few cases of this sort are listed in the original catalogue. If the generic name now used is not the same as that under which the species was originally described, the author's name is placed in parenthesis.

*Morningstar, Helen. Ohio Jour. Sci., Vol. XXIV, No. 1, pp. 31-64, 1924.

†Schuchert, Charles. U. S. Nat. Mus., Bull. 53, Pt. 1, 1905.

Of the 106 types listed in this supplement 45 are primary or basic types, and 61 are secondary or supplementary types. With the exception of two or three specimens, all this material is from the Ohio rock formations. Some entries are included which were listed in the original catalogue as *chirotypes*. Descriptions and illustrations of these species have now been published, and the proper terms for the various types are here recorded.

The terms used descriptive of the various kinds of types are the same as those used in the catalogue of 1924. The definitions of these terms are as follows:

PRIMARY TYPES.

Holotype.—A single specimen selected from the original material on which a new species is based.

Paratype.—A specimen selected in addition to the holotype which is used in preparing the original description of a new species. A species may have, therefore, both holotype and one or more paratypes.

Cotypes.—Two or more specimens used in describing and figuring a new species where no holotype has been selected.

Chirotype.—A term applied to material described in the manuscript form. After the manuscript has been published the chirotype will become either a holotype, paratype, etc.

SECONDARY TYPES.

Plesiotype.—A specimen which was not used in the original description of a new species, but which is used for a subsequent description or figure of it.

ARTIFICIAL MODLES.

Plastotype.—An artificial cast or model made directly from a primary type is called a plastotype.

FIGURED SPECIMENS.

This includes specimens which have been described and figured but to which no specific name has been assigned. They cannot be classed as real types, and such entries are marked *figured*.

MARKING OF TYPES.

To distinguish primary types in the Geological Museum at Ohio State University small red stars are glued to the specimens. For the supplementary types green stars are used. The label is also starred and on it is recorded the kind of type and the reference to the description.

The total number of entries included in the catalogue of 1924 and the present supplement is 381, 15 of which are duplicate entries. Of these there are 80 holotypes, 21 paratypes, 49 cotypes, 179 plesiotypes, 14 chirotypes, 3 plastotypes and 20 figured specimens.

ALPHABETICAL LIST.

16285. *Acanthoclema sulcatum* Hall and Simpson. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 31, Pl. II, Figs. 13, 14.
16229. *Ambocoelia umbonata* (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 49.
15330. *Ancylopus ortonii* Carman. Holotype.
Monongahela (Penn.). New Straitsville, Ohio.
CARMAN. Bull. Geol. Soc. Amer., Vol. XXXVIII, 1927, pp. 391-395, Pl. XIII.
15329. *Anomoeichnus ohioensis* Carman. Holotype.
Middle Kitanning, Allegheny (Penn.). New Straitsville, Ohio.
CARMAN. Bull. Geol. Soc. Amer., Vol. XXXVIII, 1927, pp. 388-391, Pl. XII.
16281. *Arthracantha carpenteri* (Hinde). Plesiotypes (3).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 22, Pl. I, Figs. 9-11.
16511. *Atrypa reticularis* (Linnaeus). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 42, Pl. IV, Fig. 1.
16512. *Athyris vittata* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 49, Pl. V, Fig. 1.
16270. *Aulopora serpens* Goldfuss (?). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 19, Pl. I, Fig. 4.

16553. *Baropus hainesi* Carman. Holotype.
 16554. *Baropus hainesi* Carman. Paratype.
 Monongahela (Penn.). Hackney, Morgan Co., Ohio.
 CARMAN. Bull. Geol. Soc. Amer., Vol. XXXVIII, 1927, pp. 385-388,
 Pl. XI.
16965. *Bellephon hyaline* Hall. Plesiotype.
 Columbus limestone (chert zone) (Dev.). Dublin, Ohio.
 STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, pp. 190-191,
 Pl. XVII, Figs. 3, 4.
16286. *Botryllopora socialis* Nicholson. Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 HALL AND SIMPSON. Pal. N. Y., Vol. VI, 1887, p. 282, Pl. LXIV, Fig. 3.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 28, Pl. II,
 Figs. 5, 6.
16537. *Bythocypris indianensis* Ulrich. Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 58, Pl. I, Fig. 13.
16513. *Camarotoechia prolifica* Hall (?). Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 41, Pl. III,
 Fig. 24.
16271. *Ceratopora flabellata* Greene. Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 20, Pl. I,
 Fig. 5.
16272. *Ceratopora jacksoni* Grabau. Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 20, Pl. I,
 Fig. 6.
16505. *Chonetes coronatus* (Conrad). Plesiotypes (3).
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 37, Pl. III,
 Figs. 13-15.
16259. *Chonetes fragilis* Stewart. Cotypes (4).
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 38-39,
 Pl. III, Figs. 16-19.
16300. *Craniella hamiltonæ* Hall. Plesiotype.
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 35, Pl. III,
 Fig. 8.
16523. *Crinoid stems*. Figured (4).
 Silica shale (Dev.). Silica, Ohio.
 STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 25, Pl. I,
 Figs. 12-15.

16507. *Cyrtina hamiltonensis* Hall. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 43, Pl. III,
Figs. 27, 28.
5887. *Cyrtoceras hertzeri* Hall and Whitfield. Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
HALL AND WHITFIELD. Pal. Ohio, Vol. II, 1875, p. 150, Pl. VIII,
Figs. 7, 8.
= *Hexameroceras hertzeri*.
16273. *Cystiphyllum vesiculosum* Goldfuss. Plesiotypes (4).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 18.
16287. *Cystodictya incisurata* (Hall). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 33, Pl. III,
Figs. 5, 6.
16265. *Cytherella* (?) *bispinulatus* Stewart. Cotypes (3).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 60, Pl. V,
Figs. 18, 19.
16515. *Diaphorostoma lineatum* (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 56, Pl. V,
Fig. 11.
3082. *Diestoceras eos* (Hall and Whitfield). Holotype.
Richmond (Ord.). Near Dayton, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XX, 1924, p. 265, Pl. III,
Fig. 5.
See *Gomphoceras eos*.
16963. *Dipterus eastmani* Stauffer. Holotype.
Columbus limestone (Dev.). Whitehouse, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 196, Pl.
XVII, Figs. 14-17.
1876. *Elrodoceras* (?) *carmani* Foerste. Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIII, 1928, p. 261,
Pl. LXXI, Fig. 1.
16531. *Favosites nitella* Winchell. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 52, Pl. I, Fig. 1.
16289. *Fistulipora vesiculata* (Hall and Simpson). Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 28, Pl. II,
Figs. 3, 4.
3082. *Gomphoceras eos* Hall and Whitfield. Holotype.
Richmond (Ord.). Near Dayton, Ohio.
HALL AND WHITFIELD. Pal. Ohio, Vol. II, 1875, p. 100, Pl. III, Fig. 5.
= *Diestoceras eos*.

7304. *Graftonoceras graftenense* (Meek and Worthen). Plesiotype.
Niagaran (Sil.). Rising Sun, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXI, 1925, p. 59, Pl. XII, Figs. 3A, B.
3404. *Graftonoceras ortonii* (Meek). Holotype.
Niagaran (Sil.). Greenville, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXI, 1925, p. 61, Pl. XII, Figs. 5A, B.
See *Lituities* (?) *ortonii* Meek.
7057. *Graftonoceras ortonii* (Meek). Plesiotype.
Niagaran (Sil.). Wilmington, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXI, 1925, p. 61, Pl. XII, Figs. 4A-E.
16522. *Grammysia bisulcata* (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 50, Pl. V, Fig. 2.
16290. *Hederella canadensis* (Nicholson). Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 25, Pl. I, Figs. 16, 17.
16292. *Hederella cirrhosa* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 26, Pl. I, Fig. 18.
16293. *Hederella magna* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 26, Pl. I, Fig. 19.
16274. *Heliophyllum halli* Milne-Edwards and Haime. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 19, Pl. I, Fig. 3.
5887. *Hexameroceras hertzeri* (Hall and Whitfield). Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 375, Pl. XLIX, Figs. 3A, B.
See *Cyrtoceras hertzeri*.
16768. *Intrapora* (?) *irregularis* Stewart. Cotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 33, Pl. III, Figs. 2-4.
16538. *Isochilina scapha* Stewart. Holotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 57, Pl. I, Figs. 11, 12.

14802. *Kionoceras* sp. Figured.
(3431A). Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIII, 1928, p. 290,
Pl. LXV, Fig. 3.
14803. *Kionoceras* sp. Figured.
(3431B). Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIII, 1928, p. 290,
Pl. LXII, Fig. 6.
3160. *Kionoceras strix* (Hall and Whitfield). Plesiotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIII, 1928, p. 293,
Pl. LXVII, Fig. 1.
16533. *Leiorhynchus kelloggi* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 54, Pl. I,
Figs. 3, 4.
16260. *Leiorhynchus lucasi* Stewart. Holotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 42, Pl. III,
Figs. 25, 26.
16536. *Leperditia* (?) *subrotunda* (?) Ulrich. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 57, Pl. I, Fig. 10.
3404. *Lituites* (?) *ortoni* Meek. Holotype.
Niagaran (Sil.). Greenville, Ohio.
MEEK. Pal. Ohio, Vol. I, 1873, p. 186, Pl. XV, Fig. 4.
(*Gyroceras ortoni* at end of description.)
= *Graftonoceras ortoni*.
16139. *Modiomorpha concentrica* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 52, Pl. V,
Fig. 4.
16514. *Modiomorpha mytiloides* (Conrad) (?). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 53, Pl. V,
Fig. 5.
16267. *Monotrypella ohioensis* Stewart. Cotypes (4).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 29-30,
Pl. II, Figs. 7-10.
16294. *Monotrypella* sp. Figured.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 30, Pl. III,
Fig. 1.

16967. *Murchisonia eversolensis* Stauffer. Holotype.
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 191, Pl.
XVI, Fig. 13.
16968. *Murchisonia intermedia* Stauffer. Holotype.
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, pp. 191-192,
Pl. XVI, Fig. 91.
16969. *Murchisonia quadricarinata* Stauffer. Cotypes (2).
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 192, Pl.
XVII, Figs. 10, 11.
3405. *Ophidioceras wilmingtontense* Foerste. Holotype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXI, 1925, p. 66, Pl.
XXIV, Figs. 4A, B.
- 3423A. *Orthoceras crebescens* Hall and Whitfield. Plesiotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
HALL AND WHITFIELD. Pal. Ohio, Vol. II, 1875, p. 148, Pl. IX, Fig. 2.
= *Orthoceras whitfieldi*.
- 3423A. *Orthoceras whitfieldi* Foerste. Paratype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIII, 1928, p. 243,
Pl. L, Fig. 2.
See *Orthoceras crebescens*.
17114. *Orthophragmina meroensis* W. Berry. Cotypes (3).
Samon cgl. (Eocene). Cal Mero, Peru.
W. BERRY. Jour. Wash. Acad. Sci., Vol. XX, 1930.
16964. *Palaeoneilo (?) sanduskiensis* Stauffer. Holotype.
Delaware limestone (Dev.). Sandusky, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 190, Pl.
XVI, Figs. 7, 8.
16295. *Paleschara (?)* sp. Figured.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 34, Pl. III,
Fig. 7.
16266. *Phacops rana* var. *milleri* Stewart. Cotypes (3).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 58-60,
Pl. V, Figs. 14-17.
16502. *Pholidostrophia iowaensis* (Owen). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 36, Pl. III,
Fig. 12.

- 3145.
3148. *Phragmoceras augustum* (Newell). Plesiotypes (3).
3149. Niagaran (Sil.). Marion, Indiana.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 330.
- 7302A. *Phragmoceras auroraense* Foerste. Holotype.
- 7302B. *Phragmoceras auroraense* Foerste. Paratype.
Niagaran (Sil.). Rising Sun, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 333,
Pl. LIII, Figs. 1A, B; 2A, B.
- 14809B. *Phragmoceras auroraense* Foerste. Paratype.
- (9442B). Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 333,
Pl. LIII, Fig. 3.
14912. *Phragmoceras carmani* Foerste. Holotype.
Niagaran (Sil.). Greene Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 337,
Pl. LV, Fig. 1.
- 9442A. *Phragmoceras* cf. *colliciare* Foerste. Paratype.
Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 339,
Pl. LII, Figs. 3A, B.
3413. *Phragmoceras ellipticum* Hall and Whitfield. Holotype.
Niagaran (Sil.). Highland Co., Ohio.
HALL AND WHITFIELD. Pal. Ohio, Vol. II, 1875, p. 152, Pl. 8, Fig. 11.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 343,
Pl. L, Fig. 4.
3414. *Phragmoceras hillsboreense* Foerste. Holotype.
Niagaran (Sil.). Highland Co., Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 345,
Pl. LI, Figs. 1A, B.
5889. *Phragmoceras parvum* Hall and Whitfield. Holotype.
Niagaran (Sil.). Cedarville, Ohio.
HALL AND WHITFIELD. Pal. Ohio, Vol. II, 1875, p. 151, Pl. VIII, Fig. 10.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 351,
Pl. LV, Fig. 2.
- 9441A. *Phragmoceras wilmingtontense* Foerste. Paratype.
Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. Jour. Sci. Lab., Denison Univ., Vol. XXIV, 1929, p. 359,
Pl. LI, Figs. 2A, B.
16974. *Platyceras blatcheyi* Kindle. Plesiotype.
Columbus limestone (zone H) (Dev.). Dublin, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 192, Pl.
XVI, Figs. 11, 12.
16144. *Platyceras bucculentum* Hall. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 54, Pl. V,
Figs. 6, 7.

16516. *Platyceras carinatum* Hall. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 55, Pl. V,
Figs. 8, 9.
16517. *Platyceras rarispinum* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 56, Pl. V,
Fig. 10.
16973. *Platyostoma subglobosa* Stauffer. Holotype.
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 192, Pl.
XVI, Fig. 6.
16970. *Pleurotomaria cancellata* Stauffer. Cotypes (2).
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 193, Pl.
XVII, Figs. 1, 2.
16971. *Pleurotomaria dublinensis* Stauffer. Cotypes (3).
Columbus limestone (chert zone) (Dev.). Dublin, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 193, Pl.
XVII, Figs. 7-9.
16972. *Pleurotomaria sciotensis* Stauffer. Cotypes (2).
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 194, Pl.
XVII, Figs. 5, 6.
16544. *Productella spinulicosta* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 39.
16976. *Proetus welleri* Stauffer. Holotype.
Columbus limestone (Dev.). South of Venice, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 195, Pl.
XVII, Figs. 12, 13.
16140. *Pterinea flabellum* Conrad. Plesiotypes (4).
Silica shale (Dev.). Silica, Ohio.
HALL. Pal. N. Y. Vol., V, Pt. I, Lamellibranchiata, 1884, p. 93, Pl.
XIV, Fig. 3.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 51, Pl. V,
Fig. 3.
16296. *Reptaria stolonifera* Rolle. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 27, Pl. II,
Figs. 1, 2.
16297. *Reteporina striata* Hall. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 30, Pl. II,
Figs. 11, 12.

16503. *Rhipidomella vanuxemi* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 40, Pl. III,
Fig. 20.
16501. *Schizophoria striatula* (Schlotheim). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 40, Pl. III,
Fig. 21.
16261. *Schizophoria striatula* v. *parvum* Stewart. Holotype and
Paratype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 40, Pl. III,
Figs. 22, 23.
16510. *Spirifer audaculus* (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 44, Pl. IV,
Figs. 2, 3.
16263. *Spirifer bownockeri* Stewart. Cotypes (3).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 45-46,
Pl. IV, Figs. 4-6.
16508. *Spirifer euryteines* Owen. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 46, Pl. IV,
Figs. 7, 8.
16961. *Spirifer lucasensis* Stauffer. Cotypes (5).
Traverse formation (Dev.). Whitehouse, Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, pp. 188-189,
Pl. XVI, Figs. 1-5.
16262. *Spirifer mucronatus* v. *prolificum* Stewart. Cotypes (6).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 47-49,
Pl. IV, Figs. 9-14.
16280. *Spirorbis arkonensis* Nicholson. Plesiotype.
Stropheodonta perplana (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 21, Pl. III,
Fig. 11.
16264. *Spirorbis planum* Stewart. Holotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 21-22,
Pl. I, Figs. 7, 8.
16269. *Stictoporina granulifera* Stewart. Holotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 32, Pl. II,
Figs. 17-19.

16975. *Straparollus corrugatus* Stauffer. Holotype.
Columbus limestone (chert zone) (Dev.). Eversole Run,
Ohio.
STAUFFER. Geol. Surv. Ohio, Fourth Ser., Bull. 10, 1909, p. 194, Pl.
XVI, Fig. 10.
16298. *Streblotrypa hamiltonensis* Nicholson. Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 31, Pl. II,
Figs. 15, 16.
16299. *Stropheodonta demissa* (Conrad). Plesiotypes (2).
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 35, Pl. III,
Figs. 9, 10.
16532. *Stropheodonta demissa* var. Figured.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 53, Pl. I, Fig. 2.
16280. *Stropheodonta perplana* (Conrad). Plesiotype.
Spirorbis arkonensis Nicholson. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 36, Pl. III,
Fig. 11.
16519. *Styliolina fissurella* (Hall). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 57, Pl. V,
Fig. 12.
16520. *Tentaculites bellulus* Hall (?). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 57, Pl. V,
Fig. 13.
16534. *Terebratula mediocris* Stewart. Holotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 55, Pl. I,
Figs. 5-7.
16535. *Tornoceras uniaangularis* (Conrad). Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Ohio Jour. Sci., Vol. XXX, 1930, No. 1, p. 56, Pl. I, Figs. 8, 9.
17109. *Xiphias (?) drydeni* W. Berry. Holotype.
Calvert (?) (Miocene). Calvert Co., Maryland.
W. BERRY. Jour. Wash. Acad. Sci., Vol. XX, No. 3, Feb. 1930, p. 41,
Figs. 1, 2.
16278. *Zaphrentis prolifica* Billings. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, pp. 16-17,
Pl. I, Fig. 1.
16277. *Zaphrentis simplex* Hall. Plesiotype.
Silica shale (Dev.). Silica, Ohio.
STEWART. Geol. Surv. Ohio, Fourth Ser., Bull. 32, 1927, p. 17, Pl. I,
Fig. 1.