

THE TYPES OF UNIONACEA (MOLLUSCA: BIVALVIA) IN THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA¹

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ABSTRACT.—Included in this paper are references not only to over 500 unionid types which were located, but to others mentioned in the literature which indicated they should be in the Academy. The location of the holotype is included, when known, with each reference, even if it is not in the Academy. All of the unionid taxa introduced by T. A. Conrad are included even if the types are not in the Academy and references are included to all specimens mentioned by I. Lea as in the Academy, the M. Burroughs or C. M. Wheatley collns., even if they could not be located. References to all of C. S. Rafinesque's known types are included and almost 50 are illustrated for the first time; some are selected as lectotypes, others as neotypes. All of the unionids described by S. S. Haldeman are illustrated for the first time. None of T. Say's types were located, so that only references to subsequently selected neotypes are mentioned. The paper also includes types from the following additional authors: Anthony, Ahearn, F. Baker, H. B. Baker, Bartsch, Call, Cragin, Currier, Dall, Daniels, Frierson, Fuller, Grier, Guppy, Hemphill, Ihering, R. I. Johnson, Marsh, Marshall, Miles, Olsson and Wurtz, Ortmann, Ortmann and Walker, Pilsbry, Pilsbry and Bequaert, B. H. and S. H. Wright, and Wurtz.

of Comparative Zoology. The types were studied by Turner (1946) who listed all of the taxa he introduced and located all of his figured holotypes of Unionidae. Paratypes of many of Anthony's species are in the Academy, and only references to these are included here.

Conrad, T. A. — The disposition of Conrad's collection is unknown, but so many of his unionid types are in the Academy, that all of his unionid taxa, recent and fossil, are included in this list, as well as the location of all of his known unionid types. A complete bibliography of his works is available in the biography by Wheeler (1935).

Frierson, L. S. — His collection was purchased by B. Walker, and is in the Museum of Zoology, University of Michigan. Johnson (1972) studied all of the Frierson types which are extant. They are to be found in a number of institutions. Included here are only those holotypes, lectotypes, paratypes, and paralectotypes which are in the Academy.

Guppy, H. L. — Since his one introduced unionid species was not figured, and was not found in the British Museum (Natural History) by Johnson (1971), the syntype in the Academy is selected as a lectotype in this paper.

Haldeman, S. S. — All of his unionid types, previously unfigured, are in the Academy and are now figured.

Lea, Isaac. — Although Lea published the larger part of his work in the papers of the Academy, he left his extensive collection to the United States National Museum. Nevertheless, a number of his figured types are in the Academy, especially those described early in his career, many collected by Dr. Marmaduke Burroughs. Later, Lea described specimens received from C. M. Wheatley, whose pertinent collections are in the Academy (Johnson; 1956). All of Lea's references to types in the Academy or the Wheatley collections are included here even if they could not be found.

INTRODUCTION

This is the fourth study of the molluscan types in the Academy. The first three by Baker (1962, 1963, 1964) covered land and fresh water gastropods.

The more important authors of the unionid taxa associated with the Academy are Conrad, Lea, Rafinesque, and Say, but the collection also includes types from Anthony, Ahearn, F. Baker, H. B. Baker, Bartsch, Call, Cragin, Currier, Dall, Daniels, Frierson, Fuller, Grier, Guppy, Haldeman, Hemphill, Ihering, R. I. Johnson, Marsh, Marshall, Miles, Olsson and Wurtz, Ortmann, Ortmann and Walker, Pilsbry, Pilsbry and Bequaert, B. H. and S. H. Wright, and Wurtz.

SOME OF THE ASSEMBLAGES OF TYPES

Anthony, J. G. — His collection is in the Museum

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Scudder (1885) compiled an elaborate bibliography of the published works of Lea. His list of species includes all of the recent unionid taxa introduced by Lea; he did not include the fossil taxa which are included here since the types of all of them are in the Academy. Lea dated his taxa, especially those published in his earlier works, from the day they were read before a learned society, usually the American Philosophical Society. Simpson (1900) correctly dated them from their actual date of publication. Baker carefully reviewed the dates of Lea's publications for the present work, and a few minor changes have been made, but these are mostly of bibliographic interest, and do not involve problems of priority.

Pilsbry, H. A. and J. C. Bequaert. — The types of most of the Unionacea they described from the former Belgian Congo are in the Academy or in the American Museum of Natural History; the latter were located by Richards and Old (1969).

Rafinesque, C. S. — Rafinesque (1831: 1) wrote of the disposition of some of his unionids. At the time of his writing he still had specimens of 60 of the species described in his Monograph, and was selling C. A. Poulson upwards of 50 of them. These are now in the Academy, as well as several of his specimens that were acquired by S. S. Haldeman. A few additional Rafinesque types that were sent to Férussac are now in the Muséum national d'histoire naturelle, Paris. References to all known Rafinesque types are included here. A reprint of his work on mollusca was effected by Binney and Tryon (1864) and the index makes readily available those taxa not mentioned here. Rafinesque's paper on the Unionidae of the Ohio River (1820) was translated from the French by Poulson (1832) and again by LaRocque (1964). Rafinesque's types have been treated as special cases. It has been argued that the measurements of the types in the Poulson collection do not always correspond with those given in the monograph, or that Rafinesque was crazy and not to be taken seriously. Vanatta (1915) noted that these shells have Rafinesque's original labels with ink numbers on the specimens corresponding to Rafinesque's monograph of 1820.

Many of these specimens are at least syntypes, and are figured here; some are selected as lectotypes; others which are obviously subsequent identifications are chosen as neotypes if they agree with the original descriptions.

These selections are in keeping with modern procedure. Stansbery (*pers. comm.*) says, "Walker and Ortmann (1922) did a fine job for their time and in consideration of their basic premise that the validity of a name depends upon its identifiability from the original description. I consider the identification of the holotype (if extant) to be the court of last appeal in such matters. If we didn't most of Lamarck's names would now become *nomina dubia*." Johnson (1969), who figured those of Lamarck's North American unionids which were previously unfigured, agrees with Stansbery, and also with Morrison (1969) who appears to accept the same point of view except that the latter asserts the validity of many of Rafinesque's names without affording the public palpable argument.

Say, T. — While the Academy is the logical place to turn for the unionid types of Say, there are none there, in spite of the statement of Mrs. Say (Say, T. 1840: 3), "If any specimens of species here described are not contained in the Cabinet of the Academy of Natural Sciences, they will probably be found in my own private collection, which has not been opened since it was put up five years since. If this should be the case, it will afford me much pleasure to place them in that collection for future reference." [This collection appears to have been lost].

As Binney (1858) reprinted all of his work on recent conchology, and the unionid references are easily available in the index, the only references to Say in this list are to neotypes selected by Haas and by Johnson.

Wright, B. H. and S. H. — Their collection is in the United States National Museum, as are most of the figured types, although a few of them are in the Academy. Johnson (1967) studied all the Wright types and selected lectotypes when required. Included here are only those Wright types in the Academy.

ACKNOWLEDGEMENTS

Some years ago, H. B. Baker submitted to me a manuscript on the supposed unionid types in the Academy. I revised the manuscript extensively. Unfortunately ill health and death prevented Dr. Baker from completing it. I have since rewritten the manuscript, and added photographs of many of the previously unfigured types. My primary thanks are to H. B. Baker who did so much of the initial work, and it is with pleasure that I combine our names in authorship.

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I am also pleased to thank Drs. George M. Davis and Robert Robertson of the Academy for their cooperation in every way in the preparation of this paper. Dr. Joseph Rosewater, of the United States National Museum kindly made available a number of disputed types. Thanks are also extended to Dr. R. Tucker Abbott, of the Delaware Museum of Natural History, for relevant data.

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A LIST OF THE TYPES OF UNIONACEA IN THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA WITH THEIR ORIGINAL REFERENCES AND TYPE LOCALITIES.

The following list is arranged alphabetically by species, giving the author, year and place of publication of the original description, the type locality and collector or collection when relevant, and includes references to those types, with the exception of those of Say, which are believed to have been in the museum but are now lost. Since none of Say's types were located, references are given only to subsequently selected neotypes. All of Conrad's unionid taxa are included, and all those of Lea which mentioned Burrough, Wheatley, or the Academy specifically.

The location of the holotype is given when known, even if it is not in the Academy. If the location of the holotype is unknown, types are listed as syntypes or paratypes, generally the latter if the species was originally figured and there seems to be a possibility that that specimen may be extant, even though this term was unknown to earlier authors. Obviously the use of either syntype or paratype is arbitrary when the location of the holotype is not definitely known.

Isaac Lea often rushed brief latin descriptions of his new species into print, a practice common in his time. These were subsequently followed by adequate descriptions and figures, which were then reprinted as *Observations on the Genus Unio*. Only page references to this work are included here since the plates and figures were not renumbered. Lea often gave several localities where each of his species had been found and did not select types, though he always figured a single specimen for which he gave measurements. In lieu of the word 'type' under Article 73 (b) Int. Code Zool. Nomen. (1964), this

is an "equivalent expression" and these specimens are regarded as holotypes.

All locality data, contained in brackets, are additions to already published records and are from original labels or modern atlases. The plates contain measurements of the specimens figured which are not repeated elsewhere.

The following abbreviations have been used in this list:

- AMNH—American Museum of Natural History, New York, New York.
- ANSP —Academy of Natural Sciences of Philadelphia, Pennsylvania.
- BMNH—British Museum (Natural History).
- JANSP—Journal of the Academy of Natural Sciences of Philadelphia.
- MCZ —Museum of Comparative Zoology, Cambridge, Massachusetts.
- MZUM—Museum of Zoology, University of Michigan, Ann Arbor, Michigan.
- PANSP—Proceedings of the Academy of Natural Sciences of Philadelphia.
- PAPS —Proceedings of the American Philosophical Society, Philadelphia.
- Paris Museum—Museum National d'histoire naturelle, Paris.
- TAPS —Transactions of the American Philosophical Society, Philadelphia.
- USNM—National Museum of Natural History, Washington, D.C.

- abacoides* Haldeman, *Unio* Plate 9, fig. 4
1846, PANSP 3: 75 (Eastern Tennessee); 1846, American Journal of Science 2: 274. Measured holotype ANSP 41153.
- abacus* Haldeman, *Unio* Plate 9, fig. 7
1842, JANSP 8: 202 (Holston River, Tennessee). Holotype ANSP 41419, marked by Haldeman as the original specimen.
- abbevillensis* Lea, *Unio*: 1857, PANSP 9: 84 (Abbeville District, [Savannah River drainage], South Carolina; Barratt); 1858, JANSP (2) 4: 51, pl. 6, fig. 34; 1858, Obs. 6: 51. Figured holotype USNM 85583; paratype ANSP 126922 from Barratt in the Wheatley colln.
- aberti* Conrad, *Unio*: 1850, PANSP, 5: 10 (Rapids of Verdigris River, Chambers Ford [not located, Oklahoma] Arkansas [River drainage]); 1854, JANSP (2) 2: 295, pl. 26, fig. 1. Figured type not located; larger specimen ANSP 41133 from Phillips, but there is no evidence that it is a type.
- ablatius* Lea, *Unio*: see under *oblatius* Lea, *Unio*.

- alabamensis* Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 67. New name for *Symphynota inflata* Lea, non *Unio inflatus* Barnes 1823. Lea's name is obviously not preoccupied.
- alatooides* Lea, *Unio*: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.] New Jersey; Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31521. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J.: 249, pl. 33, figs. 3, 4, pl. 34, fig. 6. Is *Proptera alata* (Say).
- alatus* Say, *Unio*: 1817, Nicholson's Encyclopedia 2: [no pagination], pl. 4, fig. 2 (Lake Erie; Barton Colln.). Figured type mentioned as in the ANSP [lost]. Neotype Senckenberg Museum 4349 selected by Haas, 1930, Senckenbergiana 12: 328.
- aldrichi* Frierson, *Pleurobema*: 1927, Check List North American Naiades, p. 44 ([Alabama River] Selma [Autauga Co.], Alabama); 1928, Nautilus, 41: 139, pl. 3, fig. 1. The figured type and the three other specimens in the original lot, presumed to be in the MZUM could not be located, therefore the specimen in the ANSP labeled as "cotype" which appears to be the measured type was selected as lectotype ANSP 145246, by Johnson, 1972, Occasional Papers on Mollusks, 3: 141, pl. 24, fig. 2.
- altilis* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 43, pl. 2, fig. 1 (Alabama River, near Claiborne [Monroe Co., Alabama]). Figured holotype ANSP 56419 from Phillips, [labeled Ogeechee River, Georgia, by error, probably mixed with ANSP 46418 which is labeled Claiborne, Alabama, by error].
- altus* Conrad, *Unio*: 1854, JANSPP (2) 2: 298, pl. 27, fig. 5 (probably Tennessee). Figured type ANSP [lost]; larger type ANSP [lost].
- amazonensis* Lea, *Anodonta*: 1860, PANSP 12: 89 (Upper Amazon, Brazil); 1863, JANSPP (2) 5: 395, pl. 46, fig. 300; 1863, Obs. 10: 31. Figured holotype USNM 86724; paratypes ANSP 123430, in the Wheatley colln.
- amphichaenus* Frierson, *Unio*: 1898, Nautilus 11: 109, pl. 1 (Sabine River, Logansport [De Soto Parish], Louisiana). Figured holotype USNM 159935; 2 paratypes ANSP 77560.
- ampulus* Lea, *Unio*: 1872, PANSP 24: 157 (Irwins Creek, Mecklenburg Co., North Carolina); 1874, JANSPP (2) 8: 39, pl. 13, fig. 36; 1874, Obs. 13: 43. Figured holotype USNM 85591; paratypes in the Wheatley colln. [lost].
- andrewsii* Marsh, *Quadrula*: 1902, Nautilus, 15: 115 (Holston River, Tennessee); 1902, Nautilus, 16: 8, pl. 1, upper two figs. as *andrewsae*. Figured holotype ANSP 83170.
- angustatus* Lea, *Unio*: 1831, TAPS, 4: 114, pl. 17, fig. 43; 1834 Obs. 1: 124 (Cooper River, South Carolina). Holotype USNM 85896; paratype ANSP 41570 from Congaree River, Columbia [Richland Co.], South Carolina, mentioned as in the ANSP.
- anodontoides* Lea, *Unio*: 1831, TAPS 4: 81, pl. 8, fig. 11; 1834, Obs. 1: 91 (Mississippi River; Alabama River; Ohio River). Figured type not in the USNM; syntype mentioned as in the ANSP [lost].
- antrosa* Rafinesque, *Amblema*: See under *pachostea* Rafinesque, *Obovaria*.
- appressus* Lea, *Unio*: 1871, PANSP 23: 189 ([Tennessee River], Tuscumbia [Colbert Co.], Alabama; Tennessee River; Holston River, [Tennessee]; Law and Wheatley); 1874, JANSPP (2) 8: 12, pl. 3, fig. 8; 1874, Obs. 13: 16. Figured holotype USNM 84483; ANSP 127274 mentioned as in the Wheatley colln. but there is no evidence that Lea saw the specimen.
- aquilus* Lea, *Unio*: 1857, PANSP 9: 172 (Flint River, Macon [County], Plant; Chattahooche River, Roswell [Milton Co.]; both Georgia); 1858 JANSPP (2) 4: 92, pl. 20, fig. 72; 1858, Obs. 6: 92. Figured holotype USNM 85993 from the former locality; paratypes ANSP 127075 from Plant in the Wheatley colln.
- aratus* Conrad, *Unio*: 1849, Annals and Magazine of Natural History, (2) 4: 302, (Flint River, Georgia). See under: *plectophorus* Conrad, *Unio*.
- arctatus* Conrad, *Unio*: 1834, American Journal of Science, 25: 340, pl. 1, fig. 9 (Black Warrior and Alabama Rivers [Alabama]); 1834, New Fresh Water Shells U.S.: 36, pl. 5, fig. 4. Figured type not in the ANSP; lectotype ANSP 41356, selected by Johnson, 1970. Bulletin of the Museum of Comparative Zoology, 140: 331, pl. 10, fig. 4.
- arcula* Lea, *Margaritana*: 1836, Synopsis Naiades, p. 43 [nomen nudum]; 1838, TAPS 6: 71, pl. 22, fig. 69 (Altamaha [River] Liberty [now Long] Co., Georgia; Le Conte); 1838, Obs. 2: 71. Figured holotype USNM 86170; 2 paratypes ANSP 41284 from Le Conte.
- arcus* Conrad, *Unio* Plate 9, fig. 2
1834, American Journal of Science, 25: 340, pl. 1, fig. 8 (Alabama River). Figured holotype ANSP 56784a; larger paratype ANSP 56784.
- arquatus* Conrad, *Unio*: 1854, JANSPP (2) 2: 297, pl. 26, fig. 8 (Wabash River [Indiana]; Lucy Say). Figured type ANSP [lost].
- askewi* Marsh, *Unio*: 1896, Nautilus, 10: 91, pl. 1, figs. 3, 4 (Village Creek, Hardin Co.; Sabine River; both Texas) Figured holotype ANSP 70448a, from the latter locality.
- asperatus* Lea, *Unio*: 1861, PANSP 13: 41 (Alabama River, Claiborne [Monroe Co.], Alabama, Tait; Coosa River, Alabama); 1861 JANSPP (2) 5: 68, pl. 7, fig. 218; 1862, Obs. 8: 72. Figured holotype USNM 84272 from Tait; possible paratype ANSP 127571 from Tait in the Wheatley colln.
- asperrimus* Lea, *Unio*: 1831, TAPS 4: 71, pl. 5, fig. 3 (Ohio River); 1834, Obs. 1: 81. Figured holotype USNM 84174; paratypes ANSP 43022 from Lea.
- balonnensis* Conrad, *Unio*: 1850, PANSP 5: 10 ([Balonne River, Queensland, Australia]); 1854, JANSPP (2) 2: 295, pl. 26, fig. 3. Holotype ANSP 189249a, refigured by McMichael and Hiscock, 1958, Australian Journal

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- of Marine and Freshwater Research, 9: 392, pl. 1, figs. 8-9; 2 paratypes ANSP 189249.
- angulorum* Pilsbry and Bequaert, *Aspatharia* (*Spathopsis*) *wissmanni*: 1927, Bulletin of the American Museum of Natural History, 53: 424, fig. 93 ([Congo River] Maléma between Bumba and Basoko [Republic of the Congo]). Figured holotype ANSP 134026, single valve.
- arachi* F. Baker, *Anodontites*: 1914, PANSP 65: 668, pl. 27, figs. 3-4 (Rio Tapajoz, Bomi e Pinhel, Lat. 2°55'S., Long. 55°10'W. [Brazil]). Figured holotype ANSP 109370.
- cardleianus* Lea, *Unio*: 1861, PANSP 13: 39 (Pearl River, Jackson [Hinds Co.], Mississippi); 1861, JANSPP (2) 5: 94, pl. 14, fig. 242; 1862, Obs. 8: 98. Figured type not in the USNM; syntype USNM 85746; syntype ANSP 41638 from Lea.
- cauchampii* Marsh, *Quadrula*: 1902, Nautilus 16: 7, pl. 1, lower two figs. (Little Tennessee River; Holston River; both Tennessee). Figured holotype ANSP 83169, from the former locality.
- caucensis* Lea, *Unio*: 1868, PANSP 20: 161 (Beaver Creek [Gaston Co.]; Long Creek [Gaston Co.]; both North Carolina, both Wheatley. Carters Creek, [Baldwin Co.], Georgia, Postell); 1868, JANSPP (2) 6: 297, pl. 44, fig. 109; 1869, Obs. 12: 57. Figured holotype USNM 85598, from Beaver Creek; paratypes ANSP 126984 and 126979 in the Wheatley colln.
- cellulus* Lea, *Unio*: 1872, PANSP 24: 161 (Holtson River, Edgar; Tennessee River, White; Tennessee River, Muschel Shoals [Colbert and Lauderdale Cos.], Alabama, Wheatley); 1874, JANSPP (2) 8: 50, pl. 17, fig. 48; 1874, Obs. 13: 54. Figured holotype USNM 84772 from Wheatley; paratype ANSP 127245 in the Wheatley colln.
- bengalensis* Lea, *Unio*: 1838, TAPS 6: 3, pl. 2, fig. 3 (Bengal; Burrough); 1838, Obs. 2: 3. Figured holotype Burrough colln. in the ANSP [lost].
- berthae* Ortman, *Diplodon*: 1921, Memoirs of the Carnegie Museum, 8: 528, pl. 3, figs. 1-4 (Rio Jacuhy, Cachoeira, Rio Grande do Sul, Brazil). Syntypes Carnegie Mus. 61.5865; ANSP 167889 from Rio Camaquin marked "cotype" but it is not a primary type.
- bilineata* Lea, *Symphynota*: 1831, TAPS 4: 98, pl. 11, fig. 19 (River Hoogley [about 100 mi above Calcutta] Hindostan); 1834, Obs. 1: 108. Figured type not in the USNM; syntypes ANSP 41876 and 41878 mentioned by Lea as in the ANSP.
- biloba* Rafinesque, *Epioblasma*: 1831, Cont. Monograph Bivalve Shells River Ohio, p. 2 (Green river and Kentucky river). Syntype in the Férussac colln., *teste* Férussac (1835, Magazine de Zoology, p. 34) Paris Museum [not located]; [lost, *teste* H. Le Chevallier, pers. comm.].
- bisselianus* Lea, *Unio*: 1867, PANSP 19: 81 (Bissels Pond, Charlotte [Mecklenburg Co.], North Carolina; Wheatley); 1868, JANSPP (2) 6: 277, pl. 37, fig. 90; 1869, Obs., 12: 37. Figured holotype USNM 85373; paratypes ANSP 127180 in the Wheatley colln.
- blainvilliana* Lea, *Anodonta*: 1834, TAPS 5: 77, pl. 12, fig. 35 (Chili); 1834, Obs. 1: 189. Figured type not in the USNM; specimens identified by Lea, ANSP 41827.
- blandingianus* Lea, *Unio*: 1834, TAPS 5: 101, pl. 15, fig. 44 (St. Johns River ? Florida); 1834, Obs. 1: 213. Figured holotype USNM 85715; paratypes ANSP 41409 from Blanding.
- blatchleyi* Daniels, *Lampsilis*: 1902, Nautilus 16: 13, pl. 2 (Wabash River, Section 32, Linn Township, Posey Co., Indiana). Figured syntype MZUM 82960; syntype ANSP 84210.
- bomae* Pilsbry and Bequaert, *Caelatura* (*Laevirostris*) *stagnorum*: 1927, Bulletin of the American Museum of Natural History, 53: 405, pl. 33, fig. 2 (Congo River at Boma [Republic of the Congo]). Figured holotype ANSP 134032.
- borealis* Pilsbry, *Diplodon*: 1921 [in] Wanner, PANSP 73: 33, figs. 5, a-c (Gray shale, Little Conewago Creek, York Co., Pennsylvania; Triassic). Not located [Paleontology].
- bourguignatianus* Lea, *Unio*: 1863, PANSP 15: 189 (Tigris River, Mosul [Al Mawsil, Iraq]; Wheatley); 1866, JANSPP (2) 6: 54, pl. 18, fig. 51; 1867, Obs. 11: 58. Figured holotype USNM 84731; ANSP 41300 and 125675-7 mentioned as in the Wheatley colln. but there is no evidence Lea saw these, since he had only two specimens.
- boykianus* Conrad, *Plectomerus*: 1853, PANSP 6: 260. Error for *boykinianus* Lea.
- bracteatus* Gould, *Unio*: 1855, Proceedings of the Boston Society of Natural History, 5: 288 (Llanos River, Upper Texas [probably not far from the present crossing of US highway 87 SE of Mason, Mason Co., Texas, *teste*, Taylor, 1967, Veliger 10: 152]). Lectotype USNM 84966, selected by Johnson, 1964, United States National Museum Bulletin, 239: 47, pl. 31, fig. 5; paralectotype ANSP 56443.
- brevis* Lea, *Unio*: 1872, PANSP 34: 157 (Conasauga Creek, Monroe Co., East Tennessee); 1874, JANSPP (2) 8: 35, pl. 12, fig. 32; 1874, Obs. 13: 39. Figured holotype USNM 84546; ANSP 127368 mentioned as in the Wheatley colln., but there is no evidence Lea saw these since he had only two specimens.
- bridgesii* Lea, *Anodonta*: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSPP (2) 6: 291, pl. 42, fig. 104; 1869, Obs. 12: 51. Figured holotype USNM 86691; paratypes ANSP 41850 mentioned as in the ANSP.
- brittsi* Simpson, *Lampsilis*: 1900, PANSP 52: 76, pl. 8, fig. 2 (no locality [Big Niangua River, Camden Co., Missouri]). Figured holotype USNM 152700; paratypes ANSP 82431.
- bullata* Rafinesque, *Obliquaria* Plate 2, fig. 3
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 307, no. 36 (aux chutes de l'Ohio [River]). The specimen identified by Rafinesque, mentioned as a type by Vanatta, 1915, PANSP 67: 557, is here selected neotype ANSP 20250 from the Kentucky River.

- Non *Obliquaria flexuosa bullata* Rafinesque, op. cit. p. 307, no. 36, var. 1. Is *Quadrula pustulosa* (Lea) 1831.
- burkei* Walker, *Quincuncina*: 1922, *Nautilus* 36: 3, pl. 1, figs. 1, 4 (Sikes Creek, tributary of the Choctawatchee River, Barbour Co., Alabama). Figured holotype MZUM 94496; paratypes ANSP 131031.
- burroughiana* Lea, *Anodonta*: 1834, TAPS 5: 105, pl. 16, fig. 49 (Island of Luconia, near Manila [Philippine Islands]; Burrough); 1834, Obs., 1: 217. Figured type not in the USNM or ANSP.
- burroughianus* Lea, *Unio*: 1834, TAPS 5: 67, pl. 10, fig. 27 (River Parana, Province of Corrientes [Argentina]; Burrough); 1834, Obs. 1: 179. Figured holotype ANSP 41796.
- bursapastoris* Wright, *Unio*: 1896, *Nautilus* 9: 133, pl. 3, top and bottom figs. (Powell River [Lee Co.], Virginia). Figured holotype ANSP 67971, refigured by Johnson 1967, *Occasional Papers on Mollusks*, 3: 5, pl. 13, fig. 1.
- caelatus* Conrad, *Unio*: 1834, *American Journal of Science*, 25: 338, pl. 1, fig. 1; 1834, *New Fresh Water Shells U.S.*: 29, pl. 3, fig. 4 (Tennessee, Elk, and Flint Rivers). Figured type not in the ANSP [lost].
- caerulus* Lea, *Unio*: 1831, TAPS 4: 95, pl. 13, fig. 25 (River Hoogley, Hindostan); 1834, Obs. 1: 105. Figured holotype USNM 85193; paratype ANSP 41670 mentioned as in the ANSP.
- canadensis* Lea, *Unio*: 1857, PANSP 9: 85 (St. Lawrence River, near Montreal, [Quebec, Canada]); 1860 JANSP (2) 4: 268, pl. 44, fig. 148; 1860, Obs. 7: 86. Figured holotype USNM 84503; paratype mentioned as in the ANSP [lost].
- capillaris* Lea, *Unio*: 1834, TAPS 5: 29, pl. 2, fig. 2 (Ohio); 1834, Obs. 1: 141. Figured type or mentioned syntype not in the USNM or ANSP [lost]; larger specimen identified by Lea USNM 84602.
- capsaeformis* Lea, *Unio*: 1834, TAPS 6: 31, pl. 2, fig. 4 (Cumberland River, [Tennessee]; W. Cooper); 1834, Obs. 1: 143. Figured holotype MCZ 178570 from W. Cooper; paratype mentioned as in the ANSP [lost].
- carbonarius* Lea, *Unio*: 1838, TAPS 6: 37, pl. 11, fig. 32 (River Medellin [Vera Cruz State], Mexico; Burrough); 1838, Obs. 2: 37. Figured holotype USNM 84080a; paratype in the ANSP [lost].
- cardium* Rafinesque, *Lampsilis*: Plate 8, fig. 1 1820, *Annales Générales des Sciences Physiques*, Bruxelles 5: 298, no. 14, pl. 80, figs. 16-19 (no locality [Ohio River]). The type mentioned by Vanatta, 1915, PANSP 67: 551, is here selected lectotype ANSP 20210. This specimen is probably not the figured type which appears to have a stronger posterior ridge. It is *Lampsilis ovata* (Say) 1817. For a discussion of this species and its ecophenotypes see: Johnson, 1970, *Bulletin of the Museum of Comparative Zoology*, 140: 388.
- carinifera* Conrad, *Anadonta* [sic]: 1837, *Monography Unionidae North America*, no. 8 [back cover] (Ohio [River] or one of its tributaries below Louisville [Kentucky]; Phillips). Type not found in the ANSP. ANSP 56519 bears this name and is from Conrad, but it is labeled, "India." The specimen is not from North America.
- cariosus* Say, *Unio*: 1817, *Nicholson's Encyclopedia* 2 [no pagination], pl. 3, fig. 2 (Delaware and Schuylkill Rivers; [Susquehanna River] Wilkes Barre; [Luzerne Co.; all Pennsylvania]). The type locality was restricted to Schuylkill River, near Philadelphia, Pennsylvania, and a neotype MCZ 178839 was selected by Johnson, 1947, *Occasional Papers on Mollusks*, 1: 148, pl. 19, fig. 1.
- carolussimpsoni* Pilsbry, *Diplodon*: 1921 [in] *Wanner*, PANSP 73: 34, pl. 2, figs. 4-5 [holotype]; fig. 6 [paratype]. (Shale, Little Conewago Creek, York Co., Pennsylvania; Triassic). Holotype ANSP 31527, figured paratype ANSP 31529.
- cariosoides* Lea, *Unio*: 1886, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31517, figured by Whitfield, 1885, *Brach. and Lamell. Raritan Clays and Greensand Marls of N.J.*: 247, pl. 32, fig. 3. Is *Lampsilis cariosa* (Say).
- catawbensis* Lea, *Unio*: 1862, substitute name for *wheatleyi* Lea, *Unio*.
- catillus* Conrad, *Unio*: 1836, *Monography Unionidae North America*, no. 3, p. 30, pl. 13, fig. 2 (Scioto River, Ohio). Figured holotype ANSP 2103 Phillips colln. [lost].
- cerinus* Conrad, *Unio*: 1838, *Monography Unionidae North America*, no. 11, p. 95, pl. 52 (probably inhabits the waters of Louisiana, not far from New Orleans; Hale). Lectotype here selected, ANSP 41644, middle figure.
- choctawensis* Athearn, *Villosa*: 1964, *Nautilus* 77: 137, pl. 9, figs. c-f. (Choctawatchee River, 2 mi SW Caryville, Holmes Co., Florida). Holotype Natl. Mus. Canada 20096; paratypes ANSP 291580.
- cicatricosus* Say, *Unio*: 1829, *New Harmony [Indiana] Disseminator* 2 (19) 292 (Wabash River [Indiana]). Neotype Senckenberg Museum 4320 selected by Haas, 1930, *Senckenbergiana* 12: 327.
- circulus* Lea, *Unio*: 1829, TAPS 3: 433, pl. 9, fig. 14 (Ohio [River], Cincinnati, [Ohio]; Monongahela [River], Pittsburgh, [Pennsylvania]; Tennessee [River], Nashville, [Tennessee]); 1834, Obs. 1: 47. Figured type not in the USNM [lost]; syntype ANSP 56602 [no locality] mentioned as in the ANSP.
- circumactus* Lea, *Unio*: 1871, PANSP 23: 192 ([Tennessee River] Florence [Lauderdale Co.], Alabama; Holston River [Tennessee]); 1874, JANSP (2) 8: 14, pl. 4, fig. 11; 1874, Obs. 13: 19. Figured holotype USNM 85830 from the latter locality; paratype ANSP 127299 from the former locality in the Wheatley colln.
- cirratus* Lea, *Unio*: 1874, PANSP for 1873, 25: 422 (Abbeville District, [Savannah River drainage], South Carolina); 1874, JANSP (2) 8: 55, pl. 19, fig. 53; 1874, Obs. 13: 59. Figured holotype USNM 85584; paratypes in the Wheatley colln. [lost].
- clarkianus* Lea, *Unio*: 1852, TAPS 10: 273, pl. 21, fig. 30 ([Duck River] Williamsport [Maury Co.], Tennessee;

- Georgia or Alabama); 1852, Obs. 5: 29. Figured type not in the USNM [lost]; syntype ANSP 126052 from Georgia or Alabama, mentioned as in the Wheatley colln.
- coccineus* 'Hildreth' Conrad, *Unio*: 1836, Monography Unionidae North America, no. 3, p. 29, pl. 13, fig. 1 (Mahoning River, near Pittsburgh [Pennsylvania]). Figured holotype ANSP 2104 in the Hyde colln. [lost].
- collinus* Conrad, *Unio*: 1837, Monography Unionidae North America, no. 7, pl. 36, fig. 2 [plate caption only]. 1837, op. cit. no. 8, p. 65 (North [= Maury] River, a branch of the James River [Rockbridge Co.], Virginia). Type lot, ANSP 20408 [lost]; lectotype ANSP 41007, a subsequently figured metatype, (1840, op. cit. no. 12, p. 109, pl. 60, fig. 3) selected by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140, pl. 2, fig. 1.
- colombiana* Olsson and Wurtz, *Chevronais*: 1951, Notulae Naturae, no. 239: 6, figs. 3-6 (Rio Caquetá above Tres Esquinas, Colombia). Holotype ANSP 187181.
- compactus* Lea *Unio*: 1859, PANSP 11: 154 (Etowah River, Georgia Elliott and White; Conasauga River [Georgia]. Elliott); 1860, JANSP (2) 4: 218, pl. 28, fig. 98; 1860, Obs. 7: 36. Figured holotype USNM 84447; paratypes ANSP 125920 from the former locality and 125924 from the latter locality both in the Wheatley colln.
- compressa* Lea, *Monocondylaea*: 1863, PANSP 15: 190 (Siam, Wheatley); 1866, JANSP (2) 6: 30, pl. 11, fig. 29; 1867, Obs. 11: 34. Figured holotype USNM 86340; specimens ANSP 125614 mentioned as in the Wheatley colln. but not seen by Lea.
- compressa* Lea, *Symphynota*: 1829, TAPS 3: 450, pl. 12, fig. 22 ([Yellow Creek, near Cincinnati, Hamilton Co.] Ohio; Norman's Kill, near Albany [Albany Co., New York]); 1834, Obs. 1: 64. Figured holotype USNM 83961 from the former locality; paratypes mentioned as in the ANSP [lost].
- confragosa* Frierson, *Gibbosula*: 1928, PANSP 80: 147, pl. 21, figs. 1-2 (North China). Holotype ANSP 145237.
- congaraeus* Lea, *Unio*: 1831, TAPS 4: 72, pl. 6, fig. 4 (Congaree River, South Carolina); 1834, Obs., 1: 82. Figured holotype USNM 85693; 2 paratypes ANSP 41339 mentioned as in the ANSP.
- connollyi* Pilsbry, *Unio* (*Cafferia*): 1923, PANSP 75: 276, pl. 19, figs. 3-4, text fig. 1 (Port Natal, South Africa). Figured holotype ANSP 125501a; 2 paratypes ANSP 125501.
- conradi* Frierson, *Obliquaria reflexa*: 1927, Check List North American Naiades, p. 65. Based on Conrad, 1835, Monography Unionidae North America, no. 1, p. 7. Lectotype ANSP 56695a from the Alabama River, selected by Johnson, 1972, Occasional Papers on Mollusks, 3: 142, pl. 26, fig. 6.
- conradi* Vannata, *Pleurobema*: 1915, PANSP 67: 559. New name for *maculatus* Conrad, *Unio*: under which see.
- consanguineus* Lea, *Unio*: 1861, PANSP 13: 60 (Etowah River, White; Oostenaula River, Georgia, Elliott; Cahawba River, Alabama, Showalter); 1861, JANSP (2) 5: 5, p. 67, pl. 7, fig. 217; 1862, Obs., 8: 71. Figured holotype USNM 84726; paratypes ANSP 129863 from Showalter.
- consobrinus* Lea, *Unio*: 1859, PANSP 11: 331 (China, Wheatley); 1860, JANSP (2) 4: 272, pl. 45, fig. 152; 1860, Obs. 7: 90. Figured holotype USNM 85178; paratypes ANSP 125656 and 125654 in the Wheatley colln.
- conspicuus* Lea, *Unio*: 1872, PANSP 24: 156 (Yadkin River, Salisbury [Rowan Co.], North Carolina; Wheatley); 1874, JANSP (2) 8: 34, pl. 11, fig. 31; 1874, Obs. 13: 38. Figured holotype USNM 85056; paratypes ANSP 126223-4 in the Wheatley colln.
- constrictus* Conrad, *Unio lienosus*: 1838, Monography Unionidae North America, no. 10, p. 91, pl. 49, fig. 4 (North [= Maury] River, Rockbridge Co., Virginia). Figured holotype ANSP 20423 now ANSP 56465a.
- contorta* Lea, *Triquetra*: 1857, PANSP 8: 300. Unnecessary substitution for *lanceolata* Lea, *Triquetra*, under which see.
- contradens* Lea, *Unio*: 1838, TAPS 6: 75, pl. 18, fig. 58 (no locality); 1838, Obs. 2: 75. Figured holotype USNM 85185; specimen identified by Lea, ANSP 41680 from Java.
- contrarius* Conrad, *Unio*: 1849, PANSP 4: 153 (Ogeechee River, Georgia [should be: Flint River, Georgia, teste Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 382]; Cab. of J. H. Couper); 1850, JANSP (2) 1: 276, pl. 37, fig. 7. Figured type not in the MCZ or ANSP [lost].
- copei* Lea, *Unio*: 1868, PANSP 20: 144 (Headwaters of North branch of Holston River, Smyth Co., Virginia, Cope). 1868, JANSP (2) 6: 307, pl. 47, fig. 120; 1869, Obs. 12: 67. Figured holotype USNM 85137; paratypes ANSP 42086 mentioned as in the ANSP.
- cor* Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 28, pl. 3, fig. 3 (Elk and Flint Rivers, Alabama). Figured holotype MCZ 178792 purchased from Conrad by Anthony, figured by Johnson, 1956, Bulletin of the Museum of Comparative Zoology, 115: 111, pl. 2, fig. 3. Older paratype ANSP 20113a figured by Frierson, 1916, Nautilus 29: 103, pl. 3 who later claimed (1927, Check List North American Naiades, p. 59) that the shell figured by Conrad was not the one described, whereupon he selected the "described" shell as the type.
- cordata* Rafinesque, *Obovaria* Plate 3, fig. 1 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 312, pl. 82, figs. 6, 7 (Ohio [River]). The type mentioned by Vannata, 1915, ANSP 67: 558, is here selected lectotype ANSP 20221. Is *Pleurobema cordata cordata* (Rafinesque).
- corpulentoides* Lea, *Anodonta*: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, teste Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31525. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J.: 252, pl. 35, fig. 1. Is *Anodonta grandis* Say.
- corrianus* Lea, *Unio*: 1834, TAPS 6: 65, pl. 9, fig. 25 (In-

- dia); 1834, Obs. 1: 177. Figured holotype USNM 86056; paratype mentioned as in the ANSP [lost].
- corvunculus* Lea, *Unio*: 1868, PANSP 20: 144 (Swamp Creek, Whitfield Co., Georgia); 1868 JANSF (2) 6: 314, pl. 50, fig. 127; 1869, Obs. 12: 74. Figured holotype USNM 85293; paratypes mentioned as in the Wheatley colln. and ANSP [both lost].
- costata* Rafinesque, *Amblema* Plate 2, fig. 1 1820, *Annales Générales des Sciences Physiques, Bruxelles* 5: 315, pl. 82, figs. 13-14 (l'Ohio [River] . . . les petites rivières du Kentucky). The type mentioned by Vanatta, 1915, PANSP 67: 556, is here selected lectotype ANSP 20246 from small streams in Kentucky. Is *Amblema plicata* (Say) 1817.
- coyensis* Pilsbry, *Lampsilis*: 1910, PANSP 61: 538, pl. 27, figs. 3, 4 (Coy River, State of San Luis Potosí, Mexico). Figured holotype ANSP 99522a.
- crebristriata* Anthony, *Monocondylaea*: 1865, *American Journal of Conchology*, 1: 205, pl. 18, fig. 1 (Pegu [Burma]). Figured holotype MCZ 178935; paratypes ANSP 41761 from Anthony and ANSP 125804 mentioned by Anthony as in the Wheatley colln.
- crudus* Lea, *Unio*: 1871, PANSP 23: 190 (French Broad River, [Tennessee], Lindsley; Swamp Creek, Murray Co., Georgia, Major Downie; Holston River, [Tennessee], Wheatley and Law); 1874, JANSF (2) 8: 17, pl. 4, fig. 10; 1874, Obs. 13: 18. Figured holotype USNM 85841 from Lindsley; paratypes ANSP 127309 in the Wheatley colln.
- cuatolapamensis* H. B. Baker, *Elliptio (Sphenonaias) liebmanni*: 1922, *Occasional Papers of the Museum of Zoology, University of Michigan*, no. 106, p. 13, pl. 3, figs. 22 (Rio San Juan, Southern Vera Cruz [State], Mexico). Figured holotype MZUM 31904; figured paratype ANSP 133689, pl. 4, fig. 24.
- cultelliformis* Conrad, *Unio*: 1850, PANSP 5: 10 (Bogan River, Australia); 1854, JANSF (2) 2: 295, pl. 26, fig. 2. Figured holotype ANSP 41808a.
- cumingi* Lea, *Unio*: 1852, PANSP 6: 54 (Northern part of China; Cuming); 1860, JANSF (2) 4: 240, pl. 35, fig. 150; 1860, Obs. 7: 58. Figured holotype USNM 83897; paratype British Museum (Natural History) 1964360. Lea saw only these two specimens. Specimen identified by Lea, ANSP 56514.
- cuneata* Rafinesque, *Pleurobema* Plate 1, fig. 5 1820, *Annales Générales des Sciences Physiques, Bruxelles* 5: 313 (l'Ohio [River] près de St[e]ubenville [Jefferson Co., Ohio]; [Ohio River], Marietta [Washington Co., Ohio]). The type mentioned by Vanatta, 1915, PANSP 67: 555, is here selected lectotype ANSP 20228 from the Ohio River. Is *Pleurobema clava* (Lamarck) 1819.
- cuneus* Conrad, *Unio*: 1838, *Monography Unionidae North America*, no. 11 [back cover] (Little Red River, Arkansas); 1840, op. cit., no. 12, p. 105, pl. 58, fig. 1. Figured holotype ANSP 41645.
- cunninghami* B. H. Wright, *Unio*: 1883, PANSP 35: 58, pl. 1, figs. 1-4 (Lakes of Sumter Co., Florida, restricted to Lake Harris, Yalaha, Lake Co., Florida, by Johnson, 1967, *Occasional Papers on Mollusks*, 3: 5). Lectotype ANSP 41348a the specimen on which figs. 1, 2 are based, selected by Johnson, op. cit., pl. 13, fig. 2.
- curatus* Lea, *Unio*: 1863, PANSP 15: 193 (Sugar Creek [Mecklenburg Co.], North Carolina); 1866 JANSF (2) 6: 23, pl. 7, fig. 21; 1867, Obs. 11: 27. Figured holotype, and only specimen seen by Lea, in the Wheatley colln. [lost]; there is a larger specimen in the Wheatley colln. ANSP 127200.
- curvatus* Lea, *Unio*: 1872, PANSP 24: 159 (Pfeiffers Pond, Mecklenburg Co., North Carolina; Wheatley); 1874, JANSF (2) 8: 47, pl. 13, fig. 35; 1874, Obs. 13: 42. Figured holotype USNM 85550; paratypes in the Wheatley colln. [lost].
- cygneiformis* Pilsbry, *Glabaris trapezialis*: 1897, PANSP 48: 563, pl. 26, figs. 4, 5 (Pond, and a small creek near Maldonado, Uruguay). Figured holotype ANSP 69741a.
- cylindracea* Lea, *Anodonta*: 1838, TAPS 6: 45, pl. 13, fig. 40 (River Medellin, near Vera Cruz [Vera Cruz State, Mexico]; Burrough); 1838, Obs. 2: 45. Figured type and mentioned syntype not in the USNM or ANSP [lost]; specimen identified by Lea USNM 86712.
- cylindricus* Say, *Unio*: 1817, *Nicholson's Encyclopedia* 2 [no pagination] pl. 4, fig. 3 (Wabash River [Indiana] Barton Colln.) Figured type in ANSP [lost]. Neotype Senckenberg Museum 4310 selected by Haas, 1930, *Senckenbergiana* 12: 327; ANSP 41712 from Mrs. Say, but there is no evidence that it is a type.
- cyphya* Rafinesque, *Obliguaria* Plate 1, fig. 4 1820, *Annales Générales des Sciences Physiques, Bruxelles* 5: 305 (aux chutes de l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67, 556, is here selected lectotype ANSP 20239 from the Ohio River. Is *Plethobasus cyphyum* (Rafinesque).
- dallasiana* Lea, *Anodonta*: 1863, PANSP 15: 190 (Lake Winnipeg, at the mouth of the Saskatchewan River [Manitoba, Canada]); 1866, JANSF (2) 6: 29, pl. 11, fig. 28; 1867, Obs. 11: 33. Figured holotype USNM 86443; paratype ANSP 41203, mentioned by Lea as in the ANSP.
- dalli* F. Baker, *Anodontites*: 1914, PANSP 65: 667, pl. 27, figs. 1, 2 (Island of Mexiana [NE Pará, Brazil, in Amazon delta]). Figured holotype ANSP 109369.
- dallii* B. H. Wright, *Unio*: 1888, PANSP 40: 119, pl. 6, fig. 1 (Lake Beresford, Volusia Co., Florida). Figured holotype USNM 151037, refigured by Johnson, 1967, *Occasional Papers on Mollusks*, 3: 5, pl. 10, fig. 2; paratypes ANSP 41342.
- damascensis* Lea, *Unio*: 1863, PANSP 15: 190 (River Barada, Damascus [Iraq]); 1866, JANSF (2) 6: 55, pl. 18, fig. 52; 1867, Obs. 11: 59. Figured holotype ANSP 125733 mentioned as in the Wheatley colln.
- danielsi* B. H. Wright, *Unio*: 1899, *Nautilus* 13: 31 (Spring Creek [a branch of the Flint River], Decatur Co., Georgia). Measured holotype USNM 168967 figured by Johnson, 1967, *Occasional Papers on Mollusks*, 3: 5, pl. 6, fig. 1; paratypes ANSP 48039.
- datus* Lea, *Unio*: 1868, PANSP 20: 161 (Paw Creek [Mecklenburg Co.], North Carolina); 1866, JANSF (2) 6: 23, pl. 7, fig. 21; 1867, Obs. 11: 27. Figured holotype, and only specimen seen by Lea, in the Wheatley colln. [lost]; there is a larger specimen in the Wheatley colln. ANSP 127200.
- decidua* Long, *Unio*: 1834, Obs. 1: 177. Figured holotype USNM 86056; paratype mentioned as in the ANSP [lost].
- declivis* Conrad, *Unio*: 1850, PANSP 5: 10 (Bogan River, Australia); 1854, JANSF (2) 2: 295, pl. 26, fig. 2. Figured holotype ANSP 41808a.
- delumbis* Conrad, *Unio*: 1850, PANSP 5: 10 (Bogan River, Australia); 1854, JANSF (2) 2: 295, pl. 26, fig. 2. Figured holotype ANSP 41808a.
- depressa* Rafinesque, *Pleurobema* Plate 1, fig. 5 1820, *Annales Générales des Sciences Physiques, Bruxelles* 5: 313 (l'Ohio [River] près de St[e]ubenville [Jefferson Co., Ohio]; [Ohio River], Marietta [Washington Co., Ohio]). The type mentioned by Vanatta, 1915, PANSP 67: 555, is here selected lectotype ANSP 20228 from the Ohio River. Is *Pleurobema clava* (Lamarck) 1819.
- depygis* Conrad, *Unio*: 1838, *Monography Unionidae North America*, no. 11 [back cover] (Little Red River, Arkansas); 1840, op. cit., no. 12, p. 105, pl. 58, fig. 1. Figured holotype ANSP 41645.
- differtus* Long, *Unio*: 1834, Obs. 1: 177. Figured holotype USNM 86056; paratype mentioned as in the ANSP [lost].
- difficilis* Lea, *Unio*: 1868, PANSP 20: 161 (Paw Creek [Mecklenburg Co.], North Carolina); 1866, JANSF (2) 6: 23, pl. 7, fig. 21; 1867, Obs. 11: 27. Figured holotype, and only specimen seen by Lea, in the Wheatley colln. [lost]; there is a larger specimen in the Wheatley colln. ANSP 127200.

- [Mecklenburg Co.]; Beaver Co. [= Creek, Gaston Co.]; Long Creek [Gaston Co.]; all North Carolina); 1868, JANSF (2) 6: 299, pl. 44, fig. 11; 1869, Obs. 12: 59. Figured holotype USNM 85097 labeled, Paw Creek, Beaver Co., North Carolina; paratypes ANSP 127085 from the first locality, mentioned as in the Wheatley colln.
- decisus* Lea, *Unio*: 1831, TAPS 4: 22, pl. 12, fig. 23 (Alabama River); 1834, Obs. 1: 102. Figured holotype USNM 84723; paratype mentioned as in the ANSP [lost].
- declivis* Conrad, *Anodonta*: 1834, American Journal of Science, 25: 341, pl. 1, fig. 11 (Flint River, Morgan Co., Alabama). Figured holotype ANSP [lost].
- declivis* Say, *Unio*: 1831 [1832], Transylvania Journal of Medicine 4: 527 (Bayou Teche, Louisiana); 1832, American Conchology, no. 4 [no pagination], pl. 35. Three supposed syntypes ANSP 41698 from Barabino, all smaller than the figured type.
- declivis* Conrad, *Unio*: 1836, Monography Unionidae North America, no. 5, p. 45, pl. 23, fig. 1 (small creek in Greene Co., Alabama); non Say 1831, changed to *Unio rivularis* Conrad, 1853, PANSP 6: 275. Figured holotype ANSP 42852.
- decurtata* Conrad, *Anodonta*: 1870, American Journal of Conchology, 6: 200, pl. 11, fig. 6 (Colorado; Tertiary). Location of the type not known.
- delicatulus* Lea, *Unio*: 1863, PANSP 15: 189 (River Orontes, Syria; Wheatley); 1866, JANSF (2) 6: 58, pl. 19, fig. 56; 1867, Obs. 11: 62. Figured holotype, and only specimen seen by Lea, USNM 84906; specimens ANSP 125709 mentioned as in the Wheatley colln.
- delumbis* Conrad, *Unio*: 1834, New Freshwater Shells U.S.: 35, pl. 5, fig. 3 (small streams near Cooper River, South Carolina). Figured type not in the ANSP [lost].
- depressa* Rafinesque, *Obliquaria* Plate 4, fig. 5
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 303, pl. 81, figs. 5-7 (Ohio River, Evansville [Evansville, Vanderburg Co., Indiana]). Figured holotype, and only specimen seen by Rafinesque in J. D. Clifford colln. [lost]. The specimen identified by Rafinesque, mentioned by Vanatta, 1915 PANSP 67: 553, is here selected neotype ANSP 20207 from the Ohio River; subsequently identified specimen also in the Paris Museum. Is *Plagiola lineolata* (Rafinesque), teste Ortmann and Walker (1922: 52). Erroneously mentioned as lectotype by Johnson (In press).
- depygis* Conrad, *Unio*: 1866, American Journal of Conchology, 2: 107, pl. 10, fig. 1 (Harpeth River, Tennessee, W. H. DeCamp). Figured type, and only specimen seen by Conrad [lost], see Johnson, 1948, Nautilus 62: 102.
- differtus* Lea, *Unio*: 1872, PANSP 24: 158 ([Savannah River], Georgia?); 1874, JANSF (2) 8: 42, pl. 14, fig. 39; 1874, Obs. 13: 46. Figured holotype USNM 85399; paratype ANSP 41382, mentioned as in the ANSP.
- difficilis* Lea, *Unio*: 1868, PANSP 20: 144 (Swamp Creek, Whitfield Co., Georgia; waters of the Holston [River], Washington Co., Virginia); 1868, JANSF (2) 6: 311, pl. 49, fig. 124; 1869, Obs. 12: 71. Figured holotype USNM 85158 from the former locality; paratype mentioned as in the ANSP [lost].
- dignatus* Lea, *Unio*: 1863, PANSP 15: 189 (River Tigris, Bagdad [Iraq]; Wheatley); 1866, JANSF (2) 6: 51, pl. 17, fig. 48; 1867, Obs., 11: 55. Figured holotype USNM 84714; paratypes ANSP 41322 and 129673 in the Wheatley colln.
- dilatata* Rafinesque, *Unio* Plate 1, fig. 2
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 297 ([Ohio River]). From the types mentioned by Vanatta, 1915, PANSP 67: 555, is here selected a lectotype ANSP 20248a. Is *Elliptio dilatata* (Rafinesque).
- diluculi* Pilsbry, *Mycetopoda*: 1921 [in] Wanner, PANSP 73: 36, pl. 3, fig. 1 (Shale, Little Conewago Creek, York Co., Pennsylvania; Triassic). Holotype ANSP 31526.
- dimitus* Lea, *Unio*: see under *sumatrensis* Lea, *Unio*.
- discoidea* Lea, *Symphynota*: 1834, TAPS 5: 73, pl. 11, fig. 33 (China); 1834, Obs. 1: 187. Figured holotype USNM 86358 Burrough colln., apparently not returned to the ANSP; specimens under this name ANSP 56521.
- dissimilis* Lea, *Unio*: 1872, PANSP 24: 161 (Long Creek, Gaston Co.; Pfeiffers Pond, Mecklenburg Co.; both North Carolina; Wheatley); 1874, JANSF (2) 8: 53, pl. 18, fig. 52; 1874, Obs. 13: 57. Figured holotype USNM 86019 from the former locality; paratypes in the Wheatley colln. [lost].
- distans* Anthony, *Unio*: 1865, American Journal of Conchology, 1: 156, pl. 13, fig. 2 (Ohio). Figured holotype MCZ 146978; paratypes ANSP 42349.
- diversus* Conrad, *Unio*: 1856: American Journal of Science, (2) 21: 172 [fig. in outline] (Shoal Creek, N. Alabama). Not round.
- dolabraeformis* Lea, *Unio*: 1838, TAPS 6: 103, pl. 24, fig. 113 (Altamaha River, Liberty [now Long] Co., Le Conte; Altamaha River, near Darien [McIntosh Co.]; both Georgia); 1838, Obs. 2: 103. Figured holotype USNM 84888; paratype ANSP 41102 from Le Conte.
- dolearis* Lea, *Anodonta*: 1863, PANSP 15: 193 (Stewarts Mill Dam, Union Co., North Carolina). Changed to:
- doliaris* Lea, *Anodonta*: 1866, JANSF (2) 6: 24, pl. 8, fig. 23; 1867, Obs. 11: 28. Figured holotype ANSP 126522a.
- donaciformis* Lea, *Unio*: 1828, TAPS 3: 267, pl. 4, fig. 3 (Ohio); 1834, Obs. 1: 9. Figured holotype USNM 84457; paratype ANSP 56632 from Lea.
- dooleyensis* Lea, *Unio*: 1874, PANSP for 1873, 25: 424 (Flint River Dooley Co., Georgia; Abbeville [Savannah River drainage] Abbeville Co., South Carolina) 1874, JANSF (2) 8: 64, pl. 22, fig. 60; 1874, Obs. 13: 68. Figured holotype USNM 85538; paratypes mentioned as in the Wheatley colln. [lost].
- dorei* B. H. Wright, *Unio*: 1888, PANSP 40: 115, pl. 3, fig. 1 (Lake Monroe [Volusia Co.], Florida). Figured holotype USNM 151034, refigured by Johnson, 1967, Occasional Papers on Mollusks, 3: 6, pl. 9, fig. 2; paratypes ANSP 41363.

- dorsatus* Lea, *Unio*: 1868, PANSP 20: 160 (Catawba River, North Carolina; Wheatley); 1868, JANSF (2) 6: 300, pl. 45, fig. 112; 1869, Obs. 12: 60. Figured holotype USNM 84494; paratypes ANSP 126857 mentioned as in the Wheatley colln.
- downiei* Lea, *Unio*: 1858, PANSP 10: 166 (Buck Lake, a bayou of the Satilla River, Wayne [Brantly] Co., Georgia); 1859, JANSF (2) 4: 210, pl. 25, fig. 91, 1859, Obs. 7: 28. Figured holotype USNM 84854; paratype ANSP 41392 from Lea.
- dromus* Lea, *Unio*: 1834, TAPS 5: 70, pl. 10, fig. 29; 1834, Obs. 1: 182 (Harpeh River; Cumberland River, near Nashville [Davidson Co.]; both Tennessee). Figured holotype USNM 25852; paratypes ANSP 41139 mentioned as in the ANSP.
- edwardsi* Conrad, *Unio*: 1867, American Journal of Conchology, 3: 11 (Hab. ?; Eocene) [nomen nudum].
- elegans* Lea, *Unio*: 1831, TAPS 4: 83, pl. 9, fig. 13 (Ohio River); 1834, Obs. 1: 93. Figured holotype USNM 84449; paratype mentioned as in the ANSP [lost].
- elliottii* Lea, *Margaritana*: 1858, PANSP 10: 138 (Chattahoochee River [below Uchee Bar] near Columbus [Muscogee Co.], Georgia); 1859, JANSF (2) 4: 226, pl. 31, fig. 108; 1859, Obs. 7: 44. Figured holotype USNM 86257; possible paratype ANSP 126659 from Hallenbeck in the Wheatley colln.
- ellipsaria* Rafinesque, *Obliquaria* (*Ellipsaria*) Plate 5, fig. 1 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 303 (le Kentucky [River]). The specimen identified by Rafinesque, mentioned as a type by Vanatta, 1915, PANSP 67: 553, is here selected neotype ANSP 20233 from the Ohio River. Specimen identified by Rafinesque in the Férussac colln., teste Férussac (1835, Mag. de Zool. p. 33) Paris Museum [not located]. Is *Plagiola lineolata* (Rafinesque), teste Ortmann and Walker (1922: 52).
- ellipsiformis* Conrad, *Unio*: 1836, Monography Unionidae North America: 7, p. 60, pl. 34, fig. 1 (Michigan, Cabinet of Phillips). Figured holotype ANSP 42114a, from Phillips.
- ellipsis* Lea, *Unio*: 1828, TAPS 3: 268, pl. 4, fig. 4; 1834, Obs. 1: 10 (Ohio). Figured type not found in the USNM; syntypes ANSP 56614 mentioned as in the ANSP.
- elliptica* Lea, *Margaritana*: 1859, PANSP 11: 113 (Tombigbee River, Columbus [Lowndes Co.], Mississippi; Spillman); 1861, JANSF (2) 5: 106, pl. 18, fig. 254; 1862, Obs. 8: 110. Figured holotype USNM 86258; paratype ANSP 126658 from Spillman in the Wheatley colln.
- elliptica* Rafinesque, *Unio* (*Elliptio*) Plate 6, fig. 6 1820, Annales Générales des Science Physiques, Bruxelles 5: 296 (Ohio River près de Louisville [Jefferson Co.], et de Maysville [Mason Co., both Kentucky]). The type mentioned by Vanatta, 1915, PANSP 67: 555, is here selected lectotype ANSP 20213. Is *Pleurobema clava* (Lamarck) 1819.
- ellipticum* Conrad, *Pseudodon*: 1865, American Journal of Conchology, 1: 352, pl. 25, fig. 1 [*ellipticus* on pl. caption] (Cambodia). Figured holotype ANSP 41763; paratype MCZ 175575 and not the holotype as thought by Johnson, 1956, Bulletin of the Museum of Comparative Zoology, 115: 113.
- emesaensis* Lea, *Unio*: 1866, PANSP 17: 286 (Lake Homs, River Orontes, North Syria; Wheatley); 1868, JANSF (2) 6: 254, pl. 30, fig. 68; 1869, Obs. 12: 14. Figured holotype USNM 85856; paratypes ANSP 125722 in the Wheatley colln.
- emmonsii* Lea, *Unio*: 1857, PANSP 9: 86, (Roanoke River, Weldon [Halifax Co.] North Carolina); 1861, JANSF (2) 5: 56, pl. 2, fig. 203; 1862, Obs. 8: 60. Figured holotype USNM 86028; paratypes ANSP 127140 from Emmons in the Wheatley colln.
- encarpus* Lea, *Unio*: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSF (2) 6: 294, pl. 42, fig. 105; 1869, Obs. 12: 54. Figured holotype USNM 84386; paratype ANSP 56544, the only other specimen seen by Lea.
- enno* Ortmann, *Diplodon*: 1921, Memoirs of the Carnegie Museum, 8: 531, pl. 8, figs. 3-8 (Rio Grande, Boqueirão, Bahia, Brazil; S. Francisco drainage). Figured syntypes Carnegie Museum, 61.9264; syntypes ANSP 167875.
- estabrookianus* Lea, *Unio*: 1845, PAPS 4: 165 (Clinch River and Second Creek, Tennessee); 1848, TAPS 10: 77, pl. 6, fig. 17; 1848, Obs. 4: 51. Figured holotype USNM 84389 from the former locality; paratype ANSP 41582 from Lea.
- etowaensis* [sic] Conrad, *Margaritana*: 1849, PANSP 4: 154 (Etowah River [Georgia]). Type loaned by J. H. Couper to Conrad [lost].
- exactus* Lea, *Unio*: 1858, PANSP 10: 41 (Neuse River, 6 mi from [East] Raleigh [Wake Co.] North Carolina); 1861, JANSF (2) 5: 62, pl. 4, fig. 210; 1862, Obs. 8: 66. Figured holotype, and only specimen seen by Lea, USNM 85002; specimens identified by Lea, ANSP 42820.
- excultus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11, p. 99, pl. 55, fig. 1 (New Orleans, [Orleans Parish], Louisiana). Figured holotype ANSP 20427 [lost].
- exilior* Lea, *Anodonta*: 1871, PANSP 23: 188 (Mexico, Wheatley) 1874, JANSF (2) 8: 24, pl. 7, fig. 21; 1874, Obs. 13: 28. Figured holotype USNM 86730; paratypes ANSP 125882.
- fabilis* Lea, *Unio*: 1831, TAPS 4: 86, pl. 10, fig. 16 (Ohio River); 1834, Obs. 1: 96. Figured holotype USNM 85270a; paratype mentioned as in the ANSP [lost].
- fasciata* Rafinesque, *Unio*: Plate 6, fig. 4 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 294 (l'Ohio et les rivières Alleghany, Muskingum, Kentucky, Salt, Green, etc.). The type mentioned by Vanatta, 1915, PANSP 67: 551, is here selected lectotype ANSP 20222, from the Kentucky River. Is *Actinonaias ligamentina* (Lamarck) 1819; see Johnson (1969, Nautilus 83: 53).
- fasciola* Rafinesque, *Lampsilis*: 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 229 (le Kentucky [River] [Ohio]). Figured holotype USNM 84386; paratype ANSP 56544, the only other specimen seen by Lea.
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- [River]). The specimen regarded as the type by Vanatta, 1915, PANSP 67: 551, ANSP 20203 is *Lampsilis radiata siliquoidea* (Barnes) and not the species described by Rafinesque which is identifiable from the original description, *teste* Ortmann and Walker (1922: 64). Syntype in the Ferussac colln., *teste* Ferussac (1835, Mag. de Zool., pp. 26, 32) which he correctly identified as *Unio multiradiatus* Lea 1829. Paris Museum [not located].
- fasciolaris* Rafinesque, *Obliquaria* (*Ellipsaria*) Plate 4, fig. 2 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 303 (l'Ohio, le Wabash, Kentucky, etc. [Rivers]). The type mentioned by Vanatta, 1915, PANSP 67: 554 is here selected lectotype ANSP 20253 from the Kentucky River. Is *Ptychobranchus fasciolaris* (Rafinesque), *teste* Ortmann and Walker (1922: 42).
- fassinans* Lea, *Unio*: 1868, PANSP 20: 143 (head waters of Holston River, Washington Co., Virginia); 1868, JANSP (2) 6: 305, pl. 47, fig. 118. 1869, Obs. 12: 65. Figured holotype USNM 84926 and only specimen seen by Lea; specimens mentioned as in the ANSP [lost].
- felix* Pilsbry, *Glabaris latomarginatus*: 1897, PANSP 48: 563, pl. 26, fig. 8 (Colonia, Uruguay). Figured holotype ANSP 69714.
- ferussaceana* Lea, *Anodonta*: 1834, TAPS 5: 45, pl. 6, fig. 15 (Ohio River, near Cincinnati, [Hamilton Co.], Ohio); 1834, Obs. 1: 157. Figured holotype USNM 86520; paratypes mentioned as in the ANSP [lost].
- fiatum* Frierson, *Pleurobema*: 1927, Check List North American Naiades, p. 43 (Cahaba River, Alabama); 1928, Nautilus 41: 139, pl. 3, fig. 2. Figured holotype MZUM 87575; paratype ANSP 145244.
- fimbriata* Frierson, *Lampsilis*: 1907, Nautilus 21: 86, pl. 12, two upper figs. and lower left one. (Valles River [near Valles, San Luis Potosi State] Mexico). Holotype MZUM 87579; paratypes ANSP 99547-9.
- flava* Anthony, *Anodon*: 1865, American Journal of Conchology, 1: 160, pl. 14, fig. 3 (Michigan). Figured holotype MCZ 161866; paratypes ANSP 127805 from Anthony.
- flava* Pilsbry and Bequaert, *Aspatharia*: 1927, Bulletin of the American Museum of Natural History, 53: 418, pl. 43, figs. 3, 3a (holotype); pl. 44, figs. 2, 2a (Medje 2°25' N., 27°30' [Republic of the Congo]. Figured holotype AMNH 72063; paratypes ANSP 134025.
- flava* Rafinesque, *Obliquaria*: Plate 3, fig. 6 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 305, pl. 81, figs. 13-14 (les petites rivières se jetant dans le Kentucky, Saltriver et Greenriver). The type mentioned by Vanatta, 1915, PANSP 67: 557 is here selected lectotype ANSP 20230 from small creeks in Kentucky. Is *Fusconaia flava* (Rafinesque), *teste* Ortmann and Walker (1922: 5).
- flavidus* Lea, *Unio*: 1872, PANSP 24: 156 (Clinch River, Anderson Co., Holston River; both Tennessee; North Alabama); 1874, JANSP (2) 8: 28, pl. 9, fig. 25; 1874, Obs. 13: 32. Holotype USNM 84550 from the first locality; paratypes ANSP 127282 from the second locality mentioned as in the Wheatley colln.
- flexuosa* Rafinesque, *Obliquaria* Plate 7, fig. 2 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 306 (le Kentucky, Salt-river et Green-river). The type mentioned by Vanatta, 1915, PANSP 67: 550 is here selected lectotype ANSP 20249 from the Kentucky River. Is *Dynomia* (*Dynomia*) *flexuosa* (Rafinesque), *teste* Ortmann and Walker (1922: 70).
- florentinus* Lea, *Unio*: 1857, PANSP 9: 83 ([Tennessee River], Florence [Lauderdale Co.], Alabama; Cumberland River, Tennessee); 1861, JANSP (2) 5: 64, pl. 5, fig. 213; 1862, Obs. 8: 68. Figured holotype USNM 84948; paratypes ANSP 56403 Alabama from Lea.
- floridensis* Lea, *Unio*: 1852, TAPS 10: 274, pl. 21, fig. 31 (Chácktaháchi River, West Florida, Le Conte; restricted by Clench and Turner, 1956, Bulletin of the Florida State Museum, 1: 202 to Choctawhatchee River, 1 mi west of Caryville, Holmes Co., Florida); 1852, Obs. 5: 30. Clench and Turner claimed that the figured holotype was in the USNM, but it is not; Lea returned the specimen to Le Conte. Figured holotype ANSP 42081.
- flucki* Bartsch, *Nephronaias*: 1906, Proceedings of the United States National Museum, 30: 393, pl. 39, figs. 1-3 (Wounta River of Kukallaya, Nicaragua; Fluck). Figured holotype USNM 106102; paratypes ANSP 97585 from Fluck.
- folliculatus* Lea, *Unio*: 1838, TAPS 6: 38, pl. 11, fig. 33 (Savannah River [Georgia]; Le Conte); 1838, Obs. 2: 38. Figured holotype USNM 85861; paratype ANSP 42746 from Le Conte.
- fontanus* Conrad, *Unio*: 1866, American Journal of Conchology, 2: 279, pl. 15, fig. 13 (rivulet near Vicksburg, [Warren Co.], Mississippi). Figured holotype ANSP 56458.
- forbesiana* Lea, *Anodonta*: 1860, PANSP 12: 92 (Uruguay River, Argentina and Uruguay); 1863, JANSP (2) 5: 393, pl. 47, fig. 301; 1863, Obs. 10: 29. Figured holotype USNM 86694; paratypes ANSP 125427 mentioned as in the Wheatley colln.
- forbesianus* Lea, *Unio*: 1852, TAPS 10: 264, pl. 16, fig. 17 (Savannah River [Georgia]; Le Conte); 1852, Obs. 5: 20. Figured holotype USNM 84542; paratypes ANSP 290911 from Le Conte.
- formosus* Lea, *Unio*: 1831, TAPS 4: 111, pl. 16, fig. 41 (Ohio River); 1834, Obs. 1, 121. Figured type not found in the USNM; types mentioned as in the ANSP [lost].
- fragilis* Rafinesque, *Unio* Plate 5, fig. 4 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 295 (no locality). The type mentioned by Vanatta, 1915, PANSP 67: 552 is here selected lectotype ANSP 20209 from creeks in Kentucky. Is *Leptodea fragilis* (Rafinesque), *teste* Ortmann and Walker (1922: 53).
- fragosus* Conrad, *Unio*: 1835, Monography Unionidae North America, no. 1, p. 12, pl. 6, fig. 1 (Scioto River, Ohio; Blanding). Figured type, and the only specimen seen by Conrad, not found.

- frierisoni* B. H. Wright, *Unio*: 1896, *Nautilus* 9: 134, pl. 3 (Bayou Pierre, an arm of the Red River in De Soto Parish, Louisiana). Lectotype USNM 133432 selected by Johnson, 1967, *Occasional Papers on Mollusks*, 3: 6, pl. 5, fig. 4; paralectotypes ANSP 67972.
- fryanus* B. H. Wright, *Unio*: 1888, PANSP 40: 113, pl. 2, fig. 1 (Lake Ashby, Volusia Co., Florida). Figured holotype USNM 151032; paratypes ANSP 41349.
- fulgens* Rafinesque, *Unio* Plate 10, fig. 4 1831, Continuation of a Monograph Bivalve Shells River Ohio: 7 (River Ganges [India]). Lectotype Paris Museum [not catalogued], selected by Johnson (In press).
- furvus* Conrad, *Unio*: 1834 *New Fresh Water Shells U.S.*: 39, pl. 6, fig. 3 (Black Warrior river [near its source, among the mountains of Alabama]). Figured type not in the ANSP.
- fuscata* Rafinesque, *Unio viridis*: see under *viridis*
- gabbianus* Lea, *Unio*: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, *JANSP* (2) 6: 295, pl. 43, fig. 106; 1869, *Obs.* 12: 55. Figured holotype USNM 84387; paratype ANSP 56542 mentioned as in the ANSP.
- ganina* Pilsbry, *Lampsilis metallica*: 1910, PANSP 61: 539, pl. 27, fig. 6 (Ganina River, 3 mi SW of San Diequito [State of San Luis Potosi] Mexico). Figured holotype ANSP 99523a.
- garambae* Pilsbry and Bequaert, *Mutela*: 1927, *Bulletin of the American Museum of Natural History*, 53: 431, pl. 40, figs. 1, 1a, 2 (Middle Garamba River [approximately 4°10' N., 29°40' E] Republic of the Congo). Figured holotype AMNH 72067; paratype ANSP 134051.
- gastonensis* Lea, *Unio*: 1863, PANSP 15: 191 (Mine Creek, Gaston Co., North Carolina; Wheatley); 1866, *JANSP* (2) 6: 20, pl. 6, fig. 18; 1867, *Obs.* 11: 24. Figured holotype USNM 85409; specimens ANSP 126963 mentioned as in the Wheatley colln. Lea saw but two specimens.
- genthii* Lea, *Unio*: 1857, PANSP 9: 85 (Catawba River, Gaston Co., Wheatley; Deep River, Gulf [Chatham Co.]; both North Carolina, restricted by Johnson, 1970, *Bulletin of the Museum of Comparative Zoology*, 140: 378, to the latter locality); 1861, *JANSP* (2) 5: 57, pl. 2, fig. 204; 1862, *Obs.* 8: 61. Figured holotype USNM 84834; paratypes ANSP 126234 mentioned as in the Wheatley colln.
- genuinus* Lea, *Unio*: 1868, PANSP 20: 161 (Bissels Pond, Charlotte [Mecklenburg Co.], North Carolina; Wheatley); 1868, *JANSP* (2) 6: 305, pl. 46, fig. 117; 1869, *Obs.* 12: 64. Figured holotype USNM 85123; specimens ANSP 126259-60 mentioned as in the Wheatley colln. Lea saw but three specimens.
- geometricus* Lea, *Unio*: 1834, TAPS 5: 38, pl. 4, fig. 10 (Bayou Teche, [St. Landry Parish], Louisiana); 1834, *Obs.* 1: 150. Figured holotype USNM 85712; paratypes ANSP [lost].
- germanus* Lea, *Unio*: 1861, PANSP 13: 40 (Coosa River, Alabama); 1866, *JANSP* (2) 6: 49, pl. 19, fig. 54; 1867, *Obs.* 11: 53. Figured holotype, and only specimen seen by Lea, USNM 85296; specimens identified by Lea ANSP 56500.
- gibbosa* Rafinesque, *Amblema* Plate 7, fig. 6 1820, *Annales Générales des Sciences Physiques, Bruxelles* 5: 315 (l'Ohio et les rivières adjacentes). The type mentioned by Vanatta, 1915, PANSP 67: 550, is here selected lectotype ANSP 20232 from the Ohio River. Is *Dysnomia (Torulosa) torulosa* (Rafinesque), *teste* Ortmann and Walker (1922: 69).
- glandulosa* Anthony, *Anodon*: 1865, *American Journal of Conchology*, 1: 163, pl. 16, fig. 3 (Michigan). Figured holotype MCZ 161869; paratypes ANSP 129748 from Anthony.
- Glebulula* Conrad: 1853, PANSP 6: 268. Type species: *Unio rotundatus* Lamarck, monotypic.
- globosa* Lea, *Anodonta*: 1841, PAPS 2: 31 (Concha Lake, 20 leagues [= 60 mi] S Vera Cruz, Tlotalpam [Tlaxcala], Vera Cruz State] Mexico); 1842, TAPS 8: 241, pl. 24, fig. 56; 1842, *Obs.* 3: 79. Figured holotype USNM 86701; larger paratype ANSP 41262, mentioned as in the Burrough colln.
- globosa* Lea, *Symphynota*: 1834, TAPS 5: 41, pl. 4, fig. 12 (River Ohio, 150 mi below Louisville [Kentucky]; Long); 1834, *Obs.* 1: 153. Type not in the USNM; smaller syntypes ANSP 56609, from Long, mentioned as in the ANSP.
- globosus* Lea, *Unio*: 1831, TAPS 4: 119 ([Ohio]); 1834, *Obs.* 1: 129. Types not found in the USNM or ANSP, though mentioned as in the latter.
- goascoranensis* Lea, *Unio*: 1858, PANSP 10: 118 (River Goascoran, Honduras, Pacific slope; Le Conte); 1860, *JANSP* (2) 4: 258, pl. 41; fig. 139; 1860, *Obs.* 7: 76. Figured holotype USNM 85086; paratypes ANSP 129957 from Le Conte in the Wheatley colln.
- Gonidea* Conrad: 1857, PANSP 9: 165, no type selected. Type species: *A. randalli* Trask (= *A. angulata* Lea). Subsequent designation, Hannibal, 1922, *Proceedings of the Malacological Society of London*, 10: 126.
- gracilentus* Lea, *Unio*: 1857, PANSP 9: 85 (Catawba River, Gaston Co., North Carolina; Wheatley); 1861, *JANSP* (2) 5: 58, pl. 3, fig. 205; 1862, *Obs.* 8: 62. Figured holotype USNM 85976; paratypes ANSP 127719 in the Wheatley colln.
- gracillior* Lea, *Unio*: 1856, PANSP 8: 262 (Buckhead Creek [Burke Co.]; Tobesaufke [Tobesofkee] Creek near Macon [Bibb Co.]; Elliott; both Georgia); 1858, *JANSP* (2) 4: 56, pl. 8, fig. 38; 1858, *Obs.* 6: 56. Figured holotype USNM 85088; paratypes ANSP 126290 from Elliott in the Wheatley colln.
- granadensis* Lea, *Anodonta*: 1868, PANSP 20: 96 (Lake Nicaragua [Central America]); 1868, *JANSP* (2) 6: 288, pl. 41, fig. 100; 1869, *Obs.* 12: 48. Figured holotype USNM 86655; paratypes ANSP 41835 mentioned as in the ANSP.
- granadensis* Lea, *Unio*: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]); 1868, *JANSP* (2) 6: 292, pl. 42, fig. 103; 1869, *Obs.* 12: 53. Figured holotype USNM 84388; paratypes ANSP 56543 mentioned as in

- the ANSP. Non *Unio granadensis* Conrad 1855, changed to *Micronaias marshalli* by Morrison, 1943, Nautilus 57: 15.
- granadensis* Conrad, *Unio*: 1855, PANSP 7: 256 (Rio Grande, Texas) Type not in the ANSP [lost].
- grandioides* Lea, *Anodonta*: 1868, PANSP 20: 164 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31516. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls, p. 251, pl. 34, figs. 2, 3. Is *Anodonta grandis* Say.
- grandis* Say, *Anodonta*: 1829, New Harmony [Indiana] Disseminator 2 (22): 341 (Fox River of the Wabash [Indiana]). Neotype Senckenberg Museum 4301 selected by Haas, 1930, Senckenbergiana 12: 326. Simpson (1914, Cat. Naiades 1: 420) mentions seeing what he supposed was Say's type, but it was not located.
- gravidus* Lea, *Unio*: 1856, PANSP 8: 93 (Siam; colln. of Haines); 1857, JANSP (2) 3: 292, pl. 24, fig. 5; 1857, Obs. 6: 12. Figured holotype USNM 83935; paratype ANSP 41748 from Haines.
- greenii* Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 32, pl. 4, fig. 1 (headwaters of the Black Warrior River, Alabama); 1837, Monography Unionidae North America, no. 8, p. 69, pl. 38, fig. 2. Figured type ANSP 20413 [lost]; syntype ANSP 41136 from Conrad; syntype USNM 84950 from the ANSP.
- guadalupensis* Wurtz, *Quadrula (Quincuncina)*: 1950, Notulae Naturae, no. 224, p. 2, figs. 1-5 (Guadalupe River, above Seguin between Routes 123 and 90, Guadalupe Co., Texas). Holotype ANSP 185974.
- haasi* Pilsbry, *Spatha*: 1923, PANSP 75: 275, pl. 19, figs. 1-2 (Boran, Kenya). Figured holotype ANSP 81211a; paratype 81211.
- hayleri* Frierson, *Unio (Pleurobema)*: 1900, Nautilus 13: 2 (North River, near Tynes [= Tyner, Tuscaloosa Co.], Alabama). Lectotype ANSP 77902a, 2 lower figs. selected by Johnson, 1972, Occasional Papers on Mollusks, 3: 144, pl. 25, fig. 1.
- hallenbecki* Lea, *Anodonta*: 1858, PANSP 10: 138 (Uphapee [Uphapee] Creek, Macon Co., Georgia [Alabama]; 1859, JANSP (2) 4: 232, pl. 32, fig. 112; 1859, Obs. 7: 50. Figured holotype USNM 86428; paratype ANSP 126608 from Hallenbeck in the Wheatley colln.
- haricotti* Frierson, *Elliptio*: 1927, Check List North American Naiades, p. 38 (Guatemala); 1928, Nautilus 41: 139, pl. 3, figs. 2, 2a. Holotype MZUM 97047; paratype ANSP 145240. Known only from these two specimens.
- haroldiana* Dall, *Gonidea angulata*: 1908, Smith. Misc. Coll. 50: 500 (Guadalupe Creek, between San José and San Francisco [Santa Clara and San Mateo Cos.], California). Measured holotype USNM 110596a; paratypes ANSP 94552 mentioned by Dall as in the ANSP.
- hartii* B. H. Wright, *Unio (Elliptio) webbiana*: 1934, Nautilus 47: 95, pl. 10, figs. 3-4 (Lake Consuelo, near Floral City [or Little Lake, SE Floral city, just outside village limits], Citrus Co., Florida). Holotype USNM 424925; figured paratypes ANSP 161595a, fig. 4.
- hartwrightii* B. H. Wright, *Unio*: 1896, Nautilus 9: 121, pl. 2, figs. 4-6 (Lake Beresford [Volusia Co.], restricted to St. Johns River, Blue Springs, 3 mi S Lake Beresford, Volusia Co., Florida, by Johnson, 1967, Occasional Papers on Mollusks, 3: 6). Figured holotype USNM 151031; paratype ANSP 67523.
- hasemani* Ortmann, *Diplodon*: 1921, Mem. Carnegie Mus. 8: 478, pl. 34, figs. 1-4 (Rio Guaporé, near Rio São Simão, Matto Grosso, Brazil). Type set Carnegie Museum, 61.5857 of 12 specimens; syntype ANSP 167869.
- hebatatus* Conrad, *Unio*: 1854, JANSP (2) 2: 296, pl. 26, fig. 5 (Missouri). Figured holotype ANSP 41654.
- heermannii* Lea, *Unio*: 1861, PANSP 13: 392 (Medina River, [San Antonio River System] Texas); 1862, JANSP (2) 5: 194, pl. 26, fig. 263; 1863, Obs., 9: 16. Figured holotype USNM 83932; paratype mentioned as in the ANSP [lost].
- hembeli* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 10, p. 93, pl. 51, fig. 1 (no locality, but sent from New Orleans, Louisiana [known only in Louisiana from the Bayou Teche system]). Figured holotype ANSP 20422 now 56529.
- heros* Say, *Unio*: 1829, New Harmony [Indiana] Disseminator 2 (19) 291 (Fox River of the Wabash [Indiana]). Neotype Senckenberg Museum 4307, selected by Haas, 1930, Senckenbergiana 12: 328.
- heterodon* Lea, *Unio*: 1829, TAPS 3: 428, pl. 8, fig. 11; 1834, Obs. 1: 42 (Schuylkill [River] and Derby Creek [mostly in Delaware Co.], Pennsylvania). Figured type belonged to Mason, not in the USNM or ANSP [presumed lost]. Lea mentioned specimens in the possession of T. A. Conrad now ANSP 41004 and 41005.
- hians* Rafinesque, *Amblasmodon*: 1831, Cont. Monograph Bivalve Shells River Ohio, p. 5 (River Tennessee). Syntype, consisting of a single valve, in the Férussac colln., *teste* Férussac (1835, Mag. de Zool., p. 31) Paris Museum [not located].
- hildae* Ortmann, *Diplodon*: 1921, Memoires Carnegie Museum 8: 514, pl. 36 fig. 7, pl. 37, figs. 1-3. (Rio Jacuhy, Cachoeira, Rio Grande do Sul, Brazil). Type set Carnegie Mus., 61.5864; syntype ANSP 167911.
- hildrethianus* Lea, *Unio*: 1834, TAPS 5: 36, pl. 3, fig. 8; 1834, Obs. 1: 148 (Ohio [River] near Marietta [Washington Co., Ohio]; Hildreth). Figured type not in the USNM; syntypes ANSP 41826 mentioned as in the ANSP.
- hinkleyi*, B. H. Wright, *Unio*: 1888, PANSP 40: 117, pl. 4, fig. 2 (Lake Monroe [Volusia Co.], Florida). Holotype USNM 151033 refigured by Johnson, 1967, Occasional Papers on Mollusks, 3: 7, pl. 11, fig. 1; paratypes ANSP 43140.
- holtonis* Lea, *Anodonta*: 1857, PANSP 9: 85 (near Carthago, New Grenada [Colombia]); 1857, JANSP (2) 3: 316, pl. 32, fig. 31; 1857, Obs. 6: 36. Figured holo-

- type USNM 86519; paratype mentioned as in the Wheatley colln. [lost].
- homsensis* Lea, *Unio*: 1864, PANSP 16: 285 (Lake Homs, ancient Emesa, River Orontes, North Syria; Wheatley); 1868, JANSF (2) 6: 249, pl. 29, fig. 63; 1869, Obs. 12: 9. Figured holotype ANSP 125718 in the Wheatley colln.
- houghtonensis* Currier, *Anodonta*: 1881 [in] DeCamp, Shell Bearing Moll., Michigan, Kent Sci. Inst., Grand Rapids, Michigan, Pub. no. 5, p. 14, pl. 1, fig. 2 ([Houghton's Lake, Roscomon Co., Michigan]). Figured holotype ANSP 126581a from Currier in the Wheatley colln.
- humerosoides* Lea, *Unio*: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden [Camden Co.], New Jersey; Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31518, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J., p. 248, pl. 31, fig. 4. Is *Elliptio complanata* (Lightfoot).
- humerosus* Lea, *Unio*: 1868, PANSP 20: 161 (Charlotte, Mecklenburg Co., North Carolina; Wheatley); 1868, JANSF (2) 6: 301, pl. 45, fig. 113; 1869, Obs. 12: 61. Figured holotype USNM 85414; paratypes ANSP 126993 mentioned as in the Wheatley colln.
- icterinus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 41, pl. 6, fig. 5 (muddy shore, Savannah River, opposite Augusta [Richmond Co.], Georgia). Figured holotype ANSP 41381, refigured by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 325, pl. 9, fig. 3.
- idahoensis* Hemphill, *Anodonta*: 1891, Zoe 1: 328, pl. 10, fig. 3 (Spokane River above Post Falls [Kootenai Co.], Idaho). Figured holotype ANSP 62767a.
- imbecilis* Say, *Anodonta*: 1829, New Harmony [Indiana] Disseminator 2 (23): 355 (Wabash River [Indiana]). Neotype Senckenberg Museum 4301 selected by Haas, 1930, Senckenbergiana 12: 326.
- imbricata* Anthony, *Anodon*: 1865, American Journal of Conchology, 1: 159, pl. 14, fig. 1 (Camp Lake, Michigan). Figured holotype MCZ 161860; paratypes ANSP 41173 and 129745.
- imitator* Ortmann, *Diplodon*: 1921, Memoires of the Carnegie Museum 8: 491, pl. 34, figs. 5-7, pl. 35, figs. 1-2 (Rio Vaccahy-mirim, Santa Maria, Rio Grande do Sul, Brazil). Type set Carnegie Museum, 61.9248; paratypes ANSP 167910.
- implicata* Say, *Anodonta*: 1829, New Harmony Indiana Disseminator 2 (22): 340 (pond in Danvers [Essex Co.], Massachusetts). The type locality was changed to: Agawam River (outlet of Halfway Pond), Plymouth [Plymouth Co.] Massachusetts and a neotype MCZ 176769 was selected by Johnson, 1946, Occasional Papers on Mollusks, 1: 110, pl. 16, figs. 1-2.
- impressa* Anthony, *Alasmodon*: 1865, American Journal of Conchology, 1: 157, pl. 12, fig. 4 (Tennessee). Figured holotype MCZ 150666; paratype ANSP 41265 from Anthony.
- inaequivalva* Lea, *Anodonta*: 1868, PANSP 20: 95 (Lake Nicaragua [Central America]; Gabb); 1868, JANSF (2) 6: 292, pl. 43, fig. 108; 1869, Obs. 12: 52. Figured holotype USNM 86767; paratypes ANSP 41836 from Gabb mentioned as in the ANSP.
- incerta* Lea, *Anodonta*: 1834, TAPS 5: 46, pl. 6, fig. 16 (Ohio River, near Cincinnati [Hamilton Co., Ohio]); 1834, Obs. 1: 158. Type not found in the USNM or ANSP, though mentioned as in the ANSP.
- incrassatus* Lea, *Unio*: 1840, PAPS 1: 286 (Chattahoochee River, near Columbus [Muscogee Co.], Georgia); 1842, TAPS 8: 217, pl. 16, fig. 34; 1842, Obs. 3: 55. Figured holotype USNM 84537; paratype ANSP 126854 from Lea in the Wheatley colln.
- indefinitus* Lea, *Unio*: 1863, PANSP 15: 192 (Long Creek, Mecklenburg Co., Wheatley; Neuse River, near Raleigh [Wake Co.], Emmons; both North Carolina); 1866, JANSF (2) 6: 15, pl. 4, fig. 12; 1867, Obs. 11: 19. Figured holotype USNM 85388 from the former locality; paratypes ANSP 126969 in the Wheatley colln.
- inflata* Lea, *Symphynota*: 1831, TAPS 4: 99, pl. 14, fig. 28; 1834, Obs. 1: 109 (Alabama River). Figured holotype USNM 83909; paratype ANSP 56511 mentioned as in the ANSP.
- infossus* H. B. Baker, *Anodontites*: 1930, Occasional Papers of the Museum of Zoology, University of Michigan, no. 210, p. 67, pls. 32, 33, figs. E. (Cano Mihapam, trib. of the Rio Aroa near Palma Sola, Venezuela). Figured holotype MZUM 112621; paratypes ANSP 147732.
- infucatus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 45, pl. 3, fig. 2 (Flint River, Georgia, restricted to Flint River, Albany, Dougherty Co., Alabama by Clench and Turner, 1956, Bulletin of the Florida State Museum 1: 154). Type not found.
- infulgens* Lea, *Unio*: 1874, PANSP for 1873, 25: 422 (Stewarts [Mill] Pond, Union Co., North Carolina; Wheatley); 1974, JANSF (2) 8: 60, pl. 21, fig. 59; 1874, Obs. 12: 64. Figured holotype USNM 85403; paratypes ANSP 126985 in the Wheatley colln.
- infuscus* Lea, *Unio*: 1872, PANSP 24: 159 (Fox River [not located]; Irwins Creek, Mecklenburg Co.; both North Carolina; Wheatley); 1874, JANSF (2) 8: 51, pl. 17, fig. 49; 1874, Obs. 13: 55. Figured holotype USNM 85587 from Fox River; paratypes ANSP 126991 from Irwins Creek in the Wheatley colln.
- inornatus* Reeve, *Unio*: 1865, Conch. Iconica 16, *Unio*, pl. 29 species 147 (Cambogia; Cuming and Hanley collns.) Holotype British Museum (Natural History) [not catalogued]; possible paratypes ANSP 41673 from Hanley. Non *Unio inornatus* Lea 1856, changed to *Unio verus* by Lea, 1870, Synopsis *Unio*, p. 46.
- insolidus* Lea, *Unio*: 1872, PANSP 24: 159 (Irwins Creek, Mecklenburg Co. North Carolina; Wheatley); 1874, JANSF (2) 8: 40, pl. 13, fig. 37; 1874, Obs. 13: 44. Figured holotype USNM 83974; paratypes ANSP 126703 mentioned as in the Wheatley colln.
- intermedius* Conrad, *Unio*: 1836, Monography Unionidae North America, no. 7, p. 63, pl. 35, fig. 2 (Nolachuky

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- River, Tennessee; Blanding). Lectotype, here selected, ANSP 41606, lowest shell in cited fig.
- interrupta* Rafinesque, *Obliquaria (Plagiola)* Plate 7, Fig. 4 1820, *Annales Générales des Sciences Physiques*, Bruxelles, 5: 302 (le Kentucky et Ohio [Rivers]). The type mentioned by Vanatta, 1915, PANSP 67: 550, is here selected lectotype ANSP 20257 labeled Ohio River; paralectotype Paris Museum [not catalogued]. Rafinesque's description was of a male shell, the lectotype is a female. Since this species is known only from the Tennessee and Cumberland Rivers, the locality is here restricted to the latter. Considered unidentifiable by Ortmann and Walker (1922: 66), this species was placed under *Dysnomia (Truncillopsis) brevidens* (Lea) 1831.
- ovatus* Lea, *Unio*: 1874, PANSP for 1873, 25: 424 ([Chattahoochee River] Columbus [Muscogee Co.]; Russell Co.; both Georgia. Irwins Creek [Mecklenburg Co.], North Carolina); 1874, JANSP (2) 8: 66, pl. 22, fig. 62; 1874, Obs. 13: 70. Figured holotype USNM 85704 from the first locality; paratypes in the Wheatley colln. [lost].
- padella* Pilsbry and Frierson, *Lampsilis*: 1907, *Nautilus* 21, pl. 12, two lower right figs.; 1908, *Nautilus* 22: 81 (Valles, [Valles River, San Luis Potosi State] Mexico). Figured holotype ANSP 93810a.
- pidescens* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11 [back cover] (Rivers in North Illinois). Type not found.
- piri* Pilsbry and Bequaert, *Mutela*: 1927, Bulletin of the American Museum of Natural History 53: 434, pl. 41, fig. 2 (Channel leading from Lake Kabamba to the Lualaba River, Mulongo [Republic of the Congo]). Figured holotype ANSP 134054.
- pirans* Anthony, *Anodon*: 1865, *American Journal of Conchology*, 1: 163, pl. 17, fig. 66 (Bostwicks Lake [Kent Co.], Michigan). Holotype MCZ 161870; paratypes ANSP 129816 from Anthony.
- irroratus* Lea, *Unio*: 1828, TAPS 3: 269, pl. 5, fig. 5 (Ohio); 1834, Obs. 1: 11. Figured holotype USNM 84637; paratypes mentioned as in the ANSP [lost].
- irwinensis* Lea, *Unio*: 1872, PANSP 24: 159 (Irwins Creek, [Mecklenburg Co.], North Carolina; Wheatley); 1874, JANSP (2) 8: 44, pl. 15, fig. 42; 1874, Obs. 13: 48. Figured holotype USNM 85680; paratypes ANSP 126995 in the Wheatley colln.
- jacksonianus* Frierson, *Unio (Obovaria)*: 1912, *Nautilus* 26: 23, pl. 3, figs. 1-3 (Pearl River; Yalabusha River; both Mississippi). Lectotype ANSP 106063a selected by Johnson, 1972, *Occasional Papers on Mollusks*, 3: 144, pl. 26, fig. 4 from the former locality; paralectotypes ANSP 106063.
- jacksoni* Marshall, *Diplodon*: 1928, *Proceedings of the United States National Museum*, 74: 1, pl. 4, figs. 1-3 (Arcas, Province of Minas Geraes, Brazil). Figured holotype USNM 368260; paratypes ANSP 142525 and 147004 from Jackson.
- jaliscoensis* Pilsbry, *Anodontites*: 1920, PANSP 72: 193, fig. 3 (Tolimán, State of Jalisco, Mexico). Holotype ANSP 46197.
- jamauchimensis* F. Baker, *Hyria*, 1914: PANSP 65: 664, pl. 27, figs. 8-9 (Rio Jamauchim, Lat. 5°30' S., Long. 54°15' W. [Brazil]). Figured holotype ANSP 109373.
- japanensis* Lea, *Unio*: 1859, PANSP 11: 153 (Japan; Cuming); 1860, JANSP (2) 4: 244, pl. 36, fig. 123; 1860, Obs. 7: 62. Figured holotype British Museum (Natural History) 1965181, paratype mentioned as in the Wheatley colln. [lost].
- jeffreysianus* Lea, *Unio*: 1871, PANSP 23: 188 (Australia; Wheatley. Restricted to Yarra River, Victoria by Iredale, 1934, *Australian Zoologist* 8: 60); 1874, JANSP (2) 8: 23, pl. 7, fig. 20; 1874, Obs. 13: 27. Figured holotype USNM 84849; refigured by McMichael and Hiscock, 1958, *Australian Journal of Marine and Freshwater Research* 9: 392, pl. 1, figs. 3-5; paratypes ANSP 125838 and 125840 both mentioned as in the Wheatley colln.
- kamerunensis* Walker, *Spatha*: 1910, *Nautilus* 24: 38, pl. 3, figs. 1-2 (Kribi River, 17 mi from Efulen, Kamerun). Figured holotype MZUM 30902; paratype ANSP 101287.
- kelseyi* F. Baker, *Diplodon*: 1914, PANSP 65: 665, pl. 27, figs. 6-7 (Rio Jamauchim, Lat. 5°30' S., Long. 54°15' W. [Brazil]). Figured holotype ANSP 109371.
- kullethensis* Lea, *Unio*: 1865, PANSP 16: 285 (Near Mardin, in a stream from Kulleth, falling into the Tigris River [Iraq]; Wheatley); 1868, JANSP (2) 6: 251, pl. 29, fig. 65; 1869, Obs. 12: 11. Figured holotype USNM 85663; paratypes ANSP 125736 in the Wheatley colln.
- kuxensis* Frierson, *Psoroniaias*: 1917, *Nautilus* 31: 48, pl. 7, figs. 1-2 (Kux Creek, Chama [Alta Verapaz State] Guatemala, a few dead specimens were [also] obtained on the bank of the Isaibha River (Chama) of which, the Kux Creek is a tributary). Lectotype ANSP 117094a, upper fig., selected by Johnson, 1972, *Occasional Papers on Mollusks* 3: 145, pl. 31, fig. 4; paralectotype ANSP 117094, lower fig.
- laciranus* Pilsbry and Olsson, *Anodontites*: 1935 PANSP 87: 18, pl. 3, figs. 1-1a (La Cira formation: Rio Oponcito near Guanabanas, Colombia; Tertiary). Holotype ANSP 13084 [Paleontology].
- lacteolus* Lea, *Unio*: 1834, TAPS 5: 40, pl. 8, fig. 19 (Rio de la Plata [Argentina]); 1834, Obs. 1: 152. Figured holotype Hyde colln. [lost]; paratype mentioned as in the ANSP [lost].
- lacustris* F. C. Baker, *Ptychobranhus fasciolaris*: 1928, *Nautilus* 42: 52 (Assembly grounds, Chautauqua Lake, New York). Holotype University Illinois, Urbana. Z-23779; paratypes ANSP 144087.
- lananensis* Frierson, *Quadrula*: 1901, *Nautilus*, 15: 75, pl. 4 (Lanana and Banita creeks, near Nacogdoches [Nacogdoches Co.], Texas). Lectotype ANSP 81561a, selected by Johnson, 1972, *Occasional Papers on Mollusks*, 3: 145, pl. 25, fig. 4; paralectotype ANSP 81561.
- lanceolata* Lea, *Triquetra*: 1856, PANSP 8: 79 [not a homonym]. See under: *contorta* Lea, *Triquetra*.
- lanceolatus* Lea, *Unio*: 1828, TAPS 3: 266, pl. 3, fig. 2 (Tar River, Tarborough) [Edgecombe Co.], North

- Carolina); 1834, Obs. 1: 8. Figured holotype USNM 85905; paratypes ANSP 41572 mentioned as in the ANSP.
- langi* Pilsbry and Bequaert, *Mutela*: 1927, Bulletin of the American Museum of Natural History 53: 432, pl. 39, figs. 3 (Zambi, in the bed of an arm of the Congo River, Republic of the Congo). Figured holotype ANSP 133860a.
- laosensis* Lea, *Unio*: 1863, PANSP 15: 190 (Laos Mountains, Cambodia, Siam); 1866, JANSF (2) 6: 63, pl. 21, fig. 61; 1867, Obs. 11: 67. Figured holotype USNM 86160; paratypes ANSP 125891 mentioned as in the Wheatley colln.
- lata* Rafinesque, *Anodonta* (Lastena) Plate 1, fig. 8 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 317, pl. 82, figs. 17, 18 (le Kentucky [River]). The type mentioned by Vanatta, 1915, PANSP 67: 554, is here selected lectotype ANSP 20227 from the Kentucky River. Is *Hemistena lata* (Rafinesque).
- lateralis* Rafinesque, *Obliquaria* (*Sintoxia*) Plate 8, fig. 7 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 310 ([Kentucky River]). From the types mentioned by Vanatta, 1915, PANSP 67: 557, is here selected a lectotype ANSP 20247a from the Kentucky River; paralectotype [single valve] ANSP 20247; paralectotype Paris Museum [not catalogued]. Is *Pleurobema cordatum* (Rafinesque), *teste* Ortmann and Walker (1922: 21). Is [*Fusconaia*] *undata* (Barnes) 1823 asserted by Morrison (1969: 24).
- latiradiatus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11, p. 96, New name for *Unio interruptus* Lea 1838 non Rafinesque 1820, non Say 1831.
- latissima* Rafinesque, *Unio* Plate 8, fig. 2 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 297, pl. 80, figs. 14, 15 ([Ohio River]). The type mentioned by Vanatta, 1915, PANSP 67: 551 is here selected lectotype ANSP 20212 from the Ohio River. Is *Ligumia recta* (Lamarck) 1819.
- latomarginata* Lea, *Anodonta*: 1834, TAPS 5: 76, pl. 12, fig. 34 (River Parana [Argentina and Brazil]; Burrough); 1834, Obs. 1: 188. Not found in the USNM or ANSP, though mentioned by Lea as in the ANSP.
- latouri* Pilsbry and Olsson, *Tripodon*: 1935, PANSP 87: 16, pl. 5, fig. 3 (La Cira formation: base of La Cira formation near Guanabanas [Colombia]; Tertiary). Holotype ANSP 13080a; figured paratypes ANSP 13080 figs. 4-5 [Paleontology].
- layardii* Lea, *Unio*: 1860 PANSP 11: 153 (Ceylon); 1860, JANSF (2) 4: 243, pl. 36, fig. 122; 1860, Obs. 7: 61. Figured holotype British Museum (Natural History) 1956159, the only specimen seen by Lea; ANSP 125653 mentioned as in the Wheatley colln.
- lehmanii* S. H. Wright, *Unio*: 1897, Nautilus, 10: 138 (St. Marys River [Nassau Co.], Florida). Lectotype USNM 149650 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 7, pl. 6, fig. 3, previously figured by Simpson, 1900 PANSP 52: 76, pl. 4, fig. 9; paralectotype ANSP 60541.
- lenis* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11 [back cover]; no. 12, p. 106, pl. 58, fig. 2 (rivers in North Illinois). Type not in the ANSP [lost].
- lenticularis* Lea, *Unio*: 1872, PANSP 24: 155 (Tellico River, Monroe Co., Tennessee); 1874, JANSF (2) 8: 30, pl. 9, fig. 27; 1874, Obs. 13: 34. Figured holotype USNM 85761; paratype ANSP 127357 mentioned as in the Wheatley colln.
- leotaudi* Guppy, *Anodonta* Plate 10, fig. 3 1866, Annals and Magazine of Natural History (3) 17: 54 (Trinidad). Type not in the BMNH. Lectotype, here selected, ANSP 125443.
- lepidus* Lea, *Unio*: 1860, PANSP 12: 91 (Uruguay River, [Argentina and Uruguay]); 1863, JANSF (2) 5: 390, pl. 50, fig. 306; 1863, Obs. 10: 25. Holotype USNM 85624; paratype ANSP 125825 mentioned as in the Wheatley colln. Non *Unio lepidus* Gould 1856, changed to: *Margaron (Unio) lepidor* by Lea, 1870, Synopsis Unionidae, ed. 4, p. 53.
- leprosus* Miles, *Unio*: 1861, Report Zool. of Michigan for 1859-60, Lansing, Mich.: 30 (Huron River, Livingston Co., Michigan). Syntypes ANSP 42392.
- leptodon* Rafinesque, *Unio* Plate 5, fig. 6 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 295, pl. 80, fig. 5-7 (parties inferieures de l'Ohio [River]). The specimen identified by Rafinesque mentioned by Vanatta, 1915, PANSP 67: 551, is here selected neotype ANSP 20214 from the Kentucky River. Is *Leptodea leptodon* (Rafinesque) *teste* Ortmann and Walker (1922: 52).
- levigata* Rafinesque, *Unio* Plate 6, fig. 5 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 296, pl. 80, figs. 11-13 (le Kentucky [River]). From the types mentioned by Vanatta, 1915, PANSP 67: 552 is here selected a lectotype ANSP 20255a from the Kentucky River; paralectotypes ANSP 20255; paralectotype Paris Museum [not catalogued]. Ortmann and Walker (1922: 46) state that, "without knowledge of what the so-called Poulson-Rafinesque 'type' is, nobody would ever suspect that Rafinesque's shell is [*Obovaria lens* (Lea) 1831]."
- lewisi* Lea, *Anodonta*: 1857, PANSP 9: 84 (Erie Canal and Mohawk River; Herkimer Co., Lewis; Genesee River below Rochester [Monroe Co.]; both New York). 1860, JANSF (2) 4: 362, pl. 62, fig. 187; 1860, Obs. 8: 44. Figured holotype USNM 86595; paratype ANSP 129898 Erie Canal, from Lewis.
- lewisi* Lea, *Unio*: 1861, PANSP 13: 40 (Coosa River, Alabama; Showalter); 1861, JANSF (2) 5: 71, pl. 8, fig. 220; 1862, Obs. 8: 75. Figured holotype USNM 85806; paratype ANSP 20115 from Showalter.
- lienosus* Conrad, *Unio*: 1834, American Journal of Science, 25: 339, pl. 1, fig. 4 (small streams in South Alabama). Syntypes ANSP 9747 from Conrad mentioned as in the ANSP.

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argentinoides Lea, *Unio*: 1868, PANSP 20: 164 ([Fish-house], 6 mi NE Camden, [Camden Co.], New Jersey; Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570). Measured holotype ANSP 31522, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J.: 249, pl. 31, fig. 1. Is *Actinonaias carinata* (Barnes).

argus Lea, *Unio*: 1872, PANSP 24: 157 (Irwins Creek, Mecklenburg Co.; Wheatley; Long Creek, Gaston Co.; both North Carolina); 1874, JANSPP (2) 8: 49, pl. 17, fig. 47; 1874, Obs. 13: 53. Figured holotypes USNM 85590 from the former locality; paratypes in the Wheatley colln. [lost].

auratus Conrad, *Unio*: 1849, PANSP 4: 154 (Savannah River [Georgia]; Cabinet of J. H. Couper); 1849, Annals and Magazine of Natural History (1) 4: 301; 1850, JANSPP (2) 1: 276, pl. 37, fig. 9. Location of type not known.

lineolata Rafinesque, *Obliquaria* Plate 4, fig. 6 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 303 (au chutes de l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 553, is here selected lectotype ANSP 20242 from the Ohio River. Is *Plagiola lineolata* (Rafinesque), *teste* Ortmann and Walker (1922: 51).

livingstonensis Lea, *Unio*: 1863, PANSP 15: 192 (Livingstons Creek, [NE corner of Columbus Co.], Brunswick Co., North Carolina; Emmons); 1866, JANSPP (2) 6: 14, pl. 4, fig. 11; 1867, Obs. 11: 18. Figured holotype USNM 85536; paratype ANSP 127101 from Emmons in the Wheatley colln.

longula Conrad, *Triquetra*: 1874, PANSP 26: 29, pl. 1, fig. 10 (Pebas, 1 mi from the mouth of the Ambyacó River, Upper Amazon, Brazil; Tertiary). Location of type not known.

macmurtrei Conrad, *Pleidodon*: 1834, JANSPP 7: 180, pl. 13 (Liberia). Figured holotype ANSP 41888 [right valve only].

macneilli Lea, *Unio*: 1869, PANSP 21: 124 (Rio Gigillillo, Corcuera, Nicaragua; McNeil); 1874, JANSPP (2) 8: 25, pl. 8, fig. 22; 1874, Obs. 13: 29. Figured holotype USNM 84414; paratype ANSP 129943 from McNeil.

maculatus Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 30, pl. 4, fig. 4 (banks of the Elk and Flint rivers, Tennessee). Figured holotype ANSP 41413.

magnifica Lea, *Symphynota*: 1834, TAPS 5: 42, pl. 5, fig. 14 (China); 1834, Obs. 1: 155. Figured holotype USNM 86379; paratype mentioned as in the ANSP [lost].

mardinensis Lea, *Monocondylaea*: 1865, PANSP 16: 286 (Near Mardin, in a stream falling into the Tigris River [Iraq]; Wheatley); 1869, JANSPP (2) 6: 252, pl. 30, fig. 67; 1869, Obs. 12: 12. Figured holotype USNM 86354; paratypes ANSP 41034 in the Wheatley colln.

mardinensis Lea, *Unio*: 1865, PANSP 16: 286 (Tigris River, near Mardin [Iraq]; Wheatley); 1868, JANSPP (2) 6: 252, pl. 30, fig. 66; 1869, Obs. 12: 12. Figured holotype USNM 85664; paratypes ANSP 125735 in the Wheatley colln.

marginata Say, *Anodonta*: 1817, Nicholson's Encyclopedia 2 [no pagination], pl. 3, fig. 5 (very common in our rivers, presumably near Philadelphia, Philadelphia Co., Pennsylvania, and so restricted by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 356). Figured type [lost].

marshalli Frierson, *Pleurobema*: 1927, Check List North American Naiades: 43 (Tombigbee River, Boligee [Greene Co.], Alabama); 1928, Nautilus, 41: 139, pl. 3, fig. 3. Figured holotype MZUM. 80859; paratype ANSP 145245.

marshii B. H. Wright, *Unio*: 1888, PANSP 40: 118, pl. 5, fig. 2 (Lake Woodruff, Volusia Co., Florida, restricted to St. Johns River Blue Springs, 3 mi S Lake Beresford, Volusia Co., Florida, by Johnson, 1967, Occasional Papers on Mollusks, 3: 7). Holotype USNM 151028, op. cit. pl. 12, fig. 2; paratypes ANSP 42493.

marshalliana Pilsbry and Olsson, *Monocondylaea*: 1935: PANSP 87: 17, pl. 4, fig. 3 (La Cira formation: Rio Oponcito, near Guanabanas, Colombia; Tertiary). Holotype ANSP 13085 [Paleontology].

marcupiobesa Fuller, *Elliptio*: 1972 PANSP 124: 1-10, figs. 1-7 (Cape Fear River: 0.1 mi downstream from Carvers Creek, about 3 mi SW Slocomb and about 6 mi NNE Fayetteville, Cumberland Co.; about 1 mi S Tolar Landing and about 3 mi NNE Tobermory, Bladen Co.; about 1.25 mi ESE Duart, Bladen Co.; all North Carolina). Holotype ANSP 324501 from the first locality.

martensi Ihering, *Castalina*: 1891, Zool. Anz. 14: 477 (Rio Camaquam, Rio Grande do Sul, Brazil); 1893, Archiv für Naturgeschichte 59 (1): 81, pl. 3, fig. 5. Lectotype Senckenburg Mus. 3785, selected by Haas, 1931, Senckenbergiana 13: 41; paralectotypes ANSP 61806.

masoni Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 34, pl. 5, fig. 2 (Savannah River, Augusta [Richmond Co.], Georgia). Figured holotype ANSP 41333, refigured by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 301, pl. 2, fig. 3; Conrad, 1836, Monography Unionidae North America, no. 3, p. 28, pl. 12, fig. 2; figured paratype ANSP 41332.

maywebbae B. H. Wright, *Elliptio*: 1934, Nautilus 48: 28; Nautilus 47, pl. 13, figs. 5-8 (near Seminole Springs [is Rock Springs, Orange Co.] 15 mi SE Eustis [Lake Co.] Florida) Holotype USNM 525354, refigured by Johnson, 1967, Occasional Papers on Mollusks, 3: 7, pl. 10, fig. 3; paratypes ANSP 162516.

medellinus Lea, *Unio*: 1838, TAPS 6: 39, pl. 12, fig. 34 (River Medellin, near Vera Cruz [Vera Cruz State], Mexico; Burrough); 1838, Obs. 2: 39. Figured holotype ANSP 9679; paratype mentioned as in the Lea colln. USNM [lost].

megaptera Rafinesque, *Metaptera* Plate 5, fig. 5 1820, Ann. Gén. Sci. Physiques, Bruxelles 5: 300, pl. 80, figs. 20-22 (l'Ohio [River]). The type mentioned by Vanatta 1915, PANSP 67: 552, is here selected lectotype ANSP 20211 from the Ohio River. Is *Proptera alata* (Say) 1817.

melinus Conrad, *Unio*: 1838, Monography Unionidae North

- America, no. 11, p. 101, pl. 56, fig. 1 (Salina Lake, New York). Type not located.
- menkianus* Lea, *Unio*: 1838, TAPS 5: 76, pl. 19, fig. 59 (Harpeh River, Tennessee; Troost); 1838, Obs. 2: 76. Figured holotype USNM 84965; specimens ANSP 126133 from Troost in the Wheatley colln. probably not seen by Lea who had two specimens.
- mesafricana* Pilsbry and Bequaert, *Caelatura*: 1927, Bulletin of the American Museum of Natural History, 53: 402, pl. 32, figs. 2, 2a (Garamba River [Congo]). Holotype AMNH 72093; paratypes ANSP 133850.
- metanevra* Rafinesque, *Obliquaria* Plate 3, fig. 4 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 305, p. 81, fig. 15, 16 (le Kentucky [River]). From the specimens identified by Rafinesque, mentioned as types by Vanatta, 1915, PANSP 67: 556, is here selected a neotype ANSP 20238a from the Ohio River. Other specimens identified by Rafinesque ANSP 20239; and Paris Museum [not catalogued]. Is *Quadrula metanevra* (Rafinesque). Erroneously mentioned as lectotype by Johnson (In press).
- metaplata* Rafinesque, *Unio* Plate 5, fig. 2 1831, Cont. Monograph Bivalve Shells River Ohio: 4 (Cumberland and Green Rivers [Kentucky]). The type mentioned by Vanatta, 1915, PANSP 67: 553, is here selected lectotype ANSP 20258 from the Cumberland River. Is *Truncilla truncata* (Rafinesque).
- metastriatus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11 [back cover]; 1840, *op. cit.*, no. 12: 104, pl. 57, fig. 2 (Black Warrior River, near Blounts Springs [Blount Co.] Alabama). Figured type not in the ANSP [lost].
- micans* Lea, *Unio*: 1857, PANSP 9: 85 (Catawba River, Gaston Co., Wheatley and Genth; Deep River; both North Carolina); 1861, JANSF (2) 5: 59, pl. 3, fig. 207; 1862, Obs. 8: 63. Holotype USNM 85077 from the former locality; paratypes ANSP 41359 and 126864 mentioned as in the Wheatley colln.
- mississippiensis* Conrad, *Unio*: 1850, JANSF (2) 1: 277, pl. 38, fig. 11 (one of the tributaries of the lower Mississippi; Dickson). Probable figured holotype MCZ 178777, thought to have been purchased by J. G. Anthony from Conrad.
- moctezumensis* Pilsbry, *Lampsilis*: 1910, PANSP 61: 534, pl. 25, figs. 1-4 (Moctezuma River, State of San Luis Potosi [Mexico]). Lectotype here selected, ANSP 99517a, this was the measured specimen, the figured ones were not located.
- mortoni* Conrad, *Unio*: 1835, Monography Unionidae North America, no. 1, p. 11, pl. 6, fig. 1 (Bayou Teche, Louisiana). Figured holotype ANSP 1874 now ANSP 10287a.
- mortoniana* Lea, *Anodonta*: 1834, TAPS 5: 80, pl. 13, fig. 37 (River Parana [Argentina]; Burrough); 1834, Obs. 1: 192. Figured holotype and only specimen seen by Lea, mentioned as in the ANSP [lost].
- mosulensis* Lea, *Unio*: 1863, PANSP 15: 190 (River Tigris, Mosul [Iraq]; Wheatley); 1866, JANSF (2) 6: 52, pl. 17, fig. 49; 1867, Obs. 11: 56. Figured holotype USNM 85230; specimens ANSP 41323 and 125743 mentioned as in the Wheatley colln., probably not seen by Lea who had three specimens.
- mundus* Lea, *Unio*: 1857, PANSP 9: 83 ([Tennessee River] Tuscumbia [Colbert Co.], Alabama; Thornton); 1866, JANSF (2) 6: 40, pl. 14, fig. 38; 1867, Obs. 11: 44. Figured holotype USNM 84767; paratype ANSP 127225 from Thornton in the Wheatley colln.
- mytiloides* 'Rafinesque' Conrad, *Unio*: 1834, American Journal of Science 25: 343, pl. 1, fig. 7 (Alabama River). Error for *mytiloides* Rafinesque, *Unio*. The figured specimen is ANSP 20112.
- mytiloides* Rafinesque, *Pleurobema*: 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 313, pl. 82, figs. 8-10 (le Wabash [River, Indiana]). Type not located by Vanatta, 1915, PANSP 67: 556. The specimen labeled "type" ANSP 20223 is *Pleurobema cordata* (Rafinesque), but the figured type is clearly *Pleurobema clava* (Lamarck) 1819. Erroneously mentioned as lectotype by Johnson (In press).
- nagpoorensis* Lea, *Unio*: 1860, PANSP 11: 331 (Ambajiri Tank Nagpoor, Bengal; Wheatley); 1860, JANSF (2) 4: 270, pl. 45, fig. 150; 1860, Obs. 7: 88. Figured holotype ANSP 125504 mentioned as in the Wheatley colln.
- napeanensis* Conrad, *Unio*: 1850, PANSP 5: 10 ([Nepean River, New South Wales, Australia]); 1854, JANSF (2) 2: 296, pl. 26, fig. 4. Figured holotype ANSP 129995a, refigured by McMichael and Hiscock, 1958. Australian Journal of Marine and Freshwater Research, 9: 442, pl. 9, fig. 12-13.
- nasutoides* Lea, *Unio*: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, *teste* Pilsbry, 1896 PANSP 48: 567-570). Measured type ANSP 31523. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clay- and Greensand Marls of N.J., p. 244, pl. 34, figs. 4, 5. Is *Elliptio lanceolata* (Lea).
- nasutus* 'Say' Conrad [*in partim*], *Unio*: 1836, Monography Unionidae North America, no. 4, p. 38, pl. 18, fig. 1 (common in the tide waters from Florida to the eastern states; Potomac river near Washington. The smaller figured specimen from James River Virginia; other figured specimen from Chester River, Maryland). Figured specimen ANSP 41461a, from the latter locality.
- natalensis* Lea, *Spatha*: 1864, PANSP 16: 113 (Umpingave River, Port Natal, South Africa; McKen); 1866, JANSF (2) 6: 64, pl. 20, fig. 58; 1867, Obs. 11: 68. Figured holotype USNM 86778; paratypes ANSP 41812 from McKen mentioned as in the ANSP.
- natalensis* Lea, *Unio*: 1864, PANSP 16: 113 (Umpingave River, Port Natal, South Africa; McKen); 1866, JANSF (2) 6: 59, pl. 20, fig. 57; 1867, Obs. 11: 63. Figured holotype ANSP 41686 from McKen mentioned as in the ANSP.
- nebulosus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 28, pl. 3, fig. 7 (mountainous region of Alabama, in the Black Warrior River). Type not found.

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- newcombianus* Lea, *Unio*: 1856, PANSP 8: 103 (Lake Nicaragua, Central America; Newcomb); 1857, JANSF (2) 3: 312, pl. 30, fig. 27; 1857, Obs. 6: 32. Figured type not in the USNM; syntypes ANSP 126425 mentioned as in the Wheatley colln.; 2 syntypes in the Newcomb colln., Cornell University, Ithaca, New York.
- nicaraguensis* Lea, *Unio*: 1868, PANSP 20: 95 (Lake Nicaragua, Central America); 1868, JANSF (2) 6: 296, pl. 43, fig. 107; 1869, Obs. 12: 56. Figured holotype USNM 84390; paratypes mentioned as in the ANSP [lost].
- obolus* Lea, *Unio*: 1852, TAPS 10: 283, pl. 24, fig. 42 (Chattahoochee River, near Columbus [Muscogee Co.] Georgia); 1852, Obs. 5: 39. Figured holotype USNM 85567 only specimen seen by Lea; specimens identified by Lea, ANSP 41360.
- ogertinus* Lea, *Unio*: 1852, TAPS 10: 268, pl. 18, fig. 23 ([Red River] Alexandria [Rapides Parish], Louisiana); 1852, Obs. 5: 24. Figured holotype USNM 85307; paratypes mentioned as in the ANSP [lost].
- oliva* Rafinesque, *Unio* Plate 1, fig. 1
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 291, pl. 80, figs. 1-4 (1' Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 555, is here selected lectotype ANSP 20243 from the Ohio River. Is *Elliptio crassidens* (Lamarck) 1819.
- obolus* Conrad, *Unio*: 1854, JANSF (2) 2: 297, pl. 27, figs. 2-3 (Bayou Teche, Louisiana). Lectotype, here selected, ANSP 43019a, figure 3.
- oliferus* Conrad, *Unio*: 1841, PANSP 1: 19 ([Pearl River] Jackson [Hinds Co., Mississippi] Louisiana); 1850, JANSF (2) 1: 277, pl. 38, figs. 4, 8. Lectotype, here selected ANSP 10285a, figure 8; paralectotype ANSP 10285, fig. 4.
- nodulata* Rafinesque, *Obliquaria* Plate 2, fig. 4
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 307, pl. 81, figs. 17, 18 (le Kentucky [River]). From the types mentioned by Vanatta 1915, PANSP 67: 557, is here selected a lectotype ANSP 20225a from the Kentucky River; paralectotype ANSP 20225 and Paris Museum [not catalogued]. Is *Quad-rula nodulata* (Rafinesque).
- nolani* B. H. Wright, *Unio*: 1888, PANSP 40: 116, pl. 4, fig. 1 (a creek flowing into St. Johns River, near Palatka [Putnam Co.], Florida. Figured holotype USNM 151030, refigured by Johnson, 1957, Occasional Papers on Mollusks, 3: 7, pl. 10, fig. 4; paratypes ANSP 41354.
- northamptonensis* Lea, *Unio*: 1861, PANSP 13: 392 (Connecticut River, [Hampshire Co.]; [Connecticut River], Springfield [Hampden Co.]; both Massachusetts. [Connecticut River] below Hartford [Hartford Co.], Connecticut. Neuse River, North Carolina); 1862, JANSF (2) 5: 190, pl. 25, fig. 260; 1863, Obs. 9: 12. Figured holotype USNM 85527 from the first locality; paratype ANSP 41372 from the Connecticut River.
- novoleonis* Pilsbry, *Lampsilis*: 1910, PANSP 61: 537, pl. 27, figs. 1-2 (Casas Viejas River, State of San Luis Potosi, Mexico). Figured holotype ANSP 99518.
- nubilus* Lea, *Unio*: 1868, PANSP 20: 161 (Paw Creek, Mecklenburg Co., North Carolina; Wheatley); 1868, JANSF (2) 6: 298, pl. 44, fig. 110; 1869, Obs. 12: 58. Figured holotype USNM 85417; paratypes ANSP 126992 in the Wheatley colln.
- nucleopsis* Conrad, *Unio*: 1849, PANSP 4: 154 (Etowah River, Georgia; Cabinet of J. H. Couper); 1850, JANSF (2) 1: 276, pl. 38, fig. 8. Figured holotype ANSP 41421.
- nux* Lea, *Unio*: 1852, TAPS 10: 283, pl. 24, fig. 43; 1852, Obs. 5: 39 (Alabama River; Wheatley). Figured holotype USNM 85316; paratypes ANSP 127349 mentioned as in the Wheatley colln.
- oblatus* Lea, *Unio*: 1863, PANSP 15: 193 [as *ablatus*] (Long Creek, Gaston Co., North Carolina; Wheatley); 1866, JANSF (2) 6: 13, pl. 4, fig. 10; 1867, Obs. 11: 17. Figured holotype USNM 86001; paratypes ANSP 127113-4 mentioned as in the Wheatley colln.
- obliquata* Rafinesque, *Obliquaria* Plate 7, fig. 1
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 309 (le Kentucky [River]). The type mentioned by Vanatta, 1915, PANSP 67: 550, is here selected lectotype ANSP 20226 from the Kentucky River. Ortmann and Walker (1922: 68) point out that this species is unidentifiable from the original description and might be *Pleurobema pyramidatum* (Lea) 1834 or *Dysnomia sulcata* (Lea) 1829. Frier-son (1927: 52), Haas (1969: 297) and Morrison (1969: 24) equate *obliquata* with *pyramidatum*, though the type is *sulcata*.
- oblongus* Lea, *Unio*: 1872, PANSP 24: 158 (Irwins Creek, Mecklenburg Co., North Carolina; Wheatley); 1874, JANSF (2) 8: 52, pl. 18, fig. 50; 1874, Obs. 13: 56. Figured holotype USNM 85572; paratypes mentioned as in the Wheatley colln. [lost].
- obovalis* Rafinesque, *Obovaria* Plate 4, fig. 1
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 311 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 558, is here selected lectotype ANSP 20244 from the Ohio River. Ortmann and Walker (1922: 4) point out that while the type has been identified as *Fusconaia ebenus* (Lea) 1831, *obovalis* can not be recognized from the original description, and hence they regard *ebenus* as valid.
- obsolescens* F. Baker, *Diplodon*: 1914, PANSP 65: 666, pl. 22, fig. 17 (Rio Jamauchim, Lat. 5°30' S, Long. 54°15' W, Brazil). Lectotype, here selected, ANSP 109327a, fig. 17; paralectotype ANSP 109327 right valve of fig. 16.
- occidens* Lea, *Unio*: 1829, TAPS 3: 435, pl. 10, fig. 16 (Ohio); 1834, Obs. 1:49. Figured holotype USNM 84866; paratype mentioned as in the ANSP [lost].
- occidentalis* Conrad, *Unio*: 1836, Monography Unionidae North America, no. 7, p. 64, pl. 36, fig. 1 (Currant River, Arkansas; Featherstonhaugh). Type not found.
- ochraceus* Say, *Unio*: 1817, Nicholson's Encyclopedia 2 [no pagination], pl. 2, fig. 8 (Delaware and Schuylkill Rivers). The type locality was restricted to Schuylkill River, near Philadelphia, Pennsylvania, and a neotype

- MCZ 178838 was selected by Johnson, 1947, Occasional Papers on Mollusks, 1: 153, pl. 20, fig. 2.
- ogeecheensis* Conrad, *Unio*: 1849, PANSP 4: 153 (Ogeechee River, Georgia; J. H. Couper [loaned]); 1850, JANSP (2) 1: 275, pl. 37, figs. 3-4. Lectotype MCZ 1469971 figure 3, selected by Johnson, 1956, Bulletin of the Museum of Comparative Zoology, 115: 126; refigured by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 376, pl. 18, fig. 8.
- ohiensis* Rafinesque, *Anodonta*: 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 316, no. 58 (l'Ohio [River]). ANSP 216908 is labeled, "*Unio ohiensis* Raf. Ohio River" to which has been added, "Ex Univ. of Penna. coll." The old calligraphy appears somewhat similar to that of one of Rafinesque's labels in the Poulson collection, however the number 30 in the shell, if it referred to Rafinesque's monograph, would make it *Qbliquaria metanevra*. There is really no evidence that this specimen is a type.
- olivaria* Rafinesque, *Amblema* Plate 8, fig. 6
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 314 (le Kentucky [River]). From the types mentioned by Vanatta, 1915, PANSP 67: 553, is here selected a lectotype ANSP 20251a; ANSP 20251 [is *Obovaria subrotunda* (Rafinesque)]; paralectotypes in the Férussac colln., *teste* Férussac (1835, Mag. de Zool. p. 34) Paris Museum [not located]. Is *Obovaria olivaria* (Rafinesque), *teste* Ortmann and Walker (1922: 46).
- olivarius* Lea, *Unio*: 1831, TAPS 4: 108, pl. 16, fig. 38 (Burrell River, India; Burroughs); 1834, Obs. 1: 118. Figured type not in the USNM or ANSP; syntypes ANSP 41742 and 41679 mentioned as in the ANSP.
- olssoni* Pilsbry, *Diplodontites*: 1933, PANSP 85: 75, pl. 2, figs. 11-13a (Rio Sinu, near Jaraguay, Uruguay). Figured holotype ANSP 160187a.
- oneidensis* F. C. Baker, *Lampsilis radiata*: 1916, Nautilus 30: 74, pl. 2 (Oneida Lake, Central New York). Figured syntypes presumed to be in the New York State College of Forestry colln., Syracuse, New York; syntypes ANSP 114854.
- opalinus* Anthony, *Unio*: 1866, American Journal of Conchology 2: 146, pl. 7, fig. 2 (Michigan). Figured holotype MCZ 161893; paratype ANSP 126269 in the Wheatley colln.
- oponcitonis* Pilsbry and Olsson, *Diplodon (Rhipidodonta)*: 1935, PANSP 87: 17, pl. 4, fig. 1, 2, 2a (La Cira formation: Rio Oponcito near Guanabanas, Colombia; Tertiary). Holotype ANSP 13086, fig. 2 [Paleontology].
- oratus* Conrad, *Unio*: 1849, PANSP 4: 153 (Flint River, Georgia [error]; restricted to Ogeechee River, Georgia by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 382); 1849, Annals and Magazine of Natural History (1) 4: 301; 1850, JANSP (2) 1: 267, pl. 37, fig. 6. Figured type not found.
- oregonensis* Lea, *Unio*: 1852, TAPS 10: 275, pl. 22, fig. 33 (Columbia River, Oregon; Wheatley [Nicaragua, *teste* C. T. Simpson]); 1852, Obs. 5: 31. Figured holotype USNM 85073; paratype mentioned as in the Wheatley colln. [lost].
- oriens* Lea, *Unio*: 1831, TAPS 4: 73, pl. 6, fig. 5 (Ohio River); 1834, Obs. 1: 83. Figured holotype USNM 86271; paratype ANSP 41210 from Lea.
- orontesensis* Lea, *Unio*: 1863, PANSP 15: 190 (River Orontes, Syria; Wheatley); 1866, JANSP (2) 6: 53, pl. 18, fig. 50; 1866, Obs. 11: 57. Figured holotype USNM 85535; paratype ANSP 125750 mentioned as in the Wheatley colln.
- orphaensis* Lea, *Unio*: 1864, PANSP 16: 285 (Tigris River, near Mardin, Pashalic of Orpha Asiatic Turkey [Iraq]; Wheatley); 1868, JANSP (2) 6: 250, pl. 29, fig. 64; 1869, Obs. 12: 10. Figured holotype USNM 85603; paratypes ANSP 125740 mentioned as in the Wheatley colln.
- ornatus* Conrad, *Unio ovatus*: 1835, Monography Unionidae North America, no. 1, 4 (rivers of South Alabama). Type lost.
- orthonotus* Conrad, *Unio*: 1839, New York State Geol. Survey, 3rd Ann. Rept.: 66. Is a marine species, *teste* Hall, 1843, Geol. Rept. 4th Dist. New York: 48.
- ortmanni* Frierson, *Unio (Nephronaias)* 1913, Nautilus 27, 14, pl. 2, (Conchins River, near Quirigua [Izabal State] Guatemala, Atlantic drainage). Lectotype ANSP 117544a, upper figs. selected by Johnson, 1972, Occasional Papers on Mollusks, 3: 146, pl. 30, fig. 3. Is *Elliptio sphenorhynchus* Crosse and Fischer, *teste*, Frierson, 1927, Check List North American Naiades, p. 36.
- ortmanni* Pilsbry and Bequaert, *Pseudospatha*: 1927, Bulletin of the American Museum of Natural History 53: 446, pl. 45, figs. 5, 7 (Lake Tanganyika: Bay of Toa in 5 m.; Tembwe; Moliro). Figured holotype ANSP 132188 from the first locality.
- oscar* B. H. Wright, *Unio*: 1892, Nautilus 5: 124 (a creek from Lake Osceola, Winter Park [Orange Co.], Florida); 1896, Nautilus 9: 122, pl. 2, figs. 1-3. Possible figured holotype USNM 123526 selected as lectotype by Johnson, 1967, Occasional Papers on Mollusks, 3: 8, pl. 11, fig. 3; paralectotypes ANSP 41361.
- ovatus* Say, *Unio*: 1817, Nicholson's Encyclopedia 2 [no pagination], pl. 2, fig. 7 (Ohio River and its tributary streams). Neotype Senckenberg Museum 4338 selected by Haas, 1930, Senckenbergiana 12: 328.
- oviformis* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 46, pl. 3, fig. 6 (Tennessee, Mr. Brewster). Type lost.
- pachostea* Rafinesque *Obovaria* Plate 10, fig. 2
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 312 (le Kentucky [River]) op. cit. p. 322 changed to: *Amblema antrosa*. Lectotype Paris Museum [not catalogued], selected by Johnson (In press). This was the syntype in the Férussac colln., *teste* Férussac (1835, Mag. de Zool. p. 34). Is *Cyclonaias tuberculata* (Rafinesque).
- pachyodon* Pilsbry, *Elliptio*: 1953, Pliocene Mollusks of Southern Florida, ANSP Monog. 8: 447, pl. 65, fig. 8 (St. Petersburg [Hillsboro Co.], Florida; Pliocene). Holotype ANSP 18586 [Paleontology].

- actens* Rafinesque, *Unio* Plate 6, fig. 3
1831, Cont. Monograph Bivalve Shells River Ohio:
3 (Ohio and Kentucky). The type mentioned by
Vanatta, 1915, PANSP 67: 551 is here selected lecto-
type ANSP 20240. Is *Actinonaias ligamentina* (La-
marck) 1819, see Johnson (1969, Nautilus, 83: 53).
- actida* Anthony, *Anodon*: 1865, American Journal of
Conchology, 1: 162, pl. 15, fig. 3 (Michigan). Figured
holotype MCZ 161871; paratype ANSP 129804.
- paludicolor* Conrad, *Unio*: 1853, PANSP 6: 254. Error
for *paludicolus* Gould, *Unio*.
- apryacea* Anthony, *Anodon*: 1865, American Journal of
Conchology 1: 161, pl. 15, fig. 2 ([Potomac River,
Virginia]). Figured holotype MCZ 150656; paratype
ANSP 41144.
- parallelus* Conrad, *Unio*: 1841, PANSP 1: 20 ([Pearl
River] Jackson [Hinds Co.], Mississippi). *Non Unio*
parallelus Sowerby 1840 changed to *Unio porrectus*
Conrad, 1854, JANSPP (2) 2: 296, pl. 26, fig. 7.
Figured holotype ANSP 42847.
- parallelipedon* Lea, *Unio*: 1834, TAPS 5: 60, pl. 8, fig.
20 (Parana River, Province of Corrientes [Argentina]);
1834, Obs. 1: 172. Figured holotype USNM 85928;
paratypes ANSP 61374 and 71278 mentioned as in
the ANSP.
- paranensis* Lea, *Unio*: 1834, TAPS 5: 99, pl. 14, fig. 42
(River Parana [Argentina]; Burrough); 1834, Obs.
1: 211. Figured type not in the USNM or ANSP;
syntypes ANSP 41798.
- parvula* Grier, *Fusconaias flava*: 1918, Nautilus 32: 11 (Big
Bend, Presque Isle Bay, Lake Erie). Holotype Car-
negie Museum 614513; paratypes ANSP 103017.
- patelloides* Lea, *Unio*, 1860, PANSP 12: 89 (Amazon
River, Brazil; Rio Plata [Argentina]); 1863, JANSPP
(2) 5: 383, pl. 43, fig. 291; 1863, Obs. 10: 19.
Figured holotype USNM 85780; specimens identified
by Lea ANSP 41799 and 41884 labeled "Rio Parana"
[Argentina].
- patinoides* Lea, *Unio*: 1871, PANSP 23: 193 (Holston
River, [Tennessee], Wheatley; Clinch River; [Vir-
ginia]); 1874, JANSPP (2) 8: 16, pl. 4, fig. 12; 1874,
Obs. 13: 20. Figured holotype USNM 84763 from
the former locality; paratypes ANSP 127244 men-
tioned as in the Wheatley colln.
- patulus* Lea, *Unio*: 1829, TAPS 3: 441, pl. 12, fig. 20
(Ohio); 1834, Obs. 1: 55. Figured holotype USNM
84760; *teste* Morrison, 1943, Nautilus 57: 16; para-
types ANSP 129871 from Lea.
- pauciplicatus* Lea, *Unio*: 1872, PANSP 24: 156 ([Colorado
River] Austin, [Travis Co.], Texas); 1874, JANSPP (2)
8: 29, pl. 9, fig. 26; 1874, Obs. 13: 33. Figured holo-
type USNM 84111; paratypes mentioned as in the
ANSP and Wheatley colln. [both lost].
- pawensis* Lea, *Unio*: 1868, PANSP 20: 161 (Paw Creek
[Mecklenburg Co.], Beaver Co. [=Creek, Gaston Co.],
Catawba Run [Gaston and Mecklenburg Cos.] all
North Carolina; Wheatley); 1868, JANSPP (2) 6: 302,
pl. 45, fig. 114; 1869, Obs. 12: 62. Figured holotype
USNM 85380 labeled "Beaver Creek, [into ?] Catawba
Run, North Carolina"; paratypes ANSP 127160 from
Paw Creek mentioned as in the Wheatley colln.
- pazii* Lea, *Anodonta*: 1866, PANSP 18: 35 (South Amer-
ica); 1868, JANSPP (2) 6: 274, pl. 36, fig. 87; 1869,
Obs. 12: 34. Figured holotype USNM 86703; para-
type ANSP 125450 mentioned as in the Wheatley colln.
- pealei* Lea, *Unio*: 1871, PANSP 23: 191 (Kansas); 1874,
JANSPP (2) 8: 26, pl. 8, fig. 23; 1874, Obs. 13: 30.
Figured holotype USNM 85745 the only specimen seen
by Lea, mentioned as in the ANSP, but not returned.
- pearlensis* Conrad, *Unio* Plate 10, fig. 1
1855, PANSP 7: 256 (Pearl River, Mississippi).
Lectotype, here selected, ANSP 29918a.
- pebasana* Conrad, *Anodonta*: 1874, PANSP 26: 29, pl. 1,
fig. 5 (Pebas, 1 mi. from mouth of the Ambyacó River,
Upper Amazon, Brazil; Tertiary). Type not located.
- pectitus* Conrad, *Unio*: 1853, PANSP 6: 255 [nomen nu-
dum]; 1854, JANSPP (2) 2: 297, pl. 27, fig. 4 (Wa-
bash River [Indiana] Poulson's cabinet). Type not
located.
- pectorosus* Conrad, *Unio*: 1834, New Fresh Water Shells
U. S.: 37, pl. 6, fig. 1 (bank of Elk River near its
junction with the Tennessee at the Muscle shoals
[Lawrence Co., Alabama]). Type not located.
- peggyae* Johnson, *Anodonta*: 1965, Breviora, Museum of
Comparative Zoology, no. 213, pl. 2, figs. 1-3 (Lake
Talquin [formed by a dam on the Ochlockonee River],
Leon Co. public fishing ground, Leon Co., Florida).
Holotype MCZ 251040; paratypes ANSP 330946.
- peguensis* Anthony, *Monocondylaea*: 1865, American
Journal of Conchology 1: 205, pl. 18, fig. 2 (Pegu,
British Burma). Figured holotype MCZ 161877;
paratype ANSP 41762 from Anthony.
- peguensis* Anthony, *Unio*: 1865, American Journal of Con-
chology 1: 351, pl. 25, fig. 2 (Pegu, British Burma).
Figured holotype MCZ 161875; paratype ANSP 47575.
- pellucidus* Lea, *Unio*: 1845, PAPS 4: 163 (Chattahoochee
River, Georgia; Le Conte); 1848, TAPS 10: 70, pl.
2, fig. 6; 1848, Obs. 4: 44. Figured holotype ANSP
56493 the only specimen seen by Lea from Le Conte.
- penitus* Conrad, *Unio*: 1834, New Fresh Water Shells,
U. S.: 33, pl. 5, fig. 1 (Alabama River, near Claiborne
[Monroe Co.] Alabama). Figured holotype ANSP
59860.
- pennsylvanicus* Pilsbry, *Diplodon*: 1921, [in] Wanner,
PANSP 73: 32, pl. 2, fig. 1 [holotype], 2, 3, pl. 3,
fig. 4 (Shale, Little Conewago Creek, York Co., Penn-
sylvania; Triassic). Not located [Paleontology].
- pentagonoides* Frierson, *Quadrula trapezoides*: 1902, Nau-
utilus 16: 39 ([Lake Charles, a shallow expansion of
the] Calcasieu River [N Lake Charles, Calcasieu Parish]
Louisiana). Lectotype ANSP 128928 selected by
Johnson 1972, Occasional Papers on Mollusks, 3: 147,
pl. 26, fig. 8.
- percoarctatus* Lea, *Unio*: 1857, PANSP 9: 85 (Catawba
River, Gaston Co., North Carolina; Wheatley); 1861,
JANSPP (2) 5: 59 pl. 3, fig. 206; 1862, Obs. 8: 63.
Figured holotype USNM 85529; paratypes ANSP
127004 mentioned as in the Wheatley colln.

- perobliquus* Conrad, *Unio gibbosus*: 1836, Monography Unionidae North America, no. 6, p. 51, pl. 27, fig. 2 (Wabash River, Indiana; Detroit River, Michigan). Type not located.
- perovalis* Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 43, pl. 2, fig. 2 (Alabama River, Claiborne, [Monroe Co.], Alabama). Figured holotype ANSP 56416a.
- perovatus* Conrad, *Unio*: 1834, American Journal of Science 25: 338, pl. 1, fig. 3 (Prairie Creek, Marengo Co., Alabama); 1834, New Fresh Water Shells U.S.: 47, pl. 2, fig. 3 (small streams in Greene Co., Alabama). Lectotype, here selected, ANSP 129864 second cited figure.
- perplexus* Lea, *Unio*: 1831: TAPS 4: 112, pl. 17, fig. 42 (Ohio; T. G. Lea); 1834, Obs. 1: 122. Figured holotype USNM 84324; paratypes mentioned as in the ANSP [lost].
- perplicatus* Conrad, *Unio*: 1841, PANSP 1: 19 ([Pearl River], Jackson [Hinds Co., Mississippi]); 1850, JANSP (2) 1: 276, pl. 38, fig. 2. Figured holotype ANSP 129919a.
- perpurpureus* Lea, *Unio*: 1861, PANSP 13: 41 (Tennessee; Anthony); 1866, JANSP (2) 6: 46, pl. 16 fig. 44; 1867, Obs. 11: 50. Figured holotype USNM 85246; paratype ANSP 56482 from Anthony.
- personatus* Say, *Unio* Plate 8, fig. 5
1829, New Harmony [Indiana] Disseminator 2 (20): 309 (Wabash River [Indiana]). From the 4 specimens identified by Say (*teste*, Call, R. E. 1898, Moll. of Indiana, p. 475 [from Rept. Indiana Geol. Surv. 24: 337-535]) is selected a neotype MCZ 25763, from the Cumberland River, Tennessee.
- perstriatus* Lea, *Unio*: 1852, TAPS 10: 255, pl. 12, fig. 3 (Abbeville District, South Carolina; Barratt); 1852, Obs. 5: 11. Figured holotype USNM 85892; paratype ANSP 127120 from Barratt in the Wheatley colln.
- phillipsii* Conrad, *Unio*: 1835, Monography Unionidae North America, no. 1, p. 9, pl. 5, fig. 1 (Wabash River [Indiana] Cabinet of Phillips). Figured holotype ANSP 19432.
- piceus* Lea, *Unio*: 1860, PANSP 12: 91 (Uruguay River [Argentina and Uruguay]; Wyman); 1863, JANSP (2) 5: 397, pl. 41, fig. 287; 1863, Obs. 10: 15. Figured holotype USNM 85243; paratypes ANSP 125824 from Wyman in the Wheatley colln.
- pictus* Lea, *Unio*: 1834, TAPS 5: 73, pl. 11, fig. 32 (Harpeh River, Tennessee; Troost); 1834, Obs. 1: 185. Figured type in Troost colln., Rijksmuseum Leiden, Holland [not found in 1961]; syntype ANSP 126139 from Troost in the Wheatley colln.
- pilsbryana* Frierson, *Lampsilis*: 1927, Check List North American Naiades: 83. Based on a specimen of *Unio purpuratus* Frierson, non Say figured by Frierson, 1912, Nautilus 26: 22, pl. 3, figs. 4, 5 (Mexico). Holotype MZUM 91175; paratypes ANSP 99551.
- pilsbryana* Olsson & Wurtz, *Diplodontites*: 1951, Notulae Naturae, no. 239, p. 7, figs. 7-10 (Cano Las Animas, near Chiriguana, Dept. of Magdalena, Colombia). Holotype ANSP 187180a.
- pilsbryi* Marsh, *Unio*: 1891, Nautilus, 5: 1 (Little Red River, Arkansas); Holotype ANSP 41589a figured by Pilsbry, 1892, PANSP 44: 131, pl. 8, figs. 7-8 and in 1892, Nautilus 6: 1, pl. 1, figs. 7-8.
- pinei* B. H. Wright, *Unio*: 1897, Nautilus 11: 40 (unnamed lake in Withlacoochee [Withlacoochee] River region of Hernando Co., Florida. Holotype USNM 150127, figured by Simpson, 1900, PANSP 52: 80, pl. 3, fig. 1; refigured by Johnson, 1967, Occasional Papers on Mollusks, 3: 8, pl. 10, fig. 5; paratypes ANSP 73861 from Pine.
- plainilateris* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11 [back cover]; no. 12, p. 105, pl. 57 upper fig. 1 (Yadkin River, North Carolina; also found in Black Water River, Virginia and Neuse River, North Carolina). Type lost.
- plana* Lea, *Anodonta*: 1834, TAPS 5: 48, pl. 7, fig. 18 (Bear Grass Creek, near Louisville, [Jefferson Co.], Kentucky); 1834, Obs. 1: 160. Figured holotype USNM 86626; paratype mentioned as in the ANSP [lost].
- planior* Lea, *Unio*: 1868, PANSP 20: 145 (Tennessee: headwaters of the Holston River, Washington Co., Virginia); 1868, JANSP (2) 6: 316, pl. 50, fig. 129; 1869, Obs. 12: 76. Figured holotype USNM 84391 from the former locality; paratype mentioned as in the ANSP [lost].
- planulatus* Lea, *Unio*: 1829, TAPS 3: 431, pl. 9, fig. 13 (Ohio; T. G. Lea); 1834, Obs. 1: 45. Figured holotype USNM 86059; paratypes mentioned as in the ANSP [lost].
- pleasi* Marsh, *Unio* Plate 9, fig. 5
1891, Nautilus 5: 2 (Little Red River, Arkansas). Lectotype, here selected, ANSP 56480a; allotype ANSP 56480.
- Plectomerus* Conrad: 1853, PANSP 6: 260, no type species selected. Type species: *Unio trapezoides* Lea. Subsequent designation Ortmann and Walker, 1922. Occasional Papers of the Museum of Zoology, University of Michigan, no. 112, p. 9.
- plectophorus* (*plectophorus*) Conrad, *Unio*: 1849, PANSP 4: 154 (Flint River, Georgia; loaned by J. H. Couper); 1850, JANSP (2) 1: 277, pl. 38, fig. 7. Left valve of figured holotype ANSP 290740.
- plexus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 10, p. 89, pl. 49, figs. 1, 2 (Vera Cruz, Mexico; Burrough). Lectotype, here selected, ANSP 129923a [formerly 20421], fig. 1.
- plicata* Say, *Unio*: 1817, Nicholson's Encyclopedia, 2 [no pagination] under discussion of pl. 1, fig. 8 (Lake Erie). Neotype Senckenburg Mus. 4305 from the Ohio River selected by Haas, 1930, Senckenburgiana 12: 327; specimen identified by Say, ANSP 153204 from Senckenberg Museum 4306.
- plicatus* Haldeman, *Anodon* Plate 9, fig. 3
1842, JANSP 8: 202 (Cumberland River, Tennessee). Lectotype, here selected, ANSP 41042.

- shufneri* Lea, *Unio*: 1838, TAPS 6: 61, pl. 17, fig. 53 (Mexico; Burrough); 1838, Obs. 2: 61. Figured type not in the USNM or ANSP; syntype USNM 84080.
- simorphus* B. H. Wright, *Unio*: 1899, Nautilus 13: 42 (Spanish Creek, Okefenokee Swamp [a tributary of St. Marys River, W of Folkston], Charlton Co., Georgia). Lectotype USNM 152060 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 8, pl. 6, fig. 2; paralectotype ANSP 48173.
- stenderosus* Rafinesque, *Unio (Bariosta)*: 1831, Continuation Monograph Bivalve Shells River Ohio: 2 (lower Ohio and Mississippi [rivers]). Syntype in the Férussac colln., *teste* Férussac (1835, Mag. de Zool.: 27, 34) Paris Museum [not located].
- stenoii* Call, *Unio*: 1885, Bulletin of the Washburn College Laboratory of Natural History 1: 48, pl. 2 (Fall River [Wilson Co.]; Virdigris River; both Kansas). Figured holotype MCZ 4934 from Fall River; paratypes ANSP 41132 from Virdigris River.
- strictus* Conrad, *Unio*: see under: *parallelus* Conrad, *Unio*.
- subsoni* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 25, pl. 1 (Black Warrior River, North Alabama). Type not found.
- subtenius* Pilsbry and Bequaert, *Mutela garambae*: 1927, Bulletin of the American Museum of Natural History 53: 432, pl. 40, fig. 3 (Aba River, near Aba [Republic of the Congo]). Figured holotype AMNH 72066; paratypes ANSP 132309.
- tasinatus* Conrad, *Unio*: 1866, American Journal of Conchology, 2: 279, pl. 15, fig. 14 (Florida). Figured holotype ANSP 41347.
- tasinus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 44, pl. 3, fig. 1 (Fox River, Greenbay [Brown Co.], Wisconsin). Figured type ANSP [lost]. Based on the same specimen as: *schoolcraftensis* Lea, *Unio*.
- teostianus* Lea, *Unio*: 1852, TAPS 10: 269, pl. 19, fig. 24 (Eutowah River, Georgia; Wheatley); 1852, Obs. 5: 25. Figured type and the only specimen seen by Lea in the Wheatley colln. [lost].
- trimitigenius* Conrad, *Unio*: 1838, New York Geological Survey, 2nd Annual Report: 66. Is a marine species, *teste* Bassler, 1915, USNM, Bulletin 92, p. 819.
- productus* Conrad, *Unio*: 1836, Monography Unionidae North America, no. 3, p. 31, pl. 14, fig. 1 (Savannah River, Augusta [Richmond Co., Georgia]). Figured holotype ANSP 41397 refigured by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 333, pl. 10, fig. 10.
- proprius* Lea, *Unio*: 1865, PANSP 17: 89 ([Dry Creek] Lafayette [Walker Co.], Georgia; White); 1868, JANSF (2) 6: 256, pl. 31, fig. 70; 1869, Obs. 12: 16. Figured holotype USNM 85141; paratype ANSP 126207 from White in the Wheatley colln.
- provancheriana* Pilsbry, *Unio (Arconalia)*: 1890, Nat. Canadienne 20: 171 (locality unknown); 1891, Nautilus, 4: 127; 1892, PANSP 44: 132, pl. 7, figs. 4-6. Figured holotype ANSP 63094.
- prunoides* Lea, *Unio*: 1868, PANSP 20: 150 (South America?); 1868, JANSF (2) 6: 323, pl. 53, fig. 136; 1869, Obs. 12: 83. Figured holotype ANSP 41791, the only specimen seen by Lea.
- pullatis* Lea, *Unio*: 1856, PANSP 8: 262 (Creeks near Columbus [Muscogee Co.], Georgia; Elliott.) Changed to *pullatus*: 1858, JANSF (2) 4: 57, pl. 8, fig. 39; 1858, Obs. 6: 57. Figured holotype USNM 86020; paratypes ANSP 127064 from Elliott.
- pullus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11, p. 100, pl. 55, fig. 2 (Wateree River, South Carolina; Warm Springs, [=Hot Springs, Madison Co.], North Carolina). Figured type ANSP [lost] from Wateree River, North Carolina, and so restricted by Johnson, 1970, Bulletin of the Museum of Comparative Zoology 140: 370.
- puniceus* Haldeman, *Unio* Plate 9, fig. 1 1842, JANSF 8: 201 (Holston River, Washington Co., Virginia). Measured holotype ANSP 56456a.
- pustulatus* Lea, *Unio*: 1831, TAPS 4: 79, pl. 7, fig. 9 (Ohio; Tennessee); 1834, Obs. 1: 89. Figured holotype USNM 84200; paratypes ANSP 43079-80 mentioned as in the ANSP.
- pustulosus* Lea, *Unio*: 1831, TAPS 4: 76, pl. 7, fig. 7 (Ohio; Alabama River); 1834, Obs. 1: 86. Figured type not in the USNM; syntypes ANSP 43058 from Ohio mentioned as in the ANSP.
- pyramidatus* Lea, *Unio*: 1831, TAPS 4: 109, pl. 16, fig. 39 (Ohio); 1834, Obs. 1: 119. Figured holotype not in the USNM; syntypes ANSP 41726 mentioned as in the ANSP.
- quadrans* Lea, *Unio*: 1860, PANSP 12: 306 (Texas; Wheatley); 1860, JANSF (2) 4: 360, pl. 61, fig. 185; 1860, Obs. 8: 42. Figured holotype ANSP 125601 the only specimen seen by Lea, in the Wheatley colln.
- quadrilaterus* Lea, *Unio*: 1863, PANSP 15: 192 (Abbeville District, [Savannah River drainage] South Carolina, Barratt; Neuse River, near Raleigh [Wake Co.], Emmons; Catawba River, Wheatley; both North Carolina); 1866, JANSF (2) 5: 6, pl. 1, fig. 1; 1867, Obs. 11: 9. Figured holotype USNM 85385 from Emmons; paratypes ANSP 127011 in the Wheatley colln.
- quadrula* Rafinesque, *Obliquaria* Plate 2, fig. 2 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 307 (Ohio [River]). The specimen identified by Rafinesque, mentioned by Vanatta, 1915, PANSP 67: 556, is here selected neotype ANSP 20224 from the Salt River, Kentucky. Is *Quadrula quadrula* (Rafinesque).
- quintardii* Cragin, *Unio*: 1887, Bulletin of Washburn College, Laboratory of Natural History, 2: 6 (Salt Creek, a tributary of the Deep Fork of the Canadian River, Sac and Fox Reservation, Oklahoma Territory). Measured holotype ANSP 63304 figured by Pilsbry 1892, PANSP 44: 131, pl. 7, figs. 1-3.
- radiata* Conrad, *Alasmodonta*: 1834, American Journal of Science 25: 341, pl. 1, fig. 10 (small streams in South Alabama). Measured holotype ANSP 41147 refigured by Johnson, 1967, Breviora, no. 270, p. 6, pl. 2, fig. 1.

- radiolus* Lea, *Unio*: 1871, PANSP 23: 192 (Ogeechee River, Liberty Co., Georgia); 1874, JANSP (2) 8: 21, pl. 6, fig. 18; Obs. 13: 25. Figured holotype USNM 85621; paratype mentioned as in the ANSP [lost].
- radiosus* Lea, *Unio*: 1871, PANSP 23: 192 (Holston River, East Tennessee); 1874, JANSP (2) 8: 13, pl. 3, fig. 9; 1874, Obs. 13: 17. Figured holotype USNM 84674; paratypes ANSP 127294 mentioned as in the Wheatley colln.
- raditoides* Lea, *Unio*: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey; Pleistocene, *teste* Pilsbry 1896, PANSP 48: 567-570). Measured type ANSP 31519. Specimens figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N. J.: 245, pl. 34, figs. 1-3. Is *Lampsilis radiata* (Gmelin).
- rafinesqueana* Frierson, *Lampsilis*: 1927, Check List North American Naiades: 69 ([Mud Creek] Moodys [10 mi N. Tahlequah, Cherokee Co.], Oklahoma). Holotype MZUM 87576 figured by Frierson, 1928, Nautilus 41: 138, pl. 1, figs. 1-2; paratype ANSP 145238.
- raveneli* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 39, pl. 6, fig. 4 (Wateree Canal; since found in the small creeks near Cooper River; vicinity of Santee Canal; all South Carolina). Two syntypes ANSP 41370; the smaller one agrees with Conrad's description but is not the figured specimen which appears to be *Elliptio complanata* (Lightfoot). The second specimen is *Elliptio lanceolata* (Lea), *non Unio ravenelianus* Lea, 1834.
- ravenelianus* Conrad, *Strophitus*: 1863: PANSP 6: 263. Error for *Margaritana raveneliana* Lea.
- ravenelianus* Lea, *Unio*: 1834, TAPS 5: 32, pl. 3, fig. 5 (French Broad River, tributary to the Tennessee, near Asheville [Buncombe Co.], North Carolina); 1834, Obs., 1: 144. Figured holotype USNM 84783; paratype mentioned as in the ANSP [lost].
- recurvatus* Lea, *Unio*: 1871, PANSP 23: 192 (Holston River, East Tennessee; Tennessee River); 1874, JANSP (2) 8: 10, pl. 2, fig. 6; 1874, Obs. 13: 14. Figured holotype USNM 85800 from the former locality; paratype mentioned as in the Wheatley colln. [lost].
- reflexa* Rafinesque, *Obliquaria* Plate 4, fig. 4 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 360 (le Kentucky [River] et aux rapides de Letart [of the Ohio River, Meigs Co., Ohio]). From the types mentioned by Vanatta, 1915, PANSP 67: 554, is here selected a lectotype ANSP 20206a from Letart Falls; paralectotype ANSP 20206. Is *Obliquaria reflexa* Rafinesque, *teste* Ortmann and Walker (1922: 42).
- refulgens* Lea, *Unio*: 1868, PANSP 20: 145 (Oktibbeha River, [Enterprise] Lauderdale Co., Mississippi; Spillman); 1868, JANSP (2) 6: 317, pl. 51, fig. 130; 1869, Obs. 12: 77. Figured holotype USNM 84290; possible paratype ANSP 127597 from Spillman in the Wheatley colln.
- regis* Pilsbry and Bequaert, *Parreysia*: 1927, Bulletin of the American Museum of Natural History, 53: 389, pl. 31, figs. 12-12b (Lake Edward at Kabare [Republic of the Congo]). Figured holotype ANSP 133784.
- retusa* Rafinesque, *Obliquaria* Plate 3, fig. 3 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 306, pl. 81, figs. 19, 20 (l'Ohio et le Kentucky [Rivers]). The specimen identified by Rafinesque, mentioned as the type by Vanatta, 1915, PANSP 67: 556, is here selected neotype ANSP 20220 from the Green River [Kentucky].
- "As to *Obliquaria retusa* even the identification of the so-called Poulson "type" is doubtful. From the description and figure it is absolutely impossible to recognize it as *Quadrula pustulosa* (Lea) 1831, and not even the characteristic tubercles are mentioned or figured," *teste* Ortmann and Walker (1922: 15). Not mentioned by Frierson (1927) or Haas (1969).
- rhombica* Anthony, *Alasmodon*: 1865, American Journal of Conchology 1: 158, pl. 12, fig. 5 (Michigan). Figured holotype MCZ 50296; paratype ANSP 56720.
- riograndensis* Ihering, *Anodonta*: 1890, Archiv für Naturgeschichte 56: (1) 154, 158 ([Rio Camaquam] Rio Grande do Sul; und dem Plata Gebiete, Brazil). Holotype Senkenburg Mus. 3838; paratypes ANSP 61793.
- rivicolus* Conrad, *Unio*: 1868, American Journal of Conchology, 4: 280, pl. 18, fig. 4 (brook near Tampa [Hillsboro Co.], Florida). Figured holotype ANSP 41411.
- rivularis* Conrad, *Unio*: 1853, PANSP 6: 257 [*non nudum*]; 1865, JANSP (2) 296 New name for *Unio declivis* Conrad *non* Say 1836, Monography Unionida North America, no. 5, p. 45, pl. 23, fig. 1 (small stream in Greene Co., Alabama). Figured holotype ANSP 42852.
- roanokoides* Lea, *Unio*: 1868, PANSP 20: 164 ([Fish-house], 6 mi NE Camden, [Camden Co.], New Jersey. Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570). Measured type ANSP 31520. Specimen figured by Whitfield, 1885, Brach. and Lamell. Raritan Clay and Greensand Marls of N. J., p. 248, pl. 33, figs. 1-2, pl. 34, fig. 7. Is *Elliptio complanata* (Lightfoot).
- rosaceus* Conrad, *Unio*: 1849, PANSP 4: 153 (Savannah River [Georgia], J. H. Couper [loaned]); 1850, JANSP (2) 1: 275, pl. 37, fig. 5. Figured holotype MCZ 178779, refigured by Johnson, 1971, Bulletin of the Museum of Comparative Zoology, 140: 388, pl. 21, fig. 3.
- rostellum* Lea, *Unio*: 1872, PANSP 24: 160 (Macon [Bibb Co.], Georgia; Plant); 1874, JANSP (2) 8: 44, pl. 15, fig. 41; 1874, Obs. 13: 48. Figured holotype USNM 85972; paratype ANSP 127145 from Plant in the Wheatley colln.
- rotula* Pilsbry and Bequaert, *Caelatura* (*Laevirostris*?): 1927, Bulletin of the American Museum of Natural History, 53: 405, pl. 33, figs. 5, 5a (Congo River at Leopoldville, Republic of the Congo)]. Figured holotype ANSP 133847.
- roviroisai* Pilsbry, *Unio* (*Lampsilis*): 1900, Nautilus, 13:

- 140 (Laguna de Atasta, near San Juan Bautista, Tabasco, Mexico); 1903, PANSP 55: 788, pl. 54, figs. 1, 1a. Holotype ANSP 58916.
- cabellus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 38, pl. 6, fig. 2 (Black Warrior River, near its source, among the mountains of Alabama). Figured holotype ANSP 41433.
- caudatus* Lea, *Unio*: 1861, PANSP 13: 40 (Tombigbee River [Columbus, Lauderdale Co.], Mississippi, W. Spillman; Coosa River and Big Prairie Creek, [Hale Co.]; both Alabama, Showalter); 1861, JANSP (2) 5: 95, pl. 14, fig. 244; 1862, Obs. 8: 99. Figured holotype USNM 84381 from the former locality; paratypes ANSP 127621 from Spillman in the Wheatley colln.
- caudatus* Lea, *Unio*: 1829, TAPS 3: 427, pl. 8, fig. 10 (Ohio); 1834, Obs. 1: 41. Figured holotype USNM 84556; paratype mentioned as in the ANSP [lost].
- caudatus* Rafinesque, *Obliquaria* Plate 3, fig. 2 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 314 (le Kentucky [River]). The type mentioned by Vanatta, 1915, PANSP 67: 557, is here selected lectotype ANSP 20237. Not identifiable from the original description, *teste* Ortmann and Walker (1922: 25). Not recognized by Frierson (1927: 53).
- caudatus* Conrad, *Unio*: 1837, Monography Unionidae North America, no. 9, p. 76, pl. 43, fig. 1. New name for *Unio ravenelianus* Lea non *Unio raveneli* Conrad 1834. Lea's name is obviously not preoccupied.
- caudatus* Lea, *Unio*: 1856, PANSP 8: 93 (Siam); 1857, JANSP (2) 3: 294, pl. 25, fig. 7; 1857, Obs. 6: 14. Figured holotype USNM 84082; paratype ANSP 41681 from Haines.
- caudatus* H. B. Baker, *Lampsilis*: 1922, Occasional Papers of the Museum of Zoology, University of Michigan, no. 106; 29, pl. 11-13, figs. 51-54 (Rio San Juan, Southern Vera Cruz, Mexico). Figured holotype MZUM 34891; paratypes ANSP 133696.
- caudatus* Conrad, *Unio*: 1836, Monography Unionidae North America no. 6, p. 53, pl. 24, fig. 1 (Detroit River, Michigan; A. Sager). Figured type not found.
- caudatus* Lea, *Unio*: 1852, TAPS 10: 277, pl. 22, fig. 35 (Oconee River, near Athens [Clarke Co.], Georgia); 1852, Obs. 5: 33. Figured holotype USNM 85970; paratype ANSP 41388 mentioned as in the Le Conte colln.
- caudatus* Frierson, *Elliptio*: 1927, Check List North American Naiades: 37 (Saja River, [4 mi. W] Esmaralda, Guatemala). Holotype MZUM 108010 figured by Frierson, 1928, Nautilus 41: 139, pl. 2, fig. 2; paratypes ANSP 145239.
- caudatus* Frierson, *Quadrula flava*: 1927, Check List North American Naiades, p. 55 (Elk River, [McDonald Co.], Missouri). Lectotype MZUM 92226 selected by Johnson, 1972, Occasional Papers on Mollusks, 3: 149, pl. 25, fig. 5; paralectotype ANSP 145241.
- caudatus* B. H. Wright, *Unio* (*Elliptio*): 1933, Nautilus 47: 17, pl. 1 (Lake Druid, near Floral City [Citrus Co.], Florida). Holotype USNM 424738; paratype ANSP 161016.
- caudatus* H. B. Baker, *Lampsilis rovirosai*: 1922, Occasional Papers of the Museum of Zoology, University of Michigan, no. 106: 27, pl. 7, figs. 39-42. Figured holotype MZUM fig. 40; paratypes ANSP 133691 includes, figs. 39 and 41.
- caudatus* Lea, *Unio*: 1841, PAPS 2: 30 (Sapotat River, near Tlocatalpan [Tlacatalpan, Vera Cruz State] Mexico; Burrough); 1842, TAPS 8: 233, pl. 21, fig. 47; 1842, Obs. 3: 71. Figured holotype USNM 85072 the only specimen seen by Lea, mentioned as in the Burrough colln. but not returned to the ANSP.
- caudatus* Lea, *Unio*: 1857, PANSP 9: 169 (Savannah River; Brantley's Mill, Washington Co.; both Georgia; Santee Canal, South Carolina; Sugar Creek, Mecklenburg Co., North Carolina) 1859, JANSP (2) 4: 80, pl. 16, fig. 61; 1858, Obs. 6: 81. Figured holotype USNM 85404 from Savannah River; paratypes ANSP 42819 from Sugar Creek, Mecklenburg Co., North Carolina mentioned as in the Wheatley colln.
- caudatus* Olsson and Wurtz, *Prisodon (Triplodin) rugosissima*: Notulae Naturae, no. 239, p. 5, figs. 11-12 (general Rio Mecayo area of the Caquetá Basin, Colombia). Holotype ANSP 187179a.
- caudatus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11 [back cover] (Alabama River, Clairborne, [Monroe Co.] Alabama). 1840, *op. cit.*, no. 12, p. 109, pl. 60, fig. 1. Figured type not found; syntype ANSP 9747 from Conrad.
- caudatus* Conrad, *Unio*: 1838, Monography Unionidae North America, no. 11: 102; 1840, *op. cit.*, no. 12, p. 103, pl. 56, fig. 2 (small stream Greene Co., Alabama). Figured type not found. Error for *Unio sayi* Ward.
- caudatus* Rafinesque, *Obliquaria* Plate 1, fig. 6 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 309, pl. 81, figs. 24, 25 (le Kentucky [River]). The specimen identified by Rafinesque, mentioned as the type by Vanatta, 1915, PANSP 67: 555, is here selected neotype ANSP 20229 from the Ohio [River]. Is *Pleurobema clava* (Lamarck) 1819.
- caudatus* Lea, *Unio*: 1834, TAPS 5: 37, pl. 3, fig. 9 (Fox River at Green Bay, [Brown Co., Wisconsin]; 1834, Obs. 1: 149. Figured type in the ANSP [lost]. Based on the same specimen as: *prasinus* Conrad, *Unio*.
- caudatus* Lea, *Anodonta*: 1852, TAPS 11: 292, pl. 29, fig. 55 (Rio Negro, Brazil; Wheatley); 1852, Obs. 5: 43. Holotype USNM 86727 consisting of two odd valves, the only specimen seen by Lea; specimens in the Wheatley colln. [lost].
- caudatus* Lea, *Unio*: 1860, PANSP 12: 93 ([Tennessee River], Tuscombina [Colbert Co.], Alabama; Thornton); 1860, JANSP (2) 4: 342, pl. 55, fig. 167; 1860, Obs. 8: 24. Figured holotype USNM 85084; paratype ANSP 126262 from Thornton in the Wheatley colln.
- caudatus* Conrad, *Unio*: 1848, PANSP 4: 152 (Flint River, Georgia; Cabinet of J. H. Couper); 1850, JANSP (2) 1: 275, pl. 37, fig. 1. Figured type not found.
- caudatus* Lea, *Unio*: 1829, TAPS 3: 437, pl. 11, fig. 17

- (Ohio); 1834, Obs. 1: 51. Figured holotype USNM 84475; paratype ANSP 59869 mentioned as in the ANSP.
- semirasa* Pilsbry, *Lampsilis*: 1910, PANSP 61: 534, pl. 26, figs. 7-9 (Ganima River, 3 mi SW San Dieguito; Valles River, Mecos [both State of San Luis Potosi, Mexico]). Lectotype, here selected, ANSP 99542a, fig. 7, from the former locality.
- shanghaiensis* Lea, *Unio*: 1859, PANSP 11: 153 (Shanghai, China; H. Cuming); 1860, JANSP (2) 4: 242, pl. 36, fig. 121; 1860 Obs. 7: 60. Figured holotype British Museum (Nat. Hist.) 1965171; specimen not seen by Lea, mentioned as in Wheatley colln. [lost].
- showalterii* Lea, *Anodonta*: 1860, PANSP 12: 307 (Coosa River, Wetumpka, [Elmore Co.], Alabama; Showalter); 1862 JANSP (2) 5: 215, pl. 33, fig. 284; 1863, Obs. 9: 37. Figured holotype USNM 86487; paratype ANSP 56711 from Showalter.
- showalterii* Lea, *Unio*: 1860, PANSP 12: 307 (Coosa River, Wetumpka [Elmore Co.], Alabama; Showalter); 1861, JANSP (2) 5: 73, pl. 8, fig. 223; 1862, Obs. 8: 77. Figured holotype USNM 85748; paratype ANSP 41432 from Showalter.
- siamensis* Lea, *Unio*: 1866, PANSP 18: 133 (Siam; Wheatley); 1868, JANSP (2) 6: 279, pl. 38, fig. 93; 1869, Obs. 12: 39. Figured holotype USNM 85893; paratypes ANSP 125659 mentioned by Lea as in the Wheatley colln.
- signata* Pilsbry, *Lampsilis*: 1910, PANSP 61: 536, pl. 25, figs. 5, 6 (Valles River, near a small falls about 3 mi below Valles, [State of San Luis Potosi, Mexico]). Figured holotype ANSP 99529a.
- similis* Lea, *Unio*: 1857, PANSP 10: 169 (Buckhead Creek, Burke Co., Georgia; Elliott); 1858, JANSP (2) 4: 91, pl. 19, fig. 71; 1858, Obs. 6: 91. Figured holotype USNM 85653; paratypes ANSP 126871 from Elliott in the Wheatley colln.
- simillimus* Ortmann, *Diplodon*: 1921, Memoirs of the Carnegie Museum, 8: 495, pl. 35, figs. 3-6 (Rio Nhundiaguara, Morretes, Paraná, Brazil). Syntypes Carnegie Mus. 61.9250; syntypes ANSP 167907.
- simpsoni* B. H. Wright, *Unio*: 1888, PANSP 40: 117 (Lake Woodruff, Volusia Co., Florida). Figured holotype USNM 151038; paratypes ANSP 41346.
- simpsonianana* Lea, *Anodonta*: 1861, PANSP 13: 56 (Fort Rae, Great Slave Lake [District of Mackenzie, Canada]; 1862, JANSP (2) 5: 212, pl. 32, fig. 281; 1863, Obs. 9: 34. Figured holotype USNM 86434 and the only specimen seen by Lea; specimens identified by Lea, ANSP 41202.
- simpsonianus* Pilsbry, *Glabaris*: 1897, PANSP 48: 564, pl. 27, fig. 13 (Rio de la Plata [Uruguay]). Figured holotype ANSP 41845a.
- simus* Lea, *Unio*: 1838, TAPS 6: 26, pl. 8, fig. 20 (Cumberland River, Tennessee); 1838, Obs. 2: 26. Figured holotype USNM 85342; paratype ANSP 56474 from Lea.
- sintoxia* Rafinesque, *Obliquaria* (*Sintoxia*) Plate 2, fig. 6 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 310 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 558, is here selected lectotype ANSP 20208 from the Ohio River. Not identifiable from the original description, *teste* Ortmann and Walker (1922: 4). Placed under the synonymy of *Quadrula subrotunda* (Lea) 1831 by Frierson (1927: 56). Is [*Pleurobema*] *solidum* (Lea) 1838 asserted by Morrison (1969: 24).
- sinuata* Rafinesque, *Obliquaria* Plate 1, fig. 3 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 321 (le Kentucky [River]). The type mentioned by Vanatta, 1915, PANSP 67: 555, is here selected lectotype ANSP 20252 from the Kentucky River. Is *Elliptio dilatata* (Rafinesque).
- Solenia* Conrad: 1868, American Journal of Conchology, 4: 249. Type species, *Mycetopsis emarginatus* Lea. monotypic.
- solenoides* Rafinesque, *Unio* Plate 3, fig. 5 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 298 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 556, is here selected lectotype ANSP 20204 from the Ohio River. Is *Quadrula cylindricus* (Say) 1817.
- sparus* Lea, *Unio*: 1868, PANSP 20: 143 (Swamp Creek, Whitfield Co., Georgia); 1869, JANSP (2) 6: 306, pl. 47, fig. 119; 1869, Obs. 12: 66. Figured holotype USNM 85082; paratypes ANSP 126264 mentioned as in the Wheatley colln.
- sphaericus* Lea, *Unio*: 1868, PANSP 20: 145 (Pearl River, Jackson [Hinds Co.], Mississippi; Wheatley); 1868, JANSP (2) 6: 319, pl. 51, fig. 132; 1869, Obs. 12: 79. Figured holotype USNM 84271; paratypes ANSP 127582, mentioned as in the Wheatley colln.
- spinus* Lea, *Unio*: 1836, Description of a new *Unio*, pp. 1-4 (col. figs.); 1838, TAPS 6: 57, pl. 16, fig. 50 (Altamaha [River], Hopeton, near Darien [McIntosh Co.]; Altamaha [River] Liberty [now Long] Co.; both Georgia); 1838, Obs. 2: 57. Figured type in the collection of Shepard [presumed lost]; syntypes ANSP 129763 from Lea and 41400 from Le Conte.
- squalidus* Lea, *Unio*: 1863, PANSP 15: 192 (Neuse River, near [6 mi E] Raleigh [Wake Co.]; Roanoke River, near Weldon [Halifax Co.], Emmons; Deep River; all North Carolina); 1866, JANSP (2) 6: 22, pl. 7, fig. 20; 1867, Obs. 11: 26. Figured holotype USNM 85376; paratype ANSP 127152; both from Emmons.
- stabilis* Lea, *Unio*: 1861, PANSP 13: 59 (Coosa River, Alabama; Showalter); 1861, JANSP (2) 5: 71, pl. 8, fig. 221; 1862, Obs. 8: 75. Figured holotype USNM 84639; possible paratypes ANSP 41428 from Showalter. Lea saw only two specimens.
- stagnalis* Conrad, *Unio*: 1849, PANSP 4: 152 (Ogeechee River, Georgia, Cabinet of J. H. Couper); 1850, JANSP (2) 1: 275, pl. 37, fig. 2. Figured holotype MCZ 178778 purchased from J. H. Couper.
- stappersi* Pilsbry and Bequaert, *Pseudospatha*: 1927, Bulletin of the American Museum of Natural History, 53: 446, pl. 45, fig. 6 (Lake Tanganyika [Central Africa]: bay of Kilewa, in 12 m). Holotype ANSP 132189.

- acuta* Rafinesque, *Obovaria*: see under *tuberculata* Rafinesque. *Obovaria*.
- acensis* H. B. Baker, *Tetraplodon*: 1930, Occasional Papers of the Museum of Zoology, Univ. Michigan, no. 210, p. 63, pls. 32-33, figs. B (Rio Yuruari, Essequibo drainage, Venezuela). Holotype ANSP 125531a.
- acensis* Lea, *Unio*: 1871, PANSP 23: 188 (Yuruari River, tributary to Essequibo River, Guiana); 1874, JANSP (2) 8: 22, pl. 7, fig. 19; 1874, Obs. 13: 26. Figured holotype USNM 83901; paratype ANSP 125550 mentioned as in the Wheatley colln.
- acardsoni* Lea, *Unio*: 1852, TAPS 10: 278, pl. 23, fig. 36 (Tennessee River, Chatanooga, [Hamilton Co., Tennessee]); 1852, Obs. 5: 34. Figured holotype, and the only specimen seen by Lea, ANSP 56572, mentioned as in the ANSP.
- acartiana* Lea, *Anodonta*: 1834, TAPS 5: 47, pl. 6, fig. 17 (River Teche, [St. Landry Parish], Louisiana); 1834, Obs. 1: 159. Figured holotype USNM 86664; paratype ANSP [lost].
- acamineus* Conrad, *Unio*: 1834, American Journal of Science, 25: 339, pl. 1, fig. 6 (small streams in South Alabama); 1834, New Fresh Water Shells U.S.: 71, pl. 7, fig. 3, the figure was not referred to until 1838, Monography Unionidae North America, no. 10, p. 91, pl. 50, fig. 1 (brooks or mill streams in Greene Co., Alabama). Type ANSP 20420 [lost].
- acriata* Rafinesque, *Obovaria* Plate 2, fig. 5
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 311 (la partie supérieur de l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 552, is here selected lectotype ANSP 20205. Frierson (1927: 50) argues that this species is *Quadrula striata* (Rafinesque) and has priority over *Unio cooperianus* Lea 1834, and so asserted by Morrison (1969: 24).
- acriatissimus* Anthony, *Unio*: 1865, American Journal of Conchology, 1: 155, pl. 12, fig. 1 ([Clinch River] Tennessee). Figured holotype MCZ 17356; paratype ANSP 173341.
- acriatulus* Lea, *Unio*: 1857, PANSP 9: 86 (Roanoke River, Weldon [Halifax Co.], North Carolina); 1861, JANSP (2) 5: 55, pl. 2, fig. 202; 1862, Obs. 8: 59. Figured holotype USNM 84548; paratype ANSP 41365 from Lea.
- acrumosus* Lea, *Unio*: 1872, PANSP 24: 158 (Yadkin River, North Carolina; Wheatley) 1874, JANSP (2) 8: 57, pl. 19, fig. 55; 1874, Obs. 13: 61. Figured holotype USNM 85755; paratypes ANSP 127103-4 mentioned as in the Wheatley colln.
- acubangulata* Anthony, *Anodon*: 1865, American Journal of Conchology, 1: 158, pl. 13, fig. 1 ([Shears Lake, Kent Co.], Michigan). Figured holotype MCZ 150645; paratype ANSP 129829.
- acubarinata* Currier, *Anodonta*: American Journal of Conchology, 3: 113, pl. 6, fig. 5 (Pentwater, Oceana Co., Michigan). Figured holotype MZUM in Walker colln., teste Simpson, 1900, Proceedings of the United States National Museum, 22: 633; paratypes ANSP 126555 from McNeil in the Wheatley colln., mentioned as in the ANSP.
- acrocroceus* Conrad, *Unio*: 1854, JANSP (2) 2: 297, pl. 27, fig. 1 (one of the tributaries to Canadian River, Arkansas; Woodhouse). Figured holotype ANSP 41406a.
- acubylindracea* Lea, *Anodonta*: 1838, TAPS 6: 106, pl. 24, fig. 117 (Oak Orchard Creek, Orleans Co., New York); 1838, Obs. 2: 106. Figured type not found in the USNM; ANSP 126680 identified by Lea in the Wheatley colln.
- acugibbosa* Anthony, *Anodon*: 1866: American Journal of Conchology 2: 144, pl. 6, fig. 2 (Black Lake, Michigan). Figured holotype MCZ 161854; paratypes ANSP 126603 in the Wheatley colln.
- acuglobosus* Lea, *Unio*: 1834, TAPS 5: 30, pl. 2, fig. 3 (Bayou Teche, [St. Landry Parish], Louisiana); 1834, Obs. 1: 142. Figured holotype USNM 159969; paratype mentioned as in the ANSP [lost].
- acubinflata* Anthony, *Anodon*: 1865, American Journal of Conchology, 1: 160, pl. 15, fig. 1 (Michigan). Figured holotype MCZ 161863; paratype ANSP 129858.
- acubinflatus* Conrad, *Unio complanatus*: 1835, New Fresh Water Shells U. S.: Appendix, 5, pl. 9, fig. 2 (Savannah River [Augusta, Richmond Co., Georgia]; Congaree River, South Carolina: Syntype ANSP 119985 from the Savannah River.
- acubolivaceus* Lea, *Unio*: 1874, PANSP for 1873, 25: 422 (Catawba, Fox [not located], and Yadkin Rivers; all North Carolina; Wheatley); 1874, JANSP (2) 8: 57, pl. 20, fig. 56; 1874, Obs. 13: 61. Figured holotype USNM 85564 from the Fox River; paratypes mentioned as in the Wheatley colln. [lost].
- acubovatus* Lea, *Unio*: 1831, TAPS 4: 118, pl. 18, fig. 46 (Ohio River); 1834, Obs. 1: 128. Figured holotype USNM 84509; paratype ANSP 42308.
- acuboparallelus* Lea, *Unio*: 1872, PANSP 24: 158 (Irwins Creek [Mecklenburg Co.] and Fox River [not located]; both North Carolina; Wheatley); 1874, JANSP (2) 8: 46, pl. 16, fig. 44; 1874, Obs. 13: 50. Figured holotype USNM 85418; paratypes mentioned as in the Wheatley colln. [lost].
- acubplanus* Conrad, *Unio*: 1837, Monography Unionidae North America no. 9, p. 73, pl. 41, fig. 1 ([North = Maury River, a] branch of the James River, Lexington, Rockbridge Co., Virginia). Figured holotype ANSP 20412 [lost].
- acubrostratus* Say, *Unio*: 1831, New Harmony [Indiana] Disseminator [not paged] (Wabash [River, Indiana]). Neotype Senckenberg Museum 4348, selected by Haas, 1930, Senckenbergiana 12: 328.
- acubrotunda* Rafinesque, *Obliquaria* Plate 6, fig. 1
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 308, pl. 81, figs. 21-23 (l'Ohio [River]). The specimen identified by Rafinesque, mentioned by Vanatta, 1915, PANSP 67: 552, is here selected neotype ANSP 20254 from the Kentucky River. Is *Obovaria subrotunda* (Rafinesque), teste Ortmann and Walker (1922: 45).
- acubrotundoides* Lea, *Unio*: 1868, PANSP 20: 163 ([Fish-house], 6 mi. NE Camden, [Camden Co.], New Jersey;

- Pleistocene, *teste* Pilsbry, 1896, PANSP 48: 567-570. Measured holotype ANSP 31524, figured by Whitfield, 1885, Brach. and Lamell. Raritan Clays and Greensand Marls of N.J.: 246, pl. 32, fig. 5. Is *Quadrula subrotunda* (Lea).
- subsquamosus* Lea, *Unio*: 1872, PANSP 24: 160 (Yadkin River, North Carolina; Wheatley); 1874, JANSP (2) 8: 47, pl. 16, fig. 45; 1874, Obs. 13: 51. Figured holotype USNM 85557; paratypes ANSP 126999 mentioned as in the Wheatley colln.
- subvexa* Conrad, *Anodonta*: 1834, American Journal of Science 25: 341, pl. 1, fig. 12 (Black Warrior River [Alabama]). Figured type ANSP [lost].
- subviridis* Conrad, *Unio*: 1835, New Fresh Water Shells U. S.: Appendix, 4, pl. 9, fig. 1 (Schuylkill River; Juniata River [Blair Co.]; creeks in Lancaster Co.; all Pennsylvania. Figured holotype ANSP 2105 [lost] from Juniata River.
- succissus* Lea, *Unio*: 1852, TAPS 10: 275, pl. 21, fig. 32 (West Florida; Le Conte. Type locality restricted to Choctawhatchee River, Caryville, Holmes Co., Florida, by Clench and Turner, 1956, Bulletin of the Florida State Museum 1: 151); 1852, Obs. 5: 31. Figured holotype USNM 84574; 2 paratypes from New Orleans, Louisiana, mentioned as in the Wheatley colln. [lost].
- sulcatus* Lea, *Unio*: 1829, TAPS 3: 430, pl. 8, fig. 2 (Ohio; T. G. Lea); 1834, Obs. 1: 44. Figured holotype USNM 84803; paratypes mentioned as in the ANSP [lost].
- sumatrensis* Lea, *Unio*: 1859, PANSP 11: 153 (Sumatra; Cuming); 1860, JANSP (2) 4: 239, pl. 34, fig. 118; 1860, Obs. 7: 57. Figured holotype USNM 84059; paratypes mentioned as in the Wheatley colln. [lost]. Non *Unio sumatrensis* Dunker 1852 changed by Lea to *Unio dimotus* 1870, Synopsis 4th edit. p. 30.
- superiorensis* Marsh, *Unio*: 1897, Nautilus 10: 103, pl. 1, figs. 1, 2, 5, (Michipicoton River, upper shore of Lake Superior). Figured holotype ANSP 70449a; paratype ANSP 70449, fig. 5.
- swordianus* S. H. Wright, *Unio*: 1897, Nautilus 11: 4 (Powell Creek [River], Lee Co., Virginia). Lectotype USNM 149654 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 9, pl. 3, fig. 3; paralectotypes ANSP 48304.
- taeniatus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 26, pl. 4, fig. 2 (Flint River, Morgan Co., Alabama). Figured holotype ANSP 56441.
- taiwanica* Pilsbry, *Nodularia douglasiae* Plate 9, fig. 6 1906, PANSP 57: 750 (Formosa). Holotype ANSP 58170.
- tampicoensis* Lea, *Unio*: 1838, TAPS 6: 24, pl. 7, fig. 18 (River Tampico, Mexico; River Medellin, 10 mi. S of Vera Cruz [State of Vera Cruz]; Mexico; Burrough); 1838, Obs. 2: 24. Figured holotype USNM 84843 from the former locality; paratypes mentioned as in the ANSP [lost].
- tauilapanus* Conrad, *Unio*: 1855, PANSP 7: 256 (San Juan River, Taumulapas [Tamaulipas State] Mexico). Type not found. Changed to *tamaulipasensis* by Crosse et Fischer, 1893, Miss. Sci. Mexique, pt. 7, 2: 621.
- tecomatensis* Lea, *Unio*: 1841, PAPS 2: 30 (Tecomate River, near Tlocatalpam, [Tlaxcala Vera Cruz State], Mexico; Burrough); 1842, TAPS 8: 234, pl. 21, fig. 48; 1842, Obs. 3: 72. Figured holotype USNM 85338; paratype ANSP 129941 from Burrough mentioned as in the ANSP.
- tenebrosus* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 42, pl. 7, fig. 1 (Rappahannock [sic] River near Falmouth, Stafford Co., Virginia; South Carolina). Type not found.
- tenebricosa* Lea, *Anodonta*: 1834, TAPS 5: 78, pl. 12, fig. 36 (Parana River, South America; Burrough); 1834, Obs. 1: 190. Figured holotype USNM 86761; paratype ANSP 41855 from Burrough mentioned as in the ANSP.
- tenuisculus* Frierson, *Unio*: 1911, Nautilus 25: 29, pl. 1, figs. 4-6 (Reedy Lake, Polk Co., Florida; in the Gulf drainage). Lectotype MZUM 96312, figs. 4, 6, selected and refigured by Johnson, June 2, 1972, Occasional Papers on Mollusks, 3: 150, pl. 29, fig. 3; also June 5, 1972, Bulletin of the Florida State Museum, 16: 212; paralectotypes ANSP 105060.
- teres* Conrad, *Anodonta*: 1834, New Fresh Water Shells U. S.: 47, pl. 7, fig. 2 (Santee Canal, South Carolina). Type not found.
- teres* Rafinesque, *Elliptio*: 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 321 (la rivière Wabash [Indiana]). The type was figured by Conrad 1836, Monography Unionidae North America, no. 6. p. 52, pl. 28, in the Poulson colln. [lost].
- tinkeri* B. H. Wright, *Unio*: Nautilus, 13: 7 (Tombigbee River [Moscow, Lamar Co.], Alabama). Holotype USNM 159193 figured by Simpson, 1900, PANSP 52: 78, pl. 4, fig. 3; refigured by Johnson, 1967, Occasional Papers on Mollusks 3: 9, pl. 1, fig. 2; paratypes ANSP 48376.
- tolimanensis* Pilsbry, *Nephronaias aztecorum*: 1920, PANSP 72: 194, fig. 4 (Tolimán, State of Jalisco, Mexico). Figured holotype ANSP 46195a (lower figure).
- tombigbeanum* Frierson, *Pleurobema*: 1908, Nautilus, 22: 27, pl. 3, figs. 3, 4 ([Tombigbee River] Demopolis, Marengo Co., Alabama; also [Tombigbee River] Columbus [Lowndes Co.] Mississippi). Lectotype ANSP 173339a, fig. 4, from the latter locality selected by Johnson, 1972, Occasional Papers on Mollusks, 3: 150, pl. 24, fig. 4; paralectotype ANSP 173340, fig. 3, from the former locality. Is *Pleurobema taiitanum* Lea, *teste* Frierson, 1927, Check List North American Naiades, p. 42.
- topekaensis* Lea, *Unio*: 1868, PANSP 20: 144 ([Kansas River] Topeka [Shawnee Co.], Kansas, Daniels; Little Arkansas River, Le Conte; Rock Creek, Hawn; Walnut Creek, Santa Fe Road, [not located], Idler; Verdigris River; all Kansas. [Nemaha River], Falls City [Richardson Co.], Nebraska); 1868, JANSP (2) 6: 313, pl. 49, fig. 126; 1869, Obs. 12: 73. Figured

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- holotype USNM 84978 from the last locality; paratypes mentioned as in the ANSP [lost].
- obovata* Rafinesque, *Obovaria* Plate 6, fig. 2
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 311, pl. 82, figs. 1-3 (l'Ohio [River]). The specimen identified by Rafinesque mentioned by Vanatta, 1915, PANSP 67: 552, is here selected neotype ANSP 20256 from the Kentucky River. Is *Obovaria retusa* (Lamarck), *teste* Ortmann and Walker (1922: 45).
- obovata* Rafinesque, *Amblema* Plate 7, fig. 5
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 314, pl. 82, figs. 11, 12 (l'Ohio et le Kentucky [Rivers]). Figured holotype ANSP 20218; paratype ANSP 20216 from the Kentucky River; both specimens mentioned by Vanatta, 1915, PANSP 67: 550. Is *Dysnomia (Torulosa) torulosa* Rafinesque, *teste* Ortmann and Walker (1922: 50).
- ohioensis* Conrad, *Unio*: 1834, New Fresh Water Shells U. S.: 27, pl. 3, fig. 5 (Flint River, Alabama). Figured holotype ANSP 56481.
- californiana* Lea, *Anodonta*: 1852, TAPS 10: 287, pl. 26, fig. 48 (Cartagena, Colombia); 1852, Obs. 5: 43. Figured holotype USNM 86684; paratype ANSP 41841 mentioned as in the ANSP.
- ohioensis* Lea, *Unio*: 1831, TAPS 4: 110, pl. 16, fig. 40 (Ohio River, Cincinnati [Hamilton Co.], Ohio, T. G. Lea; Ohio River, Louisville, [Jefferson Co.], Kentucky); 1831, Obs. 1: 120. Figured holotype USNM 86429; paratypes mentioned as in the ANSP [lost].
- triquetra* Rafinesque, *Truncilla* Plate 7, fig. 3
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 300, pl. 81, figs. 1-4 (chutes de l'Ohio [River]). The type mentioned by Vanatta 1915, PANSP 67: 550, is here selected lectotype ANSP 20231. Is *Dysnomia (Truncillopsis) triquetra* (Rafinesque), *teste* Ortmann and Walker (1922: 65).
- triumphans* B. H. Wright, *Unio*: 1898, Nautilus 13: 7 (Coosa River, St. Clair Co., Alabama). Holotype USNM 150554, figured by Simpson, 1900, PANSP 52: 83, pl. 3, fig. 3; refigured by Johnson 1967, Occasional Papers on Mollusks, 3: 9, pl. 1, fig. 1; paratypes ANSP 48226.
- truncata* Rafinesque, *Truncilla* Plate 5, fig. 3
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 301 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 553, is here selected lectotype ANSP 20217 from [Falls of the] Ohio River. Is *Truncilla truncata* Rafinesque, *teste* Ortmann and Walker (1922: 50).
- truncata* Conrad [non Say], *Alasmodonta*: 1834, New Fresh Water Shells U. S.: 73. Listed as a synonym of *Unio calceolus* Lea.
- truncata* Conrad [non Say], *Alasmodonta*: 1853, PANSP 6: 262. Listed as a synonym of *Alasmodonta marginata* Auct.
- tryonii* Lea, *Anodonta*: 1862, PANSP 14: 169 (Schuylkill River above Philadelphia; Delaware River at League Island [both Philadelphia Co., Pennsylvania]; Flemington [=Farmington, Hartford Co.], Connecticut; Westfield [Hampden Co.], Massachusetts; Potomac River near Chain Bridge, above Washington, D. C.); 1866, JANSP (2) 6: 28, pl. 10, fig. 27; 1867, Obs. 11: 32. Figured holotype USNM 86572 from the Delaware River; paratypes ANSP 27345 from Philadelphia mentioned as in the ANSP.
- tryoni* B. H. Wright, *Unio*: 1888, PANSP 40: 120, pl. 6, fig. 2 (Lake Woodruff [Spring Garden Lake], near De Leon Springs, Volusia Co., Florida). Holotype USNM 151036 refigured by Johnson, 1967, Occ. Papers on Moll. 3: 9, pl. 12, fig. 1; paratypes ANSP 42494.
- tuberculata* Rafinesque, *Obliquaria* Plate 8, fig. 3
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 308 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 558 is here selected lectotype ANSP 20215 from the Ohio River. Is *Cyclonaias tuberculata* (Rafinesque).
- tuberculata* Rafinesque, *Obovaria stegaria* Plate 4, fig. 3
1820, Annales Générales des Sciences Physiques, Bruxelles 5: 312 (l'Ohio [River]). The type mentioned by Vanatta, 1915, PANSP 67: 554 is here selected lectotype ANSP 20241 from the Ohio River. "The original figure of *stegaria* is absolutely insufficient to recognize the species as *Cyprogenia irrorata*" (Lea) 1828, *teste* Ortmann and Walker (1922: 43). Frierson (1927:66) shows that *stegaria* is identifiable from the original description. Is *Cyprogenia stegaria* (Rafinesque).
- tumidus* Morelet, *Monocondylus* 1866, Journal de Conchyliologie 14: 62 (*in torrentibus montanis Cambodiæ*); 1875, Séries Conch., pt. 4, p. 337, pl. 16, fig. 1. Figured holotype British Museum (Natural History) 93.2.4.1734; paratypes ANSP 41764 from Morelet.
- turgidus* Lea, *Unio*: 1838, TAPS 6: 11, pl. 5, fig. 11 (near New Orleans, [Orleans Parish, Louisiana]; Barabino) 1838, Obs. 2: 11. Figured holotype USNM 84277; paratypes ANSP 10286 from Barabino.
- tuomeyi* Lea, *Unio*: 1852, TAPS 10: 256, pl. 13, fig. 4 (Abbeville District, South Carolina; Barratt); 1852, Obs. 5: 12. Figured holotype USNM 85669; paratype ANSP 127068 from Barratt in the Wheatley colln.
- uber* Conrad, *Unio*: 1866, American Journal of Conchology, 2: 279, pl. 15, fig. 16 (Alabama River). Type not found.
- uhareensis* Lea, *Unio*: 1868, PANSP 20: 145 (Uharee [Uwharree] River, Montgomery Co., North Carolina; Genth); 1868, JANSP (2) 6: 304, pl. 46, fig. 116; 1869, Obs. 12: 63. Figured holotype USNM 85576; paratypes ANSP 42818 from Genth.
- undivaga* Pilsbry, *Lampsilis*: 1910, PANSP 61: 536, pl. 26, figs. 1-4 (Valles River, 2 mi above Mecos, [State of San Luis Potosi, Mexico]). Lectotype, here selected, ANSP 99520a, fig. 3.
- uniomerus* Conrad: 1853, PANSP 6: 268, no type species selected. Type species, *Unio tetralasmus* Say. Subse-

- quent designation Simpson, 1900, Proceedings of the United States National Museum, 22: 739. See Johnson, 1970 Bulletin of the Museum of Comparative Zoology, 140: 339.
- vanuxemensis* Lea, *Unio*: 1838, TAPS 6: 36: pl. 11, fig. 31 (Cumberland River, Tennessee); 1838, Obs. 2: 36. Figured holotype USNM 85146; paratype ANSP 42088 from Lea.
- varicosus* Lea, *Unio*: 1831, TAPS 4, 90, pl. 11, fig. 20 (Ohio); 1834, Obs. 1: 100. Figured holotype USNM 84320; paratype ANSP 41581 from Lea.
- velatus* Conrad, *Unio*: 1854, JANSF (2) 2: 298, pl. 27, fig. 6 (River St. Fois [not located] Cabinet of Phillips). Type not found.
- venezuelensis* Pilsbry and Olsson, *Fossula*, 1944, Nautilus 57: 89, pl. 10 (Rio Guarico, Barbacoas, State of Guarico, Venezuela). Figured holotype ANSP 179759.
- verrucosa* Rafinesque, *Obliquaria* Plate 1, fig. 7 1920, Annales Générales des Sciences Physiques, Bruxelles 5: 304, pl. 81, figs. 10-12 (l'Ohio [River]). From the types mentioned by Vanatta, 1915, PANSP 67: 554 is here selected a lectotype ANSP 20235a; paralectotype ANSP 20235. Is *Tritogonia verrucosa* (Rafinesque).
- versus* Lea, *Margaron*: 1870, Synopsis of Unionidae, 4th edit., p. 46. New name for *Unio inornatus* Reeve. See under: *inornatus* Reeve, *Unio*.
- vesicularis* Lea, *Unio*: 1872, PANSP 24: 156 (Lake Ochee-chobee, Florida; Wheatley); 1874, JANSF (2) 8: 37, pl. 12, fig. 34; 1874, Obs. 13: 41. Figured holotype USNM 85292; paratypes mentioned as in the Wheatley colln. [lost].
- vibex* Conrad, *Unio*: 1834, New Fresh Water Shells U.S.: 31, pl. 4, fig. 3 (Black Warrior River, S of Blounts Spring [Blount Co., Alabama]). Figured holotype ANSP 56488a refigured by Johnson, 1970, Bulletin of the Museum of Comparative Zoology, 140: 373, pl. 17, fig. 10; allotype ANSP 56488 fig. 11.
- virgata* Conrad, *Anodonta*: 1836, Monography Unionidae North America, no. 5 [back cover] (Buck Creek, Clarke Co., Ohio; Greene). Type not found.
- viridiradiatus* Lea, *Unio*: 1859, PANSP 11: 154 (Big Uchee River [Creek, Russell Co., Alabama] near Columbus, Georgia; Hallenbeck); 1860, JANSF (2) 4: 336, pl. 53, fig. 161; 1860, Obs. 8: 18. Figured holotype USNM 86018; paratype ANSP 127054 from Hallenbeck.
- viridis* Rafinesque, *Unio* Plate 8, fig. 4 1820, Annales Générales des Sciences Physiques, Bruxelles 5: 294 (Rare dans l'Ohio, plus commune dans le Kentucky et les petites rivières adjacentes). The single valve regarded as the type of *viridis* by Vanatta, 1915, PANSP 67: 554, ANSP 20219 as from the Kentucky River is not the western species which Rafinesque described. It appears to be a subsequently identified specimen (see: Frierson, 1915, Nautilus 29: 57-59) and is *Lasmigona subviridis* (Conrad) 1835, which except for its occurrence in the New and Greenbrier rivers of Virginia and West Virginia is restricted to the Atlantic slope region. Walker (1915, Nautilus 29: 74-78) and Ortmann and Walker (1922: 34) indicate that *viridis* does not occur in the western localities given by Rafinesque and use the taxon *Lasmigona compressa* (Lea) 1829 regarding *viridis* as unidentifiable. Frierson (1927: 20) asserts that *viridis* is identifiable, as does Haas (1969: 607). The type locality of *viridis* is, here restricted, to: Yellow Creek, near Cincinnati, Hamilton Co., Ohio, which is the same locality which appears on the label of the figured holotype of *Symphyla nota compressa* Lea, USNM 83961.
- walkeri* H. B. Baker, *Actinonaias* (*Disconaias*): 1922, Occasional Papers of the Museum of Zoology, Univ. Michigan, no. 106, p. 20, pl. 1, figs. 1, 2, pls. 9-11, figs. 48-50 (Rio San Juan Cuatolapam, State of Vera Cruz, Mexico). Holotype MZUM 31844; paratypes ANSP 133694.
- walkeri* B. H. Wright, *Unio*: 1897, Nautilus, 11: 91 (Savannah River [Ellaville], Madison Co., Florida). Lectotype USNM 150506 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 9, pl. 5, fig. 5; paralectotypes ANSP 71661.
- waltoni* B. H. Wright, *Unio*: 1888, PANSP 40: 114, pl. 2, fig. 3 (Lake Woodruff, Volusia Co., Florida). Lectotype USNM 91145 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 9, pl. 11, fig. 5; paralectotypes ANSP 41399.
- wanneri* Pilsbry, *Diplodon*: 1921, [in] Wanner, PANSP 73: 34, pl. 3, fig. 5 (Shale, Little Conewago Creek, [York Co., Pennsylvania]; Triassic). Figured holotype ANSP [not catalogued]. Paleontology.
- webbianus* B. H. Wright, *Unio*: (*Elliptio*) 1934, Nautilus 47: 94, pl. 10, figs. 1-2 (Lake Consuelo [or Little Lake SE of Floral City, just outside village limits] near Floral City, Citrus Co., Florida). Holotype USNM 424923, fig. 1; figured paratype ANSP 161594a, fig. 2.
- websteri* B. H. Wright, *Unio*: 1888, PANSP 40: 113, pl. 2, fig. 2 (Lake Woodruff, Volusia Co., Florida). Lectotype USNM 125697 selected by Johnson, 1967, Occasional Papers on Mollusks, 3: 10, pl. 7, fig. 2; paralectotype ANSP 41341.
- wheatleyanus* Lea, *Unio*: 1865, PANSP 8: 94 (Rio Plata [Argentina]; Rio Negro, 1200 mi from the mouth of the Amazon [River, Brazil]; Wheatley; Montevideo, [Uruguay]). 1857, JANSF (2) 3: 308, pl. 29, fig. 3; 1857, Obs. 6: 28. Figured holotype USNM 85335 from the last locality; specimens ANSP 125645, mentioned as in the Wheatley colln. but not seen by Lea.
- wheatleyi* Lea, *Monocondylaea*: 1862, PANSP 14: 176 (River Tigris [Iraq]; Wheatley); 1863, JANSF (2) 5: 400, pl. 50, fig. 307; 1863, Obs. 10: 35. Figured holotype USNM 86331; paratype ANSP 125633 mentioned as in the Wheatley colln.
- wheatleyi* Lea, *Unio*: 1857, PANSP 9: 85 (Catawba River, Gaston Co., North Carolina; Wheatley). Erroneously thought preoccupied by Lea and changed to: *Unio catawbensis*, 1861, JANSF (2) 5: 54, pl. 1, fig. 200; 1861, Obs. 8: 58. Figured holotype USNM 85547; paratypes ANSP 127025 mentioned as in the Wheatley colln.

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- aceleri* Ortmann and Walker, *Arkansia*: 1912, *Nautilus* 25: 98, pl. 8 (Old [Ouachita] River, Arkadelphia [Clark Co.] Arkansas). Figured holotype MZUM 105514; paratype ANSP 105546.
- antecianus* Lea, *Unio*: 1852, TAPS 10: 258, pl. 14, fig. 8 (near Savannah [Chatham Co.], Georgia; White); 1852, Obs. 5: 14. Figured holotype USNM 85658; paratype ANSP 126872 from White in the Wheatley colln.
- athonii* Lea, *Unio*: 1860, PANSP 11: 153 (Eastern Branch of Isaac's Plain [= River], Queensland, Australia); 1860, JANSF (2) 4: 256, pl. 40, fig. 137; 1860, Obs. 7: 74. Holotype ANSP 41817, refigured by McMichael and Hiscock, 1958, *Australian Journal of Marine and Freshwater Research*, 9: 399, pl. 2, figs. 8, 9.
- auodiana* Lea, *Symphynota*: 1834, TAPS 5: 42, pl. 5, fig. 13 (China; Wood); 1834, Obs. 1: 154. Figured type not in the USNM or ANSP.
- aymanii* Lea, *Anodonta* 1860, PANSP 12: 91 (Uruguay River [Argentina and Uruguay]; Wyman); 1863, JANSF (2) 5: 390, pl. 44, fig. 294; 1863, Obs., 10: 26. Figured holotype USNM 86609; paratype ANSP 125464 mentioned as in the Wheatley colln.
- aynegungaensis* Lea, *Unio*: 1859, PANSP 11: 331 (Wynegunga River, 30 mi E of Nagpoor in the Deccan, Bengal; Wheatley); 1860, JANSF (2) 4: 271, pl. 45, fig. 151; 1860, Obs. 7: 89. Figured holotype USNM 85328; paratype mentioned as in the Wheatley colln. [lost].
- wrightiana* Frierson, *Lampsilis*: 1927, Check List Naiades North America: 81 (Volusia Co., Florida); Holotype MZUM 91179 figured by Frierson, 1928, *Nautilus* 41: 139, pl. 2, fig. 3; paratype ANSP 145243.
- yadkinensis* Lea, *Unio*: 1872, PANSP 24: 156 (Yadkin River, near Salisbury [Rowan Co.], North Carolina; Wheatley) 1874, JANSF (2) 8: 32, pl. 10, fig. 29; 1874, Obs. 13: 36. Figured holotype USNM 85387; paratype ANSP 126994 mentioned as in the Wheatley colln.
- yorkensis* Pilsbry, *Diplodon*: 1921 [in] Wanner, PANSP 73: 35, pl. 3, figs. 2 (Shale, Little Conewago Creek, York Co., Pennsylvania; Triassic). Figured holotype ANSP 31530; paratype ANSP 31528.
- youconensis* Lea, *Anodonta*: 1867, PANSP 19: 81 (Upper Youkon River [Alaska]); changed to: *youkanensis*, 1868, JANSF (2) 6: 287, pl. 40, fig. 99; 1869, Obs. 12: 47. Figured holotype USNM 86624; paratype ANSP 41166 from Lea.
- zigzag* Lea, *Unio*: 1829, TAPS 3: 444, pl. 12, fig. 19 (Ohio; T. G. Lea); 1834, Obs. 1: 54. Figured type not in the USNM or ANSP.
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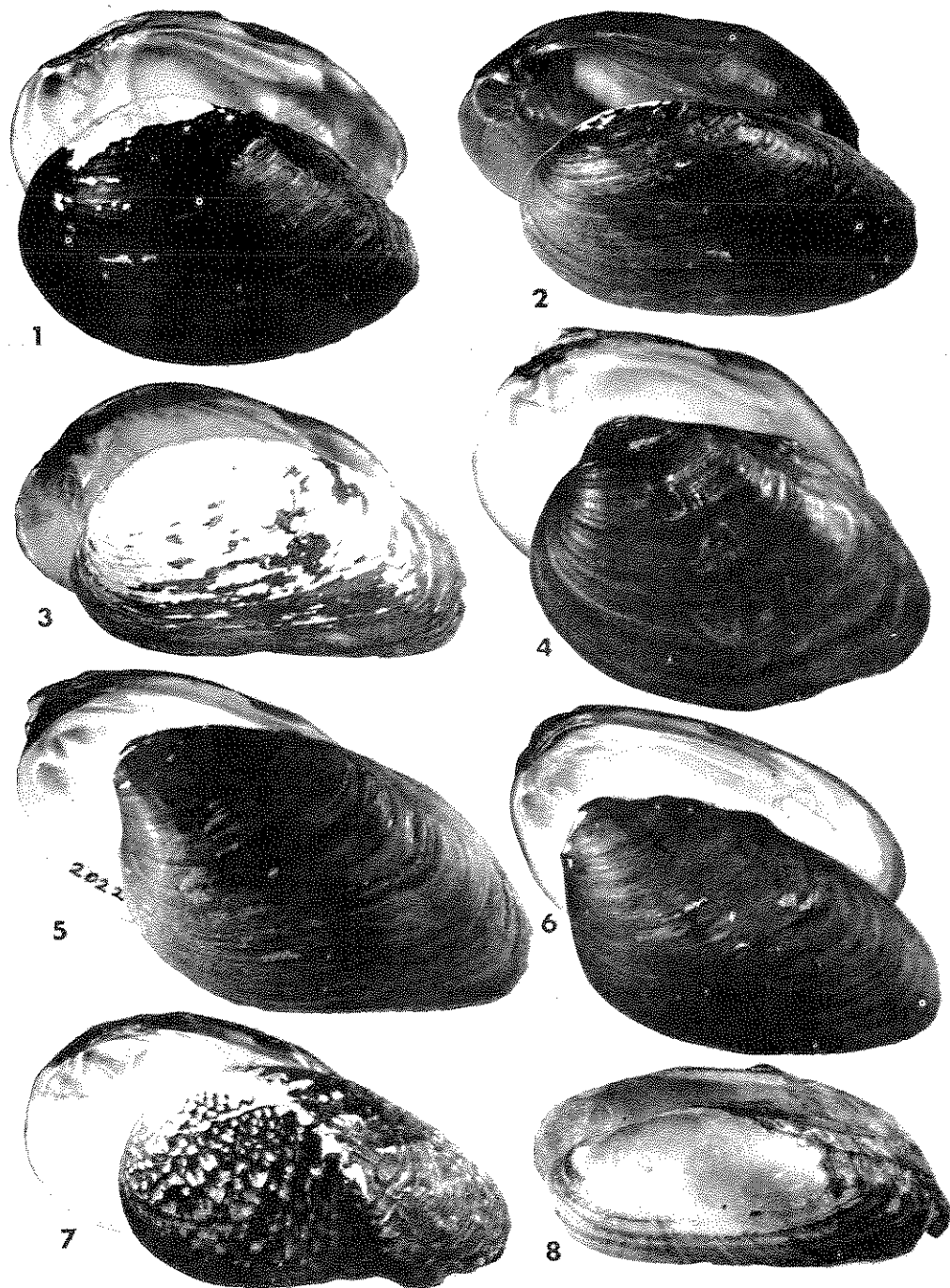


PLATE 1

FIGURE 1. *Unio nigra* Rafinesque 1820. Ohio River. Lectotype ANSP 20243. Length 73, height 47, width 30.5 mm. FIGURE 2. *Unio dilatata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20248a. Length 76.5, height 42, width 24 mm. FIGURE 3. *Obliquaria sinuata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20252. Length 110, height 61, width 37 mm. FIGURE 4. *Obliquaria cyphya* Rafinesque 1820. Ohio River. Lectotype ANSP 20239. Length 83, height 58, width 36 mm. FIGURE 5. *Pleurobema cuneata* Rafinesque 1820. Ohio River. Lectotype ANSP 20228. Length 65, height 45, width 31 mm. FIGURE 6. *Obliquaria scalenia* Rafinesque 1820. Ohio [River]. Neotype ANSP 20229. Length 54, height 35, width 26 mm. FIGURE 7. *Obliquaria verrucosa* Rafinesque 1820. Ohio River. Lectotype ANSP 20235a. Length 100, height 56, width 32 mm. FIGURE 8. *Anodonta (Lastena) lata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20227. Length 61.5, height 25, width 13 mm.

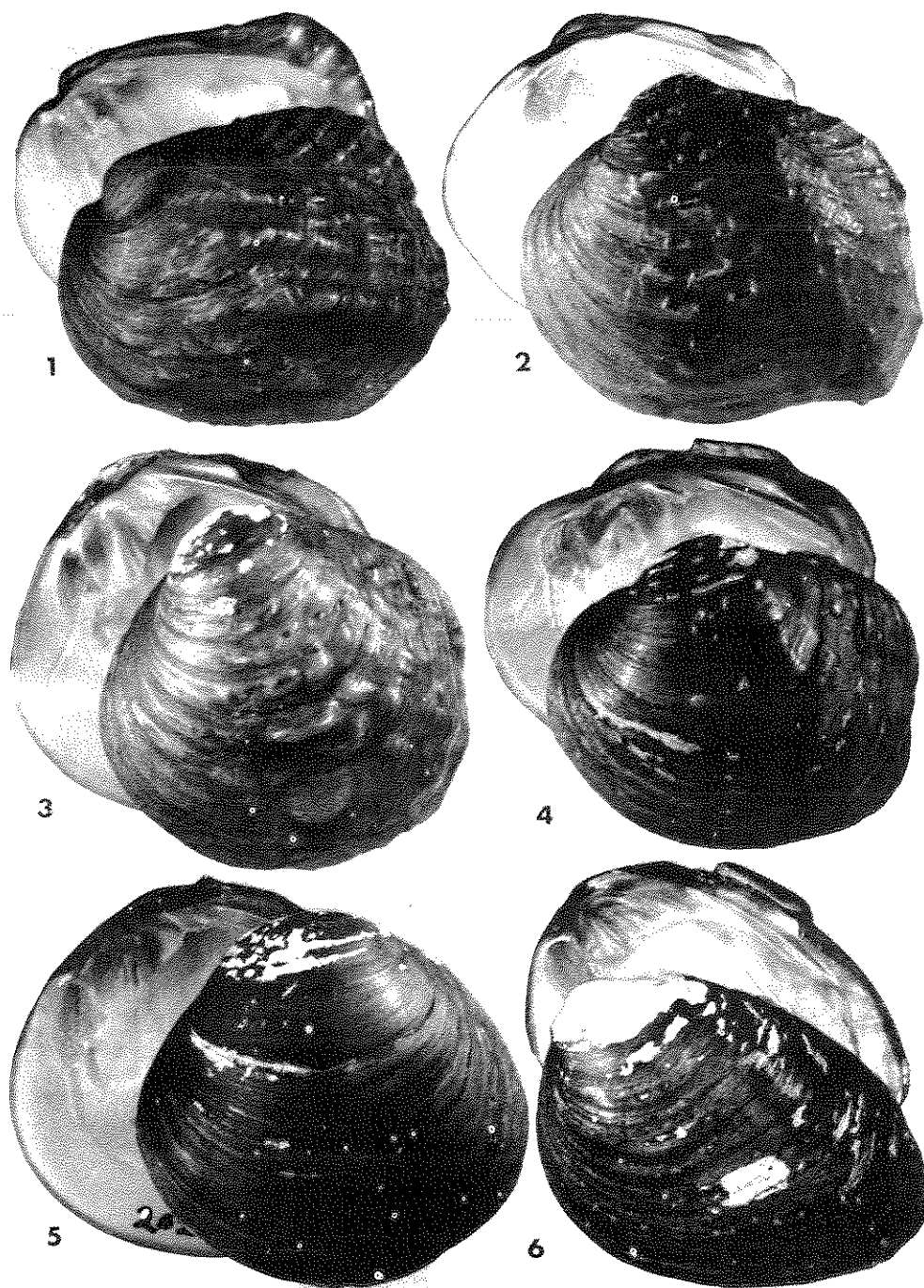


PLATE 2

FIGURE 1. *Amblema costata* Rafinesque 1820. Small streams in Kentucky. Lectotype ANSP 20246. Length 66, height 53, width 24 mm. FIGURE 2. *Obliquaria quadrula* Rafinesque 1820. Salt River [Kentucky]. Neotype ANSP 20224. Length 60, height 49, width 31 mm. FIGURE 3. *Obliquaria bullata* Rafinesque 1820. Kentucky River. Neotype ANSP 20250. Length 54, height 52, width 28.5 mm. FIGURE 4. *Obliquaria nodulata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20225a. Length 51, height 43.5, width 31 mm. FIGURE 5. *Obovaria striata* Rafinesque 1820. Ohio River. Lectotype ANSP 20205. Length 44, height 41.5, width 27.5 mm. FIGURE 6. *Obliquaria (sintoxia) sintoxia* Rafinesque 1820. Ohio River. Lectotype ANSP 20208. Length 97, height 71, width 41.5 mm.

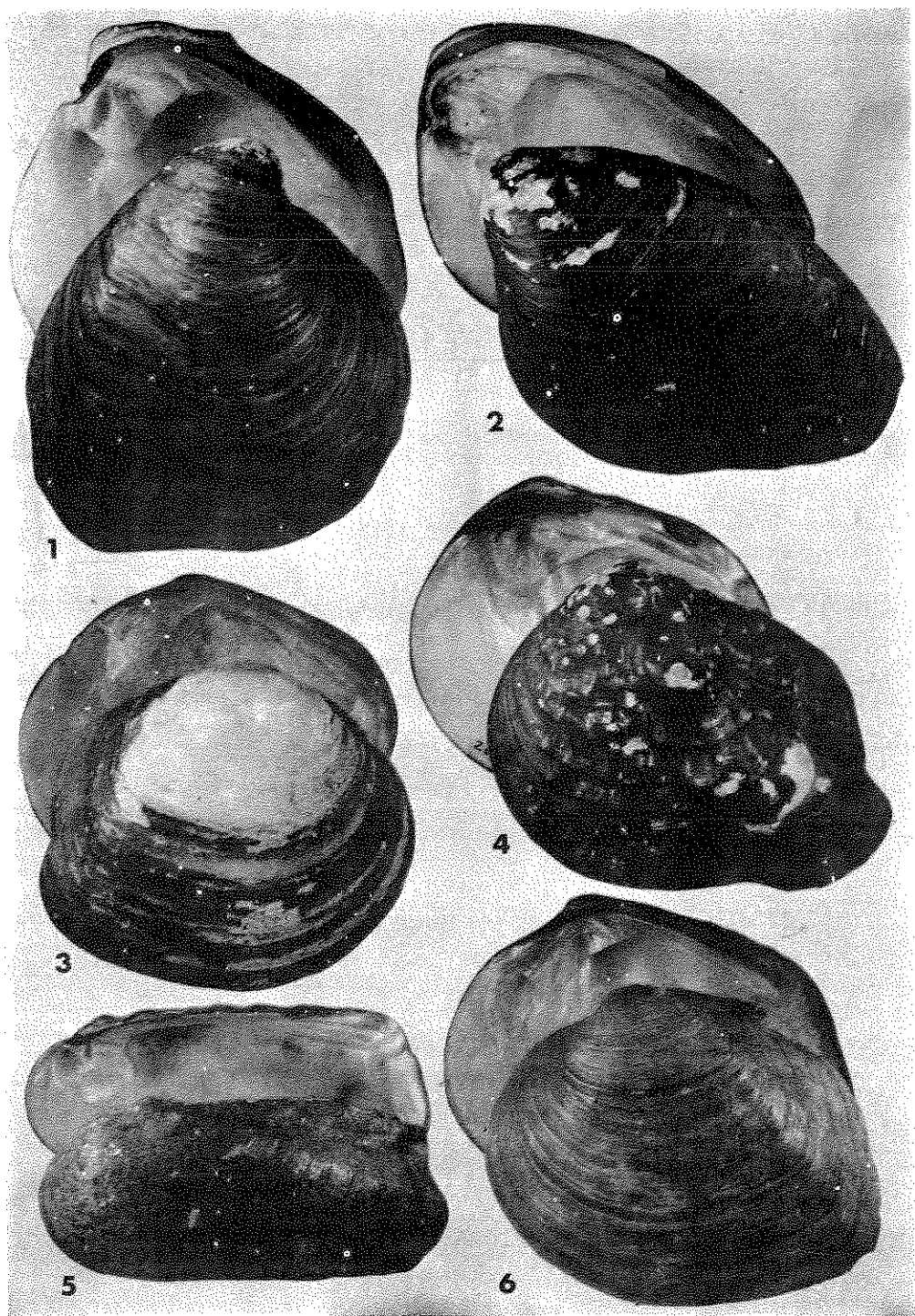


PLATE 3

FIGURE 1. *Obovaria cordata* Rafinesque 1820. Ohio River. Lectotype ANSP 20221 [consists of a single valve]. Length 61; height 63, width 19 mm. FIGURE 2. *Obliquaria rubra* Rafinesque 1820. [Kentucky River]. Lectotype ANSP 20237. Length 87, height 66, width 40 mm. FIGURE 3. *Obliquaria retusa* Rafinesque 1820. Green River. Neotype ANSP 20220 [consists of a single valve]. Length 31, height 26, width 14 mm. FIGURE 4. *Obliquaria metanevra* Rafinesque 1820. Ohio River. Neotype ANSP 20238a. Length 87, height 68, width 51 mm. FIGURE 5. *Unio solenoides* Rafinesque 1820. Ohio River. Lectotype ANSP 20204. Length 73, height 32.5, width 27 mm. FIGURE 6. *Obliquaria flava* Rafinesque 1820. Small creeks in Kentucky. Lectotype ANSP 20230. Length 46, height 36, width 18 mm.

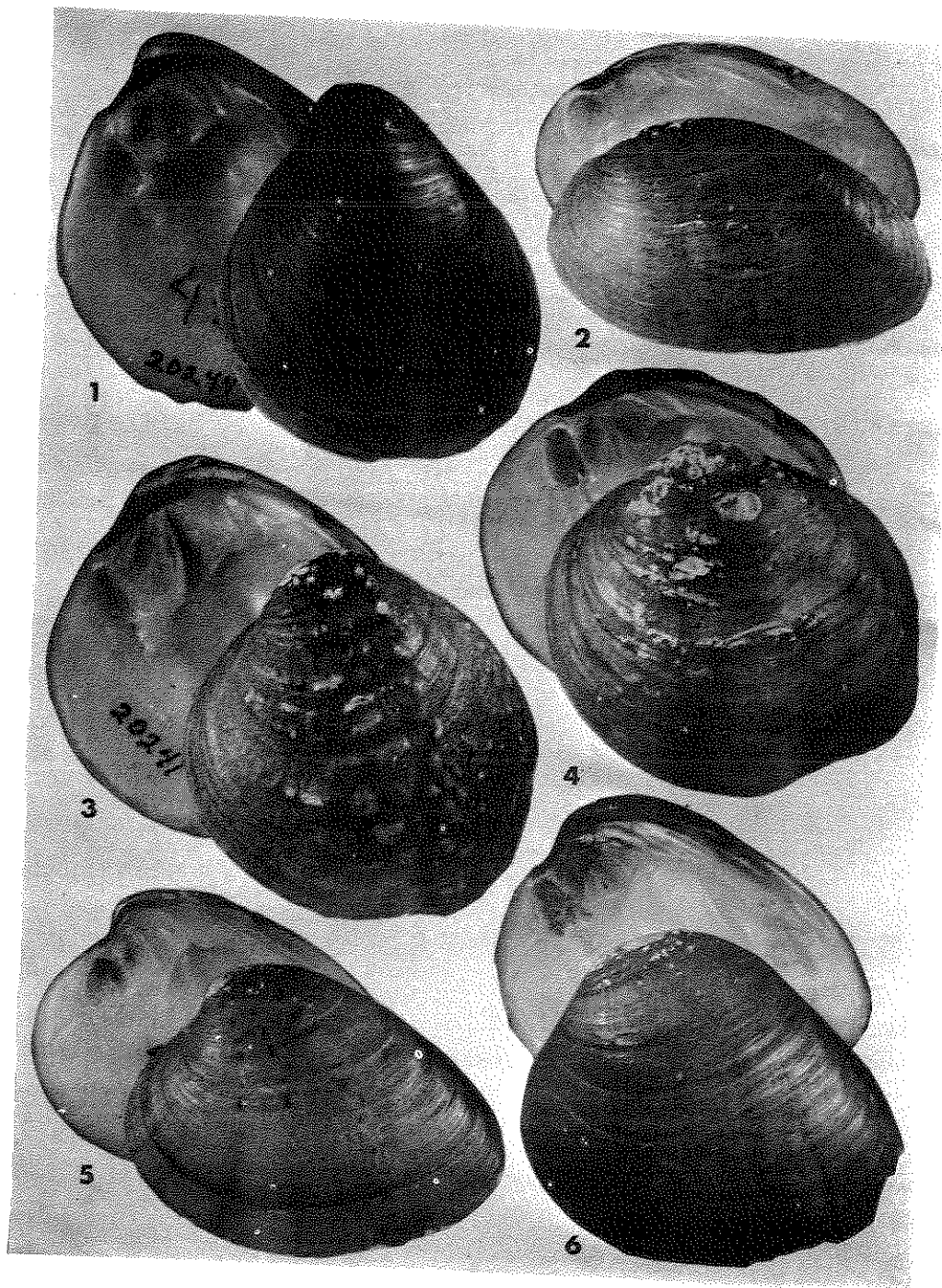


PLATE 4

FIGURE 1. *Obovaria obovalis* Rafinesque 1820. Ohio River. Lectotype ANSP 20244. Length 41, height 46.5, width 29 mm. FIGURE 2. *Obliquaria (Ellipsaria) fasciolaris* Rafinesque 1820. Kentucky River. Lectotype ANSP 20253. Length 81, height 49, width 28 mm. FIGURE 3. *Obovaria stegaria* Rafinesque 1820. Ohio River. Lectotype ANSP 20241 [is var. 1, *tuberculata*]. Length 47, height 49, width 32 mm. FIGURE 4. *Obliquaria reflexa* Rafinesque 1820. Letart Falls [of the Ohio River, Meigs Co., Ohio]. Lectotype ANSP 20206a. Length 54, height 49, width 34 mm. FIGURE 5. *Obliquaria depressa* Rafinesque 1820. Ohio River. Neotype ANSP 20207. Length 50, height 37, width 16 mm. FIGURE 6. *Obliquaria lineolata* Rafinesque 1820. [Falls of the] Ohio River [near Louisville, Jefferson Co., Kentucky]. Lectotype ANSP 20242. Length 71, height 61, width 33 mm.

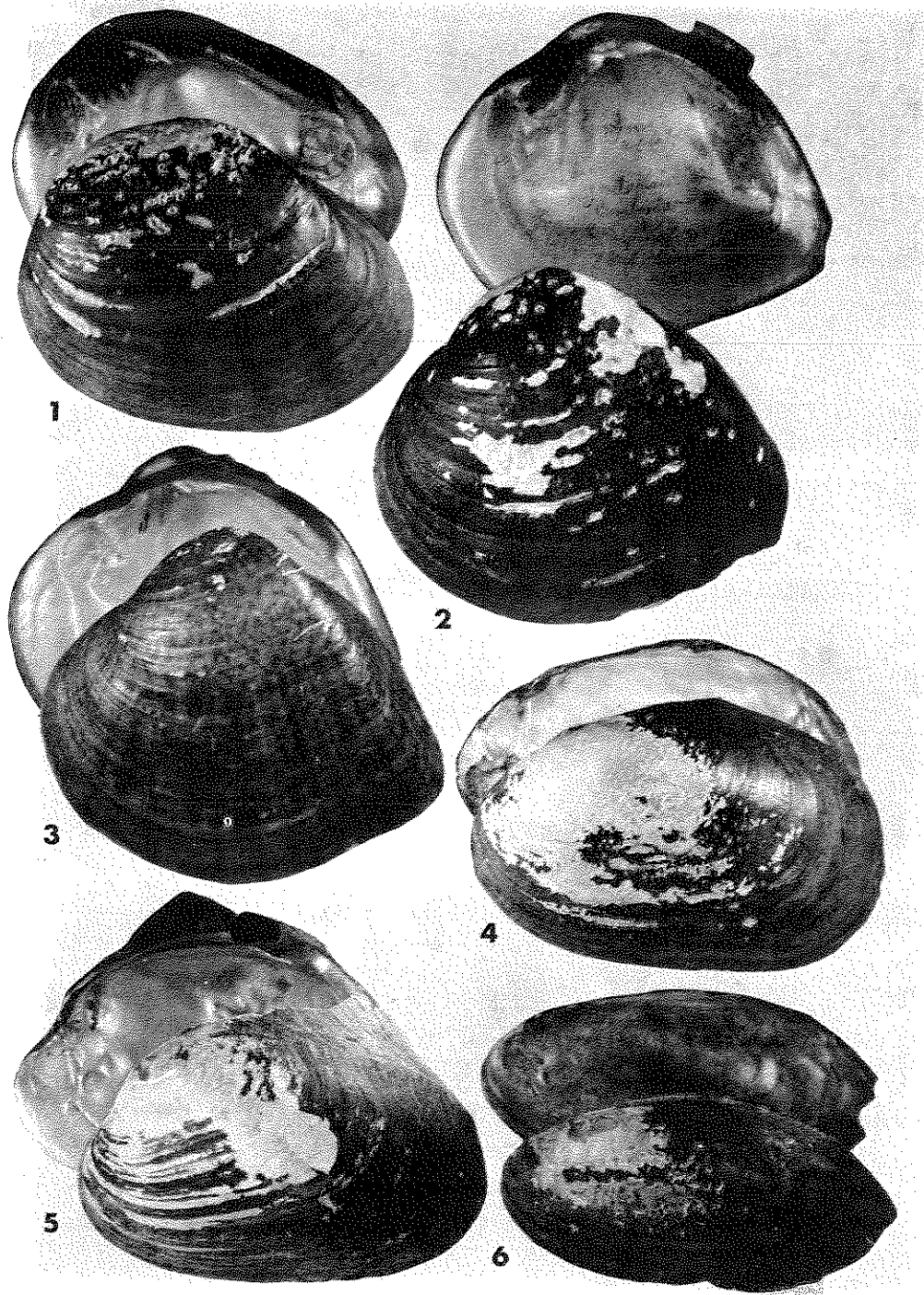


PLATE 5

FIGURE 1. *Obliquaria (Ellipsaria) ellipsaria* Rafinesque 1820. Ohio River. Neotype ANSP 20233. Length 58.5, height 48, width 39.5. FIGURE 2. *Unio metaplata* Rafinesque 1831. Cumberland River. Lectotype ANSP 20258. Length 47, height 39, width 27 mm. FIGURE 3. *Truncilla truncata* Rafinesque 1820. [Falls of the] Ohio River [near Louisville, Jefferson Co., Kentucky]. Lectotype ANSP 20217. Length 42, height 36, width 22.5 mm. FIGURE 4. *Unio fragilis* Rafinesque 1820. [Creeks in Kentucky]. Lectotype ANSP 20209. Length 97, height 64, width 32 mm. FIGURE 5. *Metaptera megaptera* Rafinesque 1820. Ohio River. Lectotype ANSP 20211. Length 141, height 100, width 50 mm. FIGURE 6. *Unio leptodon* Rafinesque 1820. Kentucky River. Neotype ANSP 20214. Length 50, height 25, width 12.5.

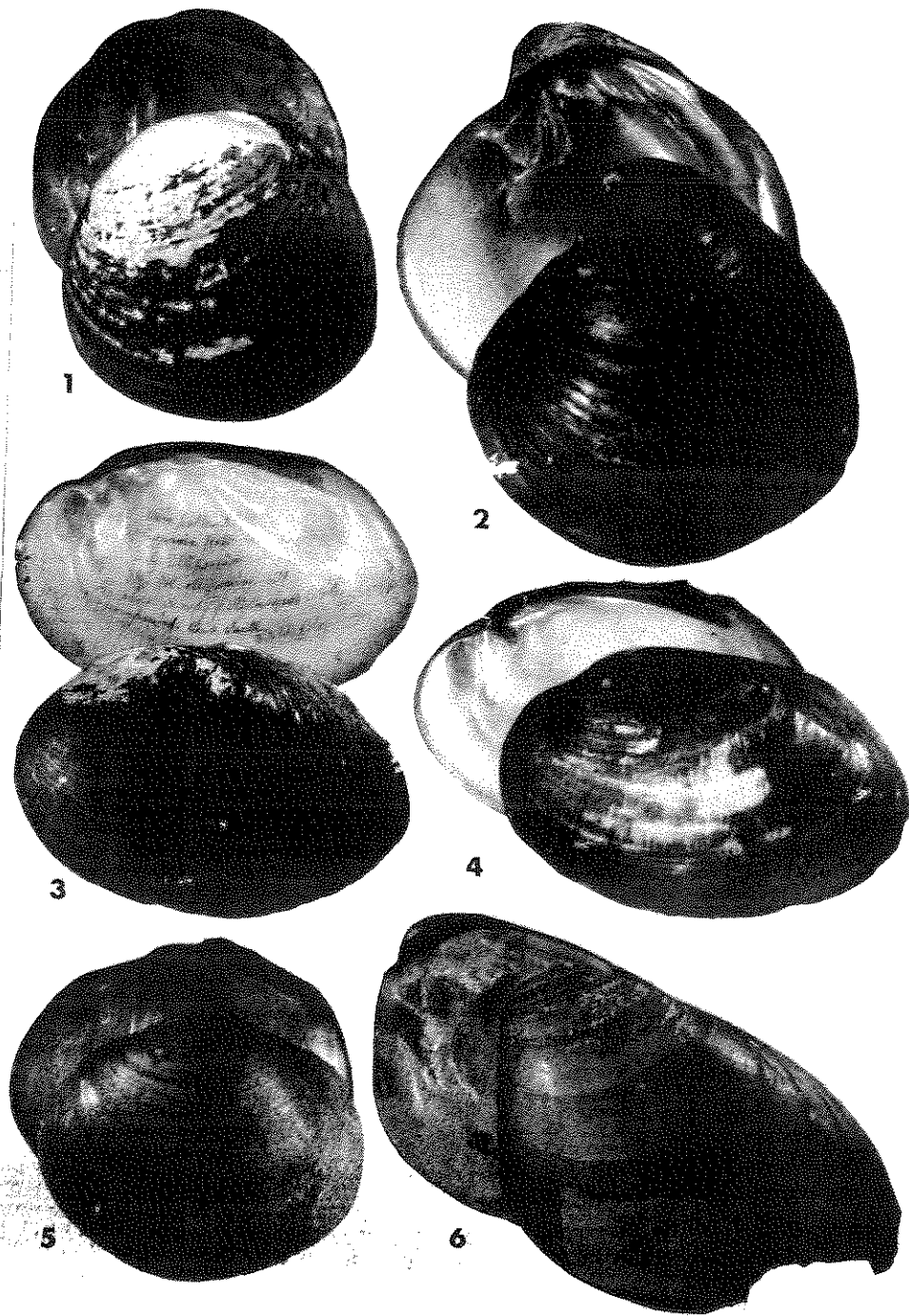


PLATE 6

FIGURE 1. *Obliquaria subrotunda* Rafinesque 1820. Kentucky River. Neotype ANSP 20254. Length 26.5, height 25.5, width 19 mm. FIGURE 2. *Obovaria torsa* Rafinesque 1820. Kentucky River. Neotype ANSP 20256. Length 56, height 57, width 36 mm. FIGURE 3. *Unio pallens* Rafinesque 1831. Ohio and Kentucky. Lectotype ANSP 20240. Length 59, height 38, width 27.5 mm. FIGURE 4. *Unio fasciata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20222. Length 72, height 48, width 25.5 mm. FIGURE 5. *Unio levigata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20255a. Length 27, height 22, width 14 mm. FIGURE 6. *Unio (Elliptio) elliptica* Rafinesque 1820. [Kentucky]. Lectotype ANSP 20213. Length 34, height 29, width 29.5 mm.

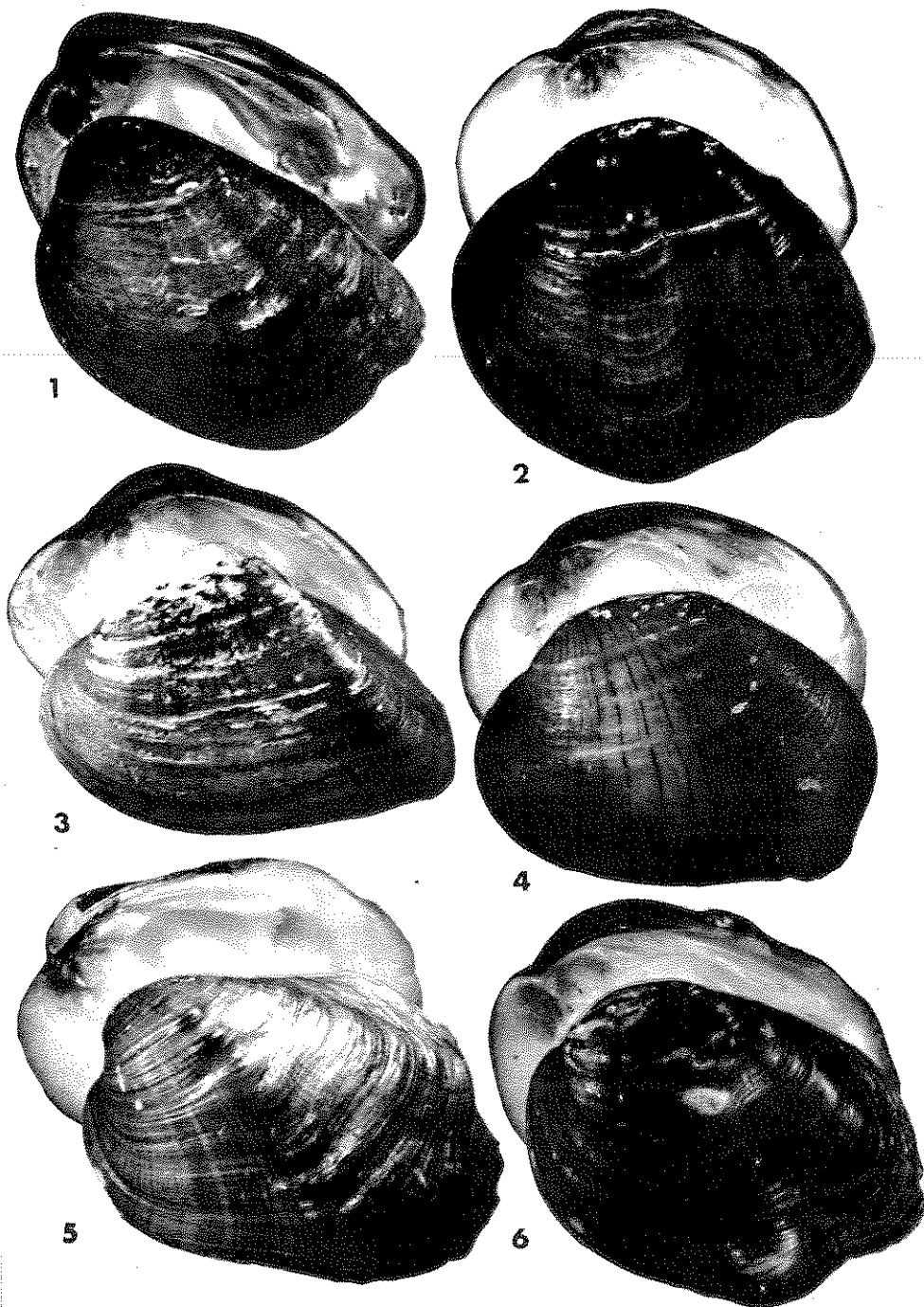


PLATE 7

FIGURE 1. *Obliquaria obliquata* Rafinesque 1820. Kentucky River. Lectotype ANSP 20226. Length 59, height 43, width 32.5 mm. FIGURE 2. *Obliquaria flexuosa* Rafinesque 1820. Kentucky River. Lectotype ANSP 20249. Length 57, height 47, width 33 mm. FIGURE 3. *Truncilla triquetra* Rafinesque 1820. Falls of the Ohio River, [near Louisville, Jefferson Co., Kentucky]. Lectotype ANSP 20231. Length 55, height 37, width 25 mm. FIGURE 4. *Obliquaria (Plagiola) interrupta* Rafinesque 1820. [Cumberland River, Tennessee]. Lectotype ANSP 20257. Length 55.5, height 43, width 26.5 mm. FIGURE 5. *Amblema torulosa* Rafinesque 1820. [Ohio and Kentucky Rivers]. Figured holotype ANSP 20218. Length 65, height 48, width 33.5 mm. FIGURE 6. *Amblema gibbosa* Rafinesque 1820. Ohio River. Lectotype ANSP 20232. Length 40, height 33, width 25 mm.

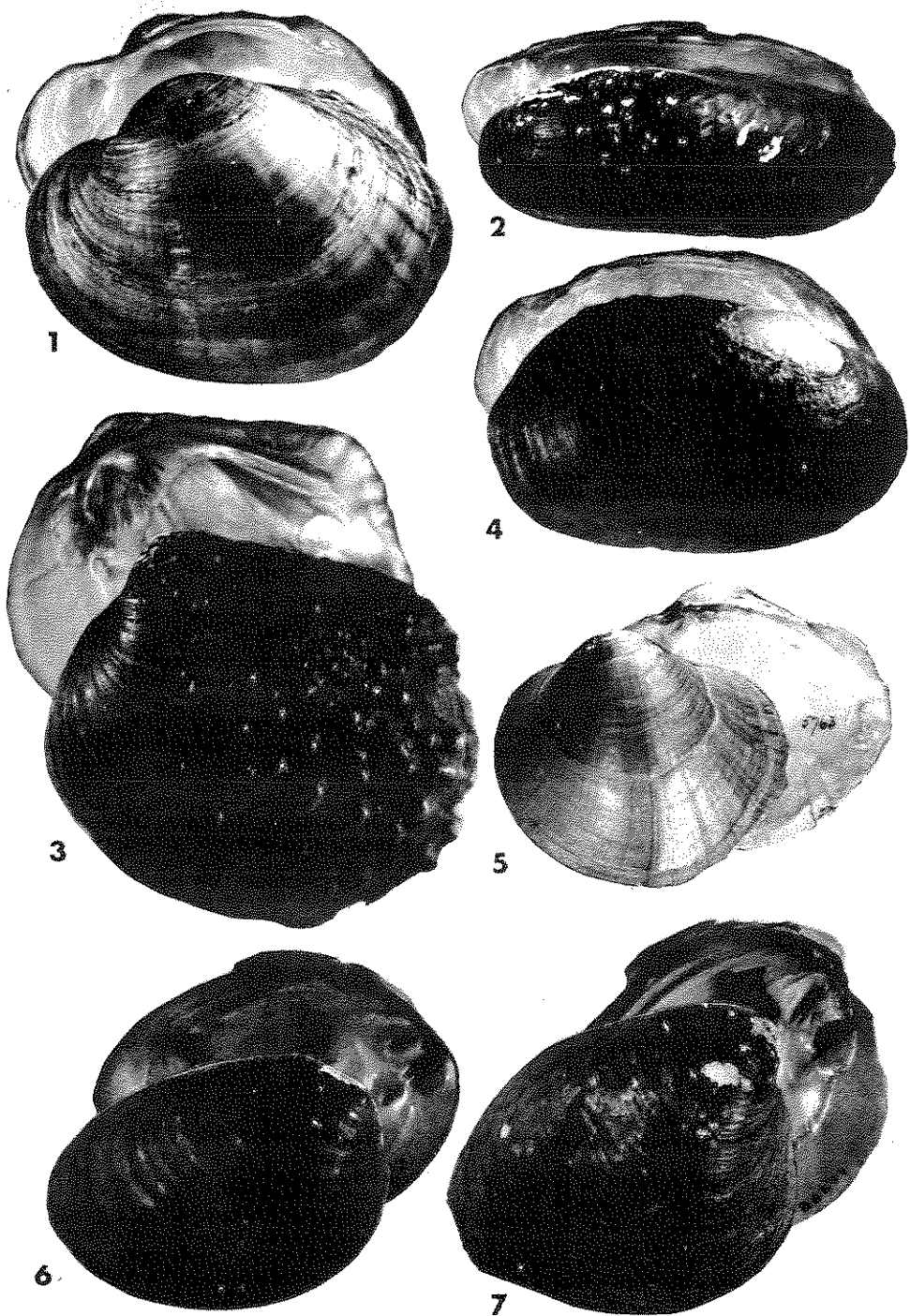


PLATE 8

FIGURE 1. *Lampsilis cardium* Rafinesque 1820. [Ohio River]. Lectotype ANSP 20210. Length 106, height 77, width 48 mm. FIGURE 2. *Unio latissima* Rafinesque 1920. Ohio River. Lectotype ANSP 20212. Length 112, height 44, width 31 mm. FIGURE 3. *Obliquaria tuberculata* Rafinesque. Ohio River. Lectotype ANSP 20215. Length 59, height 54, width 29 mm. FIGURE 4. *Lasmigona subviridis* (Conrad) 1835. [Atlantic slope region]. ANSP 20219. Length 46.5, height 28, width 16 mm. FIGURE 5. *Unio personatus* Say 1829. Cumberland River, Tennessee. Neotype MCZ 25763. Length 54, height 48, width 31 mm. FIGURE 6. *Amblema olivaria* Rafinesque. 1820. Kentucky River. Lectotype ANSP 20251a. Length 53, height 40, width 29 mm. FIGURE 7. *Obliquaria (Sintoxia) lateralis* Rafinesque 1820. Kentucky River. Lectotype ANSP 20247a. Length 75, height 67, width 20 mm.

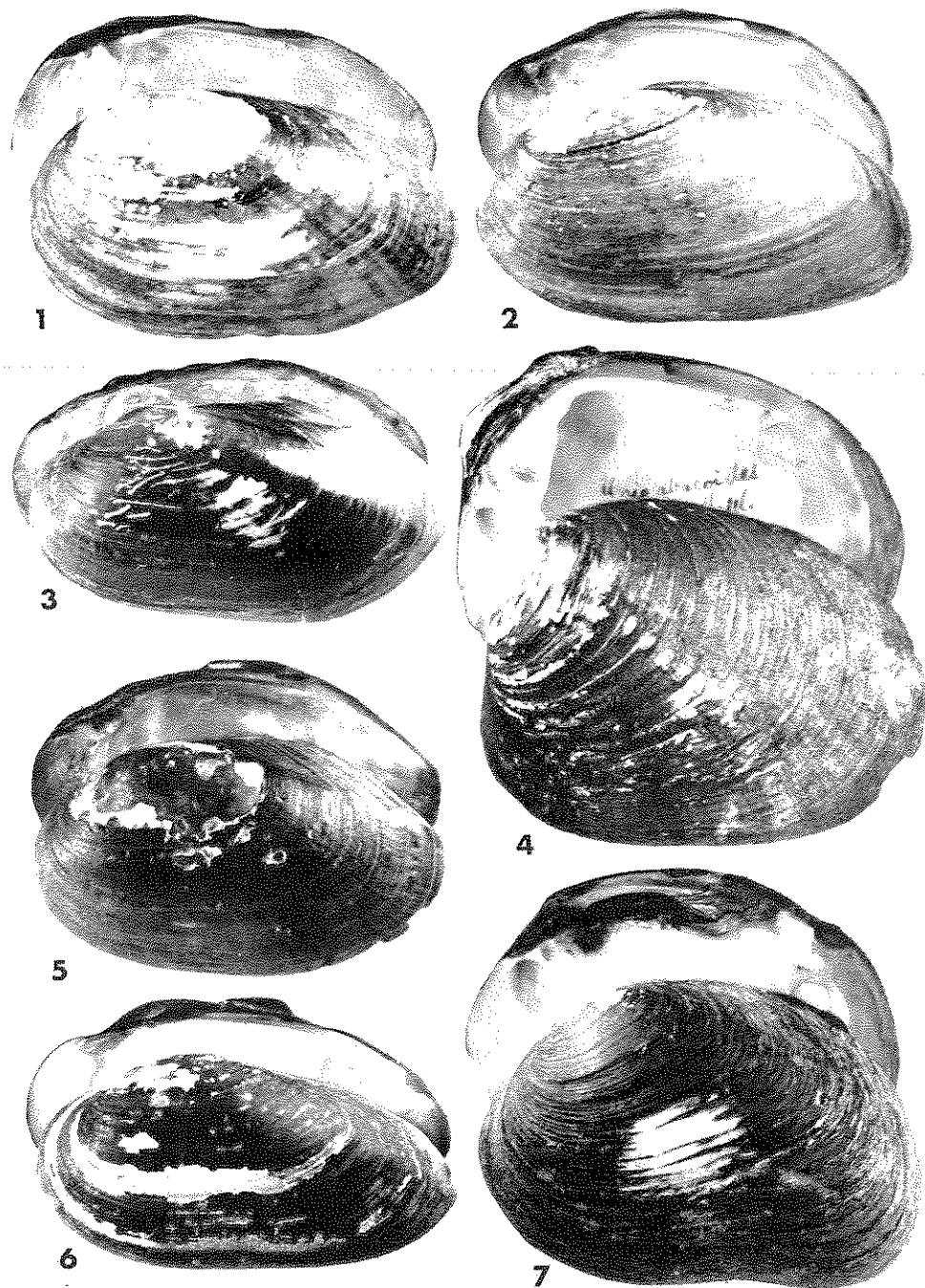


PLATE 9

FIGURE 1. *Unio puniceus* Haldeman. Holston River, Washington Co., Virginia. Holotype ANSP 56456a. Length 55, height 32, width 21 mm. FIGURE 2. *Unio arcus* Conrad. Alabama River [Alabama]. Holotype ANSP 56784a. Length 56, height 30, width 18 mm. FIGURE 3. *Anodon plicatus* Haldeman. Cumberland River, [SE Kentucky]. Lectotype ANSP 41042. Length 45, height 24, width 16 mm. FIGURE 4. *Unio abacoides* Haldeman. Eastern Tennessee. Holotype ANSP 41153. Length 66, height 54, width 29 mm. FIGURE 5. *Unio pleasii* Marsh. Little Red River, Arkansas. Lectotype ANSP 56480a. Length 43, height 26, width 15 mm. FIGURE 6. *Nodularia douglasiae taiwanica* Pilsbry. Formosa. Holotype ANSP 58170. Length 49, height 25, width 19.7 mm. FIGURE 7. *Unio abacus* Haldeman. Holston River [above Boatyard], Tennessee. Holotype ANSP 41419. Length 73, height 51, width 26 mm.

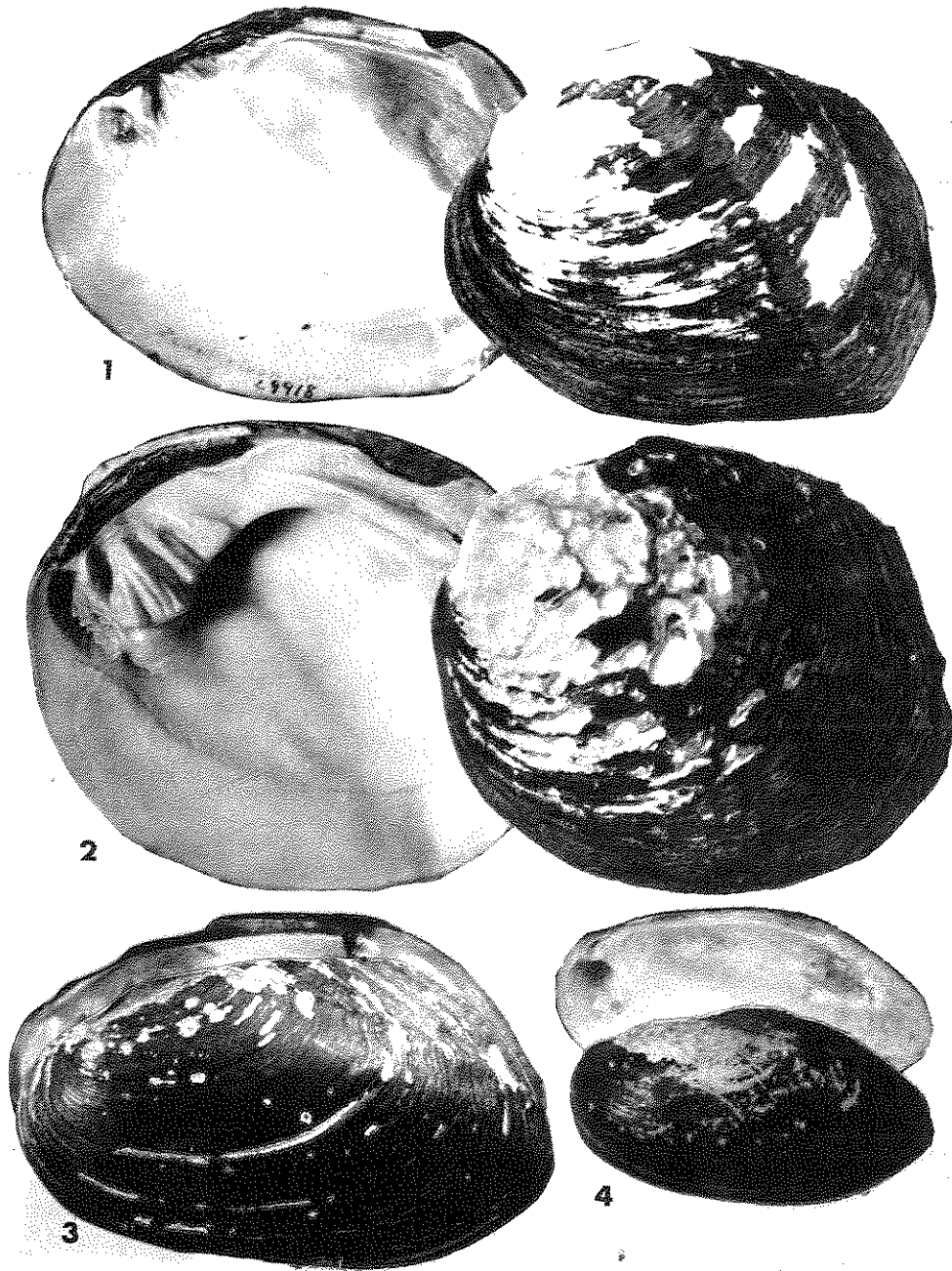


PLATE 10

FIGURE 1. *Unio pearlensis* Conrad. Pearl River, Mississippi. Lectotype ANSP 29918a. Length 83, height 63, width 31.4. FIGURE 2. *Obovaria pachostea* Rafinesque 1820. Kentucky River. Lectotype Paris Museum [not catalogued]. Length 92, height 80, width 41. FIGURE 3. *Anodonta leotaudi* Guppy. Trinidad. Lectotype ANSP 125443. Length 78, height 45, width 25 mm. FIGURE 4. *Unio fulgens* Rafinesque 1831. Ganges River [India]. Lectotype Paris Museum [not catalogued]. Length 62, height 33, width 22 mm.