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FIELDIANA: GEOLOGY

A Continuation of the
GEOLOGICAL SERIES

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VOLUME 17



FIELD MUSEUM OF NATURAL HISTORY
CHICAGO, U. S. A.

134

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CATALOG OF TYPE SPECIMENS
OF CONODONTS IN THE
FIELD MUSEUM OF NATURAL HISTORY

MATTHEW H. NITECKI
AND
EUGENE S. RICHARDSON, JR.

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CATALOG OF TYPE SPECIMENS
OF CONODONTS IN THE
FIELD MUSEUM OF NATURAL HISTORY

MATTHEW H. NITECKI

Assistant Curator, Fossil Invertebrates

AND

EUGENE S. RICHARDSON, JR.

Curator, Fossil Invertebrates

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INTRODUCTION

The type specimens of conodonts listed in this catalog are preserved in the collection of fossil invertebrates in Field Museum of Natural History, where they have been placed on permanent loan by the University of Chicago (Weller, 1964). These specimens were deposited in Walker Museum of Paleontology by two authors, C. L. Cooper and Daniel Jones. Certain species names appearing in their papers are not to be found in the present list: they are omitted for various reasons. If a specimen has been lost, it cannot, of course, be included in a list of holdings; a name for which no specimen was ever designated, or one unsupported by a description, likewise has no place here.

Names are given as they were published, even if the spelling or gender may be wrong; the specimens remain types in respect of the original name, regardless of later synonymy. If a specimen has been published under two or more names, it is listed under both.

The question of the validity of publication of Jones' dissertation vexed us. If the paper was not published, the names in it are *nuda* and the pertinent specimens are not types. Fay (1952, p. 33) considered that it was not published because it was not copyrighted. Copyright, however, is not a requisite of publication. Since copies of the papers were circulated, it seems best to consider it published, in accordance with Article 8 of the International Code of Zoological Nomenclature adopted by the 15th International Congress of Zoology.

Localities are registered by number, continuing the numeration used in previous catalogs of this series.

Assemblages and unnamed conodonts are listed at the end of the catalog of types.

CATALOG OF LOCALITIES

Locality 118.—Jones collection. Jones Locality no. 1. Section of the black shale exposed at the Brick Pit of the Coffeyville Vitrified Brick and Tile Company, in the SE $\frac{1}{4}$ of sec. 20, T. 22 N., R. 14 E., Collinsville, Oklahoma.

Locality 119.—Jones collection. Jones Locality no. 2. A long narrow coal pit north and west of the town of Collinsville in the NW $\frac{1}{4}$ of sec. 20, T. 22 N., R. 14 E., Collinsville, Oklahoma.

Locality 120.—Jones collection. Jones Locality no. 3. A series of abandoned strip pits covering most of sec. 32, T. 22 N., R. 14 E., also a new pit dug in the SW $\frac{1}{4}$ of sec. 32, Collinsville, Oklahoma.

Locality 121.—Cooper collection. Arkansas Novaculite on east side of Caddo River at Caddo Gap. Secs. 18 and 19, T. 4 S., R. 24 W., Montgomery County, Ouachita Mountains, west-central Arkansas.

Locality 122.—Cooper collection. "Pre-Welden" shale, overlying Woodford beds, in the outcrop area on the north and south sides of the Franks graben in three sections: (1) sec. 27, T. 3 N., R. 6 E., (2) SE $\frac{1}{4}$ sec. 20, T. 3 N., R. 6 E., and (3) NW $\frac{1}{4}$ sec. 2, T. 2 N., R. 6 E. Near Ada, in south-central Oklahoma.

Locality 123.—Cooper collection. Woodford Formation. Sec. 3, T. 2 N., R. 6 E., Pontotoc County, Arbuckle Mountains, Oklahoma.

CATALOG OF TYPES

Ancyrodella hamata Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38089 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 39. Cited by Fay, 1952, p. 63.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 7, 13, 16B. Locality 121.

Remarks: UC 38089 consists of three rock chips from bed 13; slide bearing one chip from bed 7, one from bed 16B.

Angulodus cf. spissus Huddle, 1934

Referred specimen: the specimen UC 38801 described and illustrated by Cooper, 1939, p. 385, pl. 47, fig. 78. Cited by Fay, 1952, p. 65.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Apatognathus varians Branson and Mehl, 1934

Referred specimen: the specimen UC 38802 described and illustrated by Cooper, 1939, p. 385, pl. 47, fig. 30. Cited by Fay, 1952, p. 66.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bicarinodus bifurcatus Jones, 1941

Holotype: by original designation, the specimen UC 44672 described and illustrated by Jones, 1941, p. 40, pl. 3, fig. 10.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bicarinodus expansus Jones, 1941

Holotype: by original designation, the specimen UC 44673 described and illustrated by Jones, 1941, p. 41, pl. 3, fig. 9 (not fig. 10).

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Bicarinodus oherni Jones, 1941

Holotype: by original designation, the specimen UC 44674 (not 44672) described and illustrated by Jones, 1941, p. 40, pl. 3, figs. 8a, 8b.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bicarinodus typicus Jones, 1941 *nomen nudum*

See: *Assemblage four* Jones, 1941

Bicarinodus sp.

See: *Assemblage four* Jones, 1941

Assemblage seven Jones, 1941

Assemblage eight Jones, 1941

Bicarinodus type

See: *Assemblage four* Jones, 1941

Bicornognathus freemani Jones, 1941

Holotype: by original designation, the specimen UC 44616 described and illustrated by Jones, 1941, pp. 16–17, pl. 1, fig. 2.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bryantodus altax Jones, 1941

Holotype: by original designation, the specimen UC 44628 described and illustrated by Jones, 1941, pp. 21–22, pl. 2, fig. 12.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, p. 50, in explanation of plate 2, fig. 12, spells it *Bryantodus alta*.

Bryantodus alternatus Jones, 1941

Holotype: by original designation, the specimen UC 44626 described and illustrated by Jones, 1941, p. 21, pl. 2, fig. 9 (not fig. 8).

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Bryantodus angularis Jones, 1941

Holotype: by original designation, the specimen UC 44622 described and illustrated by Jones, 1941, p. 19, pl. 2, fig. 6.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Bryantodus angulatus Cooper, 1931

Holotype: the original specimen UC 38408 described and illustrated by Cooper, 1931, pp. 233-234, pl. 28, fig. 8. Cited by Fay, 1952, p. 69.

Referred specimens: the other specimen on slide UC 38408, described by Cooper, 1931, pp. 233-234. Cited by Fay, 1952, p. 69; the specimen UC 38062 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 12. Cited by Fay, 1952, p. 69.

Stratigraphic position: Mississippian, UC 38408 from Woodford Formation, Locality 125; UC 38062 from Arkansas Novaculite, bed 8, Locality 121.

Remarks: UC 38408 consists of two small chips on slide; a red penciled asterisk by the left-hand specimen indicates that this is the holotype.

Bryantodus colobus Cooper, 1939

Holotype: by original designation, the specimen UC 38804 described and illustrated by Cooper, 1939, p. 385, pl. 43, figs. 18, 19. Cited by Fay, 1952, p. 70.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus curtus Cooper, 1939

Holotype: by original designation, the specimen UC 38805 described and illustrated by Cooper, 1939, pl. 43, figs. 16, 17. Cited by Fay, 1952, p. 70.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus curvata Jones, 1941

Holotype: by original designation, the specimen UC 44621 described and illustrated by Jones, 1941, p. 19, pl. 2, fig. 5.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones' (1941) spelling on p. 19 is *Bryantodus cruvata*; on p. 50, *Bryantodus curvata*. We assume that "*cruvata*" is a typographic error.

Bryantodus deltoideus Cooper, 1931

Holotype: the original specimen UC 38410 described and illustrated by Cooper, 1931, p. 234, pl. 28, fig. 10. Cited by Fay, 1952, p. 71.

Referred specimen: the other specimen on slide UC 38410 described by Cooper, 1931, p. 234. Cited by Fay, 1952, p. 71.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38410 consists of two small chips on slide; holotype marked by Cooper with red asterisk.

Bryantodus equalis Cooper, 1931

Holotype: the original specimen UC 38409 described and illustrated by Cooper, 1931, p. 234, pl. 28, fig. 9. Cited by Fay, 1952, p. 71.

Referred specimens: the other two specimens on slide UC 38409 described by Cooper, 1931, p. 234. Cited by Fay, 1952, p. 71.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38409 consists of three small chips on slide. The left-hand chip is indicated by Cooper with a red asterisk, as holotype.

Bryantodus flexus Branson and Mehl, 1934

Referred specimen: the specimen UC 38803 described and illustrated by Cooper, 1939, p. 385, pl. 43, figs. 27, 28. Cited by Fay, 1952, p. 71.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus germanus Holmes, 1928

Referred specimens: the specimens UC 38063 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 13. Cited by Fay, 1952, p. 71.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 8, 13 and 15. Locality 121.

Remarks: UC 38063 consists of two small chips on slide, labeled "8" and "15," respectively; four small chips not on slide, accompanied by MS label reading "bed 13." Bed 15 is not cited in the publication for this species. *Bryantodus germanus* Holmes, 1928, is a junior homonym of *Bryantodus germanus* Ulrich and Bassler, 1926.

Bryantodus gracilis Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38064 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 14. Cited by Fay, 1952, p. 71.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 7, 8, 16A and 16B. Locality 121.

Remarks: UC 38064 consists of six small chips on slide; arrows placed by Cooper point to two of the chips, presumably those used in preparing the drawing.

Bryantodus inclinatus Holmes, 1928

Referred specimens: the specimens UC 38065 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 15. Cited by Fay, 1952, p. 72.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 7, 13, and 16B. Locality 121.

Remarks: UC 38065 consists of two small chips on slide, from beds 7 and 16B, and one small chip not on slide from bed 13.

Also see: *Bryantodus inclinatus* Jones, 1941

Bryantodus inclinatus Jones, 1941

Holotype: by original designation, the specimen UC 44620 described and illustrated by Jones, 1941, p. 18, pl. 2, fig. 4.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: *Bryantodus inclinatus* Jones, 1941, is a junior homonym of *Bryantodus inclinatus* Holmes, 1928.

Bryantodus inequalis Holmes, 1928

See: *Bryantodus inequalis* Holmes, 1928

Bryantodus inequalis Holmes, 1928

Referred specimens: the specimens UC 38066 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 16. Cited by Fay, 1952, p. 72.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 7, 8, 13, 14 and 16B. Locality 121.

Remarks: UC 38066 consists of two slides and one rock chip; one slide bearing five small rock chips, one from bed 8, three from bed 14, and one from bed 16B; slide 38066A bears one small rock chip with four different conodonts. See: *Synprioniodina alternata* Ulrich and Bassler, 1926 and *Hindeodella subtilis* Ulrich and Bassler, 1926.

This is a misspelling of *Bryantodus inequalis* Holmes, 1928.

Bryantodus macer Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 385, pl. 43, figs. 20, 21 (UC 38806), figs. 31, 32 (UC 38807). Cited by Fay, 1952, p. 72.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: Referred specimens are on one slide.

Bryantodus magnus Jones, 1941

Holotype: by original designation, the specimen UC 44618 described and illustrated by Jones, 1941, pp. 17-18, pl. 2, fig. 2.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bryantodus multidentata Jones, 1941

Holotype: by original designation, the specimen UC 44623 described and illustrated by Jones, 1941, pp. 19-20, pl. 2, fig. 7.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Bryantodus mundus Branson and Mehl, 1934

Referred specimen: the specimen UC 38808 described and illustrated by Cooper, 1939, p. 385, pl. 43 (not 46), figs. 25, 26. Cited by Fay, 1952, p. 72.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus orthus Cooper, 1939

Holotype: by original designation, the specimen UC 38809 described and illustrated by Cooper, 1939, p. 385, pl. 43, figs. 33, 34. Cited by Fay, 1952, p. 73.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus parva Jones, 1941

Holotype: by original designation, the specimen UC 44627 described and illustrated by Jones, 1941, p. 21, pl. 2, fig. 11.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bryantodus planus Branson and Mehl, 1934

Referred specimen: the specimen UC 38810 described and illustrated by Cooper, 1939, p. 385, pl. 43, figs. 29, 30. Cited by Fay, 1952, p. 73.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus pseudoalternata Jones, 1941

Holotype: the original specimen UC 44619 described and illustrated by Jones, 1941, p. 18, pl. 2, fig. 3.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Bryantodus pseudoregularis Jones, 1941

Holotype: the original specimen UC 44624 described and illustrated by Jones, 1941, p. 20, pl. 2, fig. 8.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Bryantodus scolops Cooper, 1939

Holotype: by original designation, the specimen UC 38811 described and illustrated by Cooper, 1939, pp. 385-386, pl. 43, fig. 24. Cited by Fay, 1952, p. 74.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus seminolensis Jones, 1941

Holotype: by original designation, the specimen UC 44617 described and illustrated by Jones, 1941, p. 17, pl. 2, fig. 1.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Bryantodus subequalis Cooper, 1931

Holotype: the original specimen UC 38411 described and illustrated by Cooper, 1931, p. 234, pl. 28, fig. 11. Cited by Fay, 1952, p. 75.

Referred specimen: the other specimen on slide UC 38411 described by Cooper, 1931, p. 234. Cited by Fay, 1952, p. 75.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38411 consists of two small chips on slide; left-hand specimen is indicated by Cooper with a red asterisk as holotype.

Bryantodus subradiatus Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38068 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 18. Cited by Fay, 1952, p. 75.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 13, 15 and 16A. Locality 121.

Remarks: UC 38068 consists of two rock chips from bed 13, slide bearing three rock chips from bed 15 and one from bed 16A.

Another specimen with this same number is on slide 38066A, in a small rock chip containing conodonts of several species from bed 7.

Bryantodus symmetricus Jones, 1941

Holotype: by original designation, the specimen UC 44625 described and illustrated by Jones, 1941, p. 20, pl. 2, fig. 10.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Bryantodus tylus Cooper, 1939

Holotype: by original designation, the specimen UC 38812 described and illustrated by Cooper, 1939, p. 386, pl. 43, figs. 45, 46. Cited by Fay, 1952, p. 75.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Bryantodus sp.

See: *Assemblage three* Jones, 1941

Assemblage four Jones, 1941

Assemblage six Jones, 1941

Cavusgnathus? sp.

See: *Assemblage three* Jones, 1941

Chirognathus neossa Cooper, 1939

Holotype: by original designation, the specimen UC 38813 described and illustrated by Cooper, 1939, p. 386, pl. 47, fig. 81. Cited by Fay, 1952, p. 80.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Dinodus leptus Cooper, 1939

Holotype: by original designation, the specimen UC 38815 described and illustrated by Cooper, 1939, p. 386, pl. 47, fig. 76. Cited by Fay, 1952, p. 86.

Referred specimens: other specimens described and illustrated by Cooper, 1939, p. 386, pl. 47, fig. 63 (UC 38814) and fig. 76 (UC 38816). Cited by Fay, 1952, p. 86.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide.

Diplododella bilateralis Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38082 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 32. Cited by Fay, 1952, p. 87.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 8 and 16A. Locality 121.

Remarks: UC 38082 consists of two small chips on slide.

Dryphenotus litus Cooper, 1939

Holotype: by original designation, the specimen UC 38819 described and illustrated by Cooper, 1939, p. 386, pl. 42, figs. 34, 35. Cited by Fay, 1952, p. 90.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Dryphenotus macrolobus Cooper, 1939

Holotype: by original designation, the specimen UC 38821 described and illustrated by Cooper, 1939, p. 386, pl. 41, figs. 48, 49. Cited by Fay, 1952, p. 90.

Referred specimen: the other specimen UC 38820 described and illustrated by Cooper, 1939, p. 386, pl. 42, figs. 45, 46. Cited by Fay, 1952, p. 90.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Dryphenotus oxys Cooper, 1939

Holotype: by original designation, the specimen UC 38822 described and illustrated by Cooper, 1939, p. 386, pl. 42, figs. 12, 13. Cited by Fay, 1952, p. 90.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Dryphenotus punctatus Cooper, 1939

Holotype: by original designation, the specimen UC 38818 described and illustrated by Cooper, 1939, p. 386, pl. 42, figs. 10, 11. Cited by Fay, 1952, p. 90.

Referred specimen: the other specimen UC 38817 described and illustrated by Cooper, 1939, p. 386, pl. 41, figs. 42, 43. Cited by Fay, 1952, p. 90.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Elictognathus bialata (Branson and Mehl)

Referred specimen: the specimen UC 38823 described and illustrated by Cooper, 1939, p. 387, pl. 45, figs. 1, 2. Cited by Fay, 1952, p. 90.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Euprioniodella delicatissima Jones, 1941

Holotype: by original designation, the specimen UC 44648 described and illustrated by Jones, 1941, p. 30, pl. 3, fig. 21.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Euprioniodella ? robusta Jones, 1941

Holotype: by original designation, the specimen UC 44649 described and illustrated by Jones, 1941, pp. 30-31, pl. 1, fig. 6.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Euprioniodella ? sp. ?

Referred specimen: the specimen UC 44650 described and illustrated by Jones, 1941, p. 31, pl. 1, fig. 12.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, p. 48, in caption to pl. 1, fig. 12, refers it to: *Euprionio daria* sp.? We consider this to be a typing error.

Euprioniodina acuta Jones, 1941

Holotype: by original designation, the specimen UC 44631 (not UC 44361) described and illustrated by Jones, 1941, p. 23, pl. 2, fig. 15.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Also see *Assemblage two* Jones, 1941

Euprioniodina aphanes Cooper, 1939

Holotype: by original designation, the specimen UC 38824 described and illustrated by Cooper, 1939, p. 387, pl. 46, fig. 3. Cited by Fay, 1952, p. 92.

Referred specimen: the specimen UC 38825 described and illustrated by Cooper, 1939, p. 387, pl. 46, fig. 16. Cited by Fay, 1952, p. 92.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38824 and 38825 are on one slide.

Euprioniodina ? asema Cooper, 1939

Holotype: by original designation, the specimen UC 38826 described and illustrated by Cooper, 1939, p. 387, pl. 46, fig. 4. Cited by Fay, 1952, p. 92.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Euprioniodina collinsvillensis Jones, 1941

Holotype: by original designation, the specimen UC 44636 described and illustrated by Jones, 1941, p. 25, pl. 1, fig. 9.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Euprioniodina croneisi Jones, 1941

Holotype: by original designation, the specimen UC 44633 (not UC 44363) described and illustrated by Jones, 1941, p. 24, pl. 2, fig. 17.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Euprioniodina equilateralis Jones, 1941

Holotype: by original designation, the specimen UC 44634 described and illustrated by Jones, 1941, p. 24, pl. 2, fig. 18.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Euprioniodina gracilis Branson and Mehl, 1934

Referred specimen: the specimen UC 38827 described and illustrated by Cooper, 1939, p. 387, pl. 46, fig. 14. Cited by Fay, 1952, p. 93.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Euprioniodina isa Cooper, 1939

Holotype: by original designation, the specimen UC 38828 described and illustrated by Cooper, 1939, p. 387, pl. 47, fig. 66. Cited by Fay, 1952, p. 93.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Euprioniodina lacticompressa Jones, 1941

Holotype: by original designation, the specimen UC 44629 described and illustrated by Jones, 1941, p. 22, pl. 2 (not 3), fig. 13.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Euprioniodina longicuspata Jones, 1941

Holotype: by original designation, the specimen UC 44637 described and illustrated by Jones, 1941, pp. 25-26, pl. 1, fig. 10.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: also see *Assemblage five* Jones, 1941

Euprioniodina macrodentata Cooper, 1931

Holotype: the original specimen UC 38412 described and illustrated by Cooper, 1931, pp. 234-235, pl. 28, fig. 12. Cited by Fay, 1952, p. 93.

Referred specimen: the specimen UC 38070 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 20. Cited by Fay, 1952, p. 93.

Stratigraphic position: Mississippian. Holotype: Woodford Formation, Locality 123. Referred specimen: Arkansas Novaculite, bed 16B, Locality 121.

Euprioniodina minuta Jones, 1941

Holotype: by original designation, the specimen UC 44640 described and illustrated by Jones, 1941, pp. 26-27, pl. 1, fig. 16.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Euprioniodina recta Jones, 1941

Holotype: by original designation, the specimen UC 44630 described and illustrated by Jones, 1941, pp. 22-23, pl. 2, fig. 14.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Euprioniodina scotti Jones, 1941

Holotype: by original designation, the specimen UC 44638 described and illustrated by Jones, 1941, p. 26, pl. 1, fig. 14.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Euprioniodina scotti var. **acutus** Jones, 1941

Holotype: by original designation, the specimen UC 44639 described and illustrated by Jones, 1941, p. 26, pl. 1, fig. 15.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Euprioniodina subequalis Jones, 1941

Holotype: by original designation, the specimen UC 44635 described and illustrated by Jones, 1941, pp. 24-25, pl. 2, fig. 19.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Euprioniodina sp.

Referred specimens: the specimens illustrated by Cooper, 1939, pl. 46, fig. 5 (UC 39862) and fig. 23 (UC 39878). Cited by Fay, 1952, p. 94.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: also see *Assemblage two* Jones, 1941, and *Assemblage fifteen* Jones, 1941.

Falcodus conflexus Huddle, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 387, pl. 47, fig. 52 (UC 38835), fig. 46 (UC 38834), fig. 45 (UC 38833), fig. 43 (UC 38832), fig. 42 (UC 38831), fig. 34 (UC 38830) and fig. 26 (UC 38829). Cited by Fay, 1952, p. 94.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Falcodus fragosus (Branson)

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 387, pl. 47, fig. 53 (UC 38840), fig. 35 (UC 38839), fig. 33 (UC 38838), fig. 24 (UC 38837) and fig. 17 (UC 38836). Cited by Fay, 1952, p. 95.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all referred specimens are one one slide.

Falcodus trypherus Cooper, 1939

Holotype: by original designation, the specimen UC 38841 described and illustrated by Cooper, 1939, p. 387, pl. 47, fig. 25. Cited by Fay, 1952, p. 95.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: the name *typherus* was used by Cooper in the plate legend and on the slide bearing the holotype; but *trypherus* has page precedence as the heading of the description.

Gnathodus bilineatus Roundy, 1926

Referred specimen: the specimen UC 38844 described and illustrated by Cooper, 1939, p. 388, pl. 42, figs. 59, 60. Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus isomeces Cooper, 1939

Holotype: by original designation, the specimen UC 38845 described and illustrated by Cooper, 1939, p. 388, pl. 42, figs. 61, 62. Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus lius Cooper, 1939

Holotype: by original designation, the specimen UC 38846 described and illustrated by Cooper, 1939, p. 388, pl. 42, figs. 71, 72. Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus loncotus Cooper, 1939

Holotype: by original designation, the specimen UC 38847 described and illustrated by Cooper, 1939, p. 388, pl. 42, figs. 65, 66. Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus mosquensis Pander, 1856

Referred specimens: the specimens described by Cooper, 1939, p. 388, and illustrated by him on pl. 41, figs. 30-32 (UC 38849); figs. 23-25 (UC 38848) and on pl. 42, figs. 75, 76 (UC 38850). Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38848 is on the slide with UC 38849.

Gnathodus parallelus Cooper, 1939

Holotype: by original designation, the specimen UC 38851 described and illustrated by Cooper, 1939, p. 388, pl. 42, figs. 73, 74. Cited by Fay, 1952, p. 96.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus perplexus Branson and Mehl, 1938

Referred specimens: the specimens described by Cooper, 1939, p. 388, and illustrated by him on pl. 42, figs. 49, 50 (UC 38843) and figs. 47, 48 (UC 38842). Cited by Fay, 1952, pp. 96, 97.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Gnathodus stinus Cooper, 1939

Holotype: by original designation, the specimen UC 38852 described and illustrated by Cooper, 1939, p. 388, pl. 41, figs. 40, 41. Cited by Fay, 1952, p. 97.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus texanus (Roundy)

Referred specimen: the specimen UC 38853 described and illustrated by Cooper, 1939, p. 388, pl. 41, figs. 26, 27. Cited by Fay, 1952, p. 97.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gnathodus typicus Cooper, 1939

Holotype: by original designation, the specimen UC 38854 described and illustrated by Cooper, 1939, p. 389, pl. 42, figs. 77, 78. Cited by Fay, 1952, p. 97.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Gondolella cuneiformis Jones, 1941

Holotype: by original designation, the specimen UC 44664 described and illustrated by Jones, 1941, pp. 36-37, pl. 3, fig. 25.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, p. 52, in the caption to pl. 3, fig. 25, spells it *Gondolella cuneiformix*. We assume it to be a spelling error. Also see *Assemblage two* Jones, 1941

Gondolella ovata Jones, 1941

Holotype: by original designation, the specimen UC 44665 described and illustrated by Jones, 1941, p. 37, pl. 3, figs. 26, 26a.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: see *Assemblage five* Jones, 1941

Gondolella sp.

See: *Assemblage two* Jones, 1941

Gondolella type

See: *Assemblage one* Jones, 1941

Assemblage two Jones, 1941

Assemblage five Jones, 1941

Hamulosodina bidens Cooper, 1931

Holotype: the original specimen UC 38427 described and illustrated by Cooper, 1931, p. 240, pl. 28, fig. 27. Cited by Fay, 1952, p. 99.

Referred specimen: the other specimen on slide UC 38427 described by Cooper, 1931, p. 240. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38427 consists of two small chips on slide; the holotype is identified by a red asterisk.

Hamulosodina delicatissima Jones, 1941

Holotype: by original designation, the specimen UC 44643 described and illustrated by Jones, 1941, p. 28, pl. 3, fig. 20.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Remarks: Jones, 1941, p. 52, in explanation of pl. 3, fig. 20, refers it to *Hamulosodina delicatula* Jones, 1941. We consider it to be an error of negligence.

Hamulosodina delicatissima elongata Jones, 1941

Holotype: by original designation, the specimen UC 44644 described and illustrated by Jones, 1941, pp. 28, 29, pl. 3, fig. 23.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Hamulosodina nodosa Cooper, 1931

Holotype: the original specimen UC 38429 described and illustrated by Cooper, 1931, pp. 240-241, pl. 28, fig. 29. Cited by Fay, 1952, p. 99.

Referred specimens: the specimens UC 38080 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 30. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian. Holotype: Woodford Formation. Locality 123. Referred specimens: Arkansas Novaculite, beds 7 and 14. Locality 121.

Remarks: UC 38080 consists of three small chips on slide; one from bed 7 and two from bed 14.

Hamulosodina parilis Cooper, 1931

Holotype: the original specimen UC 38425 described and illustrated by Cooper, 1931, p. 240, pl. 28, fig. 25. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Hamulosodina perdentata Cooper, 1931

Holotype: the original specimen UC 38426 described and illustrated by Cooper, 1931, p. 240, pl. 28, fig. 26. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Hamulosodina regularis Jones, 1941

Holotype: by original designation, the specimen UC 44641 described and illustrated by Jones, 1941, pp. 27-28, pl. 3, fig. 12.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Hamulosodina simplex Cooper, 1931

Holotype: the original specimen UC 38424 described and illustrated by Cooper, 1931, pp. 239-240, pl. 28, fig. 24. Cited by Fay, 1952, p. 99.

Referred specimen: the specimen UC 38081 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 31. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian. Holotype: Woodford Formation, Locality 123. Referred specimen: Arkansas Novaculite, bed 16A, Locality 121.

Hamulosodina spinosa Jones, 1941

Holotype: by original designation, the specimen UC 44642 described and illustrated by Jones, 1941, p. 28, pl. 3, fig. 16.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Hamulosodina tridens Cooper, 1931

Holotype: the original specimen UC 38423 described and illustrated by Cooper, 1931, p. 239, pl. 28, fig. 23. Cited by Fay, 1952, p. 99.

Referred specimen: the other specimen on slide UC 38423 described by Cooper, 1931, p. 239. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38423 consists of two small chips on slide; the holotype is identified by a red asterisk.

Hamulosodina unica Cooper, 1931

Holotype: the original specimen UC 38428 described and illustrated by Cooper, 1931, p. 240, pl. 28, fig. 28. Cited by Fay, 1952, p. 99.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Hamulosodina sp.

See: *Assemblage three* Jones, 1941
Assemblage four Jones, 1941
Assemblage six Jones, 1941
Assemblage seven Jones, 1941
Assemblage eight Jones, 1941
Assemblage nine Jones, 1941
Assemblage eleven Jones, 1941
Assemblage thirteen Jones, 1941

Hindeodella aculeata Huddle, 1934

Referred specimens: the specimen UC 38855 described and illustrated by Cooper, 1939, p. 389, pl. 46, fig. 36. Cited by Fay, 1952, p. 102.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Hindeodella acuta Branson and Mehl, 1934

Referred specimens: the specimens described by Cooper, 1939, p. 389, and illustrated on pl. 46, fig. 15 (UC 38856); fig. 23 (UC 38857); fig. 29 (UC 38858). Cited by Fay, 1952, p. 102.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide.

Hindeodella anomaloda Cooper, 1939

Holotype: by original designation, the specimen UC 38859 described and illustrated by Cooper, 1939, p. 389, pl. 46, fig. 27. Cited by Fay, 1952, p. 103.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Hindeodella crassidens Cooper, 1931

Holotype: the original specimen UC 38416 described and illustrated by Cooper, 1931, p. 236, pl. 28, fig. 16. Cited by Fay, 1952, p. 103.

Referred specimens: the specimens UC 38074 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 24. Cited by Fay, 1952, p. 103.

Stratigraphic position: Mississippian. Holotype: Woodford Formation, Locality 123. Referred specimens: Arkansas Novaculite, beds 7 and 8, Locality 121.

Remarks: UC 38074 consists of two small chips on slide.

Hindeodella curvidens Cooper, 1931

Holotype: the original specimen UC 38415 described and illustrated by Cooper, 1931, pp. 235-236, pl. 28, fig. 15. Cited by Fay, 1952, p. 103.

Referred specimens: the other specimen on slide UC 38415 described by Cooper, 1931, pp. 235-236. Cited by Fay, 1952, p. 103. The specimen UC 38073 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 23. Cited by Fay, 1952, p. 103.

Stratigraphic position: Mississippian. UC 38415 Woodford Formation. Locality 123; UC 38073 Arkansas Novaculite, beds 7, 13 and 14. Locality 121.

Remarks: UC 38415 consists of two small chips on slide; the holotype is marked by Cooper with a red asterisk. UC 38073 consists of a rock chip 37 mm. maximum dimension, plus a slide bearing two rock chips from bed 7, one from bed 14 and a chip from bed 13.

Hindeodella delicatula Branson and Mehl, 1934

Referred specimen: the specimen UC 38860 described and illustrated by Cooper, 1939, p. 389, pl. 46, fig. 33. Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Hindeodella echinata Branson, 1934

Referred specimens: the specimens described by Cooper, 1939, p. 389, and illustrated on pl. 47, fig. 33 (UC 38861); fig. 77 (UC 38862). Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38861 is on the same slide with UC 38862.

Hindeodella elongata Huddle, 1934

Referred specimen: the specimen UC 38863 described and illustrated by Cooper, 1939, p. 389, pl. 46, fig. 26. Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Hindeodella germana Holmes, 1928

Referred specimen: the specimen UC 38075 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 25. Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 8 and 15. Locality 121.

Remarks: UC 38075 consists of three small chips on slide: two from bed 15, and one from bed 8.

Hindeodella gladiola Branson, 1934

Referred specimens: the specimens described by Cooper, 1939, p. 389, and illustrated on pl. 46, fig. 24 (UC 38864); fig. 25 (UC 38865). Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38865 is on one slide with UC 38864.

Hindeodella hamata Branson and Mehl, 1934

Referred specimen: the specimen UC 38866 described and illustrated by Cooper, 1939, p. 389, pl. 47, figs. 79, 80. Cited by Fay, 1952, p. 104.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Hindeodella latidentata Jones, 1941

Holotype: by original designation, the specimen UC 44645 described and illustrated by Jones, 1941, p. 29, pl. 3, fig. 17.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Remarks: Jones, 1941, p. 29, refers it to pl. 3, fig. 17; however, in the caption, on p. 52, the specimen figured is identified as "*Hindeodella?* Jones sp." We assume this entry to be a typist's error.

Hindeodella lineata (Pander)

Referred specimens: the specimens described and illustrated by Cooper, 1939, pp. 389-390, pl. 46, fig. 28 (UC 38867); fig. 31 (UC 38868). Cited by Fay, 1952, p. 105.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38868 is on one slide with UC 38867.

Hindeodella macrodentata Cooper, 1931

Holotype: the original specimen UC 38422 described and illustrated by Cooper, 1931, pp. 238-239, pl. 28, fig. 22. Cited by Fay, 1952, p. 105.

Stratigraphic position: Mississippian, Woodford Formation, Locality 123.

Hindeodella mediana Cooper, 1931

Holotype: the original specimen UC 38420 described and illustrated by Cooper, 1931, p. 237, pl. 28, fig. 20. Cited by Fay, 1952, p. 105.

Stratigraphic position: Mississippian, Woodford Formation, Locality 123.

Hindeodella petila Cooper, 1931

Holotype: the original specimen UC 38421 described and illustrated by Cooper, 1931, pp. 237-238, pl. 28, fig. 21. Cited by Fay, 1952, pp. 105-106.

Referred specimen: the specimen UC 38079 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 29. Cited by Fay, 1952, pp. 105-106.

Stratigraphic position: Mississippian. Holotype: Woodford Formation, Locality 123. Referred specimen: Arkansas Novaculite, bed 13, Locality 121.

Hindeodella pumilla Cooper, 1931

Holotype: the original specimen UC 38418 described and illustrated by Cooper, 1931, pp. 236-237, pl. 28, fig. 18. Cited by Fay, 1952, p. 106.

Referred specimens: the other specimen on slide UC 38418 described by Cooper, 1931, pp. 236-237. Cited by Fay, 1952, p. 106. The specimen UC 38076 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 26. Cited by Fay, 1952, p. 106.

Stratigraphic position: Mississippian. UC 38418 from Woodford Formation, Locality 123; UC 38076 from Arkansas Novaculite, bed 8, Locality 121.

Remarks: UC 38418 consists of two small chips on slide; the holotype is indicated by a red asterisk. UC 38076 consists of four small chips on slide.

Hindeodella sinuata Jones, 1941

Holotype: by original designation, the specimen UC 44646 described and illustrated by Jones, 1941, pp. 29-30, pl. 3, fig. 18.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Hindeodella sinuata pigmea Jones, 1941

Holotype: by original designation, the specimen UC 44647 described and illustrated by Jones, 1941, p. 30, pl. 3, fig. 19.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Hindeodella subgracilis Cooper, 1931

Holotype: the original specimen UC 38419 described and illustrated by Cooper, 1931, p. 237, pl. 28, fig. 19. Cited by Fay, 1952, p. 106.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Hindeodella subtilis Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38077 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 27. Cited by Fay, 1952, p. 106.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 7, 18, 13, 14, 15, 16A and 16B. Locality 121.

Remarks: UC 38077 consists of two chips from bed 13: slide bearing two chips from bed 7 and one from bed 8. Additional specimen of this number on slide UC 38066A with *Bryantodus inequalis* Holmes, 1928.

Hindeodella subtilita Cooper, 1931

Holotype: the original specimen UC 38417 described and illustrated by Cooper, 1931, p. 236, pl. 28, fig. 17. Cited by Fay, 1952, p. 106.

Referred specimens: the other specimen on slide UC 38417 described by Cooper, 1931, p. 236. Cited by Fay, 1952, p. 106. The specimen UC 38078 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 28. Cited by Fay, 1952, p. 106.

Stratigraphic position: Mississippian UC 38417 Woodford Formation, Locality 123; UC 38078 Arkansas Novaculite, bed 15. Locality 121.

Remarks: UC 38417 consists of two small chips on slide; the holotype is indicated by Cooper with a red asterisk.

Hindeodella sp.

Referred specimens: the specimens illustrated by Cooper, 1939, pl. 46, fig. 30 (UC 39863), fig. 32 (UC 39864), fig. 37 (UC 39865), and fig. 43 (UC 39866). Cited by Fay, 1952, p. 107.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred specimens are all on one slide. Also see *Assemblage three* Jones, 1941.

Icriodus derus Cooper, 1939

Holotype: by original designation, the specimen UC 38869 described and illustrated by Cooper, 1939, p. 390, pl. 47, fig. 40. Cited by Fay, 1952, p. 110.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Icriodus tylus Cooper, 1939

Holotype: by original designation, the specimen UC 38870 described and illustrated by Cooper, 1939, p. 390, pl. 47, figs. 60, 61. Cited by Fay, 1952, p. 111.

Referred specimen: the other specimen UC 38871 described and illustrated by Cooper, 1939, p. 390, pl. 47, figs. 73, 74. Cited by Fay, 1952, p. 111.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Idiognathodus corrugatus Gunnell, 1932

Referred specimen: the specimen UC 44666 described and illustrated by Jones, 1941, p. 37, pl. 3, fig. 4.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Remarks: Jones, 1941, p. 52, in caption to pl. 3, fig. 4, spells it *Idiognathodus conugatus* Gunnell.

Ligonodina apora Cooper, 1939

Holotype: by original designation, the specimen UC 38872 described and illustrated by Cooper, 1939, p. 390, pl. 45, fig. 48. Cited by Fay, 1952, p. 116.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina arcuata (Branson and Mehl)

Referred specimen: the specimen UC 38873 described and illustrated by Cooper, 1939, p. 390, pl. 45, figs. 3, 4. Cited by Fay, 1952, p. 116.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina brevipostica Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 390, pl. 47, fig. 36 (UC 38875) and fig. 27 (UC 38874). Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: the specimens are on one slide.

Ligonodina conidens Huddle, 1934

Referred specimen: the specimen UC 38876 described and illustrated by Cooper, 1939, p. 390, pl. 45, fig. 45. Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina curvata Cooper, 1935

Holotype: by original designation, UC 38059 described and illustrated by Cooper, 1935, p. 313, pl. 27, fig. 9. Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 16A. Locality 121.

Remarks: UC 38059 consists of two small chips on slide, bearing counterpart impressions.

Ligonodina cyra Cooper, 1939

Holotype: by original designation, the specimen UC 38881 described and illustrated by Cooper, 1939, p. 390, pl. 45, fig. 59. Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina delicata Branson and Mehl, 1934

See: *Ligonodina delicatula* Branson and Mehl, 1934

Ligonodina delicatula Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 390, pl. 45, fig. 50 (UC 38877), fig. 60 (UC 38878) and fig. 61 (UC 38879). Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: the specimens are on one slide. This is misspelling of *Ligonodina delicata* Branson and Mehl, 1934.

Ligonodina flexuosa Branson and Mehl, 1934

Referred specimen: the specimen UC 38880 described and illustrated by Cooper, 1939, pp. 390–391, pl. 45, fig. 46. Cited by Fay, 1952, p. 117.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina gouldi Cooper, 1935

Holotype: by original designation, UC 38058 described and illustrated by Cooper, 1935, p. 313, pl. 27, fig. 8. Cited by Fay, 1952, p. 118.

Referred specimen: the other specimen UC 38058 described by Cooper, 1935, p. 313. Cited by Fay, 1952, p. 118.

Stratigraphic position: Mississippian, Arkansas Novaculite; holotype, bed 16A. Referred specimen, bed 13, Locality 121.

Remarks: UC 38058 consists of two small chips. The chip on slide is a holotype marked by Cooper with a red asterisk. The referred specimen is the other chip, 2 cm. greatest dimension.

Ligonodina lepta Cooper, 1939

Holotype: by original designation, the specimen UC 38882 described and illustrated by Cooper, 1939, p. 391, pl. 45, fig. 49. Cited by Fay, 1952, p. 118.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina oliga Cooper, 1939

Holotype: by original designation, the specimen UC 38883 described and illustrated by Cooper, 1939, p. 391, pl. 45, fig. 58. Cited by Fay, 1952, p. 118.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina platys Cooper, 1939

Holotype: by original designation, the specimen UC 38884 described and illustrated by Cooper, 1939, p. 391, pl. 45, fig. 47. Cited by Fay, 1952, p. 119.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina recurvata Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1934, p. 391, pl. 45, fig. 56 (UC 38885); fig. 57 (UC 38886). Cited by Fay, 1952, p. 119.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38885 and UC 38886 are on one slide.

Ligonodina styrax Cooper, 1939

Holotype: by original designation, the specimen UC 38887 described and illustrated by Cooper, 1939, p. 391, pl. 45, fig. 51. Cited by Fay, 1952, p. 119.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina transitionis (Branson and Mehl)

Referred specimen: the specimen UC 38888 described and illustrated by Cooper, 1939, p. 391, pl. 47, fig. 55. Cited by Fay, 1952, p. 119.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Ligonodina sp.

Referred specimen: the specimen UC 39877 illustrated by Cooper, 1939, pl. 47, fig. 15. Cited by Fay, 1952, p. 120.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodina angulata Cooper, 1931

Holotype: the original specimen UC 38413 described and illustrated by Cooper, 1931, p. 235, pl. 28, fig. 13. Cited by Fay, 1952, p. 121.

Referred specimen: the specimen UC 38889 described and illustrated by Cooper, 1939, p. 391, pl. 47, fig. 54. Cited by Fay, 1952, p. 121.

Stratigraphic position: Mississippian. Holotype from Woodford Formation, Locality 123. Referred specimen from "pre-Welden Shale," Locality 122.

Lonchodina curvidens Branson, 1934

Referred specimen: the specimen UC 38890 described and illustrated by Cooper, 1939, p. 391, pl. 47, fig. 67, 68. Cited by Fay, 1952, p. 122.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodina discreta Ulrich and Bassler, 1926

Referred specimens: the specimen UC 38071 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 21. Cited by Fay, 1952, p. 122. The specimens described and illustrated by Cooper, 1939, p. 391, pl. 47, figs. 50, 51 (UC 38891); figs. 71, 72 (UC 38892). Cited by Fay, 1952, p. 122.

Stratigraphic position: Mississippian: UC 38071 from Arkansas Novaculite, bed 15, Locality 121; UC 38891 and UC 38892 from "pre-Welden Shale," Locality 122.

Remarks: UC 38891 is on one slide with UC 38892.

Lonchodina equilatera Jones, 1941

Holotype: by original designation, the specimen UC 44654 described and illustrated by Jones, 1941, p. 33, pl. 1, fig. 3.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Lonchodina gracilis Jones, 1941

Holotype: by original designation, the specimen UC 44658 described and illustrated by Jones, 1941, p. 34, pl. 1, fig. 5.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Lonchodina ? horrida Jones, 1941

Holotype: by original designation, the specimen UC 44656 described and illustrated by Jones, 1941, pp. 33-34, pl. 1, fig. 7.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

***Lonchodina horrida rectus* Jones, 1941**

Holotype: by original designation, the specimen UC 44657 described and illustrated by Jones, 1941, p. 34, pl. 1, fig. 8.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

***Lonchodina irregularis* Holmes, 1928**

Referred specimen: the specimen UC 38072 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 22. Cited by Fay, 1952, p. 122.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 8. Locality 121.

***Lonchodina ligonodinoides* Jones, 1941**

Holotype: by original designation, the specimen UC 44653 described and illustrated by Jones, 1941, p. 32, pl. 1, fig. 1.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, p. 48, in caption to pl. 1, fig. 1, refers it to *Lonchodina ligonodonooides* Jones, 1941. We consider it to be an error.

Stratigraphic position: Mississippian "pre-Welden Shale." Locality 122.

***Lonchodina microcyra* Cooper, 1939**

Holotype: Cooper designated UC 38895 as holotype, but two specimens carry this number. One of these should be chosen as the holotype of the species.

Referred specimens, including holotype: the specimens described and illustrated by Cooper, 1939, p. 392, pl. 47, fig. 56 (UC 38895); fig. 57 (UC 38895); fig. 41 (UC 38894); fig. 47 (UC 38894). Cited by Fay, 1952, p. 122.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38894 and UC 38895 each include two specimens.

Lonchodina pulchra Branson and Mehl, 1934

Referred specimen: the specimen UC 38896 described and illustrated by Cooper, 1939, p. 392, pl. 47, figs. 58, 59. Cited by Fay, 1952, p. 123.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodina separata Branson and Mehl, 1934

Referred specimen: the specimen UC 38897 described and illustrated by Cooper, 1939, p. 392, pl. 47, figs. 69, 70. Cited by Fay, 1952, p. 123.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodina subarcuata Cooper, 1931

Holotype: the original specimen UC 38414 described and illustrated by Cooper, 1931, p. 235, pl. 28, fig. 14. Cited by Fay, 1952, p. 124.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Lonchodina sp.

Referred specimen: the specimen UC 39870 illustrated by Cooper, 1939, pl. 46, fig. 56. Cited by Fay, 1952, p. 124.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: also see *Assemblage one* Jones, 1941.

Lonchodus convexus ? (Pander)

Referred specimen: the specimen UC 38898 described and illustrated by Cooper, 1939, p. 392, pl. 46, fig. 35. Cited by Fay, 1952, p. 125.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

"Lonchodus curvata"

Name used by Jones, 1941, for one of the members of his *Assemblage five*.

Lonchodus deckeri Jones, 1941

Holotype: by original designation, the specimen UC 44660 described and illustrated by Jones, 1941, p. 35, pl. 1, fig. 13.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Lonchodus erectus (Holmes)

See: *Assemblage fifteen* Jones, 1941

Lonchodus inclinatus Jones, 1941

Holotype: by original designation, the specimen UC 44661 described and illustrated by Jones, 1941, p. 35, pl. 3 (not 1), fig. 22.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Lonchodus ischnus Cooper, 1939

Holotype: by original designation, the specimen UC 38899 described and illustrated by Cooper, 1939, p. 392, pl. 46, fig. 39. Cited by Fay, 1952, p. 126.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodus multidentis Jones, 1941

Holotype: by original designation, the specimen UC 44659 described and illustrated by Jones, 1941, pp. 34-35, pl. 3 (not 2), fig. 11.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Lonchodus parallelus Cooper, 1939

Holotype: by original designation, the specimen UC 38900 described and illustrated by Cooper, 1939, p. 392, pl. 46, fig. 42. Cited by Fay, 1952, p. 126.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Lonchodus simplex (Pander)

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 392, pl. 46, fig. 34 (UC 38901) and fig. 38 (UC 38902). Cited by Fay, 1952, p. 126.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38901 and UC 38902 are on one slide.

Lonchodus sp.

Referred specimens: the specimens illustrated by Cooper, 1939, pl. 46, fig. 40 (UC 39867) and fig. 41 (UC 39868). Cited by Fay, 1952, p. 127.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Also see: *Assemblage one* Jones, 1941

Assemblage two Jones, 1941

Assemblage five Jones, 1941

Assemblage ten Jones, 1941

Macropolygnathus allocota Cooper, 1939

Holotype: by original designation, the specimen UC 38904 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 53, 54. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus anameda Cooper, 1939

Holotype: by original designation, the specimen UC 38905 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 28-30. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus anodosa Cooper, 1939

Holotype: by original designation, the specimen UC 38906 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 17-19. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus anomala Cooper, 1939

Holotype: by original designation, the specimen UC 38907 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 1-3. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus bela Cooper, 1939

Holotype: by original designation, the specimen UC 38908 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 20-22. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus campsa Cooper, 1939

Holotype: by original designation, the specimen UC 38913 described and illustrated by Cooper, 1939, p. 394, pl. 42, figs. 14-16. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus curta Cooper, 1939

Holotype: by original designation, the specimen UC 38914 described and illustrated by Cooper, 1939, p. 394, pl. 43, fig. 5-7. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus diamesa Cooper, 1939

Holotype: by original designation, the specimen UC 38909 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 69, 70. Cited by Fay, 1952, p. 128.

Referred specimen: the other specimen UC 38910 described and illustrated by Cooper, 1939, p. 393, pl. 43, figs. 1, 2. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus isa Cooper, 1939

Holotype: by original designation, the specimen UC 38912 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 36-38. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus itha Cooper, 1939

Holotype: by original designation, the specimen UC 38903 described and illustrated by Cooper, 1939, p. 393, pl. 42, figs. 4-6. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus leyra Cooper, 1939

Holotype: by original designation, the specimen UC 38915 described and illustrated by Cooper, 1939, p. 394, pl. 42, figs. 39-41. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus lita Cooper, 1939

Holotype: by original designation, the specimen UC 38916 described and illustrated by Cooper, 1939, pp. 394-395, pl. 43, figs. 8, 9. Cited by Fay, 1952, p. 128.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus nodus Cooper, 1939

Holotype: by original designation, the specimen UC 38917 described and illustrated by Cooper, 1939, p. 395, pl. 42, figs. 57, 58. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus olca Cooper, 1939

Holotype: by original designation, the specimen UC 38918 described and illustrated by Cooper, 1939, p. 395, pl. 42, figs. 31-33. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus platys Cooper, 1939

Holotype: by original designation, the specimen UC 38919 described and illustrated by Cooper, 1939, p. 395, pl. 42, figs. 25-27. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus radina Cooper, 1939

Holotype: by original designation, the specimen UC 38920 described and illustrated by Cooper, 1939, pp. 395-396, pl. 42, figs. 7-9. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Macropolygnathus stena Cooper, 1939

Holotype: by original designation, the specimen UC 38921A (not UC 38921) described and illustrated by Cooper, 1939, p. 396, pl. 42, figs. 51, 52. Cited by Fay, 1952, p. 129.

Referred specimen: the other specimen UC 38921B (not UC 38921) described and illustrated by Cooper, 1939, p. 396, pl. 43, figs. 3, 4. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: in the two plate captions and on the slides bearing the specimens, Cooper used the spelling *stenna*. However, *stena*, used in the caption of the description, has page precedence.

Macropolygnathus tetrodus Cooper, 1939

Holotype: by original designation, the specimen UC 38922 described and illustrated by Cooper, 1939, p. 396, pl. 42, figs. 55, 56. Cited by Fay, 1952, p. 129.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Microcoelodus asymmetricus Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 396, pl. 46, fig. 44 (UC 38923) and fig. 67 (UC 38924). Cited by Fay, 1952, p. 130.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Microcoelodus oklahomensis Cooper, 1939

Holotype: by original designation, the specimen UC 38925 described and illustrated by Cooper, 1939, pl. 46, fig. 55. Cited by Fay, 1952, p. 130.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Microcoelodus scolops Cooper, 1939

Holotype: by original designation, the specimen UC 38926 described and illustrated by Cooper, 1939, pl. 46, fig. 57. Cited by Fay, 1952, p. 130.

Referred specimens: the other specimens described and illustrated by Cooper, 1939, pl. 46, fig. 65 (UC 38928) and fig. 58 (UC 38927). Cited by Fay, 1952, p. 130.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all three specimens are on one slide.

Neocordylodus alcus Cooper, 1939

Holotype: by original designation, the specimen UC 38938 described and illustrated by Cooper, 1939, p. 397, pl. 47, fig. 7. Cited by Fay, 1952, p. 132.

Referred specimens: the other specimens described by Cooper, 1939, p. 397, and illustrated by him on pl. 46, fig. 54 (UC 38936); pl. 47, fig. 6 (UC 38937); fig. 8 (UC 38939); fig. 9 (UC 38940); fig. 38 (UC 38941); fig. 39 (UC 38942). Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38936 is a free specimen on slide; all other specimens, including holotype, are on a separate slide.

Neocordylodus apalus Cooper, 1939

Holotype: by original designation, the specimen UC 38943 described and illustrated by Cooper, 1939, p. 397, pl. 47, fig. 10. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Neocordylodus colobus Cooper, 1939

Referred specimen: the specimen UC 38946 described and illustrated by Cooper, 1939, p. 397, pl. 47, fig. 2. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: Cooper, 1939, on p. 397 designated as holotype UC 38947, paratype UC 38946; on p. 418 in explanation of pl. 47 he reversed the numbers and spelled the species *colbus*. We consider this to be an error. The holotype UC 38947 has been missing since 1965, and UC 38946 should be recognized as holotype.

Neocordylodus cyclus Cooper, 1939

Holotype: by original designation, the specimen UC 38944 described and illustrated by Cooper, 1939, p. 397, pl. 46, fig. 52. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Neocordylodus exochus Cooper, 1939

Holotype: by original designation, the specimen UC 38945 described and illustrated by Cooper, 1939, p. 397, pl. 47, fig. 3. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Neocordylodus macrodus Cooper, 1939

Holotype: by original designation, the specimen UC 38948 described and illustrated by Cooper, 1939, p. 397, pl. 46, fig. 62. Cited by Fay, 1952, p. 132.

Referred specimen: the specimen UC 38949 described and illustrated by Cooper, 1939, pl. 47, fig. 12. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Neocordylodus orthus Cooper, 1939

Holotype: by original designation, the specimen UC 38929 described and illustrated by Cooper, 1939, p. 396, pl. 46, fig. 53. Cited by Fay, 1952, p. 132.

Referred specimens: the other specimens described by Cooper, 1939, p. 396, and illustrated by him, pl. 46, fig. 59 (UC 38930); fig. 60 (UC 38931); fig. 66 (UC 38932); fig. 72 (UC 38933); pl. 47, fig. 4 (UC 38934); fig. 14 (UC 38935). Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38934 and UC 38935 are on one slide; all other specimens are on a second slide.

Neocordylodus sp.

Referred specimens: the specimens illustrated by Cooper, 1939, pl. 46, fig. 64 (UC 39871); fig. 70 (UC 39872); fig. 73 (UC 39873); pl. 47, fig. 5 (UC 39874); fig. 11 (UC 39875); fig. 13 (UC 39876). Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: the specimens illustrated on pl. 46 are on one slide; the specimens from pl. 47 are on a separate slide.

Nodognathus campyla Cooper, 1939

Holotype: by original designation, the specimen UC 38952 described and illustrated by Cooper, 1939, pp. 397-398, pl. 40, figs. 46-48. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Nodognathus caris Cooper, 1939

Holotype: by original designation, the specimen UC 38951 described and illustrated by Cooper, 1939, p. 397, pl. 41, figs. 33-35. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Nodognathus linguifera (Branson)

Referred specimen: the specimen UC 38953 described and illustrated by Cooper, 1939, p. 398, pl. 40, figs. 56-58. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Nodognathus omphanoda Cooper, 1939

Holotype: by original designation, the specimen UC 38954 described and illustrated by Cooper, 1939, p. 398, pl. 41, figs. 11, 12. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Nodognathus spicata Cooper, 1939

Holotype: by original designation, the specimen UC 38950 described and illustrated by Cooper, 1939, p. 397, pl. 40, figs. 32-34. Cited by Fay, 1952, p. 132.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Oligodus curtus Cooper, 1939

Holotype: by original designation, the specimen UC 38955 described and illustrated by Cooper, 1939, p. 398, pl. 47, figs. 48, 49. Cited by Fay, 1952, p. 136.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Oxygonus grossus Jones, 1941

Holotype: by original designation, the specimen UC 44652 described and illustrated by Jones, 1941, p. 32, pl. 3, fig. 15.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Oxygonus multidentatus Jones, 1941

Holotype: by original designation, the specimen UC 44651 described and illustrated by Jones, 1941, pp. 31-32, pl. 3, fig. 14.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Oxygonus sp.

See: *Assemblage six* Jones, 1941

Assemblage twelve Jones, 1941

“Ozarkodina abnormis (Branson and Mehl)”

Referred specimen: the specimen UC 38957 described and illustrated by Cooper, 1939, p. 398, pl. 43, figs. 43, 44. Cited by Fay, 1952, p. 137.

Stratigraphic position: Mississippian, “pre-Welden Shale.” Locality 122.

Remarks: this species should probably be cited as *O. abnormis* Cooper, since it is clear from Cooper's reference to Branson and Mehl that he considered it to be different from their *Spathodus abnormis*, whose validity as a species he did not impugn.

Ozarkodina dera Cooper, 1939

Holotype: by original designation, the specimen UC 38956 described and illustrated by Cooper, 1939, p. 398, pl. 43, fig. 14. Cited by Fay, 1952, p. 138.

Stratigraphic position: Mississippian, “pre-Welden Shale.” Locality 122.

Ozarkodina sp.

See: *Assemblage three* Jones, 1941

Palmatodella delicatula Ulrich and Bassler, 1926

Referred specimen: the specimen UC 38083 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 33. Cited by Fay, 1952, p. 139.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 8. Locality 121.

***Palmatodella inflexa* Cooper, 1931**

Holotype: the original specimen UC 38430 described and illustrated by Cooper, 1931, p. 241, pl. 28, fig. 30. Cited by Fay, 1952, p. 139.

Referred specimens: other specimens on slide UC 38430 described by Cooper, 1931, p. 241. Cited by Fay, 1952, p. 139. The specimen UC 38084 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 34. Cited by Fay, 1952, p. 139.

Stratigraphic position: Mississippian. UC 38430 Woodford Formation, Locality 123; UC 38084 Arkansas Novaculite, bed 14, Locality 121.

Remarks: UC 38430 consists of three small chips on slide; the holotype is indicated by Cooper with a red asterisk.

***Palmatodella paridens* Huddle, 1934**

Referred specimen: the specimen UC 38958 described and illustrated by Cooper, 1939, p. 398, pl. 47, fig. 44. Cited by Fay, 1952, p. 139.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Palmatolepis elongata* Holmes, 1928**

Referred specimen: the specimen UC 38090 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 40. Cited by Fay, 1952, p. 140.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 8, 13 and 14. (Beds as cited in the paper; the specimens on the slide are labeled 8 and 4; the chips are not labeled.) Locality 121.

Remarks: UC 38090 consists of two specimens on slide and three rock chips, one of which has a red star pasted to it; the specimen on it bears the closest resemblance to the drawing.

***Palmatolepis lobatula* Ulrich and Bassler, 1926**

Referred specimen: the specimen UC 38091 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 41. Cited by Fay, 1952, p. 141.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 15. Locality 121.

***Palmatolepis ovatus* Cooper, 1935**

Holotype: by original designation, the specimen UC 38094 described and illustrated by Cooper, 1935, pp. 314-315, pl. 27, fig. 44. Cited by Fay, 1952, p. 141.

Referred specimens: the other specimens on slide UC 38094 described by Cooper, 1935, pp. 314-315. Cited by Fay, 1952, p. 141.

Stratigraphic position: Mississippian, Arkansas Novaculite, holotype from bed 15. Referred specimens from beds 15 and 16, Locality 121.

Remarks: UC 38094 consists of four small chips on slide. Cooper indicated holotype with a red asterisk. Cooper has marked the chips as 15 and 16, indicating three olive-green chips, including the type, as from bed 15 and a buff chip from 16. The text cites this species as occurring in 15 and A, so that the 16 should be taken as meaning 16A.

***Palmatolepis perlobatus* Ulrich and Bassler, 1926**

Referred specimen: the specimen UC 38092 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 42. Cited by Fay, 1952, p. 141.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 8, bed 14 and bed 15. Locality 121.

Remarks: UC 38092 consists of small chips on slide: two from bed 8; four from bed 14 and five from bed 15. *Palmatolepis perlobatus* is a misspelling of *Palmatolepis perlobata* Ulrich and Bassler, 1926.

***Palmatolepis regularis* Cooper, 1931**

Holotype: the original specimen UC 38436 described and illustrated by Cooper, 1931, p. 242, pl. 28, fig. 36. Cited by Fay, 1952, p. 142.

Referred specimens: other specimens on slide UC 38436 described by Cooper, 1931, p. 242. Cited by Fay, 1952, p. 142. The specimens UC 38093 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 43. Cited by Fay, 1952, p. 142.

Stratigraphic position: Mississippian. UC 38436 Woodford Formation, Locality 123; UC 38093 Arkansas Novaculite, beds 8 and 13, Locality 121.

Remarks: UC 38093 consists of a single rock chip, 19 mm. at greatest dimension, from bed 13, and a slide bearing small chips from bed 8.

Palmatolepis simplex Cooper, 1931

Holotype: the original specimen UC 38437 described and illustrated by Cooper, 1931, p. 243, pl. 28, fig. 37. Cited by Fay, 1952, p. 142.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: in Cooper's collection is another slide of this species, from the same collection, not numbered. Since the description refers to "the specimen," it appears that he didn't use this other slide, and may have identified it later; it is now numbered UC 51782.

Pinacodus anomius Cooper, 1939

Holotype: by original designation, the specimen UC 38960 described and illustrated by Cooper, 1939, p. 398, pl. 45, fig. 36. Cited by Fay, 1952, p. 146.

Referred specimen: the other specimen UC 38959 described and illustrated by Cooper, 1939, p. 398, pl. 45, fig. 41. Cited by Fay, 1952, p. 146.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and referred specimen are on one slide. Referred by Fay, 1952, p. 146, to *Pinacognathus* (*Pinacodus*) *anomius* (Cooper).

Pinacodus brachys Cooper, 1939

Holotype: by original designation, the specimen UC 38961 described and illustrated by Cooper, 1939, pp. 398-399, pl. 45, fig. 43. Cited by Fay, 1952, p. 146.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 146, to *Pinacognathus* (*Pinacodus*) *brachys* (Cooper).

Pinacodus profundus Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 399, pl. 45, fig. 29 (UC 38962) and fig. 35 (UC 38963). Cited by Fay, 1952, pp. 146-147.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, pp. 146-7, to *Pinacognathus* (*Pinacodus*) *profundus* (Branson and Mehl).

Pinacodus subbrevis (Ulrich and Bassler)

Referred specimen: the specimen UC 38964 described and illustrated by Cooper, 1939, p. 399, pl. 45, fig. 24. Cited by Fay, 1952, p. 147.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 147, to *Pinacognathus* (*Pinacodus*) *subbrevis* (Cooper).

Pinacodus synchus Cooper, 1939

Holotype: by original designation, the specimen UC 38965 described and illustrated by Cooper, 1939, p. 399, pl. 45, fig. 40. Cited by Fay, 1952, p. 147.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 147, to *Pinacognathus* (*Pinacodus*) *synchus* (Cooper).

Pinacognathus (Pinacodus) anomius (Cooper)

See: *Pinacodus anomius* Cooper, 1939

Pinacognathus (Pinacodus) brachys (Cooper)

See: *Pinacodus brachys* Cooper, 1939

Pinacognathus (Pinacodus) profundus (Branson and Mehl)

See: *Pinacodus profundus* Branson and Mehl, 1934

Pinacognathus (Pinacodus) subbrevis (Cooper)

See: *Pinacodus subbrevis* (Ulrich and Bassler)

Pinacognathus (Pinacodus) synchus (Cooper)

See: *Pinacodus synchus* Cooper, 1939

Polygnathellus carinatus Cooper, 1935

Holotype: by original designation, the specimen UC 38067 described and illustrated by Cooper, 1935, p. 315, pl. 27, fig. 17. Cited by Fay, 1952, p. 148.

Referred specimens: the other specimens on slide UC 38067 described by Cooper, 1935, p. 315. Cited by Fay, 1952, p. 148.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 14(?). Locality 121.

Remarks: UC 38067 consists of three chips on slide. Holotype is a small chip marked with a red asterisk. The bed is cited on p. 310 (faunal list) and p. 315 (description) as bed 14, but is marked on the slide as bed 15.

Polygnathellus parilis Cooper, 1935

Holotype: by original designation, the specimen UC 38069 described and illustrated by Cooper, 1935, p. 315, pl. 27, fig. 19. Cited by Fay, 1952, p. 148.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 16B. Locality 121.

Polygnathus adola Cooper, 1939

Holotype: by original designation, the specimen UC 38966 described and illustrated by Cooper, 1939, p. 399, pl. 39, figs. 33, 34. Cited by Fay, 1952, p. 150.

Referred specimen: the other specimen UC 38967 described and illustrated by Cooper, 1939, p. 399, pl. 39, figs. 35, 36. Cited by Fay, 1952, p. 150.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and referred specimen are on one slide.

Polygnathus angusta Branson and Mehl, 1934

Referred specimen: the specimen UC 38968 described and illustrated by Cooper, 1939, p. 399, pl. 40, figs. 13, 14. Cited by Fay, 1952, p. 150.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus anida Cooper, 1939

Holotype: by original designation, the specimen UC 38969 described and illustrated by Cooper, 1939, p. 399, pl. 39, figs. 39, 40. Cited by Fay, 1952, p. 150.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus communis Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 399, pl. 39, figs. 1, 2 (UC 38972), figs. 9, 10 (UC 38973) and figs. 23, 24 (UC 38974). Cited by Fay, 1952, p. 151.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38973, UC 38972 and UC 38974 are on one slide.

Polygnathus crassus Cooper, 1931

Holotype: the original specimen UC 38435 described and illustrated by Cooper, 1931, p. 242, pl. 28, fig. 35. Cited by Fay, 1952, p. 152.

Referred specimens: other specimens on slide UC 38435 described by Cooper, 1931, p. 242. Cited by Fay, 1952, p. 152. The specimens UC 38086 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 36. Cited by Fay, 1952, p. 152.

Stratigraphic position: Mississippian. UC 38435 Woodford Formation, Locality 123; UC 38086 Arkansas Novaculite, beds 8, 14 and 15, Locality 121.

Remarks: UC 38435 consists of small chips on slide; left-hand chip, marked with red asterisk, is the holotype; UC 38086 consists of small chips on slide; two from bed 8, one from bed 14, and two from bed 15.

Polygnathus crucifera Branson, 1934

Referred specimen: the specimen UC 38976 described and illustrated by Cooper, 1939, pp. 399-400, pl. 39, figs. 15, 16. Cited by Fay, 1952, p. 152.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus curta Cooper, 1939

Holotype: by original designation, the specimen UC 38987 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 37, 38. Cited by Fay, 1952, p. 152.

Referred specimen: the other specimen UC 38986 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 49, 50. Cited by Fay, 1952, p. 152.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus cymachila Cooper, 1939

Holotype: by original designation, the specimen UC 38977 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 17, 18. Cited by Fay, 1952, p. 152.

Referred specimen: the other specimen UC 38978 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 19, 20. Cited by Fay, 1952, p. 152.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38977 and UC 38978 are on one slide.

Polygnathus delicatula Ulrich and Bassler, 1926

Referred specimen: the specimen UC 38979 described and illustrated by Cooper, 1939, p. 400, pl. 40, figs. 37, 38. Cited by Fay, 1952, p. 153.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 153, to *Polygnathus delicatulus* Ulrich and Bassler, 1926.

Polygnathus delicatulus Ulrich and Bassler, 1926

Referred specimen: the specimen UC 38087 described and illustrated by Cooper, 1935, p. 314, pl. 27, fig. 37. Cited by Fay, 1952, p. 152.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 14.
Locality 121.

Remarks: see *Polygnathus delicatula* Ulrich and Bassler, 1926.

Polygnathus dystacta Cooper, 1939

Holotype: by original designation, the specimen UC 38980 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 41, 42. Cited by Fay, 1952, p. 154.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus exodus Cooper, 1939

Holotype: by original designation, the specimen UC 38981 described and illustrated by Cooper, 1939, p. 400, pl. 42, figs. 42-44. Cited by Fay, 1952, p. 154.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus flabella Branson and Mehl, 1938

See: *Polygnathus flabellum* Branson and Mehl, 1938

Polygnathus flabellum Branson and Mehl, 1938

Referred specimen: the specimen UC 39892 (not UC 38991) described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 13, 14. Cited by Fay, 1952, p. 154.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 154, to *Polygnathus flabella* Branson and Mehl, 1938.

Polygnathus inornata Branson, 1934

Referred specimen: the specimen UC 38982 (not UC 38983) described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 11, 12. Cited by Fay, 1952, p. 154.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus irregularis Cooper, 1939

Holotype: by original designation, the specimen UC 38984 described and illustrated by Cooper, 1939, p. 400, pl. 39, figs. 57, 58. Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus itha Cooper, 1939

Holotype: by original designation, the specimen UC 38985 described and illustrated by Cooper, 1939, pl. 39, figs. 55, 56. Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus lacinata Huddle, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 25, 26 (UC 38988) and pl. 40, figs. 3, 4 (UC 38989). Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus lita Cooper, 1939

Holotype: by original designation, the specimen UC 38990 described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 21, 22. Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus lobata Branson and Mehl, 1938

Referred specimen: the specimen UC 38983 described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 29, 30. Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus longipostica Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 31, 32 (UC 38991) and figs. 43, 44 (UC 38992). Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122

Polygnathus macra Cooper, 1939

Holotype: by original designation, the specimen UC 38995 described and illustrated by Cooper, 1939, p. 401, pl. 40, figs. 15, 16. Cited by Fay, 1952, p. 155.

Referred specimen: the other specimen UC 38994 described and illustrated by Cooper, 1939, p. 401, pl. 40, figs. 7, 8. Cited by Fay, 1952, p. 155.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 38995 and UC 38994 are on one slide.

Polygnathus marginata Branson and Mehl, 1934

Referred specimen: the specimen UC 38996 described and illustrated by Cooper, 1939, p. 401, pl. 41, figs. 15, 16. Cited by Fay, 1952, pp. 155-156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus omala Cooper, 1939

Holotype: by original designation, the specimen UC 38997 described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 71, 72. Cited by Fay, 1952, p. 156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus ortha Cooper, 1939

Holotype: by original designation, the specimen UC 38998 described and illustrated by Cooper, 1939, p. 401, pl. 39, figs. 3, 4. Cited by Fay, 1952, p. 156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus ousnodus Cooper, 1939

Holotype: by original designation, the specimen UC 38999 described and illustrated by Cooper, 1939, p. 402, pl. 40, figs. 11, 12. Cited by Fay, 1952, p. 156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus oxys Cooper, 1939

Holotype: by original designation, the specimen UC 39000 described and illustrated by Cooper, 1939, p. 402, pl. 39, figs. 53, 54. Cited by Fay, 1952, p. 156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus pachus Cooper, 1939

Holotype: by original designation, the specimen UC 38970 described and illustrated by Cooper, 1939, p. 402, pl. 40, figs. 39-41. Cited by Fay, 1952, p. 156.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus pennatulus Ulrich and Bassler, 1926

Referred specimen: the specimen UC 38088 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 38. Cited by Fay, 1952, p. 157.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 13, 15, 16A and 16B. Locality 121.

Remarks: UC 38088 consists of twelve rock chips from bed 13; slide bearing five chips from bed 15, four from 16A and two from 16B.

Polygnathus permaginata Branson, 1934

Referred specimen: the specimen UC 39002 described and illustrated by Cooper, 1939, p. 402, pl. 40, figs. 61, 62. Cited by Fay, 1952, p. 158.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus perplana Branson, 1934

Referred specimen: the specimen UC 39003 described and illustrated by Cooper, 1939, pp. 402-403, pl. 39, figs. 77, 78. Cited by Fay, 1952, p. 158.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus scapha Huddle, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 403, pl. 40, figs. 17, 18 (UC 39005), figs. 19, 20 (UC 39006) and figs. 28, 29 (UC 39007). Cited by Fay, 1952, p. 159.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus scobiniformis Branson, 1934

Referred specimens: the specimens UC 39008 and UC 39009 described and illustrated by Cooper, 1939, p. 403, pl. 39, figs. 45-48. Cited by Fay, 1952, p. 159.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 39008 and UC 39009 are on one slide.

Polygnathus semicostata Branson and Mehl, 1934

See: *Polygnathus semicostatus* Branson and Mehl, 1934

Polygnathus semicostatus Branson and Mehl, 1934

Referred specimen: the specimen UC 39011 described and illustrated by Cooper, 1939, pp. 403-404, pl. 39, figs. 27, 28. Cited by Fay, 1952, p. 159.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: the name on the slide, the name as cited by Cooper in reference to Branson and Mehl, and as cited in caption of figures is *semicostata*. The form above appears in the text at the head of the text paragraph.

Polygnathus spicata Branson, 1934

Referred specimen: the specimen UC 39012 described and illustrated by Cooper, 1939, p. 404, pl. 39, figs. 67, 68. Cited by Fay, 1952, p. 160.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus subserrata Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 404, pl. 39, figs. 51, 52 (UC 39013), figs. 65, 66 (UC 39014), figs. 75, 76 (UC 39015); pl. 40, figs. 1, 2 (UC 39016), figs. 9, 10 (UC 39017) and figs. 42, 43 (UC 39018). Cited by Fay, 1952, p. 160.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 39013, UC 39014 and UC 39015 are one slide; UC 39016, UC 39017 and UC 39018 are on a different slide.

Polygnathus surodus Cooper, 1939

Holotype: by original designation, the specimen UC 39019 described and illustrated by Cooper, 1939, p. 404, pl. 39, figs. 7, 8. Cited by Fay, 1952, p. 160.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Polygnathus symmetrica Branson, 1934

See: *Polygnathus symmetrica* Cooper, 1939

Polygnathus symmetrica Cooper, 1939

Holotype: by original designation, the specimen UC 39020 described and illustrated by Cooper, 1939, p. 404, pl. 41, figs. 50, 51. Cited by Fay, 1952, p. 160.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: *Polygnathus symmetrica* Cooper, 1939, is a homonym of *Polygnathus symmetrica* Branson, 1934.

***Polygnathus toxophora* Cooper, 1939**

Holotype: by original designation, the specimen UC 39021 described and illustrated by Cooper, 1939, p. 404, pl. 39, figs. 69, 70. Cited by Fay, 1952, p. 160.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Polygnathus tridenticulata* Cooper, 1931**

Holotype: the original specimen UC 38434 described and illustrated by Cooper, 1931, p. 242, pl. 28, fig. 34. Cited by Fay, 1952, p. 161.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

***Prioniodella acidentata* Cooper, 1931**

Holotype: the original specimen UC 38406 described and illustrated by Cooper, 1931, p. 233, pl. 28, fig. 6. Cited by Fay, 1952, p. 163.

Referred specimens: the other specimen on slide UC 38406 described by Cooper, 1931, p. 233. Cited by Fay, 1952, p. 163. The specimen UC 38061 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 11. Cited by Fay, 1952, p. 163.

Stratigraphic position: Mississippian. UC 38406 Woodford Formation, Locality 123; UC 38061 Arkansas Novaculite, bed 16A, Locality 121.

Remarks: UC 38406 consists of two small chips on slide; a red asterisk by the left specimen indicates that it is the holotype.

***Prioniodella curvata* Cooper, 1931**

Holotype: the original specimen UC 38405 described and illustrated by Cooper, 1931, p. 233, pl. 28, fig. 5. Cited by Fay, 1952, p. 163.

Referred specimens: other specimens on slide UC 38405 described by Cooper, 1931, p. 233. Cited by Fay, 1952, p. 163.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: UC 38405 consists of small chip on slide with three other chips (referred specimens); the holotype is identified by a red asterisk.

Prioniodella gracilis Ulrich and Bassler, 1926

Referred specimen: the specimen UC 38060 described and illustrated by Cooper, 1935, p. 313, pl. 27, fig. 10. Cited by Fay, 1952, p. 163.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 14.
Locality 121.

Prioniodella megastylus Cooper, 1931

Holotype: the original specimen UC 38407 described and illustrated by Cooper, 1931, p. 233, pl. 28, fig. 7. Cited by Fay, 1952, p. 164.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Prioniodus alabamensis Holmes, 1928

Referred specimen: the specimen UC 38051 described and illustrated by Cooper, 1935, p. 311, pl. 27, fig. 1. Cited by Fay, 1952, p. 167.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 15.
Locality 121.

Remarks: UC 38051 consists of two small chips on slide: arrow pointing to one chip presumably indicates figured specimen.

Prioniodus alatoides Holmes, 1928

Referred specimens: the specimens UC 38052 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 2. Cited by Fay, 1952, p. 167.

Stratigraphic position: Mississippian, Arkansas Novaculite, beds 8, 15 and 16A. Locality 121.

Remarks: UC 38052 consists of three chips on one slide; the right-hand chip, from bed 16A, is the one illustrated.

Prioniodus alatoideus Cooper, 1931

Holotype: the original specimen UC 38401 described and illustrated by Cooper, 1931, p. 232, pl. 28, fig. 1. Cited by Fay, 1952, p. 167.

Referred specimens: the specimens UC 38053 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 3. Cited by Fay, 1952,

p. 167. The specimens described and illustrated by Cooper, 1939, p. 404, pl. 45, fig. 62 (UC 39023) and pl. 46, fig. 19 (UC 39024). Cited by Fay, 1952, p. 167.

Stratigraphic position: Mississippian. UC 38401 from Woodford Formation, Locality 123; UC 38053 from Arkansas Novaculite, beds 14 and 16A, Locality 121; and UC 39023 and UC 39024 from "pre-Welden Shale," Locality 122.

Prioniodus alatus Hinde, 1879

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 404, pl. 45, fig. 55 (UC 39025); pl. 46, fig. 6 (UC 39026) and pl. 46, fig. 8 (UC 39027). Cited by Fay, 1952, p. 168.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus arcuatus Cooper, 1931

Holotype: the original specimen UC 38403 described and illustrated by Cooper, 1931, p. 232, pl. 28, fig. 3. Cited by Fay, 1952, p. 168.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Prioniodus barbatus Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 17 (UC 39028); fig. 18 (UC 39029). Cited by Fay, 1952, p. 168.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Prioniodus choneutus Cooper, 1939

Holotype: by original designation, the specimen UC 39030 described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 1. Cited by Fay, 1952, p. 169.

Referred specimen: the other specimen UC 39031 described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 2. Cited by Fay, 1952, p. 169.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide.

Prioniodus concavus Ulrich and Bassler, 1926

Referred specimen: the specimen UC 39032 described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 12. Cited by Fay, 1952, p. 169.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus cultratus Ulrich and Bassler, 1926

See: *Prioniodus culturatus* Ulrich and Bassler, 1926

Prioniodus culturatus Ulrich and Bassler, 1926

Referred specimens: the specimen UC 38054 cited and illustrated by Cooper, 1935, p. 310, pl. 27, fig. 4. Cited by Fay, 1952, p. 170. The specimen UC 39033 (not UC 39035) described and illustrated by Cooper, 1939, p. 405, pl. 45, fig. 64. Cited by Fay, 1952, p. 170.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 8, Locality 121 (UC 38054) and "pre-Welden Shale," Locality 122 (UC 39033).

Remarks: referred by Fay, 1952, p. 170, to *Prioniodus culturatus* Ulrich and Bassler.

Prioniodus curvatus Cooper, 1935

Holotype: by original designation, the specimen UC 38055A described and illustrated by Cooper, 1935, pp. 311-313, pl. 27, fig. 5. Cited by Fay, 1952, p. 170.

Referred specimens: the other specimens UC 38055B and UC 38055C described by Cooper, 1935, pp. 311-313. Cited by Fay, 1952, p. 170.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 16A. Locality 121.

Remarks: UC 38055A and UC 38055B are together on one slide. *Prioniodus curvatus* Cooper, 1935, is a homonym of *Prioniodus curvatus* Smith, 1907.

Prioniodus curvatus Smith, 1907

See: *Prioniodus curvatus* Cooper, 1935

Prioniodus englyphus Cooper, 1939

Holotype: by original designation, the specimen UC 39035 described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 13. Cited by Fay, 1952, p. 171.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus leyrus Cooper, 1939

Holotype: by original designation, the specimen UC 39036 described and illustrated by Cooper, 1939, p. 405, pl. 45, fig. 54. Cited by Fay, 1952, p. 172.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus macrocornatus Cooper, 1931

Holotype: the original specimen UC 38402 described and illustrated by Cooper, 1931, p. 232, pl. 28, fig. 2. Cited by Fay, 1952, p. 172.

Stratigraphic position: Woodford Formation. Locality 123.

Prioniodus magnus Cooper, 1939

Holotype: by original designation, the specimen UC 39034 described and illustrated by Cooper, 1939, p. 405, pl. 47, fig. 64. Cited by Fay, 1952, p. 172.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus mutabilis Branson and Mehl, 1934

Referred specimen: the specimen UC 39037 described and illustrated by Cooper, 1939, p. 405, pl. 45, fig. 52. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus obtusidens Cooper, 1935

Holotype: by original designation, the specimen UC 38056 described and illustrated by Cooper, 1935, p. 313, pl. 27, fig. 6. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 13. Locality 121.

Remarks: UC 38056 consists of a small chip, 2.4 cm. greatest length; specimen is circled. The illustration does not fairly represent the specimen, but it is sufficiently similar to make it likely that this is the intended specimen. The specimen was not numbered prior to July, 1965, but remained associated with Cooper's MS label.

Prioniodus obtusus Bryant, 1921

See: *Prioniodus obtusus* Cooper, 1931

Prioniodus obtusus Cooper, 1931

Holotype: the original specimen UC 38404 described and illustrated by Cooper, 1931, pp. 232-233, pl. 28, fig. 4. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Remarks: *Prioniodus obtusus* Cooper, 1931, is a homonym of *Prioniodus obtusus* Bryant, 1921.

Prioniodus oligus Cooper, 1939

Holotype: by original designation, the specimen UC 39041 described and illustrated by Cooper, 1939, p. 405, pl. 46, fig. 63. Cited by Fay, 1952, p. 173.

Referred specimens: the other specimens described and illustrated by Cooper, 1939, p. 405, pl. 46, figs. 9-11 (UC 39038, UC 39039 and UC 39040); pl. 47, figs. 20, 21 (UC 39043 and UC 39044). Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 39038, UC 39039, UC 39040 and UC 39041 are on one slide. UC 39043 and UC 39044 are on another slide.

Prioniodus orthus Cooper, 1939

Holotype: by original designation, the specimen UC 39047 described and illustrated by Cooper, 1939, p. 405, pl. 45, fig. 53. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus parvus Cooper, 1935

Holotype: by original designation, the specimen UC 38057 described and illustrated by Cooper, 1935, p. 313, pl. 27, fig. 7. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, Arkansas Novaculite. Locality 121.

Remarks: UC 38057 consists of a small chip of rock, 2.9 cm. greatest dimension; the specimen is ringed. Cooper did not number the specimen, but it was associated with his MS label. In our opinion the illustration is not correct, but is near enough to warrant concluding that this is the intended specimen.

Prioniodus peculiaris Branson and Mehl, 1934

Referred specimen: the specimen UC 39045 described and illustrated by Cooper, 1939, p. 406, pl. 45, fig. 63. Cited by Fay, 1952, p. 173.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus peracutus Hinde, 1900

Referred specimen: the specimen UC 39046 described and illustrated by Cooper, 1939, p. 406, pl. 46, fig. 7. Cited by Fay, 1952, p. 174.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Prioniodus sp.

Referred specimen: the specimen UC 39869 figured by Cooper, 1939, pl. 46, fig. 51. Cited by Fay, 1952, p. 177.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: also see *Assemblage nine* Jones, 1941.

Pseudopolygnathus apetodus Cooper, 1939

Holotype: by original designation, the specimen UC 39049 described and illustrated by Cooper, 1939, p. 406, pl. 40, figs. 65-67. Cited by Fay, 1952, p. 177.

Referred specimen: the other specimen described and illustrated by Cooper, 1939, p. 406, pl. 40, figs. 63, 64. Cited by Fay, 1952, p. 177.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide, with one number.

Pseudopolygnathus asymmetrica Branson, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, pp. 406-407, pl. 40, figs. 23, 24 (UC 39050), figs. 59, 60 (UC 39051) and pl. 41, figs. 13, 14 (UC 39052). Cited by Fay, 1952, p. 177.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 39050 and UC 39051 are on one slide.

Pseudopolygnathus crenulata Branson, 1934

Referred specimen: the specimen UC 39053 described and illustrated by Cooper, 1939, p. 407, pl. 40, figs. 25-27. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pseudopolygnathus cyclotelum Cooper, 1939

Holotype: by original designation, the specimen UC 39054 described and illustrated by Cooper, 1939, p. 407, pl. 39, figs. 61, 62. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Pseudopolygnathus distorta* Branson, 1934**

Referred specimen: the specimen UC 39055 described and illustrated by Cooper, 1939, pp. 407-408, pl. 40, figs. 49, 50. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Pseudopolygnathus exotyta* Cooper, 1939**

Holotype: by original designation, the specimen UC 39056 described and illustrated by Cooper, 1939, p. 408, pl. 42, figs. 23, 24. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Pseudopolygnathus fusiformis* Branson and Mehl, 1934**

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 408, pl. 43, figs. 53, 54 (UC 39058) and pl. 39, figs. 63, 64 (UC 39057). Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

***Pseudopolygnathus irregularis* Branson, 1934**

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 408, pl. 40, figs. 21, 22 (UC 39059) and figs. 35, 36 (UC 39060). Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: UC 39059 and UC 39060 are on one slide.

***Pseudopolygnathus lobata* Branson, 1934**

Referred specimen: the specimen UC 39061 described and illustrated by Cooper, 1939, p. 408, pl. 40, figs. 54, 55. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pseudopolygnathus prima Branson and Mehl, 1934

Referred specimen: the specimen UC 39062 described and illustrated by Cooper, 1939, p. 408, pl. 40, figs. 30, 31. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pseudopolygnathus projecta Branson, 1934

Referred specimen: the specimen UC 39063 described and illustrated by Cooper, 1939, p. 408, pl. 40, figs. 51-53. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pseudopolygnathus stina Cooper, 1939

Holotype: by original designation, the specimen UC 39064 described and illustrated by Cooper, 1939, p. 408, pl. 39, figs. 59, 60. Cited by Fay, 1952, p. 178.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pseudopolygnathus varicostata Branson, 1934

Referred specimen: the specimen UC 39065 described and illustrated by Cooper, 1939, pp. 408-409, pl. 40, figs. 44, 45. Cited by Fay, 1952, p. 179.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pteroconus ? bicyrus Cooper, 1939

Holotype: by original designation, the specimen UC 39066 described and illustrated by Cooper, 1939, p. 409, pl. 46, fig. 68. Cited by Fay, 1952, p. 179.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Pteroconus ? neossus Cooper, 1939

Holotype: by original designation, the specimen UC 39067 described and illustrated by Cooper, 1939, p. 409, pl. 46, fig. 61. Cited by Fay, 1952, p. 179.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Siphonodella (Siphonognathus) crenulata (Cooper)

See: *Siphonognathus crenulata* Cooper, 1939

Siphonodella (Siphonognathus) isolopha (Cooper)

See: *Siphonognathus isolopha* Cooper, 1939

Siphonodella (Siphonognathus) isosticha (Cooper)

See: *Siphonognathus isosticha* Cooper, 1939

Siphonodella (Siphonognathus) lobata (Branson and Mehl)

See: *Siphonognathus lobata* Branson and Mehl, 1934

Siphonodella (Siphonognathus) newalbanyensis (Cooper)

See: *Siphonognathus newalbanyensis* (Huddle)

Siphonodella (Siphonognathus) perlobata (Cooper)

See: *Siphonognathus perlobata* Cooper, 1939

Siphonodella (Siphonognathus) quadruplicata (Branson and Mehl)

See: *Siphonognathus quadruplicata* Branson and Mehl, 1934

Siphonodella (Siphonognathus) sexplicata (Branson and Mehl)

See: *Siphonognathus sexplicata* Branson and Mehl, 1934

Siphonognathus crenulata Cooper, 1939

Holotype: by original designation, the specimen UC 39068 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 1, 2. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 182, to *Siphonodella (Siphonognathus) crenulata* (Cooper).

Siphonognathus isolopha Cooper, 1939

Holotype: by original designation, the specimen UC 39069 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 5, 6. Cited by Fay, 1952, p. 182.

Referred specimen: the other specimen described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 19, 20. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide. Referred by Fay, 1952, p. 182, to *Siphonodella* (*Siphonognathus*) *isolopha* (Cooper).

Siphonognathus isosticha Cooper, 1939

Holotype: by original designation, the specimen UC 38975 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 9, 10. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 182, to *Siphonodella* (*Siphonognathus*) *isosticha* (Cooper).

Siphonognathus lobata Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 36, 37 (UC 39071) and figs. 46, 47 (UC 39072). Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide. Referred by Fay, 1952, p. 182, to *Siphonodella* (*Siphonognathus*) *lobata* (Branson and Mehl).

Siphonognathus newalbanyensis (Huddle)

Referred specimen: the specimen UC 39073 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 21, 22. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 182, to *Siphonodella* (*Siphonognathus*) *newalbanyensis* (Cooper).

***Siphonognathus perlobata* Cooper, 1939**

Holotype: by original designation, the specimen UC 39074 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 28, 29. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 182, to *Siphonodella* (*Siphonognathus*) *perlobata* (Cooper).

***Siphonognathus quadruplicata* Branson and Mehl, 1934**

Referred specimen: the specimen UC 39075 described and illustrated by Cooper, 1939, p. 409, pl. 41, figs. 44, 45. Cited by Fay, 1952, p. 182.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, to *Siphonodella* (*Siphonognathus*) *quadruplicata* (Branson and Mehl).

***Siphonognathus sexplicata* Branson and Mehl, 1934**

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 410, pl. 41, figs. 3, 4 (UC 39076); figs. 7, 8 (UC 39077) and figs. 38, 39 (UC 39078). Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide. Referred by Fay, 1952, p. 183, to *Siphonodella* (*Siphonognathus*) *sexplicata* (Branson and Mehl).

***Solenodella* (*Solenognathus*) *amphelicta* (Cooper)**

See: *Solenognathus amphelicta* Cooper, 1939

***Solenodella* (*Solenognathus*) *anida* (Cooper)**

See: *Solenognathus anida*, Cooper, 1939

Solenodella (Solenognathus) anomala (Cooper)

See: *Solenognathus anomala* Cooper, 1939

Solenodella (Solenognathus) anomalodus (Cooper)

See: *Solenognathus anomalodus* Cooper, 1939

Solenodella (Solenognathus) araiia (Cooper)

See: *Solenognathus araiia* Cooper, 1939

Solenodella (Solenognathus) bidentata (Cooper)

See: *Solenognathus bidentata* Cooper, 1939

Solenodella (Solenognathus) camura (Cooper)

See: *Solenognathus camura* (Huddle)

Solenodella (Solenognathus) carinata (Cooper)

See: *Solenognathus carinata* (Cooper)

Solenodella (Solenognathus) costata (Branson)

See: *Solenognathus costata* Branson, 1934

Solenodella (Solenognathus) curta (Cooper)

See: *Solenognathus curta* Cooper, 1939

Solenodella (Solenognathus) dichia (Cooper)

See: *Solenognathus dichia* Cooper, 1939

Solenodella (Solenognathus) dicrocheila (Branson)

See: *Solenognathus dicrocheila* Branson, 1934

Solenodella (Solenognathus) eura (Cooper)

See: *Solenognathus eura* Cooper, 1939

Solenodella (Solenognathus) eurynota (Cooper)

See: *Solenognathus eurynota* Cooper, 1939

Solenodella (Solenognathus) fulcrata (Branson and Mehl)

See: *Solenognathus fulcra* Branson and Mehl, 1934

Solenodella (Solenognathus) isomeces (Cooper)

See: *Solenognathus isomeces* Cooper, 1939

Solenodella (Solenognathus) lacerata (Branson and Mehl)

See: *Solenognathus lacerata* Branson and Mehl, 1934

Solenodella (Solenognathus) macra (Cooper)

See: *Solenognathus macra* Cooper, 1939

Solenodella (Solenognathus) micra (Cooper)

See: *Solenognathus micra* Cooper, 1939

Solenodella (Solenognathus) oliga (Cooper)

See: *Solenognathus oliga* Cooper, 1939

Solenodella (Solenognathus) pecta (Cooper)

See: *Solenognathus pecta* Cooper, 1939

Solenodella (Solenognathus) plecta (Cooper)

See: *Solenognathus plecta* Cooper, 1939

Solenodella (Solenognathus) syntyla (Cooper)

See: *Solenognathus syntyla* Cooper, 1939

Solenodella (Solenognathus) tabulata (Branson and Mehl)

See: *Solenognathus tabulata* Branson and Mehl, 1934

Solenodella (Solenognathus) tenera (Branson)

See: *Solenognathus tenera* Branson, 1934

Solenodella (Solenognathus) trinodus (Cooper)

See: *Solenognathus trinodus* Cooper, 1939

Solenodella (Solenognathus) tyla (Cooper)

See: *Solenognathus tyla* Cooper, 1939

Solenodella (Solenognathus) typica (Cooper)

See: *Solenognathus typica* Cooper, 1939

Solenognathus amphelicta Cooper, 1939

Holotype: by original designation, the specimen UC 39079 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 10-12. Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 183, to *Solenodella (Solenognathus) amphelicta* (Cooper).

Solenognathus anida Cooper, 1939

Holotype: by original designation, the specimen UC 39080 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 46-48. Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 183, to *Solenodella (Solenognathus) anida* (Cooper).

Solenognathus anomala Cooper, 1939

Holotype: by original designation, the specimen UC 39082 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 15-17. Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 183, to *Solenodella (Solenognathus) anomala* (Cooper)

Solenognathus anomalodus Cooper, 1939

Holotype: by original designation, the specimen UC 39081 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 27-29. Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 183, to *Solenodella (Solenognathus) anomalodus* (Cooper).

Solenognathus araiia Cooper, 1939

Holotype: by original designation, the specimen UC 39083 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 31, 32. Cited by Fay, 1952, p. 183.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 183, to *Solenodella* (*Solenognathus*) *araiia* (Cooper).

Solenognathus bidentata Cooper, 1939

Holotype: by original designation, the specimen UC 39084 described and illustrated by Cooper, 1939, p. 410, pl. 45, figs. 9, 10. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *bidentata* (Cooper).

Solenognathus camura (Huddle)

Referred specimen: the specimen UC 39085 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 58-60. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *camura* (Cooper).

Solenognathus carinata (Cooper)

Referred specimen: the specimen UC 39086 described and illustrated by Cooper, 1939, p. 410, pl. 43, figs. 55-57. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *carinata* (Cooper).

Solenognathus costata Branson, 1934

Referred specimen: the specimen UC 39882 described and illustrated by Cooper, 1939, p. 410, pl. 44, figs. 33-35. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) costata* (Branson).

Solenognathus curta Cooper, 1939

Holotype: by original designation, the specimen UC 39093 described and illustrated by Cooper, 1939, p. 411, pl. 45, figs. 5, 6. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) curta* (Cooper).

Solenognathus dica Cooper, 1939

Holotype: by original designation, the specimen UC 39087 described and illustrated by Cooper, 1939, p. 411, pl. 44, figs. 70-72. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) dica* (Cooper).

Solenognathus dicrocheila Branson, 1934

Referred specimen: the specimen UC 39088 described and illustrated by Cooper, 1939, p. 411, pl. 45, figs. 7, 8. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) dicrocheila* (Branson).

Solenognathus eura Cooper, 1939

Holotype: by original designation, the specimen UC 39089 described and illustrated by Cooper, 1939, p. 411, pl. 44, figs. 7-9. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *eira* (Cooper).

Solenognathus eurynota Cooper, 1939

Holotype: by original designation, the specimen UC 39090 described and illustrated by Cooper, 1939, p. 411, pl. 44, figs. 55-57. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *eurynota* (Cooper).

Solenognathus fulcra Branson and Mehl, 1934

Referred specimen: the specimen UC 39091 described and illustrated by Cooper, 1939, p. 411, pl. 44, figs. 61-63. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: Cooper, 1939, p. 420, spells it *Solenognathus fulcrum* Branson and Mehl. Referred by Fay, 1952, p. 184, to *Solenodella* (*Solenognathus*) *fulcrata* (Branson and Mehl).

Solenognathus fulcrum Branson and Mehl, 1934

See: *Solenognathus fulcra* Branson and Mehl, 1934

Solenognathus isomeces Cooper, 1939

Holotype: by original designation, the specimen UC 39092 described and illustrated by Cooper, 1939, p. 411, pl. 44, figs. 4-6. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) isomeces* (Cooper).

Solenognathus lacerata Branson and Mehl, 1934

Referred specimen: the specimen UC 39094 described and illustrated by Cooper, 1939, p. 411, pl. 44, fig. 30. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) lacerata* (Branson and Mehl).

Solenognathus macra Cooper, 1939

Holotype: by original designation, the specimen UC 39095 described and illustrated by Cooper, 1939, pp. 411-412, pl. 44, figs. 13, 14. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) macra* (Cooper).

Solenognathus micra Cooper, 1939

Holotype: by original designation, the specimen UC 39096 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 40, 41. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) micra* (Cooper).

Solenognathus oliga Cooper, 1939

Holotype: by original designation, the specimen UC 39097 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 21-23. Cited by Fay, 1952, p. 184.

Referred specimen: the other specimen UC 39098 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 52-54. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and referred specimen are on one slide. Referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) oliga* (Cooper).

Solenognathus pecta Cooper, 1939

Holotype: by original designation, the specimen UC 39099 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 1-3. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) pecta* Cooper.

Solenognathus plecta Cooper, 1939

Holotype: by original designation, the specimen UC 39100 described and illustrated by Cooper, 1939, p. 412, pl. 43, figs. 47-49. Cited by Fay, 1952, p. 184.

Referred specimens: the other specimens described and illustrated by Cooper, 1939, p. 412, pl. 43, figs. 50-52 (UC 39801), and figs. 58-60 (UC 39802). Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and paratypes are on one slide. Referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) plecta* (Cooper).

Solenognathus syntyla Cooper, 1939

Holotype: by original designation, the specimen UC 39803 (not UC 39083) described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 38, 39. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) syntyla* (Cooper).

Solenognathus tabulata Branson and Mehl, 1934

Referred specimen: the specimen UC 39804 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 64-66. Cited by Fay, 1952, p. 184.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) tabulata* (Branson and Mehl).

Solenognathus tenera Branson, 1934

Referred specimen: the specimen UC 39805 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 36, 37. Cited by Fay, 1952, p. 185.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 184, to *Solenodella (Solenognathus) tenera* (Branson)

Solenognathus trinodus Cooper, 1939

Holotype: by original designation, the specimen UC 39806 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 67-69. Cited by Fay, 1952, p. 185.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 185, to *Solenodella (Solenognathus) trinodus* (Cooper).

Solenognathus tyla Cooper, 1939

Holotype: by original designation, the specimen UC 39807 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 24-26. Cited by Fay, 1952, p. 185.

Referred specimen: the other specimen UC 39010 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 42, 43. Cited by Fay, 1952, p. 185.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and referred specimen are on one slide. Referred by Fay, 1952, p. 185, to *Solenodella (Solenognathus) tyla* (Cooper).

Solenognathus typica Cooper, 1939

Holotype: by original designation, the specimen UC 39808 described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 18–20. Cited by Fay, 1952, p. 185.

Referred specimens: other specimens described and illustrated by Cooper, 1939, p. 412, pl. 44, figs. 44, 45 (UC 39809), figs. 49–51 (UC 39810). Cited by Fay, 1952, p. 185.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: holotype and referred specimens are on one slide. Referred by Fay, 1952, p. 185, to *Solenodella* (*Solenognathus*) *typica* (Cooper).

Spathodus abnormis Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 39 (UC 39811) and fig. 42 (UC 39812). Cited by Fay, 1952, p. 185.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 185, to *Spathognathodus* (*Spathodus*) *abnormis* (Branson and Mehl).

Spathodus acidentatus Branson, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 26 (UC 39813); fig. 28 (UC 39814) and fig. 44 (UC 39815). Cited by Fay, 1952, p. 186.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide. Referred by Fay, 1952, p. 186, to *Spathognathodus* (*Spathodus*) *acidentatus* (Branson).

Spathodus chouteauensis Cooper, 1939

Holotype: by original designation, the specimen UC 39883 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 20. Cited by Fay, 1952, p. 186.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 186, to *Spathognathodus* (*Spathodus*) *chouteauensis* (Cooper).

Spathodus crassidentatus Branson and Mehl, 1934

Referred specimen: the specimen UC 39816 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 19. Cited by Fay, 1952, p. 186.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 186, to *Spathognathodus* (*Spathodus*) *crassidentatus* (Branson and Mehl).

Spathodus cyclus Cooper, 1939

Holotype: by original designation, the specimen UC 39817 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 32. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *cyclus* (Cooper).

Spathodus cyrius Cooper, 1939

Holotype: by original designation, the specimen UC 39823 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 25. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *cyrius* (Cooper).

Spathodus delicatulus Branson, 1934

Referred specimen: the specimen UC 39818 described and illustrated by Cooper, 1939, p. 413, pl. 41, figs. 17, 18. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *delicatulus* (Branson).

Spathodus derodus Cooper, 1939

Holotype: by original designation, the specimen UC 39820 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 27. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *derodus* (Cooper).

Spathodus exochus Cooper, 1939

Holotype: by original designation, the specimen UC 39821 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 30. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *exochus* (Cooper).

Spathodus isus Cooper, 1939

Holotype: by original designation, the specimen UC 39822 described and illustrated by Cooper, 1939, p. 413, pl. 45, fig. 33. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *isus* (Cooper).

Spathodus macrodus Cooper, 1939

Holotype: by original designation, the specimen UC 39825 described and illustrated by Cooper, 1939, pp. 415-416, pl. 45, fig. 23. Cited by Fay, 1952, p. 187.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 187, to *Spathognathodus* (*Spathodus*) *macrodus* (Cooper).

Spathodus micrus Cooper, 1939

Holotype: by original designation, the specimen UC 39826 described and illustrated by Cooper, 1939, p. 416, pl. 45, fig. 34. Cited by Fay, 1952, p. 188.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 188, to *Spathognathodus* (*Spathodus*) *micrus* (Cooper).

Spathodus orthus Cooper, 1939

Holotype: by original designation, the specimen UC 39827 described and illustrated by Cooper, 1939, p. 416, pl. 47, fig. 32. Cited by Fay, 1952, p. 188.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 188, to *Spathognathodus* (*Spathodus*) *orthus* (Cooper).

Spathodus parvifossatus Branson and Mehl, 1934

Referred specimen: the specimen UC 39828 described and illustrated by Cooper, 1939, p. 416, pl. 45, fig. 31. Cited by Fay 1952, p. 188.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 188, to *Spathognathodus* (*Spathodus*) *parvifossatus* (Branson and Mehl).

Spathodus regularis Branson and Mehl, 1938

Referred specimen: the specimen UC 39824 described and illustrated by Cooper, 1939, p. 415, pl. 45, fig. 38. Cited by Fay, 1952, p. 188.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 188, to *Spathognathodus* (*Spathodus*) *regularis* (Branson and Mehl).

Spathodus strigilis Huddle, 1934

Referred specimen: the specimen UC 39829 described and illustrated by Cooper, 1939, p. 416, pl. 45, fig. 37. Cited by Fay, 1952, p. 189.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 189, to *Spathognathodus* (*Spathodus*) *strigilis* (Huddle).

Spathodus subrectus (Holmes)

Referred specimens: the specimens UC 38095 described and illustrated by Cooper, 1935, p. 315, pl. 27, fig. 45. Cited by Fay, 1952, p. 189.

Stratigraphic position: Mississippian, Arkansas Novaculite, bed 13. Locality 121.

Remarks: UC 38095 consists of five rock chips. Referred by Fay, 1952, p. 189, to *Spathognathodus* (*Spathodus*) *subrectus* (Huddle).

Spathodus sulciferus Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 416, pl. 45, figs. 17 (UC 39830) and fig. 18 (UC 39831). Cited by Fay, 1952, p. 189.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide. Referred by Fay, 1952, p. 189, to *Spathognathodus* (*Spathodus*) *sulciferus* (Branson and Mehl).

Spathodus texanus (Roundy)

Referred specimen: the specimen described and illustrated by Cooper, 1939, p. 416, pl. 42, figs. 63, 64. Cited by Fay, 1952, p. 189.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 189, to *Spathognathodus* (*Spathodus*) *texanus* (Cooper).

Spathognathodus (**Spathodus**) **abnormis** (Branson and Mehl)

See: *Spathodus abnormis* Branson and Mehl, 1934

Spathognathodus (Spathodus) acidentatus (Branson)

See: *Spathodus acidentatus* Branson, 1934

Spathognathodus (Spathodus) chouteauensis (Cooper)

See: *Spathodus chouteauensis* Cooper, 1939

Spathognathodus (Spathodus) crassidentatus (Branson and Mehl)

See: *Spathodus crassidentatus* Branson and Mehl, 1934

Spathognathodus (Spathodus) cyclus (Cooper)

See: *Spathodus cyclus* Cooper, 1939

Spathognathodus (Spathodus) cyrius (Cooper)

See: *Spathodus cyrius* Cooper, 1939

Spathognathodus (Spathodus) delicatulus (Branson)

See: *Spathodus delicatulus* Branson, 1934

Spathognathodus (Spathodus) derodus (Cooper)

See: *Spathodus derodus* Cooper, 1939

Spathognathodus (Spathodus) exochus (Cooper)

See: *Spathodus exochus* Cooper, 1939

Spathognathodus (Spathodus) isus (Cooper)

See: *Spathodus isus* Cooper, 1939

Spathognathodus (Spathodus) macrodus (Cooper)

See: *Spathodus macrodus* Cooper, 1939

Spathognathodus (Spathodus) micrus (Cooper)

See: *Spathodus micrus* Cooper, 1939

Spathognathodus (Spathodus) orthus (Cooper)

See: *Spathodus orthus* Cooper, 1939

Spathognathodus (Spathodus) parvifossatus (Branson and Mehl)

See: *Spathodus parvifossatus* Branson and Mehl, 1934

Spathognathodus (Spathodus) regularis (Branson and Mehl)

See: *Spathodus regularis* Branson and Mehl, 1938

Spathognathodus (Spathodus) strigilis (Huddle)

See: *Spathodus strigilis* Huddle, 1934

Spathognathodus (Spathodus) subrectus (Huddle)

See: *Spathodus subrectus* (Holmes)

Spathognathodus (Spathodus) sulciferus (Branson and Mehl)

See: *Spathodus sulciferus* Branson and Mehl, 1934

Spathognathodus (Spathodus) texanus (Cooper)

See: *Spathodus texanus* (Roundy)

Streptognathodus excelsus var. **rectus** Jones, 1941

Holotype: by original designation, the specimen UC 44670 described and illustrated by Jones, 1941, p. 39, pl. 3, fig. 3.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Streptognathodus nodocarinatus Jones, 1941

Holotype: by original designation, the specimen UC 44667 described and illustrated by Jones, 1941, p. 38, pl. 3, fig. 2.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, p. 52, in caption to pl. 3, fig. 2, spells it *Streptognathodus nodocrinatus* Jones. We consider it a spelling error.

Streptognathodus obliquisulcatus Jones, 1941

Holotype: by original designation, the specimen UC 44671 described and illustrated by Jones, 1941, p. 39, pl. 3, fig. 7.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Streptognathodus sp.

See: *Assemblage three* Jones, 1941
Assemblage fourteen Jones, 1941

Streptognathodus type

See: *Assemblage three* Jones, 1941

Subbryantodus angulatus (Cooper)

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 416, pl. 45, figs. 11, 12 (UC 39833); figs. 15, 16 (UC 39834). Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all the specimens are on one slide.

Subbryantodus araius Cooper, 1939

Holotype: by original designation, the specimen UC 39835 described and illustrated by Cooper, 1939, p. 416, pl. 43, figs. 39, 40. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus arcuatus Branson and Mehl, 1934

Referred specimens: the specimens described and illustrated by Cooper, 1939, p. 416, pl. 45, figs. 13, 14 (UC 39837); figs. 21, 22 (UC 39838). Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: all specimens are on one slide.

Subbryantodus aulus Cooper, 1939

Holotype: by original designation, the specimen UC 39839 described and illustrated by Cooper, 1939, pp. 416-417, pl. 43, figs. 22, 23. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus brevidens (Huddle)

Referred specimen: the specimen UC 39840 described and illustrated by Cooper, 1939, p. 417, pl. 43, figs. 10, 11. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus camaratus Cooper, 1939

Holotype: by original designation, the specimen UC 39836 described and illustrated by Cooper, 1939, p. 417, pl. 43, figs. 41, 42. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus ethys Cooper, 1939

Holotype: by original designation, the specimen UC 39841 described and illustrated by Cooper, 1939, p. 417, pl. 43, fig. 15. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus orthus Cooper, 1939

Holotype: by original designation, the specimen UC 39842 described and illustrated by Cooper, 1939, p. 417, pl. 43, fig. 12. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus pulcher Branson, 1934

Referred specimen: the specimen UC 39843 (*not* UC 39043) described and illustrated by Cooper, 1939, p. 417, pl. 47, fig. 65. Cited by Fay, 1952, p. 193.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus radinus Cooper, 1939

Holotype: by original designation, the specimen UC 39844 described and illustrated by Cooper, 1939, p. 417, pl. 43, fig. 13. Cited by Fay, 1952, p. 194.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus ? scitulus (Branson and Mehl)

Referred specimen: the specimen UC 39845 described and illustrated by Cooper, 1939, p. 417, pl. 43, figs. 35, 36. Cited by Fay, 1952, p. 194.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus ? stenus Cooper, 1939

Holotype: by original designation, the specimen UC 39846 described and illustrated by Cooper, 1939, p. 417, pl. 43, figs. 37, 38. Cited by Fay, 1952, p. 194.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Subbryantodus sp.

Referred specimen: the specimen UC 39881 illustrated by Cooper, 1939, pl. 47, fig. 82. Cited by Fay, 1952, p. 194.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Synprioniodina aclis Huddle, 1934

Referred specimen: the specimen UC 39847 described and illustrated by Cooper, 1939, p. 417, pl. 47, fig. 22. Cited by Fay, 1952, p. 196.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Synprioniodina alternata Ulrich and Bassler, 1926

Referred specimens: the specimens UC 38085 illustrated and cited by Cooper, 1935, p. 310, pl. 27, fig. 35. Cited by Fay, 1952, p. 196.

Stratigraphic position: Mississippian, Arkansas Novaculite, Beds 7, 8, 13, 14, 15 and 16A. Locality 121.

Remarks: UC 38085 consists of a rock chip 21 mm., greatest dimension; slide bearing nine small rock chips; one from 7, two from 8, two or three from 14, two from 15, one or two from 16A; larger chip is from 13; additional specimen (bed 7) on slide UC 38066 with *Bryantodus inequalis* Holmes, 1928.

Synprioniodina cyclus Cooper, 1939

Holotype: by original designation, the specimen UC 39850 described and illustrated by Cooper, 1939, pp. 418, 421, pl. 47, fig. 16. Cited by Fay, 1952, p. 196.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Synprioniodina leptus Cooper, 1939

Holotype: by original designation, the specimen UC 39851 described and illustrated by Cooper, 1939, p. 421, pl. 46, fig. 20. Cited by Fay, 1952, p. 196.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Synprioniodina plana Holmes, 1928

Referred specimen: the specimen UC 39852 described and illustrated by Cooper, 1939, p. 421, pl. 46, fig. 21. Cited by Fay, 1952, p. 196.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Telumodina apalus Cooper, 1939

Holotype: by original designation, the specimen UC 39853 described and illustrated by Cooper, 1939, p. 421, pl. 47, fig. 37. Cited by Fay, 1952, p. 197.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Telumodina deckeri Cooper, 1931

Holotype: the original specimen UC 38432 described and illustrated by Cooper, 1931, pp. 241-242, pl. 28, fig. 32. Cited by Fay, 1952, p. 197.

Referred specimen: other specimen on slide UC 38432 described by Cooper, 1931, pp. 241-242. Cited by Fay, 1952, p. 197.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Telumodina gracilis Cooper, 1931

Holotype: the original specimen UC 38433 described and illustrated by Cooper, 1931, p. 242, pl. 28, fig. 33. Cited by Fay, 1952, p. 197.

Referred specimen: the specimen UC 39854 described and illustrated by Cooper, 1939, p. 421, pl. 47, fig. 29. Cited by Fay, 1952, p. 197.

Stratigraphic position: Mississippian, Woodford Formation, Locality 123 (holotype); and "pre-Welden Shale," Locality 122 (referred specimen).

Telumodina typicalis Cooper, 1931

Holotype: the original specimen UC 38431 described and illustrated by Cooper, 1931, p. 241, pl. 28, fig. 31. Cited by Fay, 1952, p. 197.

Referred specimens: other specimens on slide UC 38431 described by Cooper, 1931, p. 241. Cited by Fay, 1952, p. 197.

Stratigraphic position: Mississippian, Woodford Formation. Locality 123.

Trichognathus breviatata Branson and Mehl, 1934

Referred specimen: the specimen UC 39855 described and illustrated by Cooper, 1939, p. 421, pl. 46, fig. 48. Cited by Fay, 1952, p. 198.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 198, to *Trichonodella (Trichognathus) breviatata (breviatata)* (Branson and Mehl).

Trichognathus curvidens Branson, 1934

Referred specimen: the specimen UC 39856 described and illustrated by Cooper, 1939, p. 421, pl. 46, fig. 22. Cited by Fay, 1952, p. 198.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 198, to *Trichonodella (Trichognathus) curvidens* (Branson).

Trichognathus micra Cooper, 1939

Holotype: by original designation, the specimen UC 39857 described and illustrated by Cooper, 1939, p. 422, pl. 46, fig. 47. Cited by Fay, 1952, p. 198.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 198, to *Trichonodella (Trichognathus) micra* (Cooper).

Trichognathus oxys Cooper, 1939

Holotype: by original designation, the specimen UC 39858 described and illustrated by Cooper, 1939, p. 422, pl. 46, fig. 46. Cited by Fay, 1952, p. 199.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 199, to *Trichonodella (Trichognathus) oxys* (Cooper).

Trichognathus separata Branson and Mehl, 1934

Referred specimens: the specimens UC 39859 and UC 39860 described and illustrated by Cooper, 1939, p. 422, pl. 46, figs. 45 (UC 39859) and 49 (UC 39860). Cited by Fay, 1952, p. 199.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: both specimens are on one slide. Referred by Fay, 1952, p. 199, to *Trichonodella (Trichognathus) separata* (Branson and Mehl).

Trichognathus toma Cooper, 1939

Holotype: by original designation, the specimen UC 39861 described and illustrated by Cooper, 1939, p. 422, pl. 46, fig. 50. Cited by Fay, 1952, p. 199.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 199, to *Trichonodella (Trichognathus) toma* (Cooper).

Trichognathus sp.

Referred specimen: the specimen UC 39879 illustrated by Cooper, 1939, pl. 47, fig. 28. Cited by Fay, 1952, p. 199.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

Remarks: referred by Fay, 1952, p. 199, to *Trichonodella (Trichognathus) sp.*

Trichonodella (Trichognathus) breviajata (breviatata) (Branson and Mehl)

See: *Trichognathus breviata* Branson and Mehl, 1934

Trichonodella (Trichognathus) curvidens (Branson)

See: *Trichognathus curvidens* Branson, 1934

Trichonodella (Trichognathus) micra (Cooper)

See: *Trichognathus micra* Cooper, 1939

Trichonodella (Trichognathus) oxys (Cooper)

See: *Trichognathus oxys* Cooper, 1939

Trichonodella (Trichognathus) separata (Branson and Mehl)

See: *Trichognathus separata* Branson and Mehl, 1934

Trichonodella (Trichognathus) toma (Cooper)

See: *Trichognathus toma* Cooper, 1939

Trichonodella (Trichognathus) sp.

See: *Trichognathus sp.*

CATALOG OF ASSEMBLAGES AND
UNNAMED CONODONTS

Assemblage one Jones, 1941

Referred specimen: the specimen UC 44601 described and illustrated by Jones, 1941, p. 12, pl. 4, fig. 1.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, refers it to "*Gondolella* type," consisting of *Lonchodus* sp. and *Lonchodina* sp.

Assemblage two Jones, 1941

Referred specimen: the specimen UC 44602 described and illustrated by Jones, 1941, p. 12, pl. 4, fig. 2. Illustrated by Jones, 1956, p. 127, fig. 7.2.2.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Remarks: Jones, 1941, refers it to *Gondolella* type, consisting of *Gondolella cuneiformis* Jones, 1941, *Lonchodus* sp. and *Euprioniodina acuta* Jones, 1941. Jones, 1956, p. 126, refers it to *Gondolella* sp. and *Euprioniodina* sp.

Assemblage three Jones, 1941

Referred specimen: the specimen UC 44603 described and illustrated by Jones, 1941, on pp. 12-13, pl. 4, fig. 3. Illustrated by Jones, 1956, p. 127, fig. 7.2.3.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, refers it to *Streptognathodus* type, consisting of *Hamulosodina* sp., *Bryantodus* sp. and *Streptognathodus* sp. Jones, 1956, p. 126, refers it to *Cavusgnathus?* sp., *Ozarkodina* sp. and *Hindeodella* sp.

Assemblage four Jones, 1941

Referred specimen: the specimen UC 44604 (not UC 446014) described and illustrated by Jones, 1941, p. 13, pl. 4, fig. 4.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to *Bicarinodus* type, consisting of *Hamulosodina* sp., *Bicarinodus typicus* Jones, 1941 [*nomen nudum*], *Bryantodus* sp. and *Bicarinodus* sp.

Assemblage five Jones, 1941

Referred specimen: the specimen UC 44605 described and illustrated by Jones, 1941, p. 13, pl. 4, fig. 5.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to *Gondolella* type, consisting of *Gondolella ovata* Jones, 1941, *Euprionidina longicuspata* Jones, 1941, "*Lonchodus curvata*" and *Lonchodus* sp.

Assemblage six Jones, 1941

Referred specimen: the specimen UC 44606 described and illustrated by Jones, 1941, pp. 13–14, pl. 4, fig. 6.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to a partially disintegrated assemblage, consisting of *Hamulosodina* sp., *Oxygonus* sp. and *Bryantodus* sp.

Assemblage seven Jones, 1941

Referred specimen: the specimen UC 44607 described and illustrated by Jones, 1941, p. 14, pl. 4, fig. 7.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to a disintegrated assemblage consisting of *Hamulosodina* sp. and *Bicarinodus* sp.

Assemblage eight Jones, 1941

Referred specimen: the specimen UC 44608 described and illustrated by Jones, 1941, p. 14, pl. 4, fig. 8.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to a disintegrated assemblage consisting of *Hamulosodina* sp. and *Bicarinodus* sp.

Assemblage nine Jones, 1941

Referred specimen: the specimen UC 44609 described and illustrated by Jones, 1941, pp. 14–15, pl. 4, fig. 9.

Stratigraphic position: Pennsylvanian, Seminole Formation, Locality 119.

Remarks: Jones, 1941, describes it as consisting of *Prioniodus* sp. and *Hamulosodina* sp.

Assemblage ten Jones, 1941

Referred specimen: the specimen UC 44610 described and illustrated by Jones, 1941, p. 15, pl. 4, fig. 10.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 119.

Remarks: Jones, 1941, refers it to a disintegrated assemblage, consisting of *Lonchodus* sp.

Assemblage eleven Jones, 1941

Referred specimen: the specimen UC 44611 described and illustrated by Jones, 1941, p. 15, pl. 4, fig. 11.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, refers it to a disintegrated assemblage, consisting of *Hamulosodina* sp.

Assemblage twelve Jones, 1941

Referred specimen: the specimen UC 44612 described and illustrated by Jones, 1941, p. 15, pl. 4, fig. 12.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, refers it to a dissociated assemblage, consisting of *Oxygonus* sp.

Assemblage thirteen Jones, 1941

Referred specimen: the specimen UC 44613 described and illustrated by Jones, 1941, pp. 15-16, pl. 4, fig. 13.

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, describes it as consisting of *Hamuloso-dina* sp.

Assemblage fourteen Jones, 1941

Referred specimen: the specimen UC 44614 described and illustrated by Jones, 1941, p. 16, pl. 4, fig. 15 (not 14).

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 120.

Remarks: Jones, 1941, refers it to a dissociated assemblage, consisting of *Streptognathodus* sp.

Assemblage fifteen Jones, 1941

Referred specimen: the specimen UC 44615 described and illustrated by Jones, 1941, p. 16, pl. 4, fig. 14 (not 15).

Stratigraphic position: Pennsylvanian, Seminole Formation. Locality 118.

Remarks: Jones, 1941, refers it to a dissociated assemblage, consisting of *Lonchodus erectus* (Holmes) and *Euprioniodina* sp.

Conodont gen. et sp. indet.

Referred specimen: the specimen UC 39880 illustrated by Cooper, 1939, pl. 47, fig. 62.

Stratigraphic position: Mississippian, "pre-Welden Shale." Locality 122.

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