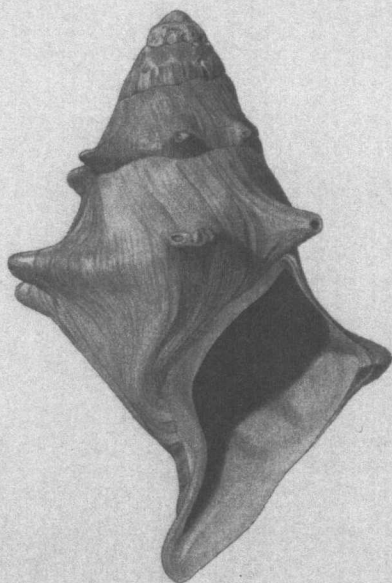


ISSN 1053-637X

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OR A LEXICON OF THE NOMINAL SPECIES OF THE
PLEUROCERIDAE (GASTROPODA: PROSOBRANCHIA)
OF RECENT NORTH AMERICA, NORTH OF MEXICO

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WALKERANA
2001

WALKERANA
A Journal of Molluscan Biology

Transactions of the POETS Society

Vol. 12, No. 27

Editor: John B. Burch
Assistant Editor: Melisa D. Ricketts
Business Manager: Renée Sherman Mulcrone

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P. O. Box 2701
Ann Arbor, Michigan 48106
U.S.A.

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ABSTRACT

The nearly 1000 nominal names of the Pleuroceridae (Gastropoda: Prosobranchia) are arranged alphabetically by trivial name and chronologically within specific-epithet homonyms. Along with each name are the relevant citations to descriptions, figures, and the type locality from which the shell was described. Also provided, when available, are the locations and catalog numbers of primary type specimens. The previous taxonomic opinions of Tryon (1873), Hannibal (1912), and Burch (1982; Burch & Tottenham, 1980) / Goodrich (numerous papers) for each nominal species are also listed. Fossil nomina are not included. No attempt has been made toward the construction of subjective synonymies.

Key words: Pleuroceridae, type catalog, nomenclature, United States, Canada

"I think the time has come when a healthful reaction from this fever of creating genera and species should set in. ... No one but an expert, a closet naturalist, who sits in his snug alcove, surrounded by scientific books and collections, and who devotes his entire time to the study, can keep track of the names introduced by this mania, and I doubt if many of these can do it."

— Charles T. Simpson, 1889

INTRODUCTION

The Pleuroceridae (Gastropoda: Prosobranchia) is yet another group of freshwater mollusks in dire need of revision. The current state of the art for these largely lentic mollusks (Burch & Tottenham, 1980; Burch, 1982; Brown, 1991; and other recent literature) follows the authoritarian taxonomy of Calvin Goodrich (numerous papers, 1917-1950). Unfortunately, Goodrich generally approached the Pleuroceridae from a geographic-rather-than-systematic perspective, and his work ended before he could synthesize his results. Thus, we are left with the current splitters' paradise of 152 species in seven genera in North America, north of Mexico.

Successful systematic revision of the Pleuroceridae will require a complete re-evaluation of the available taxonomic materials, namely the hun-

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dreds of nominal species descriptions and their associated primary types. Toward this end, I have compiled an exhaustive lexicon of the North American pleurocerid nomina described from north of Mexico. Fossil nomina have been omitted, although those are listed in Henderson (1935b). The systematics of this endeavor is left to you, gentle-reviser.

CONSTRUCTION OF THE LEXICON

The lexicon was constructed by reviewing past synopses of pleurocerid taxonomy (*i.e.*, Tryon, 1873; Hannibal, 1912; Goodrich, numerous papers; Burch, 1982) as well as by surveying the literature cited in those and other references. Citations have been verified with the primary reference whenever possible. When the original literature was unavailable, citations were checked in any of a number of taxon- and author-specific bibliographies (*e.g.*, Scutter, 1885; Sherborn, 1922-1933; Johnson, 1946, 1975; Rosewater, 1959; Ruhoff, 1980). All nominal species are presented alphabetically by their trivial name and chronologically with specific-epithet homonyms.

Four North American collections were visited to examine type specimens of the Pleuroceridae: the Museum of Comparative Zoölogy, Cambridge, Massachusetts; the Academy of Natural Sciences, Philadelphia, Pennsylvania; the National Museum of Natural History, Smithsonian Institution, Washington, D.C.; and the University of Michigan Museum of Zoology, Ann Arbor, Michigan. Primary type material (holotypes, lectotypes, and syntypes) data for each nominal species are provided when it is available. Where necessary (and possible), the originally figured specimens of syntype lots are selected as lectotypes. This was done in knowing contradiction of the Code (ICZN, 1999) (discussed below). Information regarding secondary types (paratypes and paralectotypes) is listed only when those specimens have been previously reported by other authors. The collection locality of the primary type(s) is taken to be the type locality (ICZN, 1999: Art. 76).

One challenge of this exercise was to reconcile most of the previous type catalogues with the modern standards of the ICZN (1985, 1999). Many 'inadvertent' lectotype designations were perpetrated by workers assuming that a describers mere figuring or museum-labeling of a specimen constituted a valid holotype designation (*e.g.*, Tryon, 1873; Turner, 1946; Baker, 1964). Baker (1964) not only utilized his own code for type status (listed below and discussed in Johnson, 1994) but also employed rather relaxed criteria for recognizing types in the Academy of Natural Sciences of Philadelphia. For example, he stated,

“[Isaac Lea] gave for each species the dimensions and a figure of a single shell, which should be considered the type specimen, if identifiable. But, Lea’s dimensions look more accurate than they really are, and his figures of ‘melaniids’ seem more artistic than exact. In many cases, the apical whorls either were renovated by him or his artists, or have been eroded during the century since he wrote.”
(Baker, 1964: 179)

In actuality, the discrepancies between Lea’s figures and Baker’s (1964) “types” are due to the fact that Baker was not considering valid type material. Upon examination of the Lea collection housed in the Smithsonian Institution, it was clear to me that Lea and his artists produced high quality illustrations, and the actual figured specimens are often labeled with the figure number. Baker’s (1964) type misidentifications are dealt with case-by-case below.

Another difficulty arose during the final stages of preparation of this lexicon for publication: the ICZN changed from the Code printed in the “Red” book (ICZN, 3rd edition, 1985) to the new “Green” Code (ICZN, 4th edition, 1999). This affected lectotype designations in two ways. First, the 4th edition, which took effect 1 January 2000, does not allow inadvertent lectotype designations, while the 3rd edition did (ICZN, 1985: Art. 74a, 1999: 1999: Art. 74.5). Whereas the previous edition of the Code (ICZN, 1985) provided a framework with which to interpret past definitions and interpretations of the terms “holotype” and “lectotype,” the current edition (ICZN, 1999) forces modern standards upon earlier taxonomic works. I have re-selected lectotypes where it appeared to me that a previous, inadvertent lectotype designation might not be valid under the new code.

The second way the 4th edition affects the contents of this lexicon is the way that it suggests that lectotypes should be designated. The ICZN (1999: Art. 74.7.3, p. 83) requires that, for a lectotype designation to be valid, it should “contain an express statement of the taxonomic purpose of the designation.” The implication of this rule is that the simple fact that an unambiguous, single primary type has not been identified does not constitute “an express statement of taxonomic purpose.” I take this to mean that, unless there is a pressing nomenclatural problem, all syntypes should be maintained at equal rank. This mind-set flies in the face of the Platonic type concept — How can a species have more than one *eidos*? Can *eidos* even be made plural? Although I appreciate that this decision may, in fact, invalidate my own lectotype selections, I have chosen to disregard this article (ICZN, 1999: Art. 74.7.3) in my designations. However, in all cases, I have chosen lectotypes that reflect what I believe were the intentions of the original authors.

ACKNOWLEDGMENTS

The work of what Simpson would call a “closet naturalist,” this hydra could not have been slain without the able and generous assistance of Kenneth J. Boss and Richard I. Johnson, as well as the ample resources of the Department of Mollusks of the Museum of Comparative Zoölogy. Thanks also to the curators with which I have corresponded for allowing me access to the collections in their charge: Diarmaid Ó Foighil (UMMZ), Bob Hershler (NMNH), and Gary Rosenberg (ANSP). Alan Kabat expedited my work by providing a list of NMNH pleurocerid types, and Charlene Fricker provided locality data for certain ANSP types. Fred Thompson has kindly kept me informed of his work. The burden of this task was immeasurably lightened by the computer left to me by my mentor and friend, the late Robert C. Bright. Ernest Ruber suggested the title. Adam Baldinger, Tanya Kausch, and, especially, Jack Burch, also granted their assistance. Despite all of this aid, the errors that you find are solely my own.

THE NOMINAL SPECIES OF THE PLEUROCERIDAE OF
RECENT NORTH AMERICA, NORTH OF MEXICO

Institution Abbreviations:

| | |
|------|---|
| ANSP | Academy of Natural Sciences, Philadelphia, Pennsylvania, USA |
| BMNH | British Museum of Natural History, London, UK |
| UF | University of Florida Museum of Natural History, Gainesville, Florida, USA |
| MCZ | Museum of Comparative Zoölogy, Cambridge, Massachusetts, USA |
| UCM | University of Colorado Museum, Boulder, Colorado, USA |
| UMMZ | University of Michigan Museum of Zoology, Ann Arbor, Michigan, USA |
| USNM | United States National Museum, National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA |

Publication Abbreviations:

| | |
|--------|--|
| ALNHNY | <i>Annals of the Lyceum of Natural History of New York</i> |
| BJNH | <i>Boston Journal of Natural History</i> |
| JANSP | <i>Journal of the Academy of Natural Sciences, Philadelphia</i> |
| MPUMMZ | <i>Miscellaneous Publications of the Museum of Zoology, University of Michigan</i> |
| OPUMMZ | <i>Occasional Papers of the Museum of Zoology, University of Michigan</i> |
| PANSP | <i>Proceedings of the Academy of Natural Sciences, Philadelphia</i> |
| PAPS | <i>Proceedings of the American Philosophical Society</i> |
| PBSNH | <i>Proceedings of the Boston Society of Natural History</i> |
| TAPS | <i>Transactions of American Philosophical Society</i> |

Notations:

| | |
|-----|--|
| † | type figure |
| †? | questionable type figure |
| mo | holotype by monotypy |
| od | holotype by original designation |
| TOM | “Type by Monotypy” as used by Baker (1964) |
| TOD | “Type by Original Designation” as used by Baker (1964) |
| TSD | “Type by Subsequent Designation” as used by Baker (1964) |

- abbeyillensis** **Lea, Goniobasis.** 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 323, pl. 38, fig. 174 (*Obs. on Unio* 9: 145). No type material examined. Published locality: "Abbeville District, South Carolina, J.P. Barratt, M.D." Taxonomy: *Goniobasis abbeyillensis* (Tryon, 1873: 186); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1928b: 29, 1942a: 3).
- abbreviata** **'Anthony' Gould, Melania.** 1851, *PBSNH* 3: 360. Figured in Tryon, 1873, *Strepomatidae*: 160, fig. 306[†]. Lectotype MCZ 50240 (Maury's Creek, Tennessee) here selected, listed by Tryon (1873: 160) as "Anthony's original type" and reported in Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis abbreviata* (Tryon, 1873: 159); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Lithasia (Lithasia) geniculata fuliginosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 60, 1940: 5).
- abjecta** **'Haldeman, MS' Reeve, Melania.** 1860, *Conch. Icon.* 12: pl. 46, sp. 341. Type material presumed to be in the BMNH not examined. No location given. Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287); *Ambloxyus virginicus* (Hannibal, 1912: 176); unknown *Goniobasis* (Goodrich, 1940: 19).
- abrupta** **Lea, Melania.** 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 85, pl. 9, fig. 32[†] (*Obs. on Unio* 4: 59). Lectotype USNM 118468 (Alabama) here selected. Taxonomy: *Pleurocera abruptum* (Tryon, 1873: 117); *Ambloxyus virginicus* (Hannibal, 1912: 175); "not seen" (Goodrich, 1941b: 8).
- abscida** **Anthony, Melania.** 1860, *PANSP* 12: 56. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 51, sp. 395[†]. Lectotype MCZ 161716 (Alabama) here selected; incorrectly identified by Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis abscida* (Tryon, 1873: 311); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- acuta Rafinesque, Pleurocera.** 1831, *Enumeration and Account*: 3, sp. 20. Figured in Burch & Tottenham, 1980, *Walkerana* 1: 163, fig. 521. No type material known. Published locality: "Lake Erie." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species]; *Ambloxyus virginicus* (Hannibal, 1912: 175); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2, 1939c: 2, 1940: 13).
- acuta** **Lea non Perry, 1811, Melania.** 1831a, *TAPS* 4: 101, pl. 15, fig. 32 (*Obs. on Unio* 1: 111). Syntypes USNM 119088 (Tennessee River). Taxonomy: *Goniobasis acuta* (Tryon, 1873: 205); *Ambloxyus virginicus* (Hannibal, 1912: 174); *Elimia acuta acuta* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1930a: 9, 1940: 16).
- acuta** **Bell, Melania.** 1859, *Canadian Nat.* 4: 213 [*nomen nudum*]. Reprinted in 1963, *Sterkiana* (10): 51. Published locality: "St. Lawrence, near Montreal and Varennes [Quebec]." Taxonomy: *Goniobasis haldemani* (Tryon, 1873: 282).
- acutifilosa** **Stearns, Melania (?Goniobasis).** 1891, *Proc. USNM* 13: 211, pl. 15, fig. 9[†]. Holotype^{od} USNM 60596 (Eagle Lake, [Lassen County,] California). Taxonomy: *Ambloxyus pliciferus* (Hannibal, 1912: 178); *Juga (Calibasis) acutifilosa acutifilosa* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).
- acuto-carinata** **Lea, Melania.** 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 184, pl. 6, fig. 46[†] (*Obs. on Unio* 3: 22). Holotype^{mo} USNM 119048 (Holston River, Tennessee).

Taxonomy: *Goniobasis acutocarinata* (Tryon, 1873: 228); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1939a: 126, 1940: 17).

adusta Anthony, *Melania*. 1860, *PANSP* 12: 55. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 46, sp. 338. Lectotype ANSP 8538 (Tennessee) selected by Baker (1964: 179) as "TSD now." Paralectotype MCZ 47368, incorrectly listed by Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis adusta* (Tryon, 1873: 272); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

æqua Lea, *Melania*. 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 240, pl. 34, fig. 41[†] (*Obs. on Unio* 9: 62) [as *Goniobasis*]. Lectotype USNM 119818 (Yellow Leaf Creek, [Chilton County,] Alabama) here selected. Taxonomy: *Goniobasis æqua* (Tryon, 1873: 307); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24).

æqualis Haldeman, *Melania*. 1842, *Monog. Limniades* 4: wrapper. Lectotype ANSP 8752a [not seen] (Nolichucky River, Tennessee) figured by Tryon (1873: 164, fig. 313 or 314; *fide* Baker, 1964) and selected by Baker (1964: 179) as "TSD now." Taxonomy: *Goniobasis æqualis* (Tryon, 1873: 163); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Lithasia* (*Angitrema*) *verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 5).

affinis Haldeman, *Anculosa* (*Mudalia*). 1841b, *Monog. Limniades* 3: wrapper. Figured in Tryon, 1873, *Strepomatidae*: 394, fig. 773. No type material examined. Published locality: "Ohio, Mrs. Say." Taxonomy: *Anculosa carinata* var. *c* (Tryon, 1873: 389); *Leptoxis* (*Mudalia*) *dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 20).

affine Lea, *Trypanostoma*. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 145, pl. 23, fig. 57^{††} (*Obs. on Unio* 11: 101). Lectotype USNM 121956 (Cumberland River, Smith's Shoals, Tennessee) here selected. Taxonomy: *Pleurocera affine* (Tryon, 1873: 69); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum filum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).

alabamensis Lea, *Schizostoma*. 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 250, pl. 35, fig. 54[†] (*Obs. on Unio* 9: 72) [as *alabamense*]. Lectotype USNM 119357 (Alabama) here selected. Taxonomy: *Schizostoma alabamense* (Tryon, 1873: 367); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma alabamensis* (Goodrich, 1924a: 15, 1944b: 47); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

alabamense 'Lea' Reeve, *Melatoma*. 1861, *Conch. Icon.* 12: pl. 3, sp. 20a-b. Figured specimen presumed to be in the MCZ not examined. Published locality: "Coosa River, Alabama, United States." Taxonomy: *Schizostoma pumilum* (Tryon, 1873: 357); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma pumilum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 14).

alabamensis Lea, *Melania*. 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 232, pl. 34, fig. 26 (*Obs. on Unio* 9: 54) [as *Goniobasis*]. Possible syntypes USNM 119836 (Coosa River, Alabama). Taxonomy: *Goniobasis alabamensis* (Tryon, 1873: 303); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 22, 1944b: 45).

- alabamense** **Lea, Trypanostoma**. 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 288, pl. 36, fig. 113[†] (*Obs. on Unio* 9: 110). Lectotype USNM 122159 (north Alabama) here selected. Taxonomy: *Pleurocera alabamense* (Tryon, 1873: 77); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum alabamense* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- albanyensis** **Lea, Goniobasis**. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 141, pl. 23, fig. 49 (*Obs. on Unio* 11: 97). Possible syntypes USNM 118875 ([Flint River,] near Albany [Dougherty County] and [Chickasawhatchee Creek] Blue Spring, Baker County, Georgia), figured by Chambers (1990: fig. 6G). Taxonomy: *Elimia boykiniana albanyensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1928b: 30, 1942a: 4).
- aldrichi ‘Smith’ Goodrich, Anculosa**. 1922, *MPUMMZ* (7): 31, pl. 1, fig. 1[†], 2; pl. 3, fig. 16. Holotype^{ed} UMMZ 10139 [not examined] (Coosa River, near mouth of Yellow Leaf Creek, Chilton County, Alabama). Taxonomy: *Leptoxis (Leptoxis) taeniata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1944b: 42).
- alexandrensis** **Lea, Melania**. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 87, pl. 9, fig. 37[†] (*Obs. on Unio* 4: 61). Lectotype USNM 119112 (Alexandria, [Rapides Parish,] Louisiana) here selected. Taxonomy: *Goniobasis alexandrensis* (Tryon, 1873: 284); *Ambloxus virginicus* (Hannibal, 1912: 175); *Pleurocera acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1927: 61, 1939b: 2, 1939c: 3).
- alexandriensis ‘Lea’ Hannibal, Melania**. 1912, *Proc. Mal. Soc. London* 10: 175 [error for *M. alexandrensis* Lea].
- altilis ‘Ravenel’ Lea, Paludina [also Leptoxis crenata ‘Ravenel’ Haldeman]**. 1841a, *PAPS* 2: 13 [as *Melania*]; 1842a, *PAPS* 2: 150 [as *Melania*]; 1842b, *TAPS* 8: 174, pl. 5, fig. 23 (*Obs. on Unio* 3: 12). Also in Haldeman, 1847-1848, *Leptoxis*: 6, pl. 5, fig. 153 [as *L. crenata*]. Neotype UF 40550 [not examined] (Lake Waccamaw, Columbus County, North Carolina) selected by Thompson (1984: 134, fig. 63). Taxonomy: Doubtful and Spurious Species (Tryon, 1873: 421); *Gillia altilis* (Thompson, 1984: 132).
- altipeta** **Anthony, Melania**. 1854, *ALNHNY* 6: 87, pl. 2, figs. 5a-b. Also figured in Tryon, 1873, *Strepomatidae*: 122, fig. 231. Syntypes MCZ 161755 listed as “cotypes” in Turner (1946: 98). Tryon (1873: 122) identified his figure as being from “Mr. Anthony’s type.” Published locality: “Raccoon Creek, Vinton county, Ohio.” Taxonomy: *Pleurocera altipetum* (Tryon, 1873: 122); *Ambloxus virginicus* (Hannibal, 1912: 176); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- alveare** **Conrad, Melania**. 1834a, *New Fresh-Water Shells*: 54, pl. 4, fig. 7. Tryon (1873: 50) reports type material from the Haldeman collection, but Baker (1964: 179) does not list any type material in the ANSP. The published locality lists it as occurring with *Melania lima* Conrad in “Elk river, [Limetone-Lauderdale counties,] Alabama...” Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1934b: 2, 1940: 8).
- ambusta** **Anthony, Melania**. 1854, *ALNHNY* 6: 94, pl. 2, fig. 13. Also figured in Tryon, 1873, *Strepomatidae*: 317, fig. 610[†]. Lectotype MCZ 74191 (Alabama) here selected; identified by Tryon (1873: 317) as “Mr. Anthony’s type specimen” and

listed by Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis ambusta* (Tryon, 1873: 317); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia ampla* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).

amæna **Lea, Goniobasis.** 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 323, pl. 38, fig. 175 (*Obs. on Unio* 9: 145). No type material examined. Published locality: "North Alabama, Prof. Tuomey." Taxonomy: *Goniobasis amæna* (Tryon, 1873: 169); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia interveniens* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 14, 1940: 15).

ampla **Anthony, Melania.** 1854, *ALNHNY* 6: 93, pl. 2, fig. 12^t. Also figured in Tryon, 1873, *Streptomatidae*. 315, fig. 607^t. Lectotype MCZ 161735 (Alabama) here selected; identified by Tryon (1873: 315) as "Mr. Anthony's type specimen" and listed in Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis ampla* (Tryon, 1873: 315); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia ampla* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).

ampla **Anthony, Anculosa.** 1855, *ALNHNY* 6: 159, pl. 5, fig. 22-23. Syntypes MCZ 161803 (Alabama), listed in Turner (1946: 98) as "cotypes." Taxonomy: *Anculosa ampla* (Tryon, 1873: 412); *Leptoxis (Leptoxis) ampla* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 35, 1941b: 9, 1941c: 23).

ampla **Anthony, Gyrotoma.** 1860, *PANSP* 12: 66. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melatoma*): pl. 3, sp. 16. Lectotype MCZ 85803 (Coosa River, Alabama) here selected; incorrectly identified by Turner (1946: 98) as "holotype." Baker's (1964: 179) identification of ANSP 120741a as "TOM" was not chosen from among valid type material. Taxonomy: *Schizostoma amplum* (Tryon, 1873: 360); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma ampla* (Goodrich, 1924a: 26, 1944b: 48); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

angitremoides **Adams, Io.** 1915, *Mem. Nat. Acad. Sci.* 12: 14, pl. 1, fig. 12^t. Holotype^{ad} USNM 424987 (Tennessee River, Looney's Island, [Knox County,] Tennessee). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

angulatus **Conrad, Anculotus.** 1834a, *New Fresh-Water Shells.* 60, pl. 8, fig. 15. Questionable lectotype ANSP 125348a (Flint River, [Madison County,] Alabama) selected by Baker (1964: 180) as "TSD now." Paralectotypes ANSP 125348 and MCZ 152864. Baker (1964) made his lectotype selection from specimens received in the Wheatley collection. There is, however, no mention of Conrad with these shells nor was Wheatley ever acknowledged as having examples of this species (*e.g.*, Wheatley, 1845; Ryder, [no date]). The paralectotypes deposited in the MCZ are labeled by J.G. Anthony as "types from Conrad." Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 14, 1940: 20).

angulata **Anthony, Melania.** 1854, *ALNHNY* 6: 117, pl. 3, fig. 17^t. Lectotype MCZ 161845 (Tennessee) here selected; incorrectly identified by Turner (1946: 98) as "holotype." Taxonomy: *Goniobasis angulata* (Tryon, 1873: 221); *Ambloxus virginicus* (Hannibal, 1912: 176); unknown *Goniobasis* (Goodrich, 1940: 9).

angulata **Wetherby, Angitrema.** 1876, *Proc. Cincinnati Soc. Nat. Hist.* (1): 11, pl. 1, fig. 5. No type material examined. Published locality: "Stone river, Rutherford [County, Tennessee]." Taxonomy: *Lithasia (Angitrema) armigera* (Burch &

- Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1940: 3).
- angulosa Menke, *Melania*.** 1828, *Syn. Meth.*, 1st edition: 81; 1830, 2nd edition: 135. No type material examined. Published locality: "Hab. prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 14, 1940: 20).
- angusta 'Anthony, MS' Reeve, *Melania*.** See *M. angustispira* Anthony.
- angustispira Anthony, *Melania*.** 1860, *PANSP*12: 55. Figured in Reeve, 1860, *Conch. Icon.* 12: pl. 48, sp. 359, errata [as *M. angusta*]. Lectotype ANSP 8686 (Tennessee) selected by Baker (1964: 180) as "TSD now." Paralectotype MCZ 161719, incorrectly listed by Turner (1946: 98) as "holotype." Tryon (1873: 281, fig. 545) identified his figure as being from Anthony's type. Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- annettae Goodrich, *Goniobasis*.** 1941a, *OPUMMZ* (426): 1, fig. 1[†]. Holotype^{od} UMMZ 128908 [not examined] (Cahaba River, Lily Shoals, Bibb County, Alabama). Taxonomy: *Elimia annettae* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941a: 1, 1941c: 15).
- annulata 'Conrad' Jay, *Melania*.** 1836, *Cat. Shells*, 2nd edition: 45 [error for *M. annulifera* Conrad].
- annulifera Conrad, *Melania*.** 1834a, *New Fresh-Water Shells*: 51, pl. 8, fig. 2. Possible syntype ANSP 26939 (Alabama); listed by Baker (1964: 180) as "TOM." Baker's (1964) selected specimen came from Conrad, as labeled by J.G. Anthony, but it is otherwise not identified as a type. Taxonomy: *Pleurocera annuliferum* (Tryon, 1873: 91); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera annuliferum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- anthonyi 'Budd' Redfield, *Anculosa*.** 1854, *ALNHNY* 6: 130, pl. 1, fig. 6. Possible syntypes MCZ 47795 ([Tennessee River,] near Chattanooga, [Hamilton County,] Tennessee). J.G. Anthony noted on the specimen label, "Part of the original lot. I sent some to B.W. Budd and Mr. Redf. described the species for those I sent—it is thus made authentic." Taxonomy: *Eurycælon anthonyi* (Tryon, 1873: 347); *Leptoxis (Athearnia) crassa anthonyi* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 4, 1940: 21).
- anthonyi Reeve, *Melatoma*.** 1861, *Conch. Icon.* 12: pl. 2, sp. 12a-b. Type material presumed to be in the MCZ not examined. Published locality: "Alabama, United States." Taxonomy: *Schizostoma anthonyi* (Tryon, 1873: 368); *Gyrotoma (Gyrotoma) leta incisa* (Hannibal, 1912: 182); *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).
- anthonyi Lea, *Trypanostoma*.** 1862a, *PANSP*14: 172; 1863a, *JANSP*5: 293, pl. 36, fig. 123[†] (*Obs. on Unio* 9: 115). Lectotype USNM 121615 (Tennessee) here selected. Taxonomy: *Pleurocera anthonyi* (Tryon, 1873: 80); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9). and *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b:

8).

anthonyi **Lea, Goniobasis**. 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 303, pl. 37, fig. 140[†] (*Obs. on Unio* 9: 125). Holotype^{mo} USNM 119110 (Tennessee). Taxonomy: *Goniobasis anthonyi* (Tryon, 1873: 267); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17); *nomen nudum* (Thompson, 2000: 12).

approxima **'Haldeman' Hannibal, Melania**. 1912, *Proc. Mal. Soc. London* 10: 175 [error for *M. approximata* Haldeman].

approximata **Haldeman, Melania**. 1842, *Monog. Limniades* 4: wrapper. Figured in Tryon, 1873, *Strepomatidae*: 289, figs. 557-558 [as *Goniobasis proxima*]. No type material examined. Published locality: "Tennessee." Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287); *Ambloxy virginius* (Hannibal, 1912: 175); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

arachnoidea **Anthony, Melania**. 1854, *ALNHNY* 6: 95, pl. 2, fig. 14. Syntypes MCZ 50236 (small stream emptying into the Tennessee River near Loudon, [Loudon County,] Tennessee), incorrectly listed by Turner (1946: 99) as "holotype." Taxonomy: *Goniobasis arachnoidea* (Tryon, 1873: 155); *Ambloxy virginius* (Hannibal, 1912: 176); *Elimia arachnoidea arachnoidea* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 13).

arata **'Lea' Hannibal, Melania**. 1912, *Proc. Mal. Soc. London* 10: 171 [error for *M. arata* Lea].

arata **Lea, Melania** [new name for *M. exarata* Lea]. 1841a, *PAPS* 2: 14 [as *exarata*]; 1842b, *TAPS* 8: 183, pl. 6, fig. 44[†] (*Obs. on Unio* 3: 21) [as *exarata*]; 1843b, *PAPS* 2: 242. Lectotype USNM 121551 (Tennessee) here selected. Taxonomy: *Pleurocera aratum* (Tryon, 1873: 99); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); among the "transition forms between *unciale* and *canaliculatum* groups" listed by Goodrich (1940: 12).

arata **Lea, Goniobasis**. 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 329, pl. 54, fig. 4 (*Obs. on Unio* 12: 89). Syntypes USNM 118467 (Conasauga River, [Whitfield County,] Georgia).

arctata **Lea, Melania**. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 90, pl. 9, fig. 46[†] (*Obs. on Unio* 4: 64). Lectotype USNM 119090 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Goniobasis arctata* (Tryon, 1873: 314); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 19) and *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4)

arkansensis **Hinkley, Anculosa**. 1915, *Proc. USNM* 49: 587, pl. 78, fig. 3[†]. Holotype^{od} USNM 271764 (North Fork White River, [2 or 3 miles above] Norfolk, [Baxter County,] Arkansas). Taxonomy: *Leptoxis* (*Mudalia*) *arkansensis* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1939c: 4).

armigera **Say, Melania**. 1821, *JANSP* 2: 178; 1858, Binney's reprint: 71. Figured in Reeve, 1860, *Conch. Icon.* 12(*Io*): pl. 2, sp. 11. Type material not found in the ANSP (Baker, 1964: 180). Published locality: "Inhabits Ohio River." Taxonomy:

- Angitrema armigera* (Tryon, 1873: 19); *Pleurocera* (*Pleurocera*) *fluvialitilis armigera* (Hannibal, 1912: 171); *Lithasia* (*Angitrema*) *armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1940: 3).
- assimilis** **Anthony, *Melania***. 1860, *PANSP* 12: 60. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 58, sp. 464. Possible lectotype ANSP 27422 [not examined] (North Carolina) figured by Tryon (1873: 234, fig. 458b *vide* Baker, 1964) and selected by Baker (1964: 180) as "TSD now." Paralectotypes MCZ 161827 listed in Turner (1946: 99) as "cotypes." Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia proxima* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17).
- assimilis 'Lea' Binney, *Melania***. 1860, Check List: 7, sp. 22 [error for *M. assimilis* Anthony].
- aterina** **Lea, *Goniobasis***. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 136, pl. 23, fig. 42 (*Obs. on Unio* 11: 92). Possible syntypes USNM 118874 and USNM 119067 (Gap Springs, Cumberland Gap, [Claiborne County,] Tennessee). Additional published locality: Rogers Spring, W Fincastle, Campbell County, Tennessee. The type locality should not be restricted until a lectotype is designated. Taxonomy: *Goniobasis aterina* (Tryon, 1873: 241); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia aterina* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- athearni** **Clench & Turner, *Goniobasis***. 1956, *Bull. Fla. State Mus., Bio. Sci.* 1: 131, pl. 2, fig. 6^f. Holotype^{od} MCZ 190102 (Chipola River, 2.5 miles southeast of Chason, Calhoun County, Florida). Taxonomy: *Elimia athearni* (Burch & Tottenham, 1980: 132; Burch, 1982: 33).
- athleta** **Anthony, *Melania***. 1854, *ALNHNY* 6: 83, pl. 2, fig. 1. Also figured in Tryon, 1873, *Strepomatidae*. 201, fig. 393. Syntype MCZ 161751 (Bacon Creek near Munfordville, [Hart County,] Kentucky) incorrectly listed as "holotype" in Turner (1946: 99). Tryon (1873: 201) identified his figure as being "the type specimen." Taxonomy: *Goniobasis athleta* (Tryon, 1873: 200); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia laqueata costulata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 15).
- attenuatum** **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 274, pl. 36, fig. 88^f (*Obs. on Unio* 9: 96). Lectotype USNM 122140 (Lafayette [Walker?] County, Georgia) here selected. Although ANSP 27053, from which Baker (1964: 180) made a previous lectotype designation as "TSD now," came from Lea, it is highly unlikely that Baker's (1964) selection was made from valid type material. Lea had only two specimens at the time of his description. Neither of the shells of ANSP 27053 is the figured one, and, contrary to Baker (1964), there is no mention of a collector. Taxonomy: *Pleurocera attenuatum* (Tryon, 1873: 128); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- attenuata 'Lea' Hannibal *Goniobasis***. 1912, *Proc. Mal. Soc. London* 10: P. 177 [presumably referring to *Trypanostoma attenuatum* Lea].
- angulatus 'Conrad' Tryon *Anculotus***. 1873, *Strepomatidae*. 405 [error for *A. angulatus* Conrad].

- auricoma** Lea, *Goniobasis*. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 308, pl. 37, fig. 148[†] (*Obs. on Unio* 9: 130). Holotype^{mo} USNM 119097 (Tennessee River). Taxonomy: *Goniobasis auricoma* (Tryon, 1873: 243); *Ambloxy virginius* (Hannibal, 1912: 176); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 47; Goodrich, 1927: 60, 1930a: 25, 1940: 5).
- auriculæformis** Lea, *Melania*. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 88, pl. 9, fig. 39[†] (*Obs. on Unio* 4: 62). Lectotype USNM 119238 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Goniobasis auriculæformis* (Tryon, 1873: 240); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia cylindracea* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 37).
- auriscalpium** Menke 1828, *Melania*. 1828, *Syn. Meth.*, 1st edition: 82. No type material examined. Published locality: "Hab. prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Pleurocera (Pleurocera) canaliculatum* (Tryon, 1873: 62; reference to Menke (1830: 136) is an error for Menke (1828: 82)); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).
- auriscalpium** Menke 1830, *Melania*. 1830, *Syn. Meth.*, 2nd edition: 136. No type material examined. Published locality: "Prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fl. Ohio." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxy virginius* (Hannibal, 1912: 174); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- babylonica** Lea, *Melania*. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 183, pl. 6, fig. 43[†] (*Obs. on Unio* 3: 21). Holotype^{mo} USNM 119086 (Yellow Spring, Greene County, Ohio). Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxy virginius* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- babylonicum** Lea, *Schizostoma*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 94, pl. 9, fig. 54 (*Obs. on Unio* 4: 68). Lea (1848) reported only a single specimen, and the holotype^{mo} that he figured is presumably lost. USNM 119408, labeled "holotype" and housed in type collection of the National Museum of Natural History, is from the Budd Collection and not the shell figured by Lea. Published locality: "Tuscaloosa, [Tuscaloosa County,] Alabama. B.W. Budd, M.D." Taxonomy: *Schizostoma babylonicum* (Tryon, 1873: 369); *Gyrotoma (Gyrotoma) læta incisa* (Hannibal, 1912: 182); *Gyrotoma babylonicum* (Goodrich, 1924a: 28).
- babylonicum 'Lea'** Reeve, *Melatoma*. 1860, *Conch. Icon.* 12: pl. 1, sp. 6. Figured specimen presumed to be in the BMNH not examined. Published locality: "Tuscaloosa, [Tuscaloosa County,] Alabama; Dr. Budd." Taxonomy: *Gyrotoma alabamensis* (Goodrich, 1924a: 15).
- babylonicum 'Lea'** Tryon, *Schizostoma*. 1873, *Strepomatidæ*. 369, fig. 696. Taxonomy: *Gyrotoma spillmanii* (Goodrich, 1925a: 11). [Tryon's (1873) description of *S. babylonicum* is actually that of *S. spillmanii* since the description of the latter "...appears to be much more accurate and apply well to [*babylonicum*]..." (p. 369).]
- baculoides** Lea, *Goniobasis*. 1869, *PANSP* 21: 125; 1874, *JANSP* 8: 62, pl. 21, fig. 18

- (*Obs. on Unio* 13: 66). No type material examined. Published locality: "Coosa River, Alabama, Dr. E.R. Schowalter [*sic*]." Taxonomy: *Elimia fascinans* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 5).
- baculum Anthony, *Melania*.** 1854, *ALNHNY* 6: 98, pl. 2, fig. 16. Lectotype MCZ 161820 (Tennessee) here selected, incorrectly identified by Turner (1946: 99) as "holotype." Taxonomy: *Goniobasis baculum* (Tryon, 1873: 206); *Ambloxyus virginicus* (Hannibal, 1912: 176; *Goniobasis baculum* (Goodrich, 1930a: 12); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 16).
- bairdiana Lea, *Goniobasis*.** 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 317, pl. 37, fig. 164[†] (*Obs. on Unio* 9: 139). Lectotype USNM 119069 (Columbia River at "Fort George," Oregon) here selected. Taxonomy: *Goniobasis bairdiana* (Tryon, 1873: 215); *Ambloxyus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) silicula* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 3).
- barrattii Lea, *Goniobasis*.** 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 335, pl. 38, fig. 196[†] (*Obs. on Unio* 9: 157). Lectotype USNM 119070 (Abbeville, [Abbeville County,] South Carolina) here selected. Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).
- barretti 'Lea' Goodrich, *Goniobasis*.** 1942a, *OPUMMZ* (456): 3 [error for *G. barrattii* Lea].
- barronensis Baker, *Goniobasis livescens*.** 1928, *Bull. Wis. Geol. Nat. Hist. Surv.* 70: 186, pl. 9, figs. 33[†], 34-36. Holotype^{od} UMMZ 209144 (Red Cedar River, west of Chetek, Barron County, Wisconsin). Taxonomy: *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1945: 32).
- basalis Lea, *Melania*.** 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 85, pl. 9, fig. 33 (*Obs. on Unio* 4: 59). Syntypes USNM 119852 (Alabama). Taxonomy: *Goniobasis basalis* (Tryon, 1873: 331); *Cyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).
- bella Conrad, *Melania*.** 1835, *New Fresh-Water Shells*, Appendix: 6, pl. 9, fig. 4. Also figured in Tryon, 1873, *Strepomatidae*: 157, fig. 301. Tryon (1873: 157) identified his figure as being "the type specimen in possession of Prof. Haldeman." Published locality: "Inhabits streams in North Alabama." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17); *Elimia carinifera* (Thompson, 2000: 12).
- bella Lea, *Anculosa*.** 1841c, *PAPS* 2: 83. Figured in Tryon, 1873, *Strepomatidae*: 381, fig. 715. No type material examined. Published locality: [Black] Warrior River, Alabama (Tryon, 1873). Taxonomy: *Anculosa plicata* (Tryon, 1873: 381); *Leptoxis (Leptoxis) plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10).
- bellacrenata Haldeman, *Melania*.** 1842, *Monog. Limniades* 4: wrapper. Figured in Tryon, 1873, *Strepomatidae*: 158, fig. 304. No type material examined. Published locality: "Alabama." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia bellacrenata* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17).

- bellula** **Lea, *Melania***. 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 237, pl. 34, fig. 35[†] (*Obs. on Unio* 9: 59) [as *Goniobasis*]. Lectotype USNM 119079 (Yellowleaf Creek, [Shelby County,] Alabama) here selected. Baker's (1964: 180) previous designation of ANSP 8651a as "TSD now" is hereby ignored due to its ambiguity. The selected shell, contrary to Baker (1964), is not the figured specimen. Also, Lea (1863a) reported having only two specimens; with material in the USNM, it is unlikely that anything in the ANSP is better than idotypes. Taxonomy: *Goniobasis bellula* (Tryon, 1873: 329); *Gyrotoma* (*Goniobasis*) *leta* (Hannibal, 1912: 181); *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 37, 1944b: 45).
- bentonensis 'Lea' Goodrich, *Goniobasis***. 1944b, *Nautilus* 58: 44 [error for *G. bentoniensis* Lea].
- bentoniensis** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 336, pl. 38, fig. 198 (*Obs. on Unio* 9: 158). Lectotype USNM 118464 (Calhoun [formerly Benton] County, Alabama) selected by Thompson (2000: 40, figs. 88-89[†]). Taxonomy: *Goniobasis bentoniensis* (Tryon, 1873: 151); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia bentoniensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4, 1944b: 44); *Elimia caelatura* (Thompson, 2000: 42).
- bicineta** **Anthony, *Melania***. 1860, *PANSP* 12: 56. Figured in Tryon, 1873, *Strepomatidae*. 234, fig. 458a[†]. Lectotype ANSP 27426a [not examined] (North Carolina) selected by Baker (1964: 180) as "TSD now." Paralectotypes MCZ 161823, listed in Turner (1946: 99) as "cotypes." Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia proxima* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17).
- bicinctum** **Tryon, *Pleurocera***. 1866, *Am. J. Conch.* 2: 4, pl. 2, fig. 2[†]. Holotype^{mo} [*vide* Baker, 1964: 180] ANSP 125007 [not examined] ([Tennessee River,] Bridgeport, [Jackson County,] Alabama). Taxonomy: *Pleurocera* (*Strephobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 7, 1940: 8).
- bicineta 'Anthony, 1854' Hannibal, *Melania***. 1912, *Proc. Mal. Soc. London* 10: 176 [presumably referring to *M. bicincta* Anthony, 1860].
- bicolor 'Anthony, MS' Reeve, *Melania***. 1860, *Conch. Icon.* 12: pl. 38, sp. 265 [error *M. bicolorata* Anthony].
- bicolorata 'Anthony' Gould, *Melania***. 1851, *PBSNH* 3: 361. Figured in Tryon, 1873, *Strepomatidae*. 280, fig. 542[†]. Lectotype MCZ 161721 (Camp Creek [Morgan-Johnson counties,] Indiana) here selected; incorrectly identified by Turner (1946: 99) as "holotype." Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- biconica 'Pilsbry, MS' Blatchley & Daniels, *Lithasia obovata***. 1903, *Ann. Rept. Indiana Dept. Geol. Nat. Res.* 26: 604, fig. 23a. No type material found in the ANSP (Baker, 1964: 180). Published locality: "Wabash River in Gibson County, Indiana, at Southern Railroad bridge abutment opposite Mt. Carmel, Illinois."
- bicostata** **Anthony, *Melania***. 1860, *PANSP* 12: 56. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 36, sp. 246 and in Tryon, 1873, *Strepomatidae*. 86, fig. 163. Lectotype ANSP 26998a (Tennessee) selected by Baker (1964: 180) as "TSD now." Paralectotype MCZ 161778, incorrectly listed by Turner (1946: 99) as "holotype."

- Baker (1964) claimed that his lectotype was the specimen figured by Tryon (1873); Tryon's figured specimen is actually among the shells in MCZ 161779. Taxonomy: *Pleurocera uncialis* (Tryon, 1873: 85); *Ambloxus virginicus* (Hannibal, 1912: 176); *Pleurocera uncialis uncialis* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- bifasciata** **Lea, Goniobasis.** 1868a, *PANSP* 30: 151; 1868b, *JANSP* 6: 331, pl. 54, fig. 7[†] (*Obs. on Unio* 12: 91). Lectotype USNM 119082 (Jackson County, Alabama) here selected. Taxonomy: *Elimia acuta acuta* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1930a: 10, 1940: 16).
- binneyana** **Lea, Goniobasis.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 310, pl. 37, fig. 152[†] (*Obs. on Unio* 9: 132) [as *binneyana*]. Lectotype USNM 119083 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis binneyana* (Tryon, 1873: 241); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 34).
- biteniata** **Conrad, Melania.** 1834a, *New Fresh-Water Shells*: 52, pl. 8, fig. 6. Type material not found in the ANSP (Baker, 1964: 180). Published locality: "Inhabits the Black Warrior river." Taxonomy: *Strephobasis biteniata* (Tryon, 1873: 47); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Elimia cylindracea* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 37) and *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 34, 1941c: 21).
- biteniata** '(Conrad)' **Tryon, Strephobasis.** 1873, *Strepomatidae*: 47, fig. 95. Figured specimen presumably in the MCZ not examined. Published locality: "Black Warrior River." Taxonomy: *Pleurocera (Strephobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6).
- bivittatum** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 279, pl. 36, fig. 97[†] (*Obs. on Unio* 9: 101). Lectotype USNM 122169 (Tennessee) here selected. Taxonomy: *Pleurocera incrassatum* (Tryon, 1873: 82); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera (Strephobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8) and *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- bizonalis** **DeKay, Melania.** 1843, *Zool. N.Y.* 5: 91, pl. 7, fig. 140a-b. No type material examined. Published locality: "Dr. Emmons... found it abundantly in Lake Champlain." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 31).
- blanda** **Lea 1841, Melania.** 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 179, pl. 6, fig. 34[†] (*Obs. on Unio* 3: 17). Holotype^{mo} USNM 119050 (Tennessee). Taxonomy: *Goniobasis blanda* (Tryon, 1873: 182); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- blanda** **Lea 1861, Melania (Goniobasis).** Renamed *Goniobasis versa* Lea.
- boykiniana** **Lea, Melania.** 1840, *PAPS* 1: 289; 1842b, *TAPS* 8: 228, pl. 6, fig. 59 (*Obs. on Unio* 3: 66). Lectotype USNM 118428 (Chattahoochee River, Columbus,

[Muscogee County,] Georgia selected by (Chambers, 1990: 254, fig. 5[†]). Taxonomy: *Goniobasis boykiniana* (Tryon, 1873: 150); *Ambloxy virginicus* (Hannibal, 1912: 175); *Elimia boykiniana boykiniana* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 3).

brevis **Lea, *Melania***. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 26 (*Obs. on Unio* 4: 26). Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 46, sp. 344. Holotype lost. Lea (1844) described only a single specimen and reported that shell to be in the cabinet of E. Foreman, M.D. Idiotypes ANSP 26906 listed in Baker (1964: 180) as "TOM" and USNM 121886. Published locality: "Alabama. E. Foreman, M.D." Taxonomy: *Lithasia brevis* (Tryon, 1873: 37); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Elimia brevis* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1936: 55, 1944b: 46).

brevis **Anthony, *Io***. 1860, *PANSP* 12: 69. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Io*): pl. 1, sp. 4 and Tryon, 1873, *Strepomatidae*: 86, fig. 163[†]). Possible lectotype ANSP 26873 (Tennessee) selected by Baker (1964: 180) as "TSD now." Paralectotype MCZ 50551, incorrectly listed by Turner (1946: 99) as "holotype." Taxonomy: *Io brevis* (Tryon, 1873: 9); *Pleurocera (Io) fluvialilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

brevispira 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 361. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 38, sp. 263. Syntypes MCZ 161688 (Ohio). Idiotypes MCZ 161690 listed by Turner (1946: 99) as "cotypes." Taxonomy: *Goniobasis brevispira* (Tryon, 1873: 277); *Ambloxy virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18) and *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1945: 31).

brevispira 'Smith' Goodrich, *Anculosa*. 1922, *MPUMMZ* (7): 35, pl. 1, fig. 6[†]; pl. 3, fig. 12. Holotypend UMMZ 10144 (Coosa River, Fort William Shoals, Talladega County, Alabama). Taxonomy: *Anculosa brevispira* (Goodrich, 1922: 35, 1944b: 42); *Leptoxis (Leptoxis) taeniata* (Burch & Tottenham, 1980: 157; Burch, 1982: 138).

bridgesiana **Lea, *Goniobasis***. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 305, pl. 37, fig. 142[†] (*Obs. on Unio* 9: 127). Holotype^{mo} USNM 119053 (Cahaba River, Alabama). Taxonomy: *Goniobasis bridgesiana* (Tryon, 1873: 222); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).

broccata **Thompson, *Elimia***. 2000, *Walkerana* 11: 12, fig. 20[†]. Holotypend UF 263204 (Coldwater Springs, 5.6 mi W of Oxford, Calhoun County, Alabama).

brumbyi **Lea, *Melania***. 1852, *TAPS* 10: 298, pl. 30, fig. 5[†] (*Obs. on Unio* 5: 54). Lectotype USNM 122080 ([Huntsville, [Madison County,] Alabama) here selected. Taxonomy: *Pleurocera brumbyi* (Tryon, 1873: 92); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera brumbyi* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).

brumbyi **Lea, *Goniobasis***. 1862b, *PANSP* 14: 263; 1863a, *JANSP* 5: 296, pl. 37, fig. 127[†] (*Obs. on Unio* 9: 118). Lectotype USNM 119056 (Alabama) here selected. Taxonomy: *Goniobasis brumbyi* (Tryon, 1873: 264); *Ambloxy virginicus* (Hannibal,

- 1912: 177).
- brunnea** Anthony, *Melania*. 1854, *ALNHNY* 6: 92, pl. 2, fig. 10. Idiotypes MCZ 74208 listed as “cotypes” in Turner (1946: 99). J.G. Anthony’s specimen label indicates that the original types have been lost. Published locality: “Alabama.” Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).
- buddii** Lea, *Melania*. 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 90, pl. 9, fig. 44 (*Obs. on Unio* 4: 64). No type material examined. Published locality: “Tennessee? B.W. Budd, M.D.” Taxonomy: *Goniobasis buddii* (Tryon, 1873: 295); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- buddii** ‘DeKay’ Wheatley, *Melania*. 1845, *Cat. Shells U.S.*: 24 [*nomen nudum*]. Published locality: “Erie Canal.” Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291).
- buddii** Lea, *Schizostoma*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 94, pl. 9, fig. 53 (*Obs. on Unio* 4: 68). No type material examined. Published locality: “Tuscaloosa, [Tuscaloosa County,] Alabama. B.W. Budd, M.D.” Taxonomy: *Schizostoma buddii* (Tryon, 1873: 370); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma incisum* (Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- buddii** ‘Say’ Adams & Adams, *Juga*. 1858, *Genera* 1: 304 [error for *M. buddii* Lea].
- buddii** ‘Lea’ Reeve, *Melatoma*. 1860, *Conch. Icon.* 12: pl. 1, sp. 3. Figured specimen presumed to be in the BMNH not examined. Published locality: “Tuscaloosa, [Tuscaloosa County,] Alabama; Dr. Budd.” Taxonomy: *Goniobasis laeta* (Tryon, 1873: 318); *Gyrotoma* (*Goniobasis*) *laeta* (Hannibal, 1912: 181).
- bulbosa** Gould, *Melania*. 1847, *PBSNH* 2: 225; 1852, *U.S. Exploring Exped.* 12: 142, pl. 10, fig. 163¹-163a; 1862, *Otia Conch.*: 46. Lectotype MCZ 169067 (Columbia River, Oregon [Washington]) here selected; listed by Johnson (1964: 48) as “presumed figured holotype.” Taxonomy: *Goniobasis bulbosa* (Tryon, 1873: 255); *Ambloxyus pliciferus* (Hannibal, 1912: 178); *Juga* (*Oreobasis*) *bulbosa* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Pilsbry, 1899: 66).
- bulbosa** Anthony, *Gyrotoma*. 1860, *PANSP* 12: 65. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melatoma*): pl. 3, sp. 22 and in Tryon, 1873, *Strepomatidae*: 362, fig. 684. Syntypes MCZ 50661 (Coosa River, Alabama) listed as “cotypes” by Turner (1946: 99). Baker’s (1964: 180) designation of one of the shells of ANSP 56773 as a primary type is considered invalid. Contrary to Baker (1964), none is the shelled figured by Tryon (1873), and there is nothing to indicate that those shells actually originated with J.G. Anthony. Taxonomy: *Schizostoma bulbosum* (Tryon, 1873: 361); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma incisum* (Goodrich, 1924a: 20); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- bulimoides** Tryon, *Goniobasis plicifera*. 1865b, *Am. J. Conch.* 1: 238, pl. 24, figs. 5¹-6. Lectotype ANSP 27542a (Willamette River, Eugene, [Lane County,] Oregon) selected by Baker (1964: 180) as “TSD now.” Taxonomy: *Ambloxyus pliciferus* (Hannibal, 1912: 178); *Juga* (*Juga*) *plicifera* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).

- bullula** **Lea, Melania.** 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 221, pl. 34, fig. 5[†] (*Obs. on Unio* 9: 43) [as *Goniobasis*]. Lectotype USNM 119049 (Yellowleaf Creek, [Shelby County,] Alabama) here selected. Taxonomy: *Goniobasis bullula* (Tryon, 1873: 333); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 27, 1941b: 4, 1944b: 45).
- buschiana** **Reeve, Melania.** 1859, *Conch. Icon.* 12: pl. 10, sp. 50. Type material presumed to be in the BMNH not examined. Published locality: "California." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species, "This shell is evidently of East Indian type."].
- cadus** **Lea, Goniobasis.** 1862b, *PANSP* 14: 272; 1863a, *JANSP* 5: 345, pl. 38, fig. 211[†] (*Obs. on Unio* 9: 167). Holotype^{mo} USNM 119054 (Georgia). Taxonomy: *Goniobasis obtusa* (Tryon, 1873: 168); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia leontiana decorata* (Thompson, 2000: 34).
- caelatura** **Conrad, Melania.** 1849, *PANSP* 4: 154; 1850, *JANSP* 1: 278, pl. 38, fig. 3. Neotype UF 271349 (Savannah River, below Savannah Rapids Dam, ca. 9 mi N of Augusta, Columbia County, Georgia) selected by Thompson (2000: 46, figs. 94-95[†]). Taxonomy: *Goniobasis caelatura* (Tryon, 1873: 143); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1935: 1, 1936: 29, 1941b: 5, 1944b: 45); *Elimia caelatura* (Thompson, 2000: 42).
- cahawbensis** **Lea, Melania.** 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 223, pl. 34, fig. 8[†] (*Obs. on Unio* 9: 45) [as *Goniobasis*]. Lectotype USNM 119055 (Cahaba River, Alabama) here selected. Taxonomy: *Goniobasis cahawbensis* (Tryon, 1873: 268); *Ambloxy virginius* (Hannibal, 1912: 176); *Elimia cahawbensis cahawbensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 2, 1941c: 13).
- calculoides** **Lea, Melania.** 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 238, pl. 34, fig. 38[†] (*Obs. on Unio* 9: 60) [as *Goniobasis*]. Lectotype USNM 119084 (Coosa River, Alabama) here selected. Baker's (1964: 181) previous designation of ANSP 8655a as a primary type ("TSD now") is hereby ignored. Contrary to Baker (1964), it is not the figured specimen, and, since the specimen came from Showalter rather than Lea, there is reason to question its validity as type material. Baker's (1964) designation is also inconsistent with Recommendation 74D (ICZN, 1999) since valid type material was available at the USNM. Taxonomy: *Goniobasis calculoides* (Tryon, 1873: 330); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).
- calenoides** **'Lea' Hannibal Melania.** 1912, *Proc. Mal. Soc. London* 10: 181 [error for *M. calculoides* Lea].
- californica** **Clessin, Melania.** 1882, *Mal. Blät.* 5: 189, pl. 4, fig. 8. No type material examined. Published locality: "California (com. v. Heimbürg)." Taxonomy: *Ambloxy pliciferus* (Hannibal, 1912: 178).
- caliginosa** **Lea, Melania.** 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 189, pl. 6, fig. 56 (*Obs. on Unio* 3: 27). Possible syntypes USNM 118431 (Tennessee). Taxonomy: *Goniobasis caliginosa* (Tryon, 1873: 196); *Ambloxy virginius* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).

- canaliculata Say, *Melania*.** 1821, *JANSP* 2: 175; 1858, Binney's reprint: 69. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 42, sp. 304. Improbable syntype ANSP 124410 ([Ohio River,] Cincinnati, [Hamilton County,] Ohio, "...Falls of the Ohio.") listed by (Baker (1964: 181) as "TOM." Baker's (1964) specimen was received from the Wheatley collection, and although Wheatley was known to possess examples of this species (Wheatley, 1845; Ryder, [no date]), there is no suggestion in print or on the specimen labels that this shell came from Say. Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 7, 1940: 9).
- canalifera Anthony, *Anculosa*.** 1860, *PANSP* 12: 68. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 5, sp. 39a-b and in Tryon, 1873, *Streptomatidae*: 384, fig. 722[†]. Lectotype MCZ 257989 ([Dan River,] North Carolina) here selected; identified by Tryon (1873: 384) as "Mr. Anthony's type." Paralectotypes MCZ 161791 listed as "cotypes" in Turner (1946: 99) and ANSP 27596. One from the latter lot was erroneously identified by Baker (1964: 181) as the shell figured by Tryon (1873). Taxonomy: *Anculosa canalifera* (Tryon, 1873: 384); *Anculosa canalifera* (Goodrich, 1921b: 10); *Leptoxis* (*Mudalia*) *carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1942a: 2).
- canalitium Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 292, pl. 36, fig. 121[†] (*Obs. on Unio* 9: 114). Lectotype USNM 122163 (Yellowleaf Creek, [Shelby County,] Alabama) here selected. Baker's (1964: 181) earlier selection of ANSP 125035a as "TSD now" was not made from valid type material— that shell was obtained from the Wheatley collection. Taxonomy: *Pleurocera canalitium* (Tryon, 1873: 79); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- canbyi Lea 1862, p. 264, *Goniobasis* [new name for *Goniobasis etowahensis* Lea].** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 299, pl. 37, fig. 133[†] (*Obs. on Unio* 9: 121) [as *etowahensis*]; 1864b, *PANSP* 16: 3, footnote. Holotype^m USNM 121479 (Etowah River, Georgia). Taxonomy: *Goniobasis canbyi* (Tryon, 1873: 260); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia gerhardtii* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).
- canbyi Lea 1862, p. 271, *Goniobasis*.** 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 340, pl. 38, fig. 204 (*Obs. on Unio* 9: 162). Also figured in Chambers, 1990, *Walkerana* 4: 244, fig. 2A[†]. Lectotype USNM 118415 (Lake Monroe, Volusia County, Florida) selected by Chambers (1990: 244). Taxonomy: *Goniobasis etowahensis* (Tryon, 1873: 148); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Goniobasis catenaria* (Goodrich, 1928b: 29); *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).
- cancellata Say, *Melania*.** 1829a, *New Harmony Dissem.* 2: 260; 1840, Say's reprint: 16. Type material not found in the ANSP (Baker, 1964: 181). Published locality: "Florida." Taxonomy: *Goniobasis cancellata* (Tryon, 1873: 199); *Ambloxyus virginicus* (Hannibal, 1912: 174); *Melanoides tuberculata* Müller [from Asia] (Clench, 1955: 107).

- cancellata** '(Say)' Goodrich, *Goniobasis catenaria*. 1942a, *OPUMMZ* (456): 3 [*nomen nudum*]. Previous opinion: *Goniobasis floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).
- capillaris** Lea, *Melania*. 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 236, pl. 34, fig. 34[†] (*Obs. on Unio* 9: 58) [as *Goniobasis*]. Lectotype USNM 119037 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis capillaris* (Tryon, 1873: 339); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia capillaris* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1936: 53, 1944b: 45).
- carinata Ravenel, Melania**. 1834, *Cat. Shells*: 11 [*nomen nudum*]. Published locality: "Yadkin River, [North Carolina]." Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287) and "Doubtful and Spurious Species" (Tryon, 1873: 421); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia proxima* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17, 1942a: 6).
- carinata** Lea, *Anculosa*. 1841b, *PAPS* 2: 34; 1844, *TAPS* 9: 15 (*Obs. on Unio* 4: 15). Figured in Tryon, 1873, *Strepomatidae*: 391, fig. 750[†], 751-753. Holotype^{mo} USNM 121289 (Roanoke [River, Lafayette, Montgomery County], Virginia). Taxonomy: *Anculosa carinata* var. *a* (Tryon, 1873: 388); *Leptoxis* (*Mudalia*) *carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9).
- carinata** 'Lea' Adams & Adams, *Nitocris*. 1858, *Genera* 1: 308. No location given. Taxonomy: *Anculosa carinata* var. *c* (Tryon, 1873: 389).
- carinata** Lea, *Strephobasis*. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 355, pl. 39, fig. 228[†] (*Obs. on Unio* 9: 177). Holotype^{mo} USNM 118201 (Tennessee River). Taxonomy: *Strephobasis carinata* (Tryon, 1873: 43); *Pleurocera* (*Pleurocera*) *biteniata* (Hannibal, 1912: 172); *Pleurocera* (*Strephobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- carinatum** Lea, *Trypanostoma*. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 148, pl. 23, fig. 62[†] (*Obs. on Unio* 11: 104). Lectotype USNM 121993 (Bull Run, [Anderson-Knox counties,] Tennessee) here selected. Taxonomy: *Pleurocera carinatum* (Tryon, 1873: 100); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera uncialae uncialae* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- carinatus Bruguiere, Bulimus**. 1792, *Encyc. Meth.* 1: 301. No type material examined. Published locality: "...de l'Amérique septentrionale, & se trouvent dans les eaux douces de la Virginie." Taxonomy: *Anculosa carinata* (Tryon, 1873: 388); *Leptoxis* (*Mudalia*) *carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9, 1932, 1942a: 2).
- carinatus Anthony, Anculotus**. 1840, *BJNH* 3: 394, pl. 3, fig. 5 [right][†], 5 [left]. Lectotype MCZ 257991 (Falls of the Kanawha, [Fayette County, West] Virginia) here selected. Idiotypes MCZ 143103 listed as "cotypes" in Turner (1946: 99). Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis* (*Mudalia*) *dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 19).
- carinatus DeKay, Anculotus**. 1843, *Zool. N.Y.* 5: 101 [*nomen nudum*]. Figured and described in Tryon, 1873, *Strepomatidae*: 390, fig. 746. Published locality: Lake Champlain (Tryon, 1873). Taxonomy: *Anculosa carinata* (Tryon, 1873: 388); *Leptoxis* (*Mudalia*) *carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9).
- carinifera Lamarck, Melania**. 1822, *Anim. sans Vert.* 6: 167. Figured in Reeve, 1861,

- Conch. Icon.* **12**(*Melania*): pl. 39, fig. 273. No type material examined. Published locality: "Habite dans l'Amerique septentrionale, pay des Chérokées, dans un ruisseau qui se jette dans la rivière d'Estan-Alley." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxyus virginicus* (Hannibal, 1912: 174); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1940: 19, 1941b: 2, 1941c: 16, 1944b: 44).
- carinifera** Anthony, *Gyrotoma*. 1860, *PANSP* **12**: 66. Figured in Reeve, 1861, *Conch. Icon.* **12**(*Melatoma*): pl. 2, sp. 13[†]. Lectotype MCZ 45149 (Coosa River, Alabama) here selected; incorrectly identified by Turner (1946: 99) as "holotype." Baker's (1964: 181) identification of ANSP 124483a as a primary type ("TOM") is incorrect; the specimen was not chosen from valid type material. Taxonomy: *Schizostoma cariniferum* (Tryon, 1873: 353); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma cariniferum* (Goodrich, 1924a: 16, 1944b: 47); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- carino-costata** Lea, *Melania*. 1845, *PAPS* **4**: 165; 1848, *TAPS* **10**: 88, pl. 9, fig. 40[†] (*Obs. on Unio* **4**: 62). Lectotype USNM 119059 (Tennessee) here selected. Taxonomy: *Goniobasis carinocostata* (Tryon, 1873: 164); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia carinocostata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4, 1941c: 13, 1944b: 44); *Elimia carinocostata* (Thompson, 2000: 20).
- carolinense** Lea, *Trypanostoma*. 1862c, *PANSP* **14**: 273; 1863a, *JANSP* **5**: 351, pl. 39, fig. 221 (*Obs. on Unio* **9**: 173). Syntypes USNM 121934 (South Carolina). Taxonomy: *Pleurocera luteum* (Tryon, 1873: 131); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- carolinensis** 'Lea' Hannibal *Goniobasis*. 1912, *Proc. Mal. Soc. London* **10**: 177 [presumably referring to *Trypanostoma carolinense* Lea].
- carterii** Conrad, *Goniobasis*. 1869, *Am. J. Conch.* **4**: 280, pl. 18, figs. 6-7. No type material examined. Published localities: "Barrel Springs, Wyoming Territory. Dr. J.A. Carter." and "South Park, Colorado. James Stephenson." Taxonomy: *Ambloxyus tener* (Hannibal, 1912: 178).
- casta** Anthony, *Melania*. 1854, *ALNHNY* **6**: 100, pl. 2, fig. 19[†]. Also figured in Tryon, 1873, *Strepomatidae*. 220, fig. 438[†]. Lectotype MCZ 74189 (Alabama) here selected; incorrectly listed as "holotype" in Turner (1946: 99). Tryon (1873) identified his figure as "the type specimen." Taxonomy: *Goniobasis casta* (Tryon, 1873: 219); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1941b: 5); *nomen dubium* (Thompson, 2000: 38).
- castanea** Lea, *Melania*. 1841a, *PAPS* **2**: 11; 1842b, *TAPS* **8**: 164, pl. 5, fig. 2 (*Obs. on Unio* **3**: 2). Syntype USNM 119217 (Maury County, Tennessee). Baker's (1964: 181) previous designation of ANSP 122444a as a primary type is invalid. Contrary to Baker (1964), the selected specimen is not the one figured by Lea (1842b). Also, the lot was received by the ANSP with the Wheatley collection, and although it contained many examples of this species (Ryder, [no date]), there is no evidence that it originated with Lea. Taxonomy: *Goniobasis castanea* (Tryon, 1873:

- 271); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata castanea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 5, 1940: 15).
- castanea** **Lea, Schizostoma.** 1860b, *PANSP* 12: 186; 1863a, *JANSP* 5: 247, pl. 35, fig. 50[†] (*Obs. on Unio* 9: 69) [as *castaneum*]. Lectotype USNM 119369 (Coosa River, Alabama) here selected. Taxonomy: *Gyrotoma olivula excisa* (Hannibal, 1912: 182); *Gyrotoma laciniatum* (Goodrich, 1924a: 21); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- castaneum** **Lea, Trypanostoma.** 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 338, pl. 54, fig. 20[†] (*Obs. on Unio* 12: 98). Lectotype USNM 121558 (Coosa River, Alabama) here selected. Taxonomy: *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- catabæa** **Haldeman, Goniobasis.** 1865, *Am. J. Conch.* 1: 37, pl. 1, figs. 5-6, 7[†]. Lectotype ANSP 8758 (Catawba River near Morganton, [Burke County,] North Carolina) selected by Baker (1964: 181) as "TSD now." Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia symmetrica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- catawboea** **'Haldeman' Goodrich, Goniobasis.** 1942a, *OPUMMZ* (456): 6 [error for *catabæa* Haldeman].
- catenaria** **Say, Melania.** 1822, *JANSP* 2: 379; 1858, Binney's reprint: 111. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 45, sp. 236 and in Tryon, 1873, *Strepomatidae*: 146, fig. 271[†]. Lectotype MCZ 50232 (Eutaw Springs, St. John's, Berkeley County, South Carolina *vide* Clench & Turner, 1956) here selected; listed by Tryon (1873: 147) as "the original type." Taxonomy: *Goniobasis catenaria* (Tryon, 1873: 146); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia catenaria catenaria* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 2).
- catenaria** **Lea, Melania.** Renamed *M. catenoides* Lea.
- catenaria** **'Lea' Adams & Adams, Elimia.** 1858, *Genera* 1: 300 [error for *M. catenaria* Say].
- catenoides** **Lea, Melania [new name for *M. catenaria* Lea].** 1840, *PAPS* 1: 289 [as *catenaria*]; 1842b, *TAPS* 8: 228, pl. 6, fig. 60 (*Obs. on Unio* 3: 66). Also figured in Chambers, 1990, *Walkerana* 4: fig. 6A[†]. Lectotype USNM 118429 (Chattahoochee River, Columbus, [Muscogee County,] Georgia) here selected. Taxonomy: *Goniobasis catenoides* (Tryon, 1873: 148); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia boykiniana boykiniana* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1924b: 30, 1942a: 4).
- cerea** **Lea, Goniobasis.** 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 321, pl. 38, fig. 171[†] (*Obs. on Unio* 9: 143). Lectotype USNM 119063 (Duck Creek, [Hancock County,] Tennessee) here selected. Taxonomy: *Goniobasis sparus* (Tryon, 1873: 197); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 14).
- chacei** **Henderson, Goniobasis.** 1935a, *Nautilus* 48: 132, pl. 4, fig. 8 [left][†], 8 [right][†]-9. Holotype^{od} UCM 18058-a [not examined] (small stream flowing into the Smith River at Adams Station, NE of Crescent, Del Norte County, California).
- chakashaense** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 280, pl. 36, fig. 99[†] (*Obs. on Unio* 9: 102). Lectotype USNM 122181 (Chakasha River [Chickasaw Creek?], Alabama) here selected. Taxonomy: *Pleurocera chakashaense*

- (Tryon, 1873: 121); *Ambloxy virginius* (Hannibal, 1912: 177); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- chalybæa** 'Anthony, MS' Brot, *Melania*. 1862, *Cat. Syst.*: 37 [*nomen nudum*]. Turner (1946: 100) reported MCZ 156350 as "cotypes," but they have no type status. Published locality: "Tennessee." Taxonomy: *Goniobasis abbreviata* (Tryon, 1873: 159); *Ambloxy virginius* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 6).
- charybæa** "Anth. MS," Brot' Hannibal, *Melania*. 1912, *Proc. Mal. Soc. London* 10: 176 [error for *M. chalybæa* 'Anthony, MS' Brot].
- chiltonensis** Goodrich, *Goniobasis*. 1941a, *OPUMMZ* (426): 3, fig. 2[†]. Holotype^{od} UMMZ 137905 (Warsan Creek, near junction with Waxahatchee Creek, Chilton County, Alabama). Taxonomy: *Elimia chiltonensis* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1941a: 3)
- chocoloccoensis** 'Smith' Goodrich, *Anculosa*. 1922, *MPUMMZ* (7): 34, pl. 1, fig. 7[†]; pl. 3, fig. 14. Holotype^{od} UMMZ 10145 (Chocolocco Creek at Jackson Shoals, Talladega County, Alabama). Taxonomy: *Anculosa chocoloccoensis* (Goodrich, 1922: 34, 1941b: 9); *Leptoxis (Leptoxis) taeniata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1944b: 42).
- christyi** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 272, pl. 36, fig. 83 (*Obs. on Unio* 9: 94). No type material examined. Published locality: "Cane Creek, Tennessee, Prof. D. Christy." Taxonomy: *Pleurocera christyi* (Tryon, 1873: 110); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); unknown with exception of the types (Goodrich, 1940: 11).
- christyi** Lea, *Goniobasis*. 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 328, pl. 38, fig. 185[†] (*Obs. on Unio* 9: 150). Lectotype USNM 118451 (Valley River, Cherokee County, North Carolina) here selected. Baker's (1964: 181) previous designation of ANSP 122447 as a primary type ("TSD now") is invalid. Contrary to Baker (1964), it is not the figured specimen, it is not from the published locality, and even if, as Baker (1964) claims, the shell came from the Wheatley collection, there is no record of Wheatley ever possessing an example (Ryder, [no date]). Taxonomy: *Goniobasis interrupta* (Tryon, 1873: 171); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia interrupta* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1940: 19).
- cincinnatiensis** Lea, *Melania*. 1838b, *PAPS* 1: 66; 1842b, *TAPS* 8: 190, pl. 6, fig. 58[†] (*Obs. on Unio* 3: 28). Lectotype USNM 121305 (Cincinnati, [Hamilton County,] Ohio) here selected. Taxonomy: *Anculosa prærosa* (Tryon, 1873: 405); *Leptoxis (Leptoxis) prærosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 14, 1940: 20).
- cinctum** Lea, *Trypanostoma*. 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 147, pl. 23, fig. 60[†] (*Obs. on Unio* 11: 103). Holotype^{mo} USNM 121995 (north Alabama). Taxonomy: *Pleurocera aratum* (Tryon, 1873: 99); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- cinerea** Lea, *Goniobasis*. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 306, pl. 37, fig. 145[†] (*Obs. on Unio* 9: 128). Holotype^{mo} USNM 119064 (South Carolina). Taxonomy: *Goniobasis cinerea* (Tryon, 1873: 258); *Ambloxy virginius* (Hannibal, 1912: 177);

- Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).
- cinerella** **Lea, Goniobasis.** 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 328, pl. 38, fig. 184[†] (*Obs. on Unio* 9: 150). Holotype^{mo} USNM 119031 (Tennessee). Taxonomy: *Goniobasis cinerella* (Tryon, 1873: 195); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7) and *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 16).
- cingenda** **Anthony, Goniobasis.** 1866, *Am. Jour. Conch.* 2: 146, pl. 7, fig. 3[†]. Lectotype MCZ 161807 (North Carolina) here selected; incorrectly identified by Turner (1946: 100) as "holotype." Taxonomy: *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- cingenda** '**Anthony, MS**' **Tryon Anculosa.** 1873, *Streptomatidae*: 421 [*nomen nudum*]. No locality given. Taxonomy: "Doubtful and Spurious Species... young of *carinata* Lea, a variety of *dissimilis*." (Tryon, 1873: 421).
- cinnamomea** '**Anthony, MS**' **Reeve, Melania.** 1861, *Conch. Icon.* 12: pl. 50, fig. 379. Lectotype MCZ 161816 (Alabama) here selected, incorrectly listed by Turner (1946: 100) as "holotype." Taxonomy: *Goniobasis angulata* (Tryon, 1873: 221); *Ambloxyx virginicus* (Hannibal, 1912: 176).
- circincta** **Lea, Melania.** 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 187, pl. 6, fig. 51[†] (*Obs. on Unio* 3: 25). Lectotype USNM 122072 (Tennessee) here selected. Taxonomy: *Goniobasis circincta* (Tryon, 1873: 200); *Ambloxyx virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 6) and *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 16).
- circinata** '**(Lea), H. & A. Adams**' **Goodrich, Juga.** 1930a, *OPUMMZ* (209): 6 [error for *M. circincta* Lea].
- circumlineata** **Tryon, Goniobasis.** 1865, *Am. J. Conch.* 1: 244, pl. 24, fig. 14[†]. Lectotype ANSP 27573 (Mission River, San Antonio, [Alameda County?], California) here selected; incorrectly listed by Baker (1964: 181) "TOM." Taxonomy: *Ambloxyx pliciferus* (Hannibal, 1912: 178).
- clara** **Anthony, Melania.** 1854, *ALNHNY* 6: 119, pl. 3, fig. 19[†]. Lectotype MCZ 72329 (Alabama) here selected; incorrectly identified by Turner (1946: 100) as "holotype." Taxonomy: *Goniobasis clara* (Tryon, 1873: 328); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 18).
- clarkii** **Lea, Melania.** 1852, *TAPS* 10: 297, pl. 30, fig. 4[†] (*Obs. on Unio* 5: 53). Lectotype USNM 119015 (Duck Creek, [Hancock County,] Tennessee) here selected. Taxonomy: *Goniobasis clarkii* (Tryon, 1873: 210); *Ambloxyx virginicus* (Hannibal, 1912: 176); *Elimia laqueata tortum* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 15).
- clarkii** **Lea, Strophobasis.** 1861b, *PANSP* 13: 96; 1863a, *JANSP* 5: 265, pl. 35, fig. 76 (*Obs. on Unio* 9: 87). Syntypes USNM 118200 [not examined] (Tennessee River, at Chattanooga, [Hamilton County,] Tennessee). Taxonomy: *Strophobasis bitæniata* (Tryon, 1873: 47); *Pleurocera (Pleurocera) bitæniata* (Hannibal, 1912: 172); *Pleurocera*

- (*Strophobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1940: 8).
- clarkii** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 285, pl. 36, fig. 108[†] (*Obs. on Unio* 9: 107). Lectotype USNM 122206 (Cahaba River, Alabama) here selected. Taxonomy: *Pleurocera clarkii* (Tryon, 1873: 79); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9) and *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- clathrata** **Lea, Goniobasis.** 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 331, pl. 54, fig. 8 (*Obs. on Unio* 12: 91). Syntypes USNM 119035 (Jackson County, Alabama). Taxonomy: *Elimia acuta acuta* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1930a: 10, 1940: 16).
- clausa** **Lea, Melania.** 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 231, pl. 34, fig. 25[†] (*Obs. on Unio* 9: 53) [as *Goniobasis*]. Lectotype USNM 119787 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis clausa* (Tryon, 1873: 310); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia clausa* (Burch & Tottenham, 1980: 136; Burch, 1982: 38; Goodrich, 1936: 22, 1944b: 45).
- clavæformis** **Lea, Melania.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 168, pl. 5, fig. 10[†] (*Obs. on Unio* 3: 6). Lectotype USNM 119224 (Tennessee) here selected. Taxonomy: *Goniobasis clavæformis* (Tryon, 1873: 272); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia clavæformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- clavula** **Lea, Goniobasis.** 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 335, pl. 54, fig. 15[†] (*Obs. on Unio* 12: 95). Lectotype USNM 121480 (Jackson County, Alabama) here selected. Taxonomy: *Elimia acuta clavula* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1930a: 11, 1940: 16).
- clenchi** **Goodrich, Goniobasis.** 1924b, *Nautilus* 38: 46, figs. 1-4[†]. Lectotype UMMZ 31618 (Choctawhatchee River, Newton, Dale County, Alabama) here selected, listed by Chambers (1990: 244) as "holotype." Taxonomy: *Elimia clenchi* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1924b: 46, 1942a: 4).
- clinchensis** **Adams, Io.** 1915, *Mem. Nat. Acad. Sci.* 12: 11, pl. 34, fig. 13[†]. Holotype^{od} USNM 424977 (Clinch River, Cleveland, [Russell County,] Virginia). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- clipeata** **'Smith' Goodrich, Anculosa.** 1922, *MPUMMZ* (7): 19, pl. 1, figs. 8-9[†], 10; pl. 3, fig. 8. Holotype^{od} UMMZ 10146 [not examined] (Coosa River, Fort William Shoals, Talladega County, Alabama). Taxonomy: *Leptoxis* (*Leptoxis*) *clipeata* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 19, 1944b: 41).
- clipeata** **'Smith' Goodrich, Anculosa.** 1944b, *Nautilus* 58: 41 [error for *clipeata* Smith].
- cochiliaris** **'Lea' Goodrich, Goniobasis.** 1941b, *OPUMMZ* (427): 3 [error for *cochliaris* Lea].
- cochliaris** **Lea, Goniobasis.** 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 336, pl. 54, fig. 16[†] (*Obs. on Unio* 12: 96). Lectotype USNM 119038 (Shelby County, Alabama) here selected. Taxonomy: *Elimia cochiliaris* (Burch & Tottenham, 1980: 132; Burch,

1982: 33; Goodrich, 1941b: 3, 1941c: 18).

- cognata Anthony, *Melania*.** 1860, *PANSP* 12: 60. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 58, sp. 458 and in Tryon, 1873, *Streptomatidae*: 246, fig. 479^f. Lectotype ANSP 8771a (Tennessee) here selected, reported by Tryon (1873: 246) as "Mr. Anthony's type specimen" and listed in Baker (1964: 181) as "TSD." Turner (1946: 100) identified MCZ 161836 as "cotypes," but there is no evidence supporting their type status. Taxonomy: *Goniobasis cognata* (Tryon, 1873: 245); *Ambloxus virginicus* (Hannibal, 1912: 176); *Lithasia* sp. (Goodrich, 1940: 7).
- columbiensis Whiteaves, *Goniobasis*.** 1905, *Nautilus* 19: 61, pl. 2, fig. 11-12. Specimens reported to be in the Museum of Geological Survey of Canada, Ottawa not examined. Published locality: "Headwaters of the Columbia River at Upper Columbia Lake, in the East Kootenay District of British Columbia, J.B. Tyrrell, 1883..." Taxonomy: *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1937: 84, 1939b: 4, 1945: 32).
- columella Lea, *Melania*.** 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 179, pl. 6, fig. 33 (*Obs. on Unio* 3: 17). Possible syntypes USNM 119040 (Tennessee). Taxonomy: *Goniobasis columella* (Tryon, 1873: 181); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).
- comalensis Pilsbry, *Goniobasis*.** 1890a, *Nautilus* 4: 49. Lectotype ANSP 8646a (Comal Creek, New Braunfels, [Comal County,] Texas) selected by Baker (1964: 181) as "TSD now." Taxonomy: *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia comalensis comalensis* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).
- comma Conrad, *Melania*.** 1834a, *New Fresh-Water Shells*: 53, pl. 8, fig. 7. Also figured in Tryon, 1873, *Streptomatidae*: 205, fig. 403. Tryon (1873: 205) identified the shell that he figured as, "the type specimen in the collection of Acad. Nat. Sci., Philadelphia." That specimen has not been located. Baker (1964: 181) erroneously reported ANSP 26963 as being Conrad's (1834a) figured type ("TOM"). Although the original label bears a note from J.G. Anthony, it does not indicate this shell as having any type status. Published locality: "Inhabits rivulets which are tributary to the Black Warrior in mountain districts, in Alabama." Taxonomy: *Goniobasis comma* (Tryon, 1873: 205); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia comma* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 4).
- compacta Anthony, *Melania*.** 1854, *ALNHNY* 6: 122, pl. 3, fig. 22^f. Lectotype MCZ 72063 (Alabama) here selected; incorrectly identified by Turner (1946: 100) as "holotype." Taxonomy: *Lithasia compacta* (Tryon, 1873: 36); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Leptoxis (Leptoxis) compacta* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 49, 1927: 48, 1941b: 10, 1941c: 24).
- concinna Lea, *Melania*.** 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 183, pl. 6, fig. 42^f (*Obs. on Unio* 3: 21). Holotype^m USNM 121646 (Tennessee). Taxonomy: *Goniobasis concinna* (Tryon, 1873: 207); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).

- concolor* 'Anthony, MS' Brot, *Anculosa*. 1862, *Cat. Syst.*: 24 [*nomen nudum*]. Published locality: "Alabama."
- congesta* Conrad, *Melania*. 1834b, *Am. Jour. Sci.* **25**: 343 [*nomen nudum*]; 1963, *Sterkiana* (9): 52. No locality given. Taxonomy: *Goniobasis congesta* (Tryon, 1873: 239); *Ambloxus virginicus* (Hannibal, 1912: 175).
- conica* Say, *Melania* [unnecessarily renamed *M. substricta* Haldeman]. 1821, *JANSP* **2**: 176; 1858, Binney's reprint: 70. In Haldeman, 1840b, Suppl. to *Monog. Limniades* **1**: no pagination [as *substricta*]. Figured in Reeve, 1860, *Conch. Icon.* **12** (*Melania*): pl. 37, sp. 252. Improbable syntype ANSP 27039 (["Inhabits Ohio River."] Kentucky), listed by Baker (1964: 181) as "TOM." The lot reported by Baker (1964) was received from the Swift collection, and the label bears no mention of Say. Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).
- conica* 'Shuttleworth (ubi?)' Brot, *Gyrotoma*. 1862, *Cat. Syst.*: 27 [*nomen nudum*]. No locality given. Taxonomy: *Schizostoma* "Species unknown to me." (Tryon, 1873: 380); *Gyrotoma pyramidatum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 9).
- connesaugaensis* Lea, *Goniobasis*. 1868a, *PANSP* **20**: 152; 1868b, *JANSP* **6**: 333, pl. 54, fig. 11[†] (*Obs. on Unio* **12**: 93). Lectotype USNM 119045 (Conasauga [River, Whitfield County], Georgia) here selected. Taxonomy: *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia leontiana decorata* (Thompson, 2000: 38).
- conradi* Brot, *Melania* [new name for *M. symmetrica* Conrad]. 1862, *Cat. Syst.*: 36. In Conrad, 1849, *PANSP* **4**: 155 [as *symmetrica*]; 1850, *JANSP* **1**: 278, pl. 38, fig. 5 [as *symmetrica*]. Type material presumed to be in the ANSP not found (Baker, 1964: 188). Published locality: "Inhabits Savannah River." Taxonomy: *Goniobasis conradi* (Tryon, 1873: 156); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 12, 1941c: 17).
- conradi* Tryon, *Pleurocera*. 1865a, *Am. J. Conch.* **1**: 38, pl. 1, fig. 9[†]. Lectotype ANSP 26966a (Bibb County, Alabama) here selected; incorrectly identified by Baker (1964: 181) as "TOM." Taxonomy: *Pleurocera conradii* (Tryon, 1873: 106); *Ambloxus virginicus* (Hannibal, 1912: 177).
- consanguinea* Anthony, *Melania*. 1854, *ALNHNY* **6**: 125, pl. 3, fig. 26. Lectotype MCZ 58411 (Indiana) here selected; incorrectly identified by Turner (1946: 100) as "holotype." Taxonomy: *Lithasia obovata* (Tryon, 1873: 33); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 7, 1934a: 3, 1940: 7).
- contigua* Lea, *Goniobasis*. 1868a, *PANSP* **20**: 152; 1868b, *JANSP* **6**: 334, pl. 54, fig. 12[†] (*Obs. on Unio* **12**: 94). Holotype^{mo} USNM 119046 (Conasauga River, Whitfield County, Georgia).
- constrictum* Lea, *Schizostoma*. 1845, *PAPS* **4**: 167; 1848, *TAPS* **10**: 94, pl. 9, fig. 55[†] (*Obs. on Unio* **4**: 68). Holotype^{mo} USNM 119396 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama). Taxonomy: *Schizostoma constrictum* (Tryon, 1873: 373); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma incisum*

(Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

constrictum 'Lea' Hinkley, *Schizostoma*. 1904, *Nautilus* 18: 40. Published locality: "...[Coosa River,] Fort William Shoals [Talladega County, Alabama]." Taxonomy: *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

continens Lea, *Goniobasis*. 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 321, pl. 38, fig. 170[†] (*Obs. on Unio* 9: 143). Lectotype USNM 119014 (north Alabama) here selected. Taxonomy: *Goniobasis continens* (Tryon, 1873: 188); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia interveniens* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 14, 1940: 15).

contorta Lea, *Anculosa*. 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 258, pl. 35, fig. 66[†] (*Obs. on Unio* 9: 80). Holotype^{mo} USNM 121291 (Coosa River, Wetumpka, [Elmore County,] Alabama). Taxonomy: *Anculosa contorta* (Tryon, 1873: 410).

coosaensis Lea, *Anculosa*. 1861a, *PANSP* 13: 54; 1863a, *JANSP* 5: 257, pl. 35, fig. 65[†] (*Obs. on Unio* 9: 79). Lectotype USNM 121295 (Coosa River, Alabama) here selected. Taxonomy: *Anculosa taeniata* (Tryon, 1873: 408); *Leptoxis (Leptoxis) taeniata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1944b: 42).

coosaensis Lea, *Melania*. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 234, pl. 34, fig. 30 (*Obs. on Unio* 9: 56) [as *Goniobasis*]. No type material examined. Published locality: "Coosa River, Alabama. E.R. Showalter." Taxonomy: *Goniobasis coosaensis* (Tryon, 1873: 312); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20).

copiosa Lea, *Melania*. 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 239, pl. 34, fig. 39[†] (*Obs. on Unio* 9: 61) [as *Goniobasis*]. Holotype^{mo} USNM 119017 (Coosa River, Alabama). Taxonomy: *Goniobasis ovalis* (Tryon, 1873: 325); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).

coquillensis Henderson, *Goniobasis*. 1935a, *Nautilus* 48: 131, pl. 4, fig. 6 [left][†], 6 [right]. Holotype^{od} UCM 21168a [not examined] (creek E of Riverton, on Coquille River, [Coos County,] Oregon).

coracina 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 361. Figured in Tryon, 1873, *Streptomatidae*. 180, fig. 350. Syntype MCZ 161847 (Caney Fork [Cumberland River], Tennessee), listed as "holotype" in Turner (1946: 100). Tryon (1873: 180) identified his figured specimen as the "original type." Taxonomy: *Goniobasis coracina* (Tryon, 1873: 180); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).

coracincta 'Anthony' Goodrich, *Goniobasis*. 1940, *OPUMMZ* (417): 16 [error for *M. coracina* Anthony].

cornea Lea, *Strebobasis*. 1861b, *PANSP* 13: 96; 1863a, *JANSP* 5: 265, pl. 35, fig. 75[†] (*Obs. on Unio* 9: 87). Lectotype USNM 118206 ([Tennessee River, 4 mi above] Chattanooga, [Hamilton County,] Tennessee) here selected. Taxonomy: *Strebobasis cornea* (Tryon, 1873: 45); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Pleurocera (Strebobasis) curtum curtum* (Burch & Tottenham, 1980:

- 166; Burch, 1982: 47; Goodrich, 1928a: 6).
- corneola Anthony, *Melania*.** 1860, *PANSP* 12: 61. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 58, fig. 456^f and in Tryon, 1873, *Strepomatidae*. 192, fig. 378^f. Lectotype MCZ 161822 (Alabama) selected by Baker (1964: 181) as "TSD now." The same specimen was reported by Tryon (1873: 192) as "Mr. Anthony's type," and listed by Turner (1946: 100) as "holotype." Taxonomy: *Goniobasis corneola* (Tryon, 1873: 192); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) geniculata geniculata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 5) and *Elimia pupoidea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 21, 1941c: 16).
- corneum Lea, *Trypanostoma*.** 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 148, pl. 23, fig. 63⁺ (*Obs. on Unio* 11: 104). Lectotype USNM 121517 (Tennessee) here selected. Taxonomy: *Pleurocera altipetum* (Tryon, 1873: 122); *Ambloxyus virginicus* (Hannibal, 1912: 177).
- coronilla Anthony, *Melania*.** 1854, *ALNHNY* 6: 126, pl. 3, fig. 27^f. Lectotype MCZ 50244 (Kentucky) here selected. Paralectotypes MCZ 50243 listed as "cotypes" in Turner (1946: 100). Taxonomy: *Goniobasis abbreviata* (Tryon, 1873: 159); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 6, 1940: 6).
- corpulenta Anthony, *Melania*.** 1854, *ALNHNY* 6: 127, pl. 3, fig. 28^f. Lectotype MCZ 161744 (Alabama) here selected; incorrectly identified by Turner (1946: 100) as "holotype." Taxonomy: *Strepobasis corpulenta* (Tryon, 1873: 47); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Pleurocera (Strepobasis) corpulentum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 13, 1940: 8).
- corpulenta Anthony, *Anculosa*.** 1860, *PANSP* 12: 68. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 1, sp. 9 [Reeve incorrectly refers to *Melania corpulenta* Anthony] and in Tryon, 1873, *Strepomatidae*. 399, fig. 793⁺ [*vide* Baker (1964)]. Lectotype ANSP 27647a [not examined] (North Carolina) here selected, reported by Tryon (1873: 399) as "the type specimen" and listed by Baker (1964: 181) as "24647a [*sic*] ... TSD". Paralectotypes MCZ 161800 listed in Turner (1946: 100) as "cotypes." Taxonomy: *Anculosa corpulenta* (Tryon, 1873: 399); *Nitocris carinatus corpulentus* (Goodrich, 1921b: 10, 1942a: 2); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 158; Burch, 1982: 139).
- correcta Brot, *Melania* [new name for *M. cuspidata* Gould].** 1862, *Cat. Syst.*: 39. In Gould, 1851, *PBSNH* 3: 362 [as *cuspidata*]. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 40, sp. 283 [as *cuspidata*]. It is unclear why Brot (1862) renamed *Melania cuspidata* as *M. correcta*. Perhaps his new name refers only to the Reeve reference to Anthony, in which case *M. cuspidata* Gould, 1851 is a valid nomen, and *M. cuspidata* Reeve, 1860 is renamed *M. correcta* Brot, 1862. Syntypes MCZ 79430 (Maumee River, Ohio) listed as "paratypes" in Turner (1946: 101). Taxonomy: *Goniobasis livescens* (Tryon, 1873: 248); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 31-32).
- corrugata Lea, *Melania*.** Renamed *Melania rugosa* Lea.
- costata Ravenel, *Melania*.** 1834, *Cat. Shells*: 11 [*nomen nudum*]. Published locality: "Dan River, [Virginia]". Taxonomy: *Goniobasis* (Tryon, 1873: 340, 421) [Doubt-

ful and Spurious Species; "*Anculosa dissimilis?*").

costatus Anthony, *Anculotus*. 1840a, *BJNH* 3: 278, pl. 3, fig. 1. Syntypes MCZ 143101 ([Ohio River] Cincinnati, [Hamilton County,] Ohio) listed as "cotypes" in Turner (1946: 100). Taxonomy: *Anculosa costata* (Tryon, 1873: 385); *Anculosa costata* (Goodrich, 1921b: 10); *Leptoxis (Mudalia) trilineata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1929: 16, 1940: 20).

costifera Haldeman, *Melania*. 1841a, *Monog. Limniades* 2: wrapper. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 56, sp. 440. Syntype ANSP 27434 (Hennepin, [Putnam County,] Illinois); incorrectly identified by Baker (1964: 181) as "TOM?" Taxonomy: *Goniobasis costifera* (Tryon, 1873: 185); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia costifera* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 15).

costulata Lea, *Melania*. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 181, pl. 6, fig. 39[†] (*Obs. on Unio* 3: 19). Lectotype USNM 119021 (Barren River, Kentucky) here selected. Taxonomy: *Goniobasis costulata* (Tryon, 1873: 195); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata costulata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).

couperii Lea, *Goniobasis*. 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 341, pl. 38, fig. 205[†] (*Obs. on Unio* 9: 163). Also figured in Chambers, 1990, *Walkerana* 4: 244, fig. 2B[†]. Lectotype USNM 118416 (Etowah River, although Chambers (1990) considers this doubtful) selected by Chambers (1990: 244). Taxonomy: *Goniobasis couperii* (Tryon, 1873: 153); *Ambloxus virginicus* (Hannibal, 1912: 177); *Goniobasis catenaria* (Goodrich, 1928b: 29); *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).

crandalli Pilsbry, *Goniobasis*. 1890b, *PANSP* 42: 301, pl. 5, figs. 4, 5[†]. Lectotype ANSP 61316a ([Spring River,] Mammoth Spring, [Fulton County,] Arkansas) here selected; incorrectly identified by Baker (1964: 181) as "TOM." Taxonomy: *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia potosiensis crandalli* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1939c: 3).

crassa Haldeman, *Anculosa*. 1842, *Monog. Limniades* 4: wrapper; 1847-1848, *Leptoxis* 2, pl. 1, figs. 19-23 [as *Leptoxis*]. Lectotype ANSP 27581a (Tennessee) selected by Baker (1964: 181) as "TSD now." Taxonomy: *Eurycaelon crassa* (Tryon, 1873: 348); *Leptoxis (Athearnia) crassa crassa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 7, 1940: 21).

crassa 'Haldeman' Hinkley, Eurycaelon. 1906, *Nautilus* 20: 42. Published locality: "Tennessee river, Florence, [Lauderdale County, Alabama]." Previous opinion: *Leptoxis (Athearnia) crassa anthonyi* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 4).

crebri-costata Lea, *Melania*. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 179, pl. 6, fig. 35 (*Obs. on Unio* 3: 17). Syntypes USNM 119026 (Robinson [*sic*] County, Tennessee). Taxonomy: *Goniobasis crebricostata* (Tryon, 1873: 204); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 16).

crebri-striata Lea, *Melania*. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 91, pl. 9, fig. 47[†] (*Obs. on Unio* 4: 65). Lectotype USNM 119120 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Goniobasis impressa*

- (Tryon, 1873: 337); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia impressa* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1936: 52).
- crenata Haldeman, Leptoxis.** See *Paludina altilis* 'Ravenel' Lea.
- crenatella Lea, Melania.** 1860a, *PANSP* 12: 93; 1863a, *JANSP* 5: 268, pl. 35, fig. 79 (*Obs. on Unio* 9: 90) [as *Goniobasis*]. Figured earlier in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 58, sp. 457. Syntypes USNM 118982 (Coosa River, Uniontown, Alabama [but Uniontown, Perry County, Alabama is not near the Coosa River]). Taxonomy: *Goniobasis crenatella* (Tryon, 1873: 298); *Ambloxy virginius* (Hannibal, 1912: 176); *Elimia crenatella* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1936: 50, 1941b: 2, 1944b: 45).
- crepera Lea, Melania.** 1861c, *PANSP* 13: 123; 1863a, *JANSP* 5: 240, pl. 34, fig. 42 (*Obs. on Unio* 9: 62) [as *Goniobasis*]. Syntypes USNM 119858 (Yellowleaf Creek, [Shelby County,] Alabama). Taxonomy: *Goniobasis crepera* (Tryon, 1873: 311); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24) and *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).
- crispa Lea, Goniobasis.** 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 326, pl. 38, fig. 180^f (*Obs. on Unio* 9: 148). Holotype^{mo} USNM 118463 ([Tennessee River,] Florence, [Lauderdale County,] Alabama). Taxonomy: *Goniobasis crispa* (Tryon, 1873: 173); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia perstriata crispa* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1930a: 17, 1940: 16).
- cristata Anthony, Melania.** 1854, *ALNHNY* 6: 108, pl. 3, fig. 8^t. Also figured in Tryon, 1873, *Strepomatidae*: 217, fig. 434^t. Lectotype MCZ 47794 (Alabama) here selected. The same specimen was identified by Tryon (1873: 217) as "the type specimen" and listed as "holotype" in Turner (1946: 100). Taxonomy: *Goniobasis cristata* (Tryon, 1873: 217); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Leptoxis (Athearnia) crassa anthonyi* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 4, 1940: 21).
- cruda Lea, Goniobasis.** 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 332, pl. 38, fig. 190^t (*Obs. on Unio* 9: 154). Lectotype USNM 118933 (Tennessee River) here selected. Taxonomy: *Goniobasis cruda* (Tryon, 1873: 218); *Ambloxy virginius* (Hannibal, 1912: 176); *Elimia paupercula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 19, 1940: 15).
- cruentata Menke, Melania.** 1828, *Syn. Meth.*, 1st edition: 80; 1830, 2nd edition: 134. Figured in Haldeman, 1847-1848, *Leptoxis*: 2, pl. 1, figs. 1-18 [as *Leptoxis praerosa*]. No type material examined. Published locality: "Hab. prope Cincinnati [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 14, 1940: 20).
- cubicoides Anthony, Melania.** 1860, *PANSP* 12: 60. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 56, sp. 445 and in Tryon, 1873, *Strepomatidae*: 223, fig. 444^t. Lectotype MCZ 161696 ([Wabash River,] Indiana) selected by Baker (1964: 181) as "TSD now." The same specimen was identified by Tryon (1873: 223) as "Mr. Anthony's type" and incorrectly listed as "holotype" in Turner (1946: 100). Taxonomy: *Goniobasis cubicoides* (Tryon, 1873: 223); *Ambloxy virginius* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982:

37; Goodrich, 1924b: 44, 1939b: 4, 1945: 31).

culta **Lea, Melania**. 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 237, pl. 34, fig. 36[†] (*Obs. on Unio* 9: 59) [as *Goniobasis*]. Holotype^{mo} USNM 118999 (Coosa River, Alabama). Taxonomy: *Goniobasis culta* (Tryon, 1873: 321); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).

cumberlandiensi **Lea, Goniobasis**. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 132, pl. 23, fig. 35[†] (*Obs. on Unio* 11: 88) [as *cumberlandensis*]. Lectotype USNM 119118 (Bull Run, [Anderson-Knox counties,] eastern Tennessee) here selected. Taxonomy: *Goniobasis adusta* (Tryon, 1873: 272); *Ambloxy virginicus* (Hannibal, 1912: 177); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

curatum **'Lea' Goodrich, Trypanostoma**. 1940, *OPUMMZ* (417): 12 [error for *T. curtatum* Lea].

curreyana **Lea, Melania**. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 180, pl. 6, fig. 36 (*Obs. on Unio* 3: 18). No type material examined. Published locality: "Barren River, [Kentucky]. Dr. Currey." Taxonomy: *Goniobasis curreyana* (Tryon, 1873: 185); *Ambloxy virginicus* (Hannibal, 1912: 175); *Elimia curreyana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 15).

currieranum **Lea, Trypanostoma**. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 147, pl. 23, fig. 61[†] (*Obs. on Unio* 11: 103) [as *currierianum*]. Lectotype USNM 121979 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera currierianum* (Tryon, 1873: 93); *Ambloxy virginicus* (Hannibal, 1912: 177); *Pleurocera currierianum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).

curryana **'Lea' Hannibal Melania**. 1912, *Proc. Mal. Soc. London* 10: 175 [error for *M. curreyana* Lea].

curta **Menke, Melania**. 1828, *Syn. Meth.*, 1st edition: 81; 1830, 2nd edition: 135. No type material examined. Published locality: "Ad Philadelphiam [Pennsylvania]." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxy virginicus* (Hannibal, 1912: 174); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).

curta **Haldeman, Melania**. 1841b, *Monog. Limniades* 3: wrapper. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 46, sp. 345. Tryon (1873: 40) reports type material in the collection of J.G. Anthony, but these specimens were not located in the MCZ. Baker (1964: 181) reported finding no type material in the ANSP. Published locality: "Ohio river." Taxonomy: *Strephobasis curta* (Tryon, 1873: 40); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Pleurocera (Strephobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1930b: 141, 1940: 7).

curtum **'Mighels' Gould, Schizostoma**. 1844, *PBSNH* 1: 189. No type material examined. Published locality: "[Black] Warrior River, Alabama." Johnson (1949: 224) notes that this locality must be an error as the genus *Gyrotoma* is limited to the Coosa System. Taxonomy: *Schizostoma curtum* (Tryon, 1873: 363); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma incisum* (Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

- curta** **Lea, Lithasia**. 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 340, pl. 54, fig. 24 (*Obs. on Unio* 12: 100). Lectotype ANSP 120785a (north Alabama) selected by Baker (1964: 182) as "TSD now." Taxonomy: *Lithasia* (*Angitrema*) *curta* (Burch & Tottenham, 1980: 160; Burch, 1982: 55; Goodrich, 1940: 5).
- curtatum** **Lea, Trypanostoma**. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 143, pl. 23, fig. 53 (*Obs. on Unio* 11: 99). No type material examined. Published locality: "Powell's River, near Cumberland Gap, [Claiborne County,] East [Tennessee], Maj. S.S. Lyon, U.S.E." Taxonomy: *Pleurocera gradatum* (Tryon, 1873: 96); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); among the "transition forms between *unciale* and *canaliculatum* groups" listed by Goodrich (1940: 12).
- curvata** **Lea, Melania**. 1843b, *PAPS* 2: 243; 1844, *TAPS* 9: 28 (*Obs. on Unio* 4: 28). Syntypes USNM 122185 (Tennessee). Taxonomy: *Pleurocera curvatum* (Tryon, 1873: 132); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- curvata 'Say' Adams & Adams, Gyrotoma**. 1858, *Genera* 1: 305 [error for *M. curvata* Lea].
- curvicostata 'Anthony, MS' Reeve, Melania**. 1861, *Conch. Icon.* 12: pl. 58, fig. 462. Type material presumed to be in the BMNH not found by Chambers (1990: 262). Published locality: "Florida, United States." Taxonomy: *Goniobasis curvicostata* (Tryon, 1873: 202); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia curvicostata* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1942a: 4).
- curvilabris** **Anthony, Melania**. 1854, *ALNHNY* 6: 102, pl. 3, fig. 1a-b[†]. Also figured in Tryon, 1873, *Strepomatidae*. 161, fig. 308[†]. Lectotype MCZ 50245 (Tennessee) here selected; reported by Tryon (1873: 161) to be "Mr. Anthony's original type" and incorrectly listed as "holotype" in Turner (1946: 101). Taxonomy: *Goniobasis abbreviata* (Tryon, 1873: 159); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 6, 1934a: 3, 1940: 6).
- cuspidata** **Gould, Melania**. Renamed *M. correcta* Brot.
- cylindracea** **Conrad, Melania**. 1834a, *New Fresh-Water Shells*: 55, pl. 8, fig. 10. Lectotype ANSP 122459a (Tombigbee River, Alabama) selected by Baker (1964: 182) as "TSD now." Taxonomy: *Goniobasis cylindracea* (Tryon, 1873: 299); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia cylindracea* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 35).
- cylindraceum 'Mighels' Gould, Schizostoma**. 1844, *PBSNH* 1: 189. No type material examined. Published locality: "[Black] Warrior River, Alabama." Johnson (1949: 225) notes that this locality must be an error since *Gyrotoma* is limited to the Coosa System. Taxonomy: *Schizostoma cylindraceum* (Tryon, 1873: 361); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma cylindraceum* (Goodrich, 1924a: 28).
- cylindraceum** **Lea, Trypanostoma**. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 142, pl. 23, fig. 51[†] (*Obs. on Unio* 11: 98). Lectotype USNM 121990 (Roane County, Tennessee) here selected. Taxonomy: *Pleurocera cylindraceum* (Tryon, 1873: 108); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera* (*Strepobasis*) *curtum roanense* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 12,

1940: 8).

cylindrica **Lea, Lithasia**. 1866a, *PANSP* 18: 133; 1868b, *JANSP* 6: 341, pl. 54, fig. 26[†] (*Obs. on Unio* 12: 101). Lectotype USNM 121891 (Coosa River, Alabama) here selected. Taxonomy: *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20), *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39), and *Elimia brevis* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1936: 56).

dallesensis **Henderson, Goniobasis hemphilli**. 1935a, *Nautilus* 48: 97, pl. 4, fig. 2. Holotype^{od} UCM 16016-a (Mill Creek, The Dalles, [Wasco County,] Oregon). Paratypes UCM 16016-b. Wu & Brandauer (1982) also report UCM 16016-c and 16016-d as paratypes, but these are not types according to Article 72.4.6 (ICZN, 1999) since they were not among the lots the author designated as types. Taxonomy: *Juga (Ju ga) hemphilli dallesensis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Henderson, 1935a: 97).

decampii **Lea, Goniobasis**. 1863b, *PANSP* 15: 154; 1866b, *JANSP* 6: 138, pl. 23, fig. 45[†] (*Obs. on Unio* 11: 94). Lectotype USNM 118967 (Huntsville, [Madison County,] Alabama) here selected. Taxonomy: *Goniobasis decampii* (Tryon, 1873: 210); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia perstriata decampi* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1930a: 19, 1940: 16).

decora **Lea, Melania**. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 181, pl. 6, fig. 38 (*Obs. on Unio* 3: 19). No type material examined. Published locality: “[Tennessee]. Dr. Troost... Green River, [Kentucky]. Dr. Currey.” Taxonomy: *Goniobasis decora* (Tryon, 1873: 204); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 6, 1940: 14).

decorata **Anthony, Melania**. 1860, *PANSP* 12: 55. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 36, sp. 251 and in Tryon, 1873, *Strepomatidae*: 141, fig. 263[†]. Lectotype ANSP 8721a (Oostanaulla River, [Floyd-Gordon counties,] Georgia) selected by Baker (1964: 182) as “TSD now.” Paralectotypes MCZ 50231 listed as “cotypes” in Turner (1946: 101). Taxonomy: *Goniobasis decorata* (Tryon, 1873: 141); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1935: 2, 1936: 30, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 34).

demissa **Anthony, Gyrotoma**. 1860, *PANSP* 12: 64. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melatomia*): pl. 2, sp. 9 and in Tryon, 1873, *Strepomatidae*: 372, fig. 702[†]. Lectotype MCZ 50693 (Coosa River, Alabama) here selected; incorrectly listed by Turner (1946: 101) as “holotype.” Baker’s (1964: 182) identification of ANSP 120768b as a primary type (“TOM”) was based on questionable type material. Taxonomy: *Schizostoma demissum* (Tryon, 1873: 372); *Gyrotoma (Gyrotoma) lata incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

densa ‘**Anthony**’ **Gould, Melania**. 1851, *PBSNH* 3: 360. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 36, sp. 250. Syntype MCZ 161734 (Maury [Creek], Tennessee), incorrectly identified by Turner (1946: 101) as “holotype.” Taxonomy: *Goniobasis simplex* (Tryon, 1873: 250); *Ambloxus virginicus* (Hannibal, 1912:

- 175); *Lithasia (Lithasia) geniculata fuliginosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1940: 5).
- densicostata 'Reeve' Brot, *Melania*.** 1862, *Cat. Syst.*: 35 [error for *M. densicostata* Reeve].
- densicostata Reeve, *Melania*.** 1861, *Conch. Icon.* **12**: pl. 58, sp. 465. Type material presumed to be in the BMNH not found by Chambers (1990: 262). Published locality: "Florida, United States." Taxonomy: *Goniobasis curvicostata* (Tryon, 1873: 202); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia curvicostata* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1942a: 5).
- dentatus Couthouy, *Anculotus*.** 1839, *BJNH* **2**: 185, pl. 4, fig. 7. Syntypes MCZ 154622 (rapids, about one mile above the little falls of the Potomac River, Virginia). Due to a typographic error, Johnson (1946: 39) listed the same lot as "cotypes MCZ 154626." Taxonomy: *Anculosa carinata* var. *c* (Tryon, 1873: 389); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9, 1942a: 2).
- dentata Lea, *Anculosa*.** 1841b, *PAPS* **2**: 34. Syntype USNM 121223 (Richmond, Virginia). Taxonomy: *Anculosa carinata* var. *c* (Tryon, 1873: 389); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9).
- depygis Say, *Melania*.** 1829c, *New Harmony Dissem.* **2**: 291; 1830, *Amer. Conch.* **1**: pl. 8, two bottom figures; 1840, Say's reprint: 19. Syntype MCZ 152494 was labeled as a "genuine type" by J.G. Anthony. Possible syntype ANSP 200661 (Falls of the Ohio [at Louisville, Jefferson County, Kentucky]); incorrectly listed by Baker (1964: 182) as "TOM." Taxonomy: *Goniobasis depygis* (Tryon, 1873: 247); *Ambloxus virginicus* (Hannibal, 1912: 174); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1929: 6, 1934a: 4, 1940: 6).
- deshayesiana Lea, *Melania* [new name for *M. plicatula* Lea, 1841 non Deshayes, 1825].** 1841a, *PAPS* **2**: 14 [as *plicatula*]; 1842b, *TAPS* **8**: 182, pl. 6, fig. 41[†] (*Obs. on Unio* **3**: 20) [as *plicatula*]; 1843b, *PAPS* **2**: 242; 1844, *TAPS* **9**: 24 (*Obs. on Unio* **4**: 24, footnote). Lectotype USNM 119000 (Tennessee) here selected. Taxonomy: *Goniobasis deshayesiana* (Tryon, 1873: 186); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 6, 1940: 14).
- deshayesiana Reeve, *Melania*.** Renamed *M. mutata* Brot.
- deshayesii 'Lea, MS' Reeve, *Melania*.** 1860, *Conch. Icon.* **12**: pl. 45, sp. 330. Type material presumed to be in the BMNH not examined. Published locality: "...probably a United States shell..." Taxonomy: *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 6).
- dickinsoni Clench & Turner, *Goniobasis*.** 1956, *Bull. Fla. State Mus., Bio. Sci.* **1**: 141, pl. 2, fig. 10[†]. Holotype^{od} MCZ 191771 (Holmes Creek, 1 mile west of Graceville, [Jackson County,] Florida). Taxonomy: *Elimia dickinsoni* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Clench & Turner, 1956: 141).
- difficilis Lea, *Goniobasis*.** 1862b, *PANSP* **14**: 267; 1863a, *JANSP* **5**: 317, pl. 37, fig. 163[†] (*Obs. on Unio* **9**: 139). Holotype^{mo} USNM 119001 (Tennessee). Taxonomy: *Goniobasis difficilis* (Tryon, 1873: 197); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36;

Goodrich, 1940: 14).

dignum **Lea, Trypanostoma**. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 350, pl. 39, fig. 219† (*Obs. on Unio* 9: 172). Lectotype USNM 121980 (Yellowleaf Creek, Shelby County, Alabama) here selected. Taxonomy: *Pleurocera dignum* (Tryon, 1873: 85); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

dilatata **Conrad, Melania**. 1835, *New Fresh-Water Shells*, Appendix: 6, pl. 9, fig. 5. Type material presumed to be in the ANSP not found by Baker (1964: 182). Published locality: "Inhabits rivers in Munroe [County], Virginia: Mr. William B. Rogers." Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis (Mudalia) dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 19).

dilatata **Lea, Lithasia**. 1861a, *PANSP* 13: 55; 1863a, *JANSP* 5: 260, pl. 35, fig. 69 (*Obs. on Unio* 9: 82). Also figured in Tryon, 1873, *Strepomatidae*. 29, fig. 68† (*vide* R. Hershler, pers. comm.) Lectotype USNM 121892 (Tennessee) here selected; identified by Tryon (1873: 29) as "The type of Mr. Lea's description..." Taxonomy: *Lithasia dilatata* (Tryon, 1873: 29); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Lithasia) geniculata fuliginosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 5)

dislocata **Ravenel, Melania**. 1834, *Cat. Shells*: 11. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 50, sp. 380† and in Tryon, 1873, *Strepomatidae*: 191, fig. 374†. Lectotype MCZ 152848 (Dan River, North Carolina) here selected; identified by Reeve (1861 [*Melania*]: sp. 380) as "Ravenel's original type." Taxonomy: *Goniobasis dislocata* (Tryon, 1873: 191); *Ambloxyx virginicus* (Hannibal, 1912: 175); *Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 2).

dissimilis **Say, Paludina**. 1819, *Nicholson's Encyc.*: no pagination. Figured in Haldeman, 1847-1848, *Leptoxis*: 4, pl. 3-4, figs. 85-101 and Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 4, sp. 27a-b. Type material presumed to be in the ANSP not found by Baker (1964: 182). Published locality: "...found by Mr. Thomas Nuttall, during a journey to Pittsburg." Taxonomy: *Anculosa carinata* (Tryon, 1873: 388); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9, 1942a: 2).

doolyensis **Lea, Goniobasis**. 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 315, pl. 37, fig. 159† (*Obs. on Unio* 9: 137). Lectotype USNM 119121 (small tributary to Flint River, near Vienna, Dooly County, Georgia) selected by Chambers (1990: 262, fig. 2D). Taxonomy: *Goniobasis doolyensis* (Tryon, 1873: 187); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Elimia curvicostata* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1942a: 5).

downei **'Lea' Goodrich, Anculosa**. 1941b, *OPUMMZ* (427): 9 [error for *A. downiei* Lea].

downieana **Lea, Goniobasis**. 1862b, *PANSP* 14: 272; 1863a, *JANSP* 5: 341, pl. 38, fig. 206† (*Obs. on Unio* 9: 163). Lectotype USNM 118412 (Etowah River, Georgia, although Chambers, 1990 considers the type locality doubtful) selected by Chambers (1990: 244, fig. 2C). Taxonomy: *Goniobasis papillosa* (Tryon, 1873: 151);

- Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).
- downiei** **Lea, Lithasia.** 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 354, pl. 39, fig. 227[†] (*Obs. on Unio* 9: 176). Lectotype USNM 121893 (Cumberland River) here selected. Baker's (1964: 182) previous designation of ANSP 124840a as a primary type ("TSD now") is invalid. The lot from which it was selected is large and from Wheatley, whereas Lea had only two specimens and makes no mention of Wheatley. Also, contrary to Baker (1964), it is not the shell figured by Lea. Taxonomy: *Lithasia downiei* (Tryon, 1873: 39); *Pleurocera* (*Pleurocera*) *solida* (Hannibal, 1912: 172); *Lithasia* (*Angitrema*) *armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1940: 3).
- downiei** **Lea, Anculosa.** 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 342, pl. 54, fig. 28[†] (*Obs. on Unio* 12: 102). Lectotype ANSP 124874a (Conasauga River, [Whitfield County,] Georgia) selected by Baker (1964: 182) as "TSD now." Taxonomy: *Leptoxis* (*Leptoxis*) *foremani* (Burch & Tottenham, 1980: 155; Burch, 1982: 137; Goodrich, 1922: 21, 1941b: 9, 1944b: 41).
- draytonii** **Lea, Goniobasis.** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 300, pl. 37, fig. 134[†] (*Obs. on Unio* 9: 122). Lectotype USNM 118993 (Fort George, Oregon) here selected. Taxonomy: *Goniobasis draytonii* (Tryon, 1873: 286); *Ambloxyus pliciferus* (Hannibal, 1912: 178).
- dubia** **Lea, Melania** [also *M. dubiosa*]. 1841a, *PAPS* 2: 11; 1842b, *TAPS* 8: 166, pl. 5, fig. 6[†] (*Obs. on Unio* 3: 4) [as *dubiosa*]. Lectotype USNM 119106 (Tennessee) here selected. Taxonomy: *Goniobasis dubiosa* (Tryon, 1873: 274); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia ebum ebum* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1940: 18).
- duttoniana** **Lea, Melania.** 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 188, pl. 6, fig. 54[†] (*Obs. on Unio* 3: 26); 1863a, *JANSP* 5: 314 (*Obs. on Unio* 9: 136) [as *Lithasia*]. Lectotype USNM 121739 (Duck River, [Maury County,] Tennessee) here selected. Taxonomy: *Angitrema duttoniana* (Tryon, 1873: 20); *Pleurocera* (*Pleurocera*) *fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia* (*Angitrema*) *duttoniana* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1921c: 59, 1940: 59).
- duttonii** **Lea, Goniobasis.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 314, pl. 37, fig. 158[†] (*Obs. on Unio* 9: 136). Lectotype USNM 118901 (Maury County, Tennessee) here selected. Taxonomy: *Goniobasis duttonii* (Tryon, 1873: 175); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 14).
- dux** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 170; 1863a, *JANSP* 5: 283, pl. 36, fig. 105 (*Obs. on Unio* 9: 105). No type material examined. Published locality: "Tennessee River, W. Spillman, M.D. Fox River, Illinois, J. Simpson [Sampson]; Oostenaula, Rev. G. White; Tuscumbia, [Alabama,] B. Pybas." Taxonomy: *Pleurocera ponderosum* (Tryon, 1873: 66); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9) and *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- ebenum** **Lea, Melania.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 166, pl. 5, fig. 7[†] (*Obs. on Unio* 3: 4). Lectotype USNM 119208 (Robinson [*sic*] County, Tennessee) here

- selected. Taxonomy: *Goniobasis ebenum* (Tryon, 1873: 242); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia ebenum ebenum* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1940: 17).
- edgariana** *Lea, Melania*. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 180, pl. 6, fig. 37[†] (*Obs. on Unio* 3: 18). Lectotype USNM 118423 (Caney Fork [Cumberland River], Tennessee) here selected. Taxonomy: *Goniobasis edgariana* (Tryon, 1873: 193); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).
- effosa** *Smith, Goniobasis*. 1938, *Nautilus* 51: 91, pl. 6, fig. 4a-b. Holotype presumed to be in the UF not found; paratypes ANSP 13329 (Chambers, 1990: 244). Published locality: Fossil of the Tertiary of Belle Glade, [Palm Beach County,] Florida. Taxonomy: *Goniobasis floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).
- elata** *'Anthony' Gould, Melania*. 1851, *PBSNH* 3: 362. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 45, sp. 331. Lectotype MCZ 79423 (Maumee River [at Perrysburg, Wood County,] Ohio) here selected, incorrectly listed by Turner (1946: 101) as "holotype." Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 31).
- elegans** *Anthony, Anculosa*. 1860, *PANSP* 12: 69. Figured in Reeve, 1861, *Conch. Icon.* 12(*Anculotus*): pl. 6, sp. 49 and in Tryon, 1873, *Strepomatidae*. 413, fig. 825[†]. Lectotype ANSP 27636a (Alabama) selected by Baker (1964: 182) as "TSD now." Paralectotype MCZ 161798, incorrectly listed by Turner (1946: 101) as "holotype." Taxonomy: *Anculosa ampla* var. *a* (Tryon, 1873: 412); *Leptoxis (Leptoxis) ampla* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 35, 1941b: 9, 1941c: 23).
- elegantula** *Anthony, Melania*. 1854, *ALNHNY* 6: 103, pl. 3, fig. 2. Lectotype MCZ 50241 (Kentucky) here selected; incorrectly identified by Turner (1946: 101) as "holotype" and listed by typographical error as "MCZ 50251." Taxonomy: *Goniobasis abbreviata* (Tryon, 1873: 159); *Ambloxus virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 6, 1940: 6).
- elevata** *Say, Melania*. 1821, *JANSP* 2: 176; 1858, Binney's reprint: 70. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 56, sp. 442. Improbable syntype ANSP 27366a (Ohio River) incorrectly listed by Baker (1964: 182) as "TOM." Since the specimen is not labeled with a locality or collector, how Baker (1964) determined its types status is unknown. Taxonomy: *Pleurocera elevatum* (Tryon, 1873: 95); *Ambloxus virginicus* (Hannibal, 1912: 174); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- eliminata** *Anthony, Melania*. 1854, *ALNHNY* 6: 97, pl. 2, fig. 15. Syntypes MCZ 161839 ([Ohio River,] near Owensboro, [Davies County,] Kentucky) listed as "cotypes" in Turner (1946: 101). Taxonomy: *Goniobasis eliminata* (Tryon, 1873: 207); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia costifera* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 16).

- elliottii** *Lea, Goniobasis*. 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 338, pl. 38, fig. 201[†] (*Obs. on Unio* 9: 160). Lectotype USNM 119122 (Little Uchee Creek, [Russell-Lee counties,] Alabama) selected by Chambers (1990: 263, fig. 4B). Taxonomy: *Goniobasis elliottii* (Tryon, 1873: 265); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia boykiniana viennaensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4) and *Elimia gerhardti* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3).
- ellipsoides** *Lea, Goniobasis* [new name for *Melania gracilior* *Lea*]. 1861c, *PANSP* 13: 118 [as *gracilior*]; 1863a, *JANSP* 5: 234, pl. 34, fig. 31 (*Obs. on Unio* 9: 56). Possible syntype ANSP 8714a (Coosa River, Alabama) incorrectly listed by Baker (1964: 182) as "TOM." Taxonomy: *Goniobasis ellipsoides* (Tryon, 1873: 332); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 4-5) and *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20).
- elliptica** *Lea, Melania*. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 225, pl. 34, fig. 13[†] (*Obs. on Unio* 9: 47) [as *Goniobasis*]. Lectotype USNM 119127 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis elliptica* (Tryon, 1873: 333); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 4).
- ellipticum** 'Anthony, MS' *Reeve, Melatoma*. 1861, *Conch. Icon.* 12: pl. 3, fig. 21. Syntypes MCZ 50669 (Coosa River, Alabama) listed as "cotypes" in Turner (1946: 101). Taxonomy: *Schizostoma ellipticum* (Tryon, 1873: 359); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma ellipticum* (Goodrich, 1924a: 20).
- elongata** *Lea, Melania*. 1831a, *TAPS* 4: 121, pl. 15, fig. 29[†] (*Obs. on Unio* 1: 130). Lectotype USNM 122062 (west Tennessee) here selected. Taxonomy: *Pleurocera elevatum* (Tryon, 1873: 95); *Ambloxyus virginicus* (Hannibal, 1912: 174).
- emeryensis** *Lea, Goniobasis*. 1864b, *PANSP* 16: 3; 1866b, *JANSP* 6: 137, pl. 23, fig. 43[†] (*Obs. on Unio* 11: 93). Lectotype USNM 119131 (Rocky Creek, east Tennessee) here selected. Taxonomy: *Elimia ebenum emeryensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1927: 59, 1940: 18).
- estabrookii** *Lea, Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 273, pl. 36, fig. 86[†] (*Obs. on Unio* 9: 95). Lectotype USNM 121619 (east Tennessee) here selected. Baker's (1964: 182) previous designation of ANSP 27054a as "TSD now" is hereby ignored due to its ambiguity. The selected shell, contrary to Baker (1964), is not the figured specimen. Taxonomy: *Pleurocera estabrookii* (Tryon, 1873: 129); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera uncialae uncialae* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- estabrookii** *Lea, Goniobasis*. 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 298, pl. 37, fig. 131[†] (*Obs. on Unio* 9: 120). Lectotype USNM 119003 ([Tennessee River,] Knoxville, [Knox County,] Tennessee) here selected. Taxonomy: *Goniobasis dubiosa* (Tryon, 1873: 274); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- etowahensis** 'Lea, MS' *Reeve, Melania*. 1861, *Conch. Icon.* 12: pl. 55, sp. 426. Chambers (1990: 243) reported MCZ 51334 as "possible syntypes." However, J.G. Anthony's label indicates that these specimens are only idiotypes. Published locality: "Georgia, United States." Taxonomy: *Goniobasis etowahensis* (Tryon, 1873:

148); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).

etowahensis Lea, *Goniobasis*. Renamed *Goniobasis canbyi* Lea.

exarata Menke, *Melania*. 1828, *Syn. Meth.*, 1st edition: 81; 1830, 2nd edition: 135.

No type material examine. Published locality: "Hab. ad Cincinatti [*sic*] [Hamilton County, Ohio], super fl. Ohio." Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).

exarata Lea, *Melania*. Renamed *M. arata* Lea.

excavata Anthony, *Melania*. 1854, *ALNHNY* 6: 99, pl. 2, fig. 18[†]. Also figured in Tryon, 1873, *Strepomatidae*: 334, fig. 641[†]. Lectotype MCZ 161738 (Alabama) here selected; identified by Tryon (1873: 641) as "Mr. Anthony's type" and incorrectly listed as "holotype" in Turner (1946: 101). Taxonomy: *Goniobasis excavata* (Tryon, 1873: 334); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).

excellens 'Smith' Goodrich, *Goniobasis*. 1935, *OPUMMZ* (311): 2. Holotype^{od} UF 86931 [not examined] (Little River, 5 miles [NW] of Cedar Bluff, Cherokee County, Alabama). Taxonomy: *Elimia caelatura excellens* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 2, 1941b: 5); *Elimia leontiana excellens* (Thompson, 2000: 30).

excisa Lea, *Melania (Schizostoma)*. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 25 (*Obs. on Unio* 4: 25). Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melatoma*): pl. 1, sp. 2. Possible holotype^{mo} USNM 119398 (Alabama). Taxonomy: *Schizostoma excisum* (Tryon, 1873: 356); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 20, 1944b: 47).

excisum 'Lea' Hinkley, *Schizostoma*. 1904, *Nautilus* 18: 41. Published locality: "Wetumpka [Elmore County, Alabama] and vicinity." Taxonomy: *Gyrotoma pumilum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 14).

excurata Conrad, *Melania*. 1834a, *New Fresh-Water Shells*: 49, pl. 4, fig. 6. Possible lectotype ANSP 27030a (Tennessee River, Florence, [Lauderdale County,] Alabama) selected by Baker (1964: 182) as "TSD now." The original label, in J.G. Anthony's handwriting, does not identify this lot as types, but it is from Conrad. None are Conrad's figured specimen. Taxonomy: *Pleurocera excuratum* (Tryon, 1873: 55); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).

excurtata 'Conrad' Hannibal, *Melania*. 1912, *Proc. Mal. Soc. London* 10: 170 [error for *M. excurata* Conrad].

excurvata 'Conrad' Wheatley, *Melania*. 1845, *Cat. Shells U.S.*: 25 [error for *M. excurata* Conrad].

exilis Haldeman, *Melania*. 1840b, Suppl. to *Monog. Limniades* 1. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 48, sp. 363. Lectotype ANSP 8690a (Ohio) selected by Baker (1964: 182) as "TSD now." Taxonomy: *Goniobasis semicarinata*

- (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- exilis 'Haldeman, Adams' Tryon *Melania*.** 1873, *Strepomatidae*: 282 [*nomen nudum* introduced under the synonymy of *G. haldemani* Tryon]. Taxonomy: *Goniobasis haldemani* (Tryon, 1873: 282). [Tryon's (1873) citation of *Molluscs of Vermont* presumably refers to Adams (1841), However, *M. depygis* Say is the only *Melania* in that article.]
- eximia Anthony, *Melania*.** 1854, *ALNHNY* 6: 107, pl. 3, fig. 7⁺. Also figured in Tryon, 1873, *Strepomatidae*: 98, fig. 185⁺ [slightly enlarged]. Lectotype MCZ 161759 (Tennessee) here selected; identified by Tryon (1873: 98) as "Mr. Anthony's type" and incorrectly listed as "holotype" in Turner (1946: 101). Taxonomy: *Pleurocera gradatum* (Tryon, 1873: 96); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum filum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- expansa Lea, *Melania*.** 1843b, *PAPS* 2: 243; 1844, *TAPS* 9: 28 (*Obs. on Unio* 4: 28). Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 54, sp. 425. Holotype lost. Lea (1844) described only a single specimen and reported that shell to be in the cabinet of E. Foreman, M.D. Published locality: "Alabama. E. Foreman, M.D." Taxonomy: *Goniobasis expansa* (Tryon, 1873: 219); *Ambloxus virginicus* (Hannibal, 1912: 175).
- fabalis Lea, *Goniobasis*.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 311, pl. 37, fig. 154⁺ (*Obs. on Unio* 9: 133). Lectotype USNM 119814 (Tennessee River [Alabama?]) here selected. Taxonomy: *Goniobasis fabalis* (Tryon, 1873: 305); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); "species in doubt" (Goodrich, 1930a: 23).
- fallax Lea, *Melania*.** 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 231, pl. 34, fig. 24 (*Obs. on Unio* 9: 53) [as *Goniobasis*]. No type material examined. Published locality: "Coosa River, Alabama. E.R. Showalter, M.D." Taxonomy: *Goniobasis fallax* (Tryon, 1873: 302); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24).
- fasciata Menke, *Melania*.** 1828, *Syn. Meth.*, 1st edition: 82; 1830, 2nd edition: 136. No type material examined. Published locality: "Ad Philadelphiam [Pennsylvania]." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- fascinans Lea, *Melania*.** 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 229, pl. 34, fig. 20⁺ (*Obs. on Unio* 9: 51) [as *Goniobasis*]. Lectotype USNM 119856 (Yellowleaf Creek, Shelby County, Alabama) here selected. Taxonomy: *Goniobasis fascinans* (Tryon, 1873: 308); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia fascinans* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 5, 1944b: 45).
- fasciolata Reeve, *Io*.** 1860, *Conch. Icon.* 12: pl. 2, sp. 14a-b. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Angitrema duttoniana* (Tryon, 1873: 20); *Pleurocera (Pleurocera) fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia (Angitrema) duttoniana* (Burch &

- Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 4).
- fastigiata** **Anthony, Melania**. 1854, *ALNHNY* 6: 113, pl. 3, fig. 13[†]. Also figured in Tryon, 1873, *Strepomatidae*. 75, fig. 142[†]. Lectotype MCZ 161766 (Tennessee) here selected; identified by Tryon (1873: 75) as “the type” and incorrectly listed as “holotype” in Turner (1946: 101). Taxonomy: *Pleurocera fastigiatum* (Tryon, 1873: 74); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); “unknown with exception of the types” (Goodrich, 1940: 11).
- filum** **Lea, Melania**. 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 88, pl. 9, fig. 41[†] (*Obs. on Unio* 4: 62). Holotype^m ANSP 27006 (Alabama) listed as “TSD now” in Baker (1964: 182). Taxonomy: *Pleurocera filum* (Tryon, 1873: 65); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum filum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- flammata** **Lea, Anculosa**. 1843b, *PAPS* 2: 243; 1844, *TAPS* 9: 30 (*Obs. on Unio* 4: 30). Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 3, sp. 18. Holotype lost. Lea (1844) described only a single specimen and reported that shell to be in the cabinet of E. Foreman, M.D. Published locality: “Alabama. E. Foreman, M.D.” Taxonomy: *Anculosa picta* (Tryon, 1873: 415).
- flava** **Lea, Goniobasis**. 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 303, pl. 37, fig. 139[†] (*Obs. on Unio* 9: 125). Holotype^m USNM 119130 (Benton [Calhoun] County?, northwest Alabama). Taxonomy: *Goniobasis flava* (Tryon, 1873: 263); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia flava* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3).
- flavescens** **Lea, Goniobasis**. 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 339, pl. 38, fig. 202 (*Obs. on Unio* 9: 161). Syntypes USNM 118408 (Oconee [Ocoee?] River, Tennessee) and USNM 118478 (Tennessee River, Tennessee). Taxonomy: *Goniobasis flavescens* (Tryon, 1873: 145); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1935: 2, 1936: 30, 1941b: 5); *Elimia leontiana decorata* (Thompson, 2000: 34).
- flexuosa** **‘Smith’ Goodrich, Anculosa**. 1922, *MPUMMZ* (7): 33, pl. 1, fig. 17[†]; pl. 3, figs. 17-18. Holotype^{od} UMMZ 10154 [not examined] (Coosa River, Wetumpka, Elmore County, Alabama). Taxonomy: “...a hybrid of *A. taeniata* and *griffithiana*.” (Goodrich, 1944b: 43).
- florencense** **Lea, Trypanostoma**. 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 287, pl. 36, fig. 112[†] (*Obs. on Unio* 9: 109). Lectotype USNM 122152 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera florencense* (Tryon, 1873: 77); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- florese** **‘Lea’ Goodrich, Trypanostoma**. 1940, *OPUMMZ* (417): 10 [error for *florencense* Lea].
- florentiana** **Lea, Melania**. 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 188, pl. 6, fig. 53[†] (*Obs. on Unio* 3: 26). Lectotype USNM 121902 (Tennessee River, Florence, [Lauderdale County,] Alabama) here selected. Baker’s (1964: 182) designation of ANSP 26919a [not examined] as a primary type (“TSD now”) is hereby ignored as a result of its ambiguity. That shell, contrary to Baker (1964), is not the specimen

- figured by Lea. Taxonomy: *Lithasia florentiana* (Tryon, 1873: 28); *Pleurocera* (*Pleurocera*) *verrucosa* (Hannibal, 1912: 170); *Lithasia* (*Lithasia*) *salebrosa florentiana* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1934a: 11, 1940: 4).
- floridianus** 'Lea' Reeve, *Anculotus*. 1860, *Conch. Icon.* **12**: pl. 1, sp. 4. Figured specimen presumed to be in the BMNH not examined. Published locality: "Tennessee River at Florence, [Lauderdale County,] Alabama." Taxonomy: *Angitrema tuomeyi* (Tryon, 1873: 16).
- floridensis** Reeve, *Melania*. 1860, *Conch. Icon.* **12**: pl. 45, sp. 334. Type material presumed to be in the BMNH not found by Chambers (1990: 243). Published locality: "Florida." Taxonomy: *Goniobasis floridensis* (Tryon, 1873: 147); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).
- fluvialis** Say, *Fusus*. 1825, *JANSP* **5**: 129; 1858, Binney's reprint: 117. Figured in Reeve, 1860, *Conch. Icon.* **12**(*Io*): pl. 1, sp. 5 [as *Io fluviatilis*]. Lectotype ANSP 26870a ([North Fork] Holston River [near confluence with "a brook of salt water," Virginia]) selected by Baker (1964: 182) as "TSD now." Taxonomy: *Io fluvialis* (Tryon, 1873: 4); *Pleurocera* (*Io*) *fluviatilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- fluviatilis** Say, *Io*. Alternate spelling for *fluvialis*.
- fontinalis** Pilsbry & Ferris, *Goniobasis comalensis*. 1906, *PANSP* **58**: 169, figs. 32[†], 33-35. Lectotype ANSP 91326a ("In a small spring in the pleasure garden near New Braunfels [Comal County, Texas], on the fountains of Comal Creek...") selected by Baker (1964: 182) as "TSD now." Taxonomy: *Elimia comalensis fontinalis* (Burch & Tottenham, 1980: 32; Burch, 1982: 33; Goodrich, 1942a: 3).
- foremani** Lea, *Melania*. 1843b, *PAPS* **2**: 242; 1844, *TAPS* **9**: 27 (*Obs. on Unio* **4**: 27). Figured in Reeve, 1861, *Conch. Icon.* **12**(*Melania*): pl. 55, sp. 432. Syntypes USNM 122183 (Alabama). Taxonomy: *Pleurocera foremanii* (Tryon, 1873: 52); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera foremani* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8, 1941c: 12, 1944b: 43).
- foremani** Lea, *Anculosa*. 1843b, *PAPS* **2**: 243; 1844, *TAPS* **9**: 29 (*Obs. on Unio* **4**: 29). Figured in Haldeman, 1847-1848, *Leptoxis*: **3**, pl. 3, figs. 74-80 [as *L. picta* (Conrad)]. Syntypes USNM 121259 (Alabama). Taxonomy: *Anculosa picta* (Tryon, 1873: 415); *Leptoxis* (*Leptoxis*) *foremani* (Burch & Tottenham, 1980: 155; Burch, 1982: 137; Goodrich, 1922: 16, 1944b: 41).
- formosa** Conrad, *Melania*. 1835, *New Fresh-Water Shells*, Appendix: 5, pl. 9, fig. 3[†]. Lectotype ANSP 27486 (north Alabama) here selected; incorrectly identified by Baker (1964: 182) as "TOM." Paralectotype MCZ 161927 figured by Tryon (1873: 174, fig. 337). Taxonomy: *Goniobasis formosa* (Tryon, 1873: 174); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- formosa** Lea, *Anculosa*. 1860b, *PANSP* **12**: 187; 1863a, *JANSP* **5**: 254, pl. 35, fig. 61[†] (*Obs. on Unio* **9**: 76). Lectotype USNM 121273 (Coosa River, [Shelby County,] Alabama) here selected. Baker's (1964: 182) previous selection of ANSP 124875a as a primary type is invalid. Contrary to Baker (1964), it is not the figured specimen. It was received from the C.M. Wheatley Collection; although Wheatley

had examples of this form (Ryder, [no date]), Lea makes no mention of Wheatley as someone to whom he sent this species. Taxonomy: *Anculosa amplavar. b* (Tryon, 1873: 412); *Leptoxis (Leptoxis) formosa* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 15, 1941b: 9, 1944b: 41).

***formosa* 'Anthony, MS' Reeve, *Melania*.** 1861, *Conch. Icon.* 12: pl. 51, fig. 387. Type material presumed to be in the MCZ not examined. Published locality: "Alabama."

***forsmanii* 'Lea' Goodrich, *Pleurocera*.** 1941b, *OPUMMZ* (427): 8 [error for *M. foremani* Lea].

***fragosa* 'Anthony, MS' Reeve, *Melania vanuxemiana*.** 1861, *Conch. Icon.* 12: pl. 57, sp. 543 [453]. Syntypes MCZ 161739 [not examined] (Alabama) listed in Turner (1946: 101) as "cotypes."

***fraterna* Lea, *Goniobasis*.** 1864c, *PANSP* 16: 111; 1866b, *JANSP* 6: 139, pl. 23, fig. 46[†] (*Obs. on Unio* 11: 95). Lectotype USNM 118990 (Bibb County, Alabama) here selected. Baker's (1964: 182) previous designation of ANSP 8772a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), the shell is not the one figured by Lea. Also, the lot from which it was selected was received from Showalter, the collector, rather than Lea, the author, making their validity as types suspect. Taxonomy: *Elimia cahawbensis fraterna* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3, 1941c: 14).

***fuliginosa* Lea, *Melania*.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 170, pl. 5, fig. 17[†] (*Obs. on Unio* 3: 8). Lectotype ANSP 120774a (Big Bigby Creek, Maury County, Tennessee) selected by Baker (1964: 183) as "TSD now." Taxonomy: *Lithasia fuliginosa* (Tryon, 1873: 27); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Lithasia) geniculata fuliginosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1934a: 9, 1940: 5).

***fumea* Lea, *Melania*.** 1861c, *PANSP* 13: 123; 1863a, *JANSP* 5: 222, pl. 34, fig. 6[†] (*Obs. on Unio* 9: 44) [as *Goniobasis*]. Lectotype USNM 119791 (Yellowleaf Creek, Shelby County, Alabama) here selected. Taxonomy: *Goniobasis fumea* (Tryon, 1873: 306); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24) and *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).

***funebralis* Anthony, *Melania*.** 1860, *PANSP* 12: 56. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 49, sp. 372 and in Tryon, 1873, *Strepomatidae*. 273, fig. 527. Lectotype ANSP 8586a (Tennessee) selected by Baker (1964: 183) as "TSD now." Paralectotype MCZ 161723 incorrectly listed by Turner (1946: 102) as "holotype." Baker (1964) erroneously claimed that his specimen was the one figured in Tryon (1873); Tryon's specimen was actually the paralectotype listed in Turner (1946). Taxonomy: *Goniobasis adusta* (Tryon, 1873: 272); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

***funiculatum* Lea, *Schizostoma*.** 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 95, pl. 9, fig. 56[†] (*Obs. on Unio* 4: 69). Holotype^m USNM 119361 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama). Taxonomy: *Schizostoma buddii* (Tryon, 1873: 370); *Gyrotoma (Gyrotoma) lata incisa* (Hannibal, 1912: 182); *Gyrotoma incisum* (Goodrich,

- 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
funiculata* 'Lea' Adams & Adams, *Gyrotoma. 1858, *Genera* 1: 305. No locality given.
 Taxonomy: *Schizostoma babylonicum* (Tryon, 1873: 369).
funiculata* Reeve, *Io. 1860, *Conch. Icon.* 12: pl. 2, sp. 8. Type material presumed to be in the BMNH not examined. Published locality: "Alabama."
funiculatum* 'Lea' Reeve, *Melatoma. 1860, *Conch. Icon.* 12: pl. 1, sp. 5. Figured specimen presumed to be in the BMNH not examined. Published locality: "Tuscaloosa, [Tuscaloosa County,] Alabama; Dr. Budd." Taxonomy: *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).
furva* Lea, *Melania. 1852, *TAPS* 10: 299, pl. 30, fig. 7[†] (*Obs. on Unio* 5: 55). Holotype^{mo} USNM 119218 (tributary of the Coosa River, Alabama). Taxonomy: *Goniobasis furva* (Tryon, 1873: 273); *Ambloxus virginicus* (Hannibal, 1912: 176).
fusca* Haldeman, *Anculosa. 1841b, *Monog. Limniades* 3: wrapper; 1847-1848, *Leptoxis*: 4, pls. 3, figs. 83-84. No type material examined. Published locality: "Oregon, Mr. Nuttall."
fuscata* Deshayes, *Melania. 1838, *Anim. sans. Vert.* 8: 435. No type material examined. Published locality: "Les eaux douces de la Virginie." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
fusco-cincta* Anthony, *Melania. 1854, *ALNHNY* 6: 120, pl. 3, fig. 20[†]. Also figured in Tryon, 1873, *Strepomatidae*: 239, fig. 465[†]. Holotype^{mo} MCZ 74206 (Alabama). Taxonomy: *Goniobasis fuscocincta* (Tryon, 1873: 239); *Leptoxis* (*Leptoxis compacta*) (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1941c: 24).
fusifformis* Lea, *Io. 1831b, *TAPS* 4: 122, pl. 15, fig. 37a-b (*Obs. on Unio* 1: 132). No type material examined. Published locality: "Professor Vanuxem describes the spot which it inhabits as being very circumscribed and being immediately at the confluence of a small stream and the North Fork of the Holston [River], the former of which is slightly impregnated with salt." Taxonomy: *Io fluvialis* (Tryon, 1873); *Pleurocera* (*Io*) *fluviatilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).
fusifformis* Lea, *Melania. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 167, pl. 5, fig. 9 (*Obs. on Unio* 3: 5). Syntypes USNM 119210 (Tennessee). Taxonomy: *Goniobasis fusiformis* (Tryon, 1873: 329); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Lithasia* (*Angitrema*) *verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 5).
fusifformis* Lea, *Lithasia. 1861a, *PANSP* 13: 54; 1863a, *JANSP* 5: 261, pl. 35, fig. 71[†] (*Obs. on Unio* 9: 83). Lectotype USNM 121792 (Coosa River, Alabama) here selected. Taxonomy: *Lithasia fusiformis* (Tryon, 1873: 38); *Pleurocera* (*Pleurocera*) *solida* (Hannibal, 1912: 172); *Elimia fusiformis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1927: 58, 1936: 54, 1944b: 46).
gabbiana* Lea, *Goniobasis. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 304, pl. 37, fig. 141[†] (*Obs. on Unio* 9: 126). Lectotype USNM 118991 (Tennessee) here selected. Taxonomy: *Goniobasis gabbiana* (Tryon, 1873: 268); *Ambloxus virginicus* (Hannibal, 1912: 177); "species in doubt" (Goodrich, 1930a: 23).
gemma* DeKay, *Melania. 1843, *Zool. N.Y.* 5: 91, pl. 7, fig. 142. No type material examined. Published locality: "...obtained from Mud creek, Onondaga County, [New York] by Dr. Budd..." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291);

- Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 31).
- genicula 'Lea' Wheatley, *Lythasia*.** 1845, *Cat. Shells U.S.*: 28 [error for *L. geniculata* Haldeman].
- geniculata Haldeman, *Anculosa (Lithasia)*.** 1840b, Suppl. to *Monog. Limniades* 1: wrapper. Figured in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 1, sp. 7. Possible syntype ANSP 124843a (Tennessee) incorrectly listed by Baker (1964: 183) as "TOM" [specimen from the Wheatley Collection]. Taxonomy: *Angitrema geniculata* (Tryon, 1873: 13); *Lithasia (Lithasia) geniculata geniculata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1934a, 8, 1940: 4).
- georgiana Lea, *Goniobasis*.** 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 308, pl. 37, fig. 149[†] (*Obs. on Unio* 9: 130). Lectotype USNM 118909 (northern Georgia) here selected. Taxonomy: *Goniobasis georgiana* (Tryon, 1873: 246); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia caelatura georgiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 6); *Elimia leontiana georgiana* (Thompson, 2000: 38).
- gerhardtii Lea, *Goniobasis*.** 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 330, pl. 38, fig. 187[†] (*Obs. on Unio* 9: 152). Lectotype USNM 119129 (Chattanooga [Creek, Walker County,] Georgia) here selected. Taxonomy: *Goniobasis gerhardtii* (Tryon, 1873: 226); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia gerhardtii* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1940: 19, 1941b: 3, 1944b: 44); *Elimia modesta* (Thompson, 2000: 16).
- germana Anthony, *Melania*.** 1860, *PANSP* 12: 61. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 50, sp. 383 and in Tryon, 1873, *Strepomatidae*: 324, fig. 624[†]. Lectotype MCZ 72806 (Cahaba River, Alabama) here selected; incorrectly identified by Turner (1946: 102) as "holotype." Taxonomy: *Goniobasis germana* (Tryon, 1873: 324); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Leptoxis (Leptoxis) compacta* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1941c: 24).
- gesneri Lea, *Goniobasis*.** 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 330, pl. 54, fig. 5 (*Obs. on Unio* 12: 90). Also figured in Chambers, 1990, *Walkerana*: 225, fig. 6B[†]. Holotype^{mo} USNM 119134 [not examined] (Little Uchee Creek [Russell-Lee counties, Alabama]). Taxonomy: *Elimia ucheensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).
- gibbera 'Smith' Goodrich, *Goniobasis*.** 1936, *MPUMMZ* (31): 41, pl. 1, fig. 9[†]. Holotype^{od} UF 86932 [not examined] (Coosa River, Lonigan Shoals, two miles below Lock 2, St. Clair County, Alabama). Taxonomy: *Elimia gibbera* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 41, 1944b: 46).
- gibberosa Lea, *Goniobasis*.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 312, pl. 37, fig. 155[†] (*Obs. on Unio* 9: 134). Lectotype USNM 119639 (Alabama River, Alabama) here selected. Taxonomy: *Eurycalton gibberosa* (Tryon, 1873: 345); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).
- gibbosa Lea, *Anculosa*.** 1841b, *PAPS* 2: 34; 1844, *TAPS* 9: 15 (*Obs. on Unio* 4: 15). Figured in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 1, sp. 3. Syntype USNM

- 121264 (Tennessee). Taxonomy: *Anculosa subglobosa* (Tryon, 1873: 402); *Anculosa gibbosa* (Goodrich, 1921b: 11); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 157; Burch, 1982: 138; Goodrich, 1940: 21).
- gibbosa* Lea, *Melania*.** 1852, *TAPS* 10: 301, pl. 30, fig. 12[†] (*Obs. on Unio* 5: 57). Lectotype USNM 119215 (Scioto River, Ohio) here selected. Taxonomy: *Goniobasis gibbosa* (Tryon, 1873: 244); *Ambloxus virginicus* (Hannibal, 1912: 175); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 60, 1929: 6, 1940: 5).
- gibbosa* ‘Rafinesque’ Binney, *Pleurocera*.** 1860, *Check List*: 8, sp. 122 [*nomen nudum*]. No locality given. Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- gibbosa* ‘Anthony, MS’ Reeve, *Io*.** 1861, *Conch. Icon.* 12: pl. 3, fig. 17[†]. Lectotype MCZ 50558 (Tennessee) here selected; incorrectly identified by Turner (1946: 102) as “holotype.” Taxonomy: *Io spinosa* (Tryon, 1873); *Pleurocera (Io) fluvialilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).
- glabra* Lea, *Melania*.** 1841c, *PAPS* 2: 82; 1844, *TAPS* 9: 18 (*Obs. on Unio* 4: 18). Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 56, sp. 439. No type material examined. Published locality: “Holston River, East Tennessee. Prof. Troost, and S.M. Edgar.” Taxonomy: *Goniobasis glabra* (Tryon, 1873: 244); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- glandaria* Lea, *Melania*.** 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 226, pl. 34, fig. 14[†] (*Obs. on Unio* 9: 48) [as *Goniobasis*]. Lectotype USNM 118942 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis virgulata* (Tryon, 1873: 327); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20).
- glandula* Anthony, *Melania* [new name for *M. glans* Anthony, 1854 non V.d. Busch, 1842].** 1854, *ALNHNY* 6: 123, pl. 3, fig. 23[†] [as *glans*]; 1860, *PANSP* 12: 60. Also figured in Tryon, 1873, *Strepomatidae*: 109, fig. 207[†]. Lectotype MCZ 161773 (Tennessee) here selected; identified by Tryon (1873: 109) as “Mr. Anthony’s type specimen” and incorrectly listed as “holotype” in Turner (1946: 102). Taxonomy: *Pleurocera glandulum* (Tryon, 1873: 109); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera (Strepobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- glandula* Lea, *Schizostoma*.** 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 249, pl. 35, fig. 53[†] (*Obs. on Unio* 9: 71). Holotype^m USNM 119411 ([Coosa River,] Alabama). Baker’s (1964: 183) previous selection of ANSP 124489a as a primary type (“TSD now”) is invalid. Contrary to Baker (1964), none of the shells of that lot is the one figured by Lea, and in the original description, Lea restricted the type to a single specimen. Taxonomy: *Schizostoma glandula* (Tryon, 1873: 377); *Gyrotoma (Gyrotoma) laeta incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- glans* Anthony, *Melania*.** See *M. glandula* Anthony.

- glans** **Lea, Schizostoma**. 1860b, *PANSP* 12: 186; 1863a, *JANSP* 5: 248, pl. 35, fig. 52[†] (*Obs. on Unio* 9: 70). Lectotype USNM 119373 (Coosa River, Alabama) here selected. Baker's (1964: 183) previous selection of ANSP 56776a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), none of the shells of this lot is Lea's figured specimen, and although the lot was received from Lea, there is no mention of the ANSP in his description. Taxonomy: *Schizostoma glans* (Tryon, 1873: 363); *Gyrotoma olivula excisa* (Hannibal, 1912: 182); *Gyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 20).
- glauca** **Anthony, Melania**. 1860, *PANSP* 12: 57. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 51, sp. 389 and in Tryon, 1873, *Strepomatidae*. 201, fig. 393[†]. Lectotype MCZ 161746 (Tennessee) here selected; identified by Tryon (1873: 201) as "the type specimen" and incorrectly listed as "holotype" in Turner (1946: 102). Taxonomy: *Goniobasis athleta* (Tryon, 1873: 200); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Goniobasis laqueata* (Goodrich, 1930a: 7); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 16).
- globula** **Lea, Melania**. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 174, pl. 5, fig. 22[†] (*Obs. on Unio* 3: 12). Lectotype USNM 121271 (Tennessee) here selected. Taxonomy: *Anculosa subglobosa* (Tryon, 1873: 402); *Leptoxis (Leptoxis) praeosa* (Burch & Tottenham, 1980: 157; Burch, 1982: 138; Goodrich, 1921b: 11, 1940: 21).
- globosa** **Lea, Schizostoma**. 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 252, pl. 35, fig. 58^{†2} (*Obs. on Unio* 9: 74) [as *globosum*]. Lectotype USNM 119365 (Alabama) here selected. Baker's (1964: 183) designation of ANSP 124493a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), none of the shells of this lot are Lea's figured specimen. The lot was received with the C.M. Wheatley Collection, and although Wheatley had examples of this form (Ryder, [no date]), there is no reason to suspect that these are types. Taxonomy: *Schizostoma pumilum* (Tryon, 1873: 357); *Gyrotoma olivula excisa* (Hannibal, 1912: 182); *Gyrotoma pumilum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 14).
- godwini** **Thompson, Elimia**. 2000, *Walkerana* 11: 25, fig. 56[†]. Holotype^{od} UF 271284 (Cane Creek, Ft. McClellan Military Reservation, Pelham Range, Calhoun County, Alabama).
- gonula** **Rafinesque, Pleurocera**. 1831, *Enumeration and Account* 2, sp. 19. No type material examined. Published locality: "River Kentucky." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- goodrichi** **Hinkley, Goniobasis**. 1920, *OPUMMZ* (78): 1, fig. 1[†]. Holotype^{od} UMMZ 10253 [not examined] (tributary of Swan Creek, about five mi E of Aetna, Hickman County, Tennessee). Taxonomy: *Elimia laqueata costulata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 15).
- gouldiana** **Lea, Goniobasis** [new name for *G. pulchella* **Lea**]. 1868a, *PANSP* 20: 151 [as *pulchella*]; 1868b, *JANSP* 6: 332, pl. 54, fig. 9 (*Obs. on Unio* 12: 92). No type material examined. Published locality: "North Alabama, Dr. Spillman." Taxonomy: "species in doubt" (Goodrich, 1930a: 22); *Elimia pybasi* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1940: 15).

gracilior Anthony, *Melania* [new name for *M. gracilis* Anthony]. [no date], *List of the Land the Fresh-water Shells found chiefly in the vicinity of Cincinnati*, 1st edition [as *M. gracilis*; *nomen nudum*]; 1854, *ALNHNY* 6: 129, pl. 1, fig. 5. Also in Haldeman, 1842, *Monog. Limniades* 4: wrapper [as *gracilis*]. Syntype MCZ 161731 (Congress Lake, Stark County, Ohio) incorrectly identified by Turner (1946: 102) as "holotype." Taxonomy: *Goniobasis gracilior* (Tryon, 1873: 258); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia livescens gracilior* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4).

gracilior Lea, *Melania*. Renamed *Goniobasis ellipsoides* Lea.

gracilis Lea, *Melania*. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 168, pl. 5, fig. 11 (*Obs. on Unio* 3: 6). No type material examined. Published locality: "[Tennessee]. Dr. Troost" Taxonomy: *Goniobasis gracilis* (Tryon, 1873: 178); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 5, 1940: 14).

gracilis Anthony, *Melania*. Renamed *M. gracilior* Anthony.

gracilis 'Lea' Reeve, *Melania*. 1860, *Conch. Icon.* 12: pl. 49, sp. 369 [error for *M. gracilis* (= *gracilior*) Anthony].

gracilis Lea, *Io*. 1861d, *PANSP* 13: 394; 1863a, *JANSP* 5: 349, pl. 39, fig. 217[†] (*Obs. on Unio* 9: 171). Lectotype USNM 121974 (Coosa River, Alabama) here selected. Taxonomy: *Pleurocera gracile* (Tryon, 1873: 104); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

gracillima Anthony, *Melania*. 1860, *PANSP* 12: 62. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 56, sp. 437. Lectotype MCZ 223275 (South Carolina) here selected. Paralectotypes MCZ 161846 listed as "cotypes" in Turner (1946: 102). Taxonomy: *Goniobasis gracillima* (Tryon, 1873: 209); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia catenaria catenaria* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 2).

gradata Anthony, *Melania*. 1854, *ALNHNY* 6: 112, pl. 3, fig. 12. Also figured in Tryon, 1873, *Strepomatidae*: 97, fig. 184[†]. Lectotype MCZ 45375 (Alabama) here selected; identified by Tryon (1873: 97) as "Mr. Anthony's original type" and incorrectly listed in Turner (1946: 102) as "holotype." Taxonomy: *Pleurocera gradatum* (Tryon, 1873: 96); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); among the "transition forms between the *unciale* and *canaliculatum* groups" listed by Goodrich (1940: 12); *Pleurocera gradatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46).

graminea Haldeman, *Goniobasis*. 1865, *Am. J. Conch.* 1: 37, pl. 1, fig. 4. Baker's (1964: 183) identification of ANSP 121621a as a primary type ("TOM?") is likely incorrect. The lot from which the shell was selected was received from C.M. Wheatley, and although he was known to possess examples of this form (Ryder, [no date]), there is nothing to suggest that these are types. No locality given, but Baker's (1964) specimen is labeled to be from "Turkey Creek, Concord, [Maury County?, Tennessee]." Taxonomy: *Goniobasis graminea* (Tryon, 1873: 245); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

- granata** **Lea, Goniobasis.** 1862b, *PANSP* 14: 272; 1863a, *JANSP* 5: 343, pl. 38, fig. 209[†] (*Obs. on Unio* 9: 165). Lectotype USNM 118469 (Etowah River, near Canton, [Cherokee County,] Georgia) here selected. Taxonomy: *Goniobasis decorata* (Tryon, 1873: 141); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1935: 2, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 37).
- granatoides** **Lea, Goniobasis.** 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 335, pl. 54, fig. 14[†] (*Obs. on Unio* 12: 95). Lectotype USNM 118456 (Conasauga River, [Whitfield County,] Georgia) here selected. Taxonomy: *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 38).
- granitoides 'Lea' Goodrich Goniobasis.** 1936, *MPUMMZ* (31): 31 [error for *G. granatoides* Lea].
- grata** **Anthony, Melania.** 1860, *PANSP* 12: 61. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 55, sp. 433 and in Tryon, 1873, *Strepomatidae*. 261, fig. 502a[†]. Lectotype MCZ 316292 (Alabama) here selected. Baker (1964: 183) incorrectly listed Tryon's (1873) figured specimen as ANSP 8767a. Idiotypes MCZ 36219 listed as "cotypes" in Turner (1946: 102). Taxonomy: *Goniobasis grata* (Tryon, 1873: 261); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180).
- gratiosa** **Lea, Melania.** 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 241, pl. 35, fig. 43[†] (*Obs. on Unio* 9: 63) [as *Goniobasis*]. Lectotype USNM 119643 (Coosa River, Alabama) here selected. Taxonomy: *Eurycælon gratiosa* (Tryon, 1873: 342); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia lachryma* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 40).
- gravida** **Anthony, Melania.** 1860, *PANSP* 12: 59. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 57, sp. 451 (461) and in Tryon, 1873, *Strepomatidae*. 324, fig. 623. Syntype MCZ 74187 (Alabama) incorrectly listed in Turner (1946: 102) as "holotype." Tryon (1873: 324) identified his figure as "Mr. Anthony's type." Taxonomy: *Goniobasis gravida* (Tryon, 1873: 323); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Elimia varians* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941c: 15).
- griffithiana** **Lea, Anculosa.** 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 20 (*Obs. on Unio* 4: 20). Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 1, sp. 8. Syntypes USNM 121257 (Coosa River, Alabama). Taxonomy: *Anculosa rubiginosa* (Tryon, 1873: 387); *Anculosa griffithiana* (Goodrich, 1922: 29).
- grisea** **Anthony, Melania.** 1860, *PANSP* 12: 61. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 51, sp. 390[†]. Holotype^{ms} MCZ 161741 (Tennessee River, north Alabama). Taxonomy: *Goniobasis grisea* (Tryon, 1873: 321); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Lithasia (Lithasia) salebrosa florentiana* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 62, 1930a: 25, 1940: 4).
- grossa** **Anthony, Melania.** 1860, *PANSP* 12: 59. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 53, sp. 411 and in Tryon, 1873, *Strepomatidae*. 52, fig. 102[†]. Lectotype MCZ 161768 (Tennessee) here selected; identified by Tryon (1873: 52) as "Mr. Anthony's type" and incorrectly listed as "holotype" in Turner (1946: 102). Baker's (1964: 183) designation of ANSP 122620 as a primary type ("TSD") is invalid. Contrary to Baker (1964), it is neither the shell figured by Tryon (1873)

nor valid type material. Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).

grosvenorii **Lea, Goniobasis.** 1862b, *PANSP* 14: 263; 1863a, *JANSP* 5: 297, pl. 37, fig. 128[†] (*Obs. on Unio* 9: 119). Lectotype USNM 118947 (Fox River, Illinois) here selected. Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1945: 32) and *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1945: 32).

grosvenorii **Lea, Meseschiza.** 1864a, *PANSP* 16: 2; 1866b, *JANSP* 6: 152, pl. 23, fig. 67[†] (*Obs. on Unio* 11: 108). Lectotype USNM 121750 (Wabash River [Indiana]) here selected. Baker's (1964: 183) earlier selection of ANSP 26893a [not examined] as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), it is not Lea's figured specimen. Taxonomy: *Meseschiza grosvenorii* (Tryon, 1873: 350); *Lithasia* (*Angitrema*) *armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 3).

grosvenorii **'Lea' Goodrich, Mesochiza.** 1940, *OPUMMZ* (417): 3 [error for *Meseschiza grosvenorii* Lea].

haldemani **Tryon, Goniobasis.** 1865a, *Am. J. Conch.* 1: 38, pl. 1, fig. 8[†]. Lectotype ANSP 8572 (Lake Champlain) here selected, incorrectly listed by Baker (1964: 183) as "TOM." Taxonomy: *Goniobasis haldemani* (Tryon, 1873: 282); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia livescens haldemani* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4).

haleiana **Lea, Melania.** 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 86, pl. 9, fig. 35 (*Obs. on Unio* 4: 60). Syntypes USNM 119137 (Alexandria, [Rapides Parish,] Louisiana). According to Goodrich (1927: 61), "The type lot consists of juvenile *P. acuta* together with young *Goniobasis* that, apparently, are *plebeius* Anthony." Taxonomy: *Goniobasis haleiana* (Tryon, 1873: 284); *Ambloxus virginicus* (Hannibal, 1912: 175); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1927: 61) and *Elimia plebeius* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1927: 61).

hallenbeckii **'Lea, MS' Reeve, Melania.** 1860, *Conch. Icon.* 12: pl. 45, sp. 332. Also in Lea, 1862b, *PANSP* 14: 271; Lea, 1863a, *JANSP* 5: 339, pl. 38, fig. 203[†] (*Obs. on Unio* 9: 161). Lectotype USNM 118406 (Randall Creek, [near Columbus, Muscogee County,] Georgia) selected by Chambers (1990: 243, fig. 2D). Taxonomy: *Goniobasis hallenbeckii* (Tryon, 1873: 149); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia boykiniana boykiniana* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 3); *Elimia floridensis* (Chambers, 1990: 243).

harpa **Lea, Melania.** 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 90, pl. 9, fig. 45[†] (*Obs. on Unio* 4: 64). Holotype^{em} USNM 118956 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama). Taxonomy: *Goniobasis harpa* (Tryon, 1873: 319); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 19), *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4) and *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).

- harpethensis 'Pilsbry' Pilsbry & Rhoads, *Anculosa*.** 1896, *PANSP* 48: 499. Lectotype ANSP 69357a (Big Harpeth River, near Bellevue, [Davidson County,] Tennessee) selected by Baker (1964: 183) as "TSD now." Taxonomy: *Anculosa harpethensis* (Goodrich, 1921b: 11, 1940: 21).
- hartmaniana Lea, *Melania* [also *Goniobasis hartmanii* Lea].** 1861c, *PANSP* 13: 117; 1863a, *JANSP* 5: 218, pl. 34, fig. 1[†] (*Obs. on Unio* 9: 40) [as *Goniobasis hartmanii*]. Lectotype USNM 119855 (Cahaba River, Alabama) here selected. Taxonomy: *Goniobasis ampla* (Tryon, 1873: 315); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia hartmaniana* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1936: 8).
- hartmaniana 'Lea MS' Lewis, *Strephobasis*.** 1871, *Am. J. Conch.* 6: 225. No type material examined. Published locality: "Tennessee River." Taxonomy: *Pleurocera (Strephobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 7, 1940: 8).
- hartmanii Lea, *Schizostoma*.** 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 247, pl. 35, fig. 51[†] (*Obs. on Unio* 9: 69). Holotype^{mo} USNM 119375 (Coosa River, Alabama). Taxonomy: *Schizostoma demissum* (Tryon, 1873: 372); *Gyrotoma (Gyrotoma) lata incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- hartmanii Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 270, pl. 36, fig. 80 (*Obs. on Unio* 9: 92). No type material examined. Published locality: "Cahawba [*sic*] and Coosa Rivers, [Alabama,] Dr. Showalter; [Black] Warrior River, Alabama, Dr. Budd; Knoxville, J. Clark; Tennessee River, Alabama, Dr. Spillman." Taxonomy: *Pleurocera incrassatum* (Tryon, 1873: 82); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- hastata Anthony, *Melania*.** 1854, *ALNHNY* 6: 85, pl. 2, fig. 3. Also figured in Tryon, 1873, *Streptomatidae*. 124, fig. 234[†]. Lectotype MCZ 161753 (Alabama) here selected; identified by Tryon (1873: 124) as "Mr. Anthony's type" and incorrectly listed as "holotype" in Turner (1946: 102). Taxonomy: *Pleurocera hastatum* (Tryon, 1873: 124); *Ambloxus virginicus* (Hannibal, 1912: 176); *Pleurocera unciale hastatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- haysiana 'Lea' Hannibal, *Melania*.** 1912, *Proc. Mal. Soc. London* 10: 180 [error for *M. haysiana* Lea].
- haysiana Lea, *Melania*.** 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 25 (*Obs. on Unio* 4: 25). Figured in Reeve, 1861, *Conch. Icon.* 12: pl. 43, sp. 310 and in Tryon, 1873, *Streptomatidae*. 314, figs. 603-605. Lectotype ANSP 8741a (Alabama) selected by Baker (1964: 183) as "TSD now." Taxonomy: *Goniobasis haysiana* (Tryon, 1873: 313); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 18).
- hemphilli Henderson, *Goniobasis*.** 1935a, *Nautilus* 48: 96, pl. 4, fig. 1 [left][†], [right]. Holotype^{od} UCM 21167-a [not examined] ([Columbia River,] Portland, [Multnomah County,] Oregon). Taxonomy: *Juga (Juga) hemphilli hemphilli* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Henderson, 1935a: 96).

- hendersoni** 'Smith' Goodrich, *Gyrotoma*. 1924a, *MPUMMZ* (12): 18, pl. 2, figs. 19-21[†]. Holotype^{od} UMMZ 27433 [not examined] (Coosa River, Fort William Shoals, Talladega County, Alabama). Taxonomy: *Gyrotoma hendersoni* (Goodrich, 1924a: 18); *Gyrotoma pumilum* (Burch & Tottenham, 1980: 150; Burch, 1982: 134).
- henryanum** Lea, *Trypanostoma*. 1862c, *PANSP* 14: 272; 1863a, *JANSP* 5: 351, pl. 39, fig. 222[†] (*Obs. on Unio* 9: 173). Lectotype USNM 121945 (Tennessee) here selected. Taxonomy: *Pleurocera henryanum* (Tryon, 1873: 90); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera uncialis uncialis* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- hildrethiana** Lea, *Melania*. 1841a, *PAPS* 2: 11; 1842b, *TAPS* 8: 164, pl. 5, fig. 1 (*Obs. on Unio* 3: 2). Syntypes USNM 121900 (Ohio River, near Marietta [Washington County, Ohio]). Taxonomy: *Lithasia obovata* (Tryon, 1873: 33); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1940: 6).
- hinkleyi** Goodrich, *Pleurocera*. 1921a, *OPUMMZ* (91): 1, figs. 1-1a[†]. Holotype^{od} UMMZ 10587 [not examined] (Little Muddy Creek, [Dubois,] Washington County, Illinois). Taxonomy: *Pleurocera acuta hinkleyi* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939c: 3).
- holstonia** Lea, *Melania*. 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 189, pl. 6, fig. 55[†] (*Obs. on Unio* 3: 27). Lectotype USNM 121752 (Holston River, Tennessee) here selected. Taxonomy: *Angitrema verrucosa* (Tryon, 1873: 25); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 5).
- hubrichti** Clench, *Lithasia*. 1965, *Nautilus* 79: 32, fig. 1[†]. Holotype^{od} MCZ 250916 (Big Black River, 3 miles NW of Edwards, Hinds County, Mississippi). Taxonomy: *Lithasia (Angitrema) hubrichti* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Clench, 1965: 32).
- humerosa** Anthony, *Paludina*. 1860, *PANSP* 12: 71. Lectotype MCZ 72332 (Alabama) here selected; incorrectly identified by Turner (1946: 102) as "holotype." Also listed as "holotype" in Clench (1962: 278). Taxonomy: (Tryon, 1873: 421, 427, errata) [Doubtful and Spurious Species]; *Lithasia verrucosa* (Clench, 1962: 278).
- hybrida** Anthony non Reeve, 1860, *Melania* [also *M. subcarinata* 'Anthony, MS' Reeve]. 1860, *PANSP* 12: 60. Also in Reeve, 1860, *Conch. Icon.* 12: pl. 40, sp. 282, errata [as *subcarinata*] and in Tryon, 1873, *Strepomatidae*. 239, fig. 464. Possible lectotype ANSP 27451a (Tennessee) selected by Baker (1964: 183) as "TSD now" [not figured by Tryon (1873)]. Paralectotypes MCZ 161810 and MCZ 161817, both listed as "cotypes" in Turner (1946: 102, 106 [as *M. subcarinata*]). Taxonomy: *Goniobasis hybrida* (Tryon, 1873: 238); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- hydei** Conrad, *Melania*. 1834a, *New Fresh-Water Shells*: 50, pl. 8, fig. 1. Doubtful syntype ANSP 8730a (Black Warrior River, Alabama), incorrectly listed by Baker (1964: 184) as "TOM." Taxonomy: *Goniobasis hydei* (Tryon, 1873: 140); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Elimia hydei* (Burch & Tottenham,

1980: 138; Burch, 1982: 36; Goodrich, 1941b: 6).

imbricata Anthony, *Melania*. 1854, *ALNHNY* 6: 105, pl. 3, fig. 5. Lectotype MCZ 74199 (Dalton, [Whitfield County,] Georgia) here selected; incorrectly identified by Turner (1946: 102) as "holotype." Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxy virginicus* (Hannibal, 1912: 176); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17); not *Elimia carinifera* (Thompson, 2000: 12).

imperialis Lea, *Lithasia*. 1861a, *PANSP* 13: 55; 1863a, *JANSP* 5: 258, pl. 35, fig. 67[†] (*Obs. on Unio* 9: 80). Lectotype USNM 121797 (north Alabama) here selected. Taxonomy: *Lithasia imperialis* (Tryon, 1873: 30); *Lithasia (Lithasia) salebrosa florentiana* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 4).

impressa Lea, *Melania*. 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 19 (*Obs. on Unio* 4: 19). Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 43, sp. 316. Syntypes USNM 119170 (Coosa River, Alabama). Taxonomy: *Goniobasis impressa* (Tryon, 1873: 337); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia impressa* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1936: 51, 1944b: 46).

incisa Lea, *Anculosa (Schizostoma)*. 1843b, *PAPS* 2: 243; 1844, *TAPS* 9: 28 (*Obs. on Unio* 4: 28). Figured in Haldeman, 1847-1848, *Leptoxis*: 2, pl. 1, figs. 24-26. Doubtful lectotype ANSP 124490a (Coosa River, Alabama) selected by Baker (1964: 184) as "TSD now." Taxonomy: *Schizostoma incisum* (Tryon, 1873: 378); *Gyrotoma (Gyrotoma) leta incisa* (Hannibal, 1912: 182); *Gyrotoma incisum* (Goodrich, 1922: 56, 1924a: 23, 1944b: 48); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

inclinans Lea, *Goniobasis*. 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 318, pl. 37, fig. 165 (*Obs. on Unio* 9: 140). Lectotype USNM 118420 ([Flint River,] near Albany, [Dougherty County,] Georgia) selected by Chambers (1990: 243, fig. 2E). Taxonomy: *Goniobasis inclinans* (Tryon, 1873: 153); *Ambloxy virginicus* (Hannibal, 1912: 177); *Elimia catenaria inclinans* (Burch & Tottenham, 1980: 133; Burch, 1982: 32; Goodrich, 1928b: 30).

inconstans Lea, *Goniobasis*. 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 325, pl. 38, fig. 178[†] (*Obs. on Unio* 9: 147). Lectotype USNM 119175 (Etowah River) here selected. Taxonomy: *Goniobasis inconstans* (Tryon, 1873: 188); *Ambloxy virginicus* (Hannibal, 1912: 177).

incrassata Anthony, *Melania*. 1854, *ALNHNY* 6: 99, pl. 2, fig. 17[†]. Holotype^{mo} MCZ 45374 (no locality given) (Turner, 1946: 103). Taxonomy: *Pleurocera incrassatum* (Tryon, 1873: 82); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).

incurta 'Anthony, MS' Reeve, *Melania*. 1860, *Conch. Icon.* 12: pl. 41, sp. 300. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269); *Ambloxy virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 7).

incurvum Lea, *Trypanostoma*. 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 286, pl. 36, fig. 109[†] (*Obs. on Unio* 9: 108). Lectotype USNM 122179 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Baker's (1964: 184)

- selection of ANSP 27074 as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), the shell is not the one figured by Lea. Although that specimen was received from Lea, there is nothing to suggest that it is better than an idio- or topotype. Taxonomy: *Pleurocera incurvum* (Tryon, 1873: 76); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera trochiformis* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 12).
- indianensis** 'Pilsbry, MS' Blatchley & Daniels, *Goniobasis*. 1903, *Ann. Rept. Indiana Dept. Geol. Nat. Res.* 26: 606, fig. 28. Lectotype ANSP 174791a (Blue River, Wyandotte, [Crawford County,] Indiana) selected by Baker (1964: 184) as "TSD now."
- induta** Lea, *Goniobasis*. 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 319, pl. 37, fig. 166[†] (*Obs. on Unio* 9: 141). Lectotype USNM 119174 (near Vienna, Dooly County, Georgia) selected by Chambers (1990: 262, fig. 4E). Taxonomy: *Goniobasis doolyensis* (Tryon, 1873: 187); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia induta* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1942a: 5).
- inempta** 'Anthony' Hannibal, *Melania*. 1912, *Proc. Mal. Soc. London* 10: 175 [error for *M. inemta*].
- inemta** 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 362. Syntype MCZ 31065 (Virginia) listed as "paratype" in Turner (1946: 103). On the specimen label, J.G. Anthony reports that the "type" was never returned to him, presumably from A.A. Gould. Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- inermis** Anthony, *Io*. 1860, *PANSP* 12: 70. Figured in Reeve, 1861, *Conch. Icon.* 12(*Io*): pl. 3, sp. 21[†]. Lectotype MCZ 50228 (Tennessee) here selected; incorrectly identified by Turner (1946: 103) as "holotype." Possible paralectotypes ANSP 124465, one of which Baker (1964: 184) listed incorrectly as "TOM." Taxonomy: *Io inermis* (Tryon, 1873: 6); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).
- infantula** Lea, *Goniobasis*. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 135, pl. 23, fig. 39[†] (*Obs. on Unio* 11: 91). Lectotype USNM 119178 (Falls of the Ohio [at Louisville, Jefferson County, Kentucky]) here selected. Baker's (1964: 184) selection of ANSP 8659a [not examined] as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), the shell is not the one figured by Lea. Taxonomy: *Goniobasis infantula* (Tryon, 1873: 256); *Ambloxus virginicus* (Hannibal, 1912: 177); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1929: 6, 1940: 6).
- inflata** Lea, 1841, *Melania*. 1838a, *TAPS* 6: 17, pl. 23, fig. 98; (*Obs. on Unio* 2: 17). No type material examined. Published locality: "Indian Creek, [Virginia], West of Allegheny Mountains. P.H. Nicklin." Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis (Mudalia) dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10; 1940: 20).
- inflata** Haldeman, 1838, *Melania*. 1841b, *Monog. Limniades* 3: wrapper. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 53, sp. 410. Type material presumed to be in the ANSP not found by Baker (1964: 184). Published locality: "Alabama

[River], Mr. Conrad." Taxonomy: *Goniobasis inflata* (Tryon, 1873: 328); *Gyrotoma* (*Goniobasis*) *leta* (Hannibal, 1912: 181); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).

informis **Lea, *Goniobasis***. 1863b, *PANSP* 15: 154; 1866b, *JANSP* 6: 136, pl. 23, fig. 41[†] (*Obs. on Unio* 11: 92). Lectotype USNM 119179 (Falls of the Ohio [at Louisville, Jefferson County, Kentucky]) here selected. Taxonomy: *Goniobasis informis* (Tryon, 1873: 283); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1929: 7, 1940: 6).

infraciata **Anthony, *Melania***. 1860, *PANSP* 12: 57. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 42, sp. 301 and in Tryon, 1873, *Strepomatidae*. 74, fig. 141[†]. Lectotype ANSP 26948a (Tennessee) here selected; identified by Tryon (1873: 74) as "Mr. Anthony's type" and listed in Baker (1964: 184) as "TSD." Paralectotypes MCZ 161772 listed as "cotypes" in Turner (1946: 103). Taxonomy: *Pleurocera infraciatum* (Tryon, 1873: 74); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); "unknown with exception of the types" (Goodrich, 1940: 11).

infusca '**Lea**' **Hannibal, *Goniobasis***. 1912, *Proc. Mal. Soc. London* 10: 181 [error for *G. infuscata* Lea].

infuscata **Lea, *Goniobasis***. 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 330, pl. 38, fig. 188[†] (*Obs. on Unio* 9: 152). Lectotype USNM 119181 (Georgia) here selected. Taxonomy: *Goniobasis gerhardtii* (Tryon, 1873: 226); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia fascinans* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 5) and *Elimia caelatura infuscata* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 6); *Elimia leontiana infuscata* (Thompson, 2000: 30).

inornata '**Anthony**' **Gould, *Melania***. 1851, *PBSNH* 3: 360. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 37, sp. 256. Syntype MCZ 161692 (Maumee River, Ohio); incorrectly identified by Turner (1946: 103) as "holotype." Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 31).

inosculata **Lea, *Goniobasis***. 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 334, pl. 38, fig. 195[†] (*Obs. on Unio* 9: 156). Lectotype USNM 119177 (Little Uchee [Creek], near Columbus, Georgia [Russell-Lee counties, Alabama]) selected by Chambers (1990: 263). Taxonomy: *Goniobasis pallescens* (Tryon, 1873: 266); *Ambloxyus virginicus* (Hannibal, 1912: 177).

inostoma '**Anthony**' **Goodrich, *Melania***. 1940, *OPUMMZ* (417): 19 [error for *M. iostoma* Anthony].

instabilis **Lea, *Goniobasis***. 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 329, pl. 38, fig. 186[†] (*Obs. on Unio* 9: 151). Lectotype USNM 118976 ([21 miles N of Murphy,] Cherokee County, North Carolina) here selected. Taxonomy: *Goniobasis interrupta* (Tryon, 1873: 171); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia interrupta* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1940: 19).

integer Reeve, *Anculotus*. See *Paludina integra* Say.

integra Say, *Paludina*. 1821, *JANSP* 2: 174; 1858, Binney's reprint: 69. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 5, sp. 35 [as *A. integer*]. No type material examined. Published locality: "Inhabits the waters of the Missouri." Taxonomy: *Somatogyra* (Tryon, 1873: 421) [Doubtful and Spurious Species]; a viviparid (Clench, 1962: 261).

integra Say, *Melania*. 1829b, *New Harmony Dissem.* 2: 276; 1840, Say's reprint: 18; 1858, Binney's reprint: 144. Figured in Haldeman, 1847-1848, *Leptoxis*: 6, pl. 5, fig. 154. No type material examined. Published locality: "Inhabits Ohio River and many of its tributaries."

intensa 'Anthony, MS' Reeve, *Melania*. 1860, *Conch. Icon.* 12: pl. 49, sp. 371. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Pleurocera intensum* (Tryon, 1873: 88); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Pleurocera subulare* (Goodrich, 1917: 124); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2).

intercedens Lea, *Goniobasis*. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 305, pl. 37, fig. 143[†] (*Obs. on Unio* 9: 127). Lectotype USNM 118994 (Cahaba River, Alabama) here selected. Taxonomy: *Goniobasis angulata* (Tryon, 1873: 221); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia cahawbensis cahawbensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3, 1941c: 14).

interioris Goodrich, *Goniobasis*. 1944a, *OPUMMZ* (485): 3, fig. 2[†]. Holotype^{od} UMMZ 160005 (Badger Creek, Bitner Ranch, Washoe County, Nevada) (Rosewater, 1959: 207). Taxonomy: *Juga (Oreobasis) interioris* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1944a: 3).

interlineata Anthony, *Goniobasis*. 1865, *Am. J. Conch.* 1: 36, pl. 1, fig. 3. Syntype MCZ 161726 ("Christy Creek, Indiana" [Clifty Creek, Bartholomew-Decatur counties]); incorrectly identified by Turner (1946: 103) as "holotype." Taxonomy: *Goniobasis interlineata* (Tryon, 1873: 275); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).

interrupta Haldeman, *Melania*. 1840b, Suppl. to *Monog. Limniades* 1: wrapper. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 52, sp. 398 and in Tryon, 1873, *Strepomatidae*: 172, fig. 331[†]. Lectotype ANSP 8760a ([Cumberland River,] Nashville, [Davidson County,] Tennessee) selected by Baker (1964: 184) as "TSD now." Taxonomy: *Goniobasis interrupta* (Tryon, 1873: 171); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia interrupta* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1940: 18).

intersita Haldeman, *Melania*. 1842, *Monog. Limniades* 4: wrapper. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 50, sp. 376 and in Tryon, 1873, *Strepomatidae*: 181, fig. 352. Lectotype ANSP 8695 (Swan Creek, [Wabash-Kosciusko counties,] Indiana) selected by Baker (1964: 184) as "TSD now." Paralectotype USNM 12108 listed by Tryon (1873: 181) as "Prof. Haldeman's type." Contrary to Baker (1964), the selected lectotype is not the shell figured by Tryon (1873). Taxonomy: *Goniobasis intersita* (Tryon, 1873: 181); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia costifera* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 16).

- intertexta** Anthony, *Melania*. 1860, *PANSP* 12: 62. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 41, sp. 296 and in Tryon, 1873, *Strepomatidae*. 156, fig. 296[†]. Lectotype ANSP 27471a (Tennessee) here selected, listed by Baker (1964: 184) as "TSD." Paralectotypes ANSP 27471 and MCZ 50235, the latter lot was incorrectly listed as "holotype" by Turner (1946: 103). Taxonomy: *Goniobasis arachnoidea* (Tryon, 1873: 155); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia arachnoidea arachnoidea* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1928b: 31, 1940: 13).
- interrupta** '(Haldeman)' Goodrich, *Melania*. 1940, *OPUMMZ* (417): 18 [error for *M. interrupta* Haldeman].
- interveniens** Lea, *Goniobasis*. 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 320, pl. 38, fig. 169[†] (*Obs. on Unio* 9: 142). Lectotype USNM 118959 (north Alabama) here selected. Taxonomy: *Goniobasis interveniens* (Tryon, 1873: 170); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia interveniens* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 14, 1940: 15).
- iostoma** Anthony, *Melania*. 1860, *PANSP* 12: 62. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 47, sp. 351 and in Tryon, 1873, *Strepomatidae*. 135, fig. 251. Possible lectotype ANSP 120931a (Tennessee) selected by Baker (1964: 184) as "TSD now." Paralectotype MCZ 161756, incorrectly listed by Turner (1946: 103) as "holotype." The type status of Baker's (1964: 184) designation is questionable, as it was received from Wheatley rather than Anthony. Taxonomy: *Pleurocera opaca* (Tryon, 1873: 135); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); unknown *Goniobasis* (Goodrich, 1940: 19).
- iota** Anthony, *Melania*. 1854, *ALNHNY* 6: 86, pl. 2, fig. 4. Idiotypes MCZ 161811 invalidly selected as lectotype by Turner (1946: 103). J.G. Anthony notes on the specimen label, "Type lost, but this is no doubt the same." There are now 4 specimens in this lot. No published locality given; idiotypic locality: Racoon Creek, Vinton County, Ohio. Taxonomy: *Goniobasis iota* (Tryon, 1873: 236); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- isogona** Say, *Melania*. 1829b, *New Harmony Dissem.* 2: 277; 1840, Say's reprint: 19. Figured in Haldeman, 1847-1848, *Leptoxis*: 6, pl. 5, fig. 155. No type material examined. Published locality: "Inhabits Bear-Grass Creek near Louisville [Jefferson County, Kentucky]."
- jayana** Lea, *Melania*. 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 20 (*Obs. on Unio* 4: 20). Figured in Tryon, 1873, *Strepomatidae*. 17, figs. 50-51. Holotype^m USNM 880619 (Caney Fork [Cumberland River], De Kalb County, Tennessee). Taxonomy: *Angitrema jayana* (Tryon, 1873: 17); *Pleurocera (Pleurocera) fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia (Angitrema) jayana* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 4).
- jayi** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 270, pl. 36, fig. 81[†] (*Obs. on Unio* 9: 92). Holotype^m USNM 122151 (Alabama?). Taxonomy: *Pleurocera jayi* (Tryon, 1873: 83); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- jonesi** Goodrich, *Goniobasis* [new name for *Goniobasis wheatleyi* Lea]. 1936,

- MPUMMZ* (31): 31. In Lea, 1868a, *PANSP* 20: 151 [as *wheatleyi*]; 1868b, *JANSP* 6: 328, pl. 54, fig. 1 (*Obs. on Unio* 12: 88) [as *wheatleyi*]. Syntype(s) USNM 118731 [not examined] (Coosa River, Alabama). Goodrich (1936) assigned *Lithasia wheatleyi* Lea, 1866 to the genus *Goniobasis*, reducing *Goniobasis wheatleyi* Lea, 1868 to a secondary junior-homonym. This being the case, Goodrich renamed the latter *Goniobasis jonesi*. Taxonomy: *Elimia jonesi* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 3; 1944b: 45).
- kirtlandianus** Anthony, *Anculotus*. 1840b, *BjNH* 3: 395, pl. 3, fig. 4. Also figured in Tryon, 1873, *Strepomatidae*: 396, fig. 777c[†] Lectotype MCZ 257990 (Kanawha Falls, [Fayette County, West] Virginia) here selected. Idiotype MCZ 143104 listed as “cotypes” in Turner (1946: 103). Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis (Mudalia) dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 20).
- kirtlandiana** Lea, *Melania*. 1841a, *PAPS* 2: 11; 1842b, *TAPS* 8: 165, pl. 5, fig. 4 (*Obs. on Unio* 3: 3). Syntype USNM 119300 (Ohio). Published localities: “Richmond, Indiana; Duck Creek, near Cincinnati [Ohio]; and Miami, Ohio. T.G. Lea. Little Miami [River, Ohio], Dr. Warder.” The type locality should not be restricted until a lectotype is designated. Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- knoxense** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 281, pl. 36, fig. 101[†] (*Obs. on Unio* 9: 103). Lectotype USNM 121548 (Flat Creek, Knox County, Tennessee) here selected. Taxonomy: *Pleurocera knoxense* (Tryon, 1873: 130); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- knoxvillense** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 274, pl. 36, fig. 87[†] (*Obs. on Unio* 9: 96). Holotype^{mo} USNM 122149 ([Tennessee River,] Knoxville, [Knox County,] Tennessee). Taxonomy: *Pleurocera knoxvillense* (Tryon, 1873: 127); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera unciale* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- labiatum** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 272, pl. 36, fig. 84[†] (*Obs. on Unio* 9: 94). Lectotype USNM 122158 ([Great] Miami River, Ohio) here selected. Baker’s (1964: 184) selection of ANSP 26957a as a primary type (“TSD now”) is hereby ignored due to its ambiguity. Contrary to Baker (1964), the shell is not the one figured by Lea. Although the lot was received from Lea, there is no mention of the ANSP in his original description. Taxonomy: *Pleurocera labiatum* (Tryon, 1873: 111); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera subulare* (Goodrich, 1917: 124); ??*Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 46).
- lachryma** ‘Anthony, MS’ Reeve, *Melania*. 1861, *Conch. Icon.* 12: pl. 59, sp. 473. Also figured in Tryon, 1873, *Strepomatidae*: 343, fig. 653[†]. Lectotype MCZ 316293 (Alabama) here selected; identified by Tryon (1873: 343) as “a copy of Mr. Anthony’s type.” Paralectotypes MCZ 161745 listed as “cotypes” in Turner (1946: 103). Taxonomy: *Eurycaelon lachryma* (Tryon, 1873: 343); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia lachryma* (Burch & Tottenham, 1980: 142; Burch,

1982: 38; Goodrich, 1936: 39, 1944b: 45).

laciniatum **Lea, Schizostoma**. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 95, pl. 9, fig. 57[†] (*Obs. on Unio* 4: 69). Holotype^{mo} USNM 119401 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama). Taxonomy: *Schizostoma laciniatum* (Tryon, 1873: 359); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 21, 1944b: 47).

laeta **Jay, Melania**. 1839, *Cat. Shells*, 3rd edition: 122, pl. 7, fig. 11. Syntype AMNH 56113 [not examined] (Alabama), incorrectly identified by Richards & Old (1969: 60) as "holotype." Taxonomy: *Goniobasis laeta* (Tryon, 1873: 318); *Gyrotoma* (*Goniobasis*) *laeta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 42, 1944b: 46).

laevigata **Lea, Melania**. Renamed *M. leai* Brot.

lavis **Lea, Melania**. Renamed *M. leai* Brot.

laqueata **Say, Melania**. 1829b, *New Harmony Dissem.* 2: 275; 1832, *Amer. Conch.* 1: pl. 47, fig. 1; 1840, Say's reprint: 17. Type material presumed to be in the ANSP not found by Baker (1964: 184). Published locality: "...found by Dr. Troost in Cumberland River." Taxonomy: *Goniobasis laqueata* (Tryon, 1873: 176); *Ambloxyx virginicus* (Hannibal, 1912: 174); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 5, 1940: 14).

larvaeformis '**Lea, MS**' **Reeve, Melania**. 1860, *Conch. Icon.* 12: pl. 48, sp. 357. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Goniobasis larvaeformis* (Tryon, 1873: 243); *Ambloxyx virginicus* (Hannibal, 1912: 176); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 7).

lateralis '**Cuming**' **Reeve, Melania**. 1860, *Conch. Icon.* 12 (*Melania*): pl. 43, sp. 314. Type material presumed to be in the BMNH not examined. No locality listed. Taxonomy: *Goniobasis harpa* (Tryon, 1873: 319).

latitans **Anthony, Melania**. 1854, *ALNHNY* 6: 88, pl. 2, fig. 6[†]. Lectotype MCZ 161992 ([Green River,] Mammoth Cave, [Edmonson County,] Kentucky) here selected; incorrectly identified by Turner (1946: 103) "holotype." Taxonomy: *Goniobasis latitans* (Tryon, 1873: 296); *Ambloxyx virginicus* (Hannibal, 1912: 176); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 6).

lativittatum **Lea, Trypanostoma**. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 352, pl. 39, fig. 223[†] (*Obs. on Unio* 9: 174). Lectotype USNM 121975 (Chickasaw River [Chickasaw Creek?], Alabama) here selected. Taxonomy: *Pleurocera lativittatum* (Tryon, 1873: 100); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

latitans '**Anthony**' **Goodrich, Melania**. 1940, *OPUMMZ* (417): 6 [error for *M. latitans* Anthony].

laurae **Goodrich, Goniobasis**. 1944a, *OPUMMZ* (485): 2, fig. 1[†]. Holotype^{od} UMMZ 160002 (spring W of Home Camp, Long Valley, Washoe County, Nevada). Taxonomy: *Juga* (*Oreobasis*) *laurae* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1944a: 2).

lavaeformis '**Lea, Reeve**' **Goodrich, Melania**. 1940, *OPUMMZ* (417): 17 [error for

- M. larviformis* [Lea, MS] Reeve].
- lawrencii** **Lea, Goniobasis**. 1869, *PANSP* 21: 125; 1874, *JANSP* 8: 62, pl. 21, fig. 17 (*Obs. on Unio* 13: 66) [as *lawrencei*]. No type material examined. Published locality: “[Ouachita] River, near Hot Springs, [Garland County,] Arkansas, Dr. Lawrence.” Taxonomy: *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1927: 62, 1939b: 2, 1939c: 3).
- leaii** **Brot, Melania** [new name for *M. laevis* **Lea, 1843 non Gray, 1834, which was a new name for M. laevigata** **Lea, 1841 non Lamarck, 1822**]. 1862, *Cat. Syst.*: 34. In Lea, 1841a, *PAPS* 2: 11 [as *laevigata*]; 1842b, *TAPS* 8: 165, pl. 5, fig. 3[†] (*Obs. on Unio* 3: 3) [as *laevigata*]; 1842b, *TAPS* 8: corrigenda (*Obs. on Unio* 3: corrigenda) [as *laevis*]; 1843a, *PAPS* 2: 237 [as *laevis*]. Lectotype USNM 119204 (Alabama River, Claiborne, [Monroe County,] Alabama) here selected. Taxonomy: *Goniobasis laevigata* (Tryon, 1873: 276); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia taitiana* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1942a: 5).
- leai** **Tryon, Eurycalon**. 1866, *Am. J. Conch.* 2: 5, pl. 2, fig. 3. Possible syntype ANSP 124988a [not examined] (Etowah River, Cartersville, [Bartow County,] Georgia); incorrectly listed by Baker (1964: 184) as “TOM.” Taxonomy: *Eurycalon leai* (Tryon, 1873: 342); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 38).
- leaii** **Tryon, Pleurocera** [new name for *Io viridula* **Lea**]. 1873, *Strepomatidae*. 102. In Lea, 1861d, *PANSP* 13: 394 [as *Io viridula*]; 1863a, *JANSP* 5: 349, pl. 39, fig. 218[†] (*Obs. on Unio* 9: 171) [as *Io viridula*]. Lectotype USNM 121991 (Coosa River, Alabama) here selected. Taxonomy: *Pleurocera leaii* (Tryon, 1873: 102); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- leai** **Tryon, Goniobasis**. Renamed *G. versa* **Lea**.
- lecontiana** **Lea, Melania**. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 177, pl. 5, fig. 29 (*Obs. on Unio* 3: 15). Possible lectotype ANSP 8754a (locality unknown [“Georgia. Major Le Conte.”]) selected by Baker (1964: 184) as “TSD now.” Taxonomy: *Goniobasis lecontiana* (Tryon, 1873: 167); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia caelatura lecontiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 3, 1941b: 5); *Elimia lecontiana lecontiana* (Thompson, 2000: 29).
- leidyana** **Lea, Goniobasis**. 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 322, pl. 38, fig. 173[†] (*Obs. on Unio* 9: 144). Lectotype USNM 118980 (Benton [Calhoun] County, Alabama) here selected. Taxonomy: *Goniobasis carinocostata* (Tryon, 1873: 164); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia carinocostata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4); *Elimia carinocostata* (Thompson, 2000: 20).
- lepida** **Lea, Goniobasis** [new name for *Melania propria* **Lea, 1861, p. 123**]. 1861c, *PANSP* 13: 123 [as *Melania propria*]; 1863a, *JANSP* 5: 227, pl. 34, fig. 17[†] (*Obs. on Unio* 9: 49). Holotype^{mo} USNM 119802 (Yellowleaf Creek, Shelby County, Alabama). Taxonomy: *Eurycalon lepida* (Tryon, 1873: 344); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).

- lesleyi** **Lea, Trypanostoma.** 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 146, pl. 23, fig. 59[†] (*Obs. on Unio* 11: 102). Lectotype USNM 121596 (eastern Tennessee) here selected. Taxonomy: *Pleurocera lesleyi* (Tryon, 1873: 53); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- lewisii** **Lea, Anculosa.** 1861a, *PANSP* 13: 54; 1863a, *JANSP* 5: 257, pl. 35, fig. 64[†] (*Obs. on Unio* 9: 79). Lectotype USNM 121248 (Tennessee) here selected. Taxonomy: *Anculosa lewisii* (Tryon, 1873: 418); *Anculosa lewisii* (Goodrich, 1921b: 11); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 6).
- lewisii** **Lea, Melania.** 1861a, *PANSP* 13: 118; 1863a, *JANSP* 5: 243, pl. 35, fig. 46[†] (*Obs. on Unio* 9: 65) [as *Goniobasis*]. Lectotype USNM 119407 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis lewisii* (Tryon, 1873: 331); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20).
- lewisii** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 292, pl. 36, fig. 120[†] (*Obs. on Unio* 9: 114). Lectotype USNM 122024 ([Illinois River,] Peoria, [Peoria County,] Illinois) here selected. Taxonomy: *Pleurocera lewisii* (Tryon, 1873: 90); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera acuta lewisi* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939c: 3, 1940: 13).
- lewisii** **Lea, Schizostoma.** 1869, *PANSP* 21: 125; 1874, *JANSP* 8: 61, pl. 21, fig. 16 (*Obs. on Unio* 13: 65). Syntypes USNM 119409 (Coosa River, Alabama). Taxonomy: *Gyrotoma lewisi* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 18, 1944b: 47).
- leidyana** **'Lea' Hannibal, Goniobasis.** 1912, *Proc. Mal. Soc. London* 10: 177 [error for *leidyana* Lea].
- ligata** **Menke, Melania.** 1828, *Syn. Meth.*, 1st edition: 82; 1830, 2nd edition: 136. No type material examined. Published locality: "Hab. prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).
- ligata** **Anthony, Anculosa.** 1860, *PANSP* 12: 67. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 3, sp. 19 and in Tryon, 1873, *Strepomatidae*: 420, fig. 838[†]. Possible lectotype ANSP 27621a (Coosa River, Alabama) selected by Baker (1964: 184) as "TSD now." Paralectotypes MCZ 161788, listed as "cotypes" in Turner (1946: 103), and ANSP 27621. Baker's (1964) lectotype designation is questionable since the lot was received from Showalter rather than Anthony. Taxonomy: *Anculosa ligata* (Tryon, 1873: 420); *Leptoxis (Leptoxis) ligata* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 54, 1944b: 43).
- ligata** **'Conrad (ubi)' Brot, Melania.** 1862, *Cat. Syst.*: 33 [*nomen nudum*]. Published locality: "Alabama." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- ligatum** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 288, pl. 36, fig.

- 114[†] (*Obs. on Unio* 9: 110). Lectotype USNM 122177 (Tennessee) here selected. Taxonomy: *Pleurocera troostii* (Tryon, 1873: 67); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).
- lima Conrad, Melania.** 1834a, *New Fresh-Water Shells*: 54, pl. 8, fig. 8. Type material presumed to be in the ANSP not found by Baker (1964: 184). Published locality: "Inhabits Elk river, [Limetone-Lauderdale counties,] Alabama..." Taxonomy: *Angitrema lima* (Tryon, 1873: 23); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Angitrema) lima* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 4).
- lindsleyi Lea, Goniobasis.** 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 319, pl. 37, fig. 167[†] (*Obs. on Unio* 9: 141). Lectotype USNM 118978 (Tennessee) here selected. Taxonomy: *Goniobasis dislocata* (Tryon, 1873: 191); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- lirata 'Smith' Goodrich, Anculosa.** 1922, *MPUMMZ* (7): 45, pl. 1, fig. 25[†]; pl. 3, fig. 22. Holotype^{od} UMMZ 10168 (Coosa River, Fort William Shoals, Talladega County, Alabama). Taxonomy: *Leptoxis (Leptoxis) lirata* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 45).
- lita Lea, Melania.** 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 239, pl. 34, fig. 40[†] (*Obs. on Unio* 9: 61) [as *Goniobasis*]. Holotype^{mo} USNM 119801 (Cahaba River, Alabama). Taxonomy: *Goniobasis lita* (Tryon, 1873: 301); *Cyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia pupoidea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 21, 1941c: 16).
- lithasiodes 'Lea' Goodrich, Goniobasis.** 1945, *MPUMMZ* (64): 32 [error for *G. lithasioides* Lea].
- lithasioides Lea, Goniobasis.** 1863b, *PANSP* 15: 154; 1866b, *JANSP* 6: 133, pl. 23, fig. 37[†] (*Obs. on Unio* 11: 89). Holotype^{mo} USNM 118997 (Ohio). Taxonomy: *Goniobasis lithasioides* (Tryon, 1873: 255); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 32).
- lithasoides 'Lea' Tryon, Goniobasis.** 1873, *Strepomatidae*: 255 [error for *G. lithasioides* Lea].
- littorina Haldeman, Anculosa.** 1840a, *Monog. Limniades* 1: wrapper; 1847-1848, *Leptoxis*: 4, pl. 4, fig. 110 [as *Leptoxis*]. No type material examined. Published locality: "Holston river, Virginia." Taxonomy: *Anculosa littorina* (Tryon, 1873: 384); *Anculosa littorina* (Goodrich, 1921b: 11); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 157; Burch, 1982: 138; Goodrich, 1940: 21).
- livescens Menke, Melania.** 1830, *Syn. Meth.*, 2nd edition: 135. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 34, sp. 229 and in Tryon, 1873, *Strepomatidae*: 246, fig. 483. No type material examined. Published locality: "Ad lacum Erie dictum, in provincia Newyork." Taxonomy: *Goniobasis livescens* (Tryon, 1873: 248); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 3, 1940: 18, 1942a: 6, 1945: 30).

livida Reeve, *Melania* [new name for *M. varicosa* 'Ward' Haldeman non Troschel 1837]. 1861, *Conch. Icon.* 12: pl. 55 sp. 434. In Haldeman, 1841b, *Monog. Limniades* 3: wrapper [as *M. varicosa*]. Type material presumed to be in the ANSP not found (Baker, 1964: 189). Reeve (1861) lists his shell coming from J.G. Anthony (i.e., the MCZ). Published locality: "Ohio." Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 31) and *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1927: 61, 1939b: 2).

loudonensis 'Adams' Goodrich, *Io*. 1940, *OPUMMZ* (417): 2 [error for *Io loudonensis* Adams].

loudonensis Adams, *Io*. 1915, *Mem. Nat. Acad. Sci.* 12: 14, pl. 1, fig. 13[†]; pl. 52, fig. 12. Holotypend USNM 424988 (Sam's Island and downstream to Huff's Ferry, Tennessee River, Loudon, [Loudon County,] Tennessee). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

louisvillensis Lea, *Goniobasis*. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 133, pl. 23, fig. 36[†] (*Obs. on Unio* 11: 89). Lectotype USNM 118998 (Ohio River, [Louisville, Jefferson County, Kentucky]) here selected. Taxonomy: *Goniobasis louisvillensis* (Tryon, 1873: 257); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 61, 1929: 7, 1940: 6).

livida Goodrich, *Anculosa taeniata*. 1944b, *Nautilus* 58: 42. No type material designated (Rosewater, 1959: 207). Published locality: "Tributaries of the Coosa."

lugubris Lea, *Melania*. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 84, pl. 9, fig. 29[†] (*Obs. on Unio* 4: 58). Holotype^{ms} ANSP 26965 (Alabama) listed as "TSD now" in Baker (1964: 185). Taxonomy: *Pleurocera lugubre* (Tryon, 1873: 115); *Ambloxyus virginicus* (Hannibal, 1912: 175); "not seen" (Goodrich, 1941b: 8).

livida 'Anthony, MS' Reeve, *Io*. 1861, *Conch. Icon.* 12: pl. 3, sp. 20[†]. Also figured in Tryon, 1873, *Streptomatidae* 6, fig. 33[†]. Lectotype MCZ 50229 (Tennessee) here selected; identified by Tryon (1873: 6) as "the type specimen" and incorrectly listed as "holotype" in Turner (1946: 103). Taxonomy: *Io inermis* (Tryon, 1873: 6); *Pleurocera (Io) fluvialitilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).

luteocella Lea, *Goniobasis*. 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 332, pl. 54, fig. 10[†] (*Obs. on Unio* 12: 92). Lectotype USNM 119243 (Conasauga River, [Whitfield Co.,] Georgia) here selected. Taxonomy: *Elimia caelatura luteocella* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 2, 1941b: 5); *Elimia leontiana luteocella* (Thompson, 2000: 34).

luteola Lea, *Melania*. 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 230, pl. 34, fig. 22[†] (*Obs. on Unio* 9: 52) [as *Goniobasis*]. Lectotype USNM 119803 (Alabama River, Alabama) here selected. Taxonomy: *Goniobasis luteola* (Tryon, 1873: 322); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia pupoidea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 21, 1941c: 16).

luteum Lea, *Trypanostoma*. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 350, pl. 39, fig. 220[†] (*Obs. on Unio* 9: 172). Lectotype USNM 121994 (South Carolina) here se-

- lected. Taxonomy: *Pleurocera luteum* (Tryon, 1873: 131); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- lyonii** **Lea, Goniobasis.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 313, pl. 37, fig. 156⁺ (*Obs. on Unio* 9: 135). Holotype^{mo} USNM 119147 (Grayson County, Kentucky). Taxonomy: *Goniobasis athleta* (Tryon, 1873: 200); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 14).
- lyonii** **Lea, Trypanostoma.** 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 144, pl. 23, fig. 55⁺ (*Obs. on Unio* 11: 100). Lectotype USNM 122198 (Big Creek, [south of mountain at] Cumberland Gap, [Claiborne County,] Tennessee) here selected. Taxonomy: *Pleurocera lyonii* (Tryon, 1873: 124); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia ebum ebum* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1927: 58, 1940: 18).
- lyonii** **Lea, Strophobasis.** 1864b, *PANSP* 16: 5; 1866b, *JANSP* 6: 151, pl. 23, fig. 65⁺ (*Obs. on Unio* 11: 107). Lectotype USNM 118208 (Holston River, Knoxville, [Knox County,] Tennessee) here selected; reported in Goodrich (1928a: 11) as “types.” Taxonomy: *Strophobasis lyonii* (Tryon, 1873: 46); *Pleurocera* (*Pleurocera*) *biteniata* (Hannibal, 1912: 172); *Pleurocera* (*Strophobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- lyttonensis** **Adams, Io.** 1915, *Mem. Nat. Acad. Sci.* 12: 12, pl. 1, fig. 4; pl. 29, fig. 15⁺. Holotype^{od} USNM 424979 (Powell River, near Pennington Gap, 1 mi below Lyttons Mill, [Lee County,] Virginia). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- macella** **Lea, Goniobasis.** 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 333, pl. 38, fig. 192 (*Obs. on Unio* 9: 155). No type material examined. Published locality: “Coosa River, Alabama, Prof. Brumby.” Taxonomy: *Goniobasis tecta* (Tryon, 1873: 237); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia bellacrenata* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17).
- macglameriana** **Goodrich, Goniobasis.** 1936, *MPUMMZ* (31): 48, pl. 1, fig. 20⁺. Holotype^{od} UF 86933 [not examined] (Coosa River, near Center Landing, Cherokee County, Alabama). Taxonomy: *Elimia macglameriana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 48).
- maestum** **‘Lea’ Hannibal Trypanostoma.** 1912, *Proc. Mal. Soc. London* 10: 177 [*nomen nudum* introduced under synonymy of *Ambloxyus virginicus*].
- maupinensis** **Henderson, Goniobasis hemphilli.** 1935a, *Nautilus* 48: 97. Holotype^{od} UCM 17754-a (Deschutes River, Maupin, [Wasco County,] Oregon).
- marginata** **‘Rafinesque’ Binney, Melania.** 1860, *Check List*: 9, sp. 165 [*nomen nudum*]. No locality given. Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- mediocris** **Lea, Goniobasis.** 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 326, pl. 38, fig. 179⁺ (*Obs. on Unio* 9: 148). Holotype^{mo} USNM 118985 (Tennessee). Taxonomy: *Goniobasis mediocris* (Tryon, 1873: 175); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).

- melanoides** Conrad, *Anculotus*. 1834a, *New Fresh-Water Shells*: 64, pl. 8, fig. 19. The shell identified by Tryon (1873: 400, fig. 794) as the "type specimen in the possession of Mr. Anthony" was not found in the MCZ. Baker (1964: 185) reports no type material in the ANSP. Published locality: "Inhabits rivers in North Alabama." Taxonomy: *Anculosa melanoides* (Tryon, 1873: 399); *Leptoxis* (*Leptoxis*) *melanoides* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 51, 1941b: 10).
- mellea** Lea, *Melania*. 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 224, pl. 34, fig. 10 (*Obs. on Unio* 9: 46) [as *Goniobasis*]. Syntypes USNM 119833 (Coosa River, Wetumpka, [Elmore County,] Alabama). Taxonomy: *Goniobasis mellea* (Tryon, 1873: 316); *Elimia hartmaniana* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1936: 48).
- michiganensis** F.C. Baker, *Goniobasis livescens*. 1928, *Bull. Wis. Geol. Nat. Hist. Surv.* 70: 183, pl. 9, figs. 27-30, 31[†], 32. Holotype^{od} UMMZ 209146 (Lake Michigan shore, N of Sturgeon Bay, [Door County,] Wisconsin). Taxonomy: *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1945: 32).
- microlineata** Goodrich, *Goniobasis*. 1921a, *OPUMMZ* (91): 4, pl. 1, figs. 4[†], 4a. Holotype^{od} UMMZ 10584 (Rough Creek, Falls of the Rough, Grayson County, Kentucky). Taxonomy: *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1934a: 3, 1940: 6).
- midas** Lea, *Melania*. 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 233, pl. 34, fig. 28[†] (*Obs. on Unio* 9: 55) [as *Goniobasis*]. Lectotype USNM 119640 (Alabama River, Wetumpka, [Elmore County,] Alabama) here selected. Taxonomy: *Eurycalon midas* (Tryon, 1873: 341); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).
- mihalcikae** Thompson, *Elimia*. 2000, *Walkerana* 11: 4, fig. 3[†]. Holotype^{od} UF 263213 (Coldwater Spring, 5.6 mi W of Oxford, Calhoun County, Alabama).
- milesii** Lea, *Goniobasis*. 1863b, *PANSP* 15: 154; 1866b, *JANSP* 6: 135, pl. 23, fig. 40[†] (*Obs. on Unio* 11: 91). Lectotype USNM 118987 (Tuscola County, Michigan) here selected. Taxonomy: *Goniobasis milesii* (Tryon, 1873: 250); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 32).
- mimica** 'Smith' Goodrich, *Anculosa*. 1922, *MPUMMZ* (7): 39, pl. 2, figs. 27-28[†]; pl. 3, fig. 24. Holotype^{od} UMMZ 10170 (Little Cahaba Creek, 3 mi E of Piper, Bibb County, Alabama). Taxonomy: *Leptoxis* (*Leptoxis*) *ampla* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1941b: 9, 1941c: 23).
- minor** Lea, *Trypanostoma*. 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 278, pl. 36, fig. 95[†] (*Obs. on Unio* 9: 100). Lectotype USNM 122139 (Tennessee) here selected. Taxonomy: *Pleurocera minor* (Tryon, 1873: 134); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera* (*Strophobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- minor** Hinkley, *Anculosa*. 1912, *Nautilus* 26: 47, pl. 1, figs. 7, 8[†]. Lectotype ANSP 105866a [not examined] (Tennessee River, Florence, [Lauderdale County,] Alabama) selected by Baker (1964: 185) as "TSD now." Taxonomy: *Leptoxis* (*Mudalia*)

- minor* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 20).
- modesta** **Lea, *Melania***. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 86, pl. 9, fig. 34 (*Obs. on Unio* 4: 60). Also figured by Chambers, 1990, *Walkerana* 4: 255, fig. 6E^f. Holotype^{mo} USNM 119189 (Chatahoochee River, Columbus, [Muscoogie County,] Georgia). Taxonomy: *Pleurocera lugubre* (Tryon, 1873: 115); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia boykiniana boykiniana* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4); *Elimia modesta* (Thompson, 2000: 16).
- modesta** **Lea, *Io***. 1861d, *PANSP* 13: 394; 1863a, *JANSP* 5: 348, pl. 39, fig. 216^f (*Obs. on Unio* 9: 170). Lectotype USNM 121924 (Tennessee River, Alabama?) here selected. Taxonomy: *Pleurocera modestum* (Tryon, 1873: 101); *Pleurocera (Io) canaliculatum nobile* (Hannibal, 1912: 173); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- modestum** **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 276, pl. 36, fig. 92 (*Obs. on Unio* 9: 98). No type material examined. Published locality: "Chilogita Creek, Blount County, Tennessee, J. Clark." Taxonomy: *Pleurocera knoxense* (Tryon, 1873: 130); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- modesta** **'Smith' Goodrich, *Anculosa***. 1922, *MPUMMZ* (7): 23, pl. 2, figs. 29-30^f; pl. 3, fig. 9. Holotype^{od} UMMZ 10172 (Coosa River, Riddle's Bend, Cherokee County, Alabama). Taxonomy: *Leptoxis (Leptoxis) foremani* (Burch & Tottenham, 1980: 155; Burch, 1982: 137; Goodrich, 1941b: 9, 1944b: 41).
- monilifera** **'Anthony' Jay, *Melania***. 1852, *Cat.*, 4th edition: 474 [*nomen nudum*]. Published locality: "Georgia." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxyus virginicus* (Hannibal, 1912: 176).
- moniliferum** **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 295, pl. 36, fig. 125^f (*Obs. on Unio* 9: 117). Lectotype USNM 122032 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Baker's (1964: 185) previous designation of ANSP 27027a as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), that shell is not the figured specimen. Although the specimens of that lot were received from Lea, there is nothing to indicate that they are better than topo- or idio-types. Taxonomy: *Pleurocera moniliferum* (Tryon, 1873: 57); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- monodontoides** **Conrad, *Anculotus***. 1834a, *New Fresh-Water Shells*: 61, pl. 8, fig. 16. Type material presumed to be in the ANSP not found by Baker (1964: 185). Published locality: "Inhabits streams in Virginia. Mr. Hyde." Taxonomy: *Anculosa carinata* var. *c* (Tryon, 1873: 389); *Leptoxis (Mudalia) carinata carinata* (Goodrich, 1921b: 9, 1942a: 2).
- monozonalis** **Lea, *Melania***. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 178, pl. 6, fig. 31^f (*Obs. on Unio* 3: 16). Holotype^{mo} USNM 118988 (Tennessee). Taxonomy: *Goniobasis laqueata* (Tryon, 1873: 176); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 5, 1940: 14).

- moriformi** *Lea, Trypanostoma*. 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 290, pl. 36, fig. 118[†] (*Obs. on Unio* 9: 112) [as *moriforme*]. Lectotype USNM 122193 (Tennessee River) here selected. Taxonomy: *Pleurocera moriforme* (Tryon, 1873: 70); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum moriforme* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10) and *Pleurocera showalteri* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- mucronata** *Lea, Melania*. 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 277, pl. 36, fig. 93[†] (*Obs. on Unio* 9: 99) [as *Trypanostoma mucronatum*]. Lectotype USNM 122147 (Big Prairie Creek, [Hale-Perry counties,] Alabama) here selected. Baker's (1964: 185) previous designation of ANSP 27059a as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), that shell is not the figured specimen. The lot was received from Showalter rather than Lea. Taxonomy: *Pleurocera vestitum* (Tryon, 1873: 114); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- multilineata** *Say, Melania*. 1822, *JANSP* 2: 380; 1832, *Amer. Conch.* 1: pl. 47, fig. 3; 1858, Binney reprint: 111. Type material presumed to be in the ANSP not found by Baker (1964: 185). Published locality: "I found several specimens of this shell in Frankford Creek; and Professor Vanuxem presented me with others which he obtained from a creek in New Jersey." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 291); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 6).
- multistriata** *'Lea' Wheatley, Melania*. 1845, *Cat. Shells U.S.*: 26 [*nomen nudum*]. Published locality: "Alabama." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- murrayensis** *Lea, Goniobasis*. 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 334, pl. 54, fig. 13 (*Obs. on Unio* 12: 94). Syntype USNM 119128 (Swamp Creek, Murray [Whitfield?] County, Georgia). Taxonomy: *Elimia gerhardti* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).
- mutabilis** *Lea, Goniobasis*. 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 331, pl. 38, fig. 189 (*Obs. on Unio* 9: 153). Syntype USNM 118443 (Butts County, Georgia). Taxonomy: *Goniobasis suturalis* (Tryon, 1873: 183); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia mutabilis mutabilis* (Burch & Tottenham, 1980: 140; Burch, 1982: 371; Goodrich, 1942a: 5).
- mutata** *Brot, Melania* [new name for *M. deshaysiana* Reeve, 1860 non *Lea*, 1841]. 1862, *Cat. Syst.*: 37. In Reeve, 1860, *Conch. Icon.* 12: pl. 39, sp. 278 [as *M. deshaysiana*]. Type material presumed to be in the BMNH not examined. Published locality: "Tennessee, United States." Taxonomy: *Goniobasis mutata* (Tryon, 1873: 183); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- mutilata** *'Say' Jay, Melania*. 1836, *Cat.*, 2nd edition: 45 [*nomen nudum*]. Published locality: "South Carolina." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species; "*Bulimus decollatus*, L. (*mutilatus*, Say)"].
- napella** *'Anthony' Gould, Melania*. 1851, *PBSNH* 3: 362. Figured in Tryon, 1873, *Strepomatidae*. 249, fig. 485. MCZ 79431, reported as "lectotype" in Turner (1946:

- 103), is not valid type material. Published locality: "Ohio." Taxonomy: *Goniobasis livescens* (Tryon, 1873: 248); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 31).
- napoideum** **Lea, Trypanostoma.** 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 143, pl. 23, fig. 54[†] (*Obs. on Unio* 11: 99). Lectotype USNM 121968 (Tennessee) here selected. Taxonomy: *Pleurocera napoideum* (Tryon, 1873: 137); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera* (*Strephobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- nassula** **Conrad, Melania.** 1834a, *New Fresh-Water Shells*: 55, pl. 8, fig. 9. Possible syntype MCZ 53965 (Tuscumbia, [Colbert County,] Alabama). Type material presumed to be in the ANSP not found by Baker (1964: 185). Taxonomy: *Goniobasis nassula* (Tryon, 1873: 193); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia nassula* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1930a: 3, 1940: 14).
- nebulosa** **Conrad, Melania.** 1849, *PANSP* 4: 155; 1850, *JANSP* 1: 278, pl. 38, fig. 9. Type material presumed to be in the ANSP not found by Baker (1964: 185). Published locality: "Inhabits Savannah River." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17).
- negata** **Lea, Goniobasis.** 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 337, pl. 38, fig. 200[†] (*Obs. on Unio* 9: 159). Lectotype USNM 118960 (Coosa River, Alabama) here selected. Baker's (1964: 185) previous designation of ANSP 8654a as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), that shell is not the figured specimen. Also, the lot was received from Showalter rather than Lea. Taxonomy: *Goniobasis negata* (Tryon, 1873: 336); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4).
- neglecta** **Anthony, Melania.** 1854, *ALNHNY* 6: 128, pl. 3, fig. 29. Lectotype MCZ 161784 (Miami River [near Dayton, Montgomery County], Ohio) here selected; incorrectly identified by Turner (1946: 103) as "holotype." Taxonomy: *Pleurocera neglectum* (Tryon, 1873: 113); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Pleurocera subulare* (Goodrich, 1927: 124); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2).
- neritiformis** **Deshayes, Melanopsis.** 1832, *Encyc. Meth.* 2: 438; 1838, *Anim. sans Vert.*, 2nd edition 8: 492. Figured in Haldeman, 1847-1848, *Leptoxis*: 2, pl. 1, figs. 1-18 [as *Leptoxis praerosa*]. No type material examined. Published locality: "...dans l'Ohio et ses affluens." Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis* (*Leptoxis*) *praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 14, 1940: 20).
- newberryi** **Lea, Melania.** 1860a, *PANSP* 12: 93; 1863a, *JANSP* 5: 300, pl. 37, fig. 135[†] (*Obs. on Unio* 9: 122) [as *Goniobasis*]. Lectotype USNM 118961 (Upper Deschutes River, Oregon) here selected. Taxonomy: *Goniobasis newberryi* (Tryon, 1873: 254); *Ambloxyus pliciferus* (Hannibal, 1912: 178).

- niagarensis** **Lea, *Melania***. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 173, pl. 5, fig. 21 (*Obs. on Unio* 3: 11). Syntype USNM 118971 (Niagara Falls [Niagara County, New York]). Taxonomy: *Goniobasis livescens* (Tryon, 1873: 248); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 30).
- niagraensis** '(Lea)' **Hannibal, *Melania***. 1912, *Proc. Mal. Soc. London* 10: 175 [error for *niagarensis* Lea].
- nickliniana** **Lea, *Melania***. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 171, pl. 5, fig. 18[†] (*Obs. on Unio* 3: 9). Lectotype USNM 119196 (Hot Springs, [Bath County,] Virginia) here selected. Taxonomy: *Goniobasis nickliniana* (Tryon, 1873: 240); *Ambloxus virginicus* (Hannibal, 1912: 175); *Leptoxis (Mudalia) carinata nickliniata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1942a: 2).
- nickliniatus** '(Lea)' **Goodrich, *Nitocris carinatus***. 1942a, *OPUMMZ* (456): 2 [error for *M. nickliniana* Lea].
- nigrescens** **Conrad, *Anculotus***. 1834a, *New Fresh-Water Shells*: 64, pl. 8, fig. 17[†]. Lectotype MCZ 247403 (Maryland) here selected. Taxonomy: *Anculosa carinata* var. *b* (Tryon, 1873: 389); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 146; Burch, 1982: 43; Goodrich, 1921b: 9, 1942a: 2).
- nigrina** **Lea, *Melania***. 1856, *PANSP* 8: 80; 1863a, *JANSP* 5: 302, pl. 37, fig. 137[†] (*Obs. on Unio* 9: 124) [as *Goniobasis*]. Lectotype USNM 118992 (Clear Creek, Shasta County, California) here selected. Taxonomy: *Goniobasis nigrina* (Tryon, 1873: 214); *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Oreobasis) bulbosa* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Pilsbry, 1899: 65) and *Juga (Oreobasis) nigrina* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1942b: 3).
- nigrocincta** **Anthony, *Melania***. 1854, *ALNHNY* 6: 90, pl. 2, fig. 8[†]. Lectotype MCZ 74195 (Tennessee ["Georgia" handwritten by J.G. Anthony in MCZ reprint of original description]) here selected; incorrectly identified by Turner (1946: 104) as "holotype." Taxonomy: *Goniobasis nigrocincta* (Tryon, 1873: 236); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- nigrostoma** '(Anthony MS,' **Reeve, *Melania***. 1861, *Conch. Icon.* 12: pl. 58, sp. 463. Lectotype MCZ 161764 (No locality given [Tennessee *vide* Turner, 1946]) here selected; incorrectly identified by Turner (1946: 104) as "holotype." Taxonomy: *Pleurocera opaca* (Tryon, 1873: 135); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171).
- nitida** **Lea, *Melania* [also *M. nitens*]**. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 182, pl. 6, fig. 40[†] (*Obs. on Unio* 3: 20) [as *nitens*]. Holotype^{ms} USNM 118939 (Tennessee). Taxonomy: *Goniobasis nitens* (Tryon, 1873: 182); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 6, 1940: 14).
- nobilis** **Lea, *Melania***. 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 91, pl. 9, fig. 48[†] (*Obs. on Unio* 4: 65). Holotype^{ms} ANSP 27024 (Alabama), reported in Baker (1964: 195) as "TSD now." Taxonomy: *Pleurocera nobile* (Tryon, 1873: 60); *Pleurocera (Io) canaliculatum nobile* (Hannibal, 1912: 173); *Pleurocera nobile nobile* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940d: 10).
- notata** **Reeve, *Melania***. See *M. spixiana* Lea.

- nodosa** **Lea, Io.** 1861d, *PANSP* 13: 393; 1863a, *JANSP* 5: 346, pl. 39, fig. 212[†] (*Obs. on Unio* 9: 168). Lectotype USNM 121958 (Tennessee River [Alabama?]) here selected. Taxonomy: *Pleurocera moniliferum* (Tryon, 1873: 57); *Pleurocera (Io) canaliculatum nobile* (Hannibal, 1912: 173); *Pleurocera nobile nodosa* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- nodulosa** **Lea, Melania.** 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 190, pl. 6, fig. 57[†] (*Obs. on Unio* 3: 28). Lectotype USNM 118421 (Tennessee) here selected. Taxonomy: *Goniobasis nodulosa* (Tryon, 1873: 196); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- nolichuckyensis** **Adams, Io.** 1915, *Mem. Nat. Acad. Sci.* 12: 13, pl. 1, fig. 9; pl. 48, fig. 13[†]. Holotype^{od} USNM 424984 (near mouth of Nolichucky River, White Pine, [Jefferson County,] Tennessee). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- nubia 'Lea' Hannibal, Melania.** 1912, *Proc. Mal. Soc. London* 10: 181 [error for *M. nubila* Lea].
- nubila** **Lea, Melania.** 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 235, pl. 34, fig. 33[†] (*Obs. on Unio* 9: 57) [as *Goniobasis*]. Lectotype USNM 119789 (Coosa River, [Wetumpka, Elmore County,] Alabama) here selected. Taxonomy: *Eurycelon nubila* (Tryon, 1873: 346); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20) and *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).
- nuciforme** **Lea, Trypanostoma.** 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 337, pl. 54, fig. 19[†] (*Obs. on Unio* 12: 97). Holotype^{mo} USNM 121578 (Conasauga River, [Whitfield Co.,] Georgia).
- nuclea** **Lea, Paludina.** 1838a, *TAPS* 6: 91, pl. 23, fig. 103 (*Obs. on Unio* 2: 91). No type material examined. Published locality: "Wahlamat, near its junction with the Columbia River, Professor Nuttall." Taxonomy: *Leptoxis virens* (Haldeman, 1847-1848: 5); *Amnicola* (Tryon, 1873: 421) [Doubtful and Spurious Species].
- nuclea** **Lea, Lithasia.** 1860b, *PANSP* 12: 188; 1863a, *JANSP* 5: 263, pl. 35, fig. 73 (*Obs. on Unio* 9: 85). Figured earlier in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 54, sp. 423. Syntypes USNM 121913 (Coosa River, Alabama). Taxonomy: *Lithasia compacta* (Tryon, 1873: 36); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Leptoxis (Leptoxis) compacta* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 49, 1927: 58, 1941b: 10, 1941c: 24).
- nucleola 'Anthony' Gould, Melania.** 1851, *PBSNH* 3: 360. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 47, sp. 348. Syntype MCZ 72064 (Tennessee), incorrectly listed by Turner (1946: 104) as "holotype." Taxonomy: *Lithasia nucleola* (Tryon, 1873: 32); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 6).
- nucula 'Anthony, MS' Reeve, Melatoma [see G. obliqua 'Anthony, MS' Tryon].** 1861, *Conch. Icon.* 12: pl. 3, sp. 19. "Anthony says in his notes that this species was sent to Reeve under the name of *M. obliqua*. Reeve changed the name to *nucula* in publishing" (Turner, 1946: 104). Syntypes MCZ 50694 (Coosa River, Alabama)

listed as "cotypes" in Turner (1946: 104). Taxonomy: *Schizostoma nuculum* (Tryon, 1873: 361); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

nupera Say, 1829, *Melania*. 1829a, *New Harmony Dissem.* 2: 260; 1830, *Amer. Conch.*

1: pl. 8, top 2 figures [not the middle figure]; 1840, Say's reprint: 16. Also in Deshayes, 1832, *Encyc. Meth.* 2: 438 [as *Melanopsis semigranulosa*].[‡] Improbable syntype ANSP 123033a [not examined] ([Wabash River,] Wabash, [Wabash County,] Indiana), erroneously listed by Baker (1964: 185) as "TOM." The authenticity of Baker's (1964) type specimen is questionable since the lot was received in the C.M. Wheatley Collection. Wheatley was not known to possess the types (Wheatley, 1845; Ryder, [no date]). Taxonomy: *Angitrema verrucosa* (Tryon, 1873: 24); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 5).

nupera Say, 1830, *Melania*. 1830, *Amer. Conch.* 1: pl. 8, middle figure. Published locality: "Inhabits the Wabash River." Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170).

nuttalii 'Lea, MS' Reeve, *Anculotus*. 1861, *Conch. Icon.* 12: pl. 6, sp. 46. Type material presumed to be in the MCZ not examined. Published locality: "Oregon, North America."

obesa 'Anthony, MS' Reeve, *Melania*. 1861, *Conch. Icon.* 12: pl. 59, sp. 469a-b. Type material presumed to be in the BMNH not examined. Published locality: "Alabama." Taxonomy: *Goniobasis obesa* (Tryon, 1873: 162); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181).

obliqua 'Anthony, MS' Tryon, *Gyrotoma* [see *M. nucula* 'Anthony, MS' Reeve]. 1873, *Strepomatidae.* 378 [*nomen nudum*]. Taxonomy: *Schizostoma incisum* (Tryon, 1873: 378); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma incisum* (Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

oblita Lea, *Melania*. 1852, *TAPS* 10: 298, pl. 30, fig. 6 (*Obs. on Unio* 5: 54). No type material examined. Published locality: "Tennessee?" Taxonomy: *Pleurocera unciale* (Tryon, 1873: 85); *Ambloxyus virginicus* (Hannibal, 1912: 176).

obovata Say, *Melania*. 1829b, *New Harmony Dissem.* 2: 276; 1840, Say's reprint: 18. Figured in Haldeman, 1847-1848, *Leptoxis.* 2, pls. 1-2, figs. 27-34 and in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 3, sp. 21. Type material presumed to be in

[‡]The identity of *Melanopsis semigranulosa* of Deshayes "...is proved by his quotation of Mr. Say's species as a synonyme, in his description. Say published in 1829, Deshayes in 1830. It therefore appears that the great French naturalist, upon removing the species to the genus *Melanopsis*, seized the occasion to deprive Mr. Say of his species, a meanness that has unfortunately found many advocates amongst naturalists (?) whose sole ambition appears to be, to write 'nobis' as frequently as possible. But, like Mr. Deshayes, these gentlemen, although sometimes successful for a period, will all eventually find themselves quoted where they have placed the authors they endeavor to despoil, — among the synonyms." (Tryon's emphasis) (Tryon, 1873: 25)

- the ANSP not found by Baker (1964: 185). Published locality: "Inhabits Kentucky River, and some other tributaries of the Ohio." Taxonomy: *Lithasia obovata* (Tryon, 1873: 33); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 60, 1928b: 3, 1940: 6).
- obscura Henderson, *Goniobasis yrekaensis*.** 1935a, *Nautilus* 48: 98. Holotype^{od} UCM 17724-a [not examined] (small creek 16 mi SW of Grant's Pass & 2 mi W of Wonder, Josephine County, Oregon).
- obtusa Lea, *Melania*.** 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 176, pl. 5, fig. 28^t (*Obs. on Unio* 3: 14). Lectotype USNM 118913 (Tennessee) here selected. Taxonomy: *Goniobasis obtusa* (Tryon, 1873: 168); *Ambloxy virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- occata Hinds, *Melania*.** 1844, *Ann. Mag. Nat. Hist.* 14: 9. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 38, sp. 267. No type material examined. Published locality: River Sacramento, California. Taxonomy: *Ambloxy pliciferus* (Hannibal, 1912: 178); *Juga (Calibasis) occata* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).
- occidentalis Lea, *Melania*.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 172, pl. 5, fig. 20^t (*Obs. on Unio* 3: 10). Lectotype USNM 121298 (Cincinnati, [Hamilton County,] Ohio) here selected. Baker's (1964: 185) previous selection of ANSP 27593 as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), the selected shell is not the figured specimen. Also, although the specimens of that lot were received from Lea, there is nothing to indicate that they are better than topo- or idiotypes. Taxonomy: *Anculosa costata* (Tryon, 1873: 385); *Anculosa costata* (Goodrich, 1921b: 10); *Leptoxis (Mudalia) trilineata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1929: 14, 1940: 20).
- occulta Anthony, *Melania*.** 1860, *PANSP* 12: 57. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 37, sp. 254. Syntype MCZ 79427 (Madison, [Dane County,] Wisconsin), incorrectly listed by Turner (1946: 104) as "holotype." Taxonomy: *Goniobasis depygis* (Tryon, 1873: 247); *Ambloxy virginicus* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1924b: 44, 1939b: 4, 1945: 32).
- occultata 'Smith' Goodrich, *Anculosa*.** 1922, *MPUMMZ* (7): 48, pl. 2, fig. 31-33^t; pl. 3, fig. 21. Holotype^{od} UMMZ 10173 (Coosa River, Duncan's Riffle, Chilton County, Alabama). Taxonomy: *Leptoxis (Leptoxis) occultata* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 48, 1944b: 42).
- ocoënsis Lea, *Melania*.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 169, pl. 5, fig. 13^t (*Obs. on Unio* 3: 7). Lectotype USNM 119098 ([Ocoee District] Tennessee) here selected. Taxonomy: *Pleurocera ocoënsis* (Tryon, 1873: 123); *Ambloxy virginicus* (Hannibal, 1912: 175); ?*Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- ohiensis Lea, *Goniobasis*.** 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 306, pl. 37, fig. 144^t (*Obs. on Unio* 9: 128) [as *ohioensis*]. Lectotype USNM 118943 (Yellow Springs, [Greene County,] Ohio) here selected. Taxonomy: *Goniobasis ohioensis* (Tryon, 1873: 276); *Ambloxy virginicus* (Hannibal, 1912: 176); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).

- oliva** **Lea, *Melania***. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 27 (*Obs. on Unio* 4: 27). Lectotype USNM 119810 (Alabama) here selected. Taxonomy: *Goniobasis oliva* (Tryon, 1873: 320); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 19).
- olivaceum** **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 290, pl. 36, fig. 117[†] (*Obs. on Unio* 9: 112). Lectotype USNM 121617 (Tombigbee River, Alabama [Mississippi]) here selected. Taxonomy: *Pleurocera olivaceum* (Tryon, 1873: 78); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- olivaria** **Lea, *Strophobasis***. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 356, pl. 39, fig. 229[†] (*Obs. on Unio* 9: 178). Lectotype USNM 118192 ([Tennessee River,] Knoxville, [Knox County,] Tennessee) here selected. Baker's (1964: 185) previous selection of ANSP 124779 as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), the selected shell is not the figured specimen. Also, the lot was received from C.M. Wheatley, but original material was reported to exist only in Lea's collection. Taxonomy: *Strophobasis olivaria* (Tryon, 1873: 43); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Pleurocera (Strophobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- olivella** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 327, pl. 38, fig. 182[†] (*Obs. on Unio* 9: 149). Lectotype USNM 118944 (Tennessee) here selected. Taxonomy: *Goniobasis olivella* (Tryon, 1873: 171); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- olivula** **Conrad, *Melania***. 1834b, *Am. Jour. Sci.* 25: 342, pl. 1, fig. 13; 1963, *Sterkiana* (9): 52. Possible syntype ANSP 8703a ([Alabama River,] Alabama), erroneously listed by Baker (1964: 185) as "TOM." Taxonomy: *Goniobasis olivula* (Tryon, 1873: 308); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 33, 1941c: 21).
- opaca** **Anthony, *Melania***. 1860, *PANSP* 12: 58. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 50, sp. 384[†] and in Tryon, 1873, *Strepomatidae*. 136, fig. 253[†]. Lectotype ANSP 186101a (Alabama) here selected and listed by Baker (1964: 185) as "TSD." Paralectotype MCZ 161762, incorrectly listed by Turner (1946: 104) as "holotype." Taxonomy: *Pleurocera opaca* (Tryon, 1873: 135); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).
- oppugnata** **Lea, *Melania***. 1852, *TAPS* 10: 300, pl. 30, fig. 9[†] (*Obs. on Unio* 5: 56). Lectotype USNM 119834 (Alabama River [Alabama]) here selected. Taxonomy: *Goniobasis cylindracea* (Tryon, 1873: 299); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).
- orbicula** **Lea, *Melania***. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 238, pl. 34, fig. 37[†] (*Obs. on Unio* 9: 60) [as *Goniobasis*]. Holotype^{mo} USNM 119804 (Coosa River, Alabama). Taxonomy: *Goniobasis ovalis* (Tryon, 1873: 325); *Gyrotoma (Goniobasis) leta* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138;

- Burch, 1982: 36; Goodrich, 1936: 20).
- ordiana** **Lea, *Melania***. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 26 (*Obs. on Unio* 4: 26). Holotype^{mo} USNM 122166 (Alabama). Taxonomy: *Pleurocera annuliferum* (Tryon, 1873: 91); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera annuliferum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- oregonensis** **Tryon, *Goniobasis plicifera***. 1865b, *Am. J. Conch.* 1: 238, pl. 24, fig. 4. Improbable syntypes ANSP 27550 (Portland, [Multnomah County,] Oregon); one of which was incorrectly identified by Baker (1964: 186) as "TOM." The designated specimen is *not* the shell figured by Tryon (1865b). Taxonomy: *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) plicifera* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).
- orickensis** **Henderson, *Goniobasis***. 1935a, *Nautilus* 48: 130, pl. 4, fig. 10 [left, right and middle^l]. Holotype^{od} UCM 17710-a [not examined] (Redwood Creek, 26 mi E of Arcata, [Humboldt County²] California).
- ornata** **Anthony, *Anculosa***. 1860, *PANSP* 12: 67. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 3, sp. 24 and in Tryon, 1873, *Strepomatidae*: 417, fig. 833[†] [*vide* Baker, 1964]. Lectotype ANSP 10253a [not examined] (North Carolina) selected by Baker (1964: 186) as "TSD." Paralectotypes MCZ 161795, listed as "cotypes" in Turner (1946: 104). Taxonomy: *Anculosa ornata* (Tryon, 1873: 417); *Nitocris ornata* (Goodrich, 1921b: 10, 1940: 20).
- ornatum** **'Anthony' Reeve, *Melatoma***. 1861, *Conch. Icon.* 12: pl. 2, sp. 11[†]. Lectotype MCZ 50650 (Coosa River, Alabama) here selected; incorrectly identified by Turner (1946: 104) as "holotype." Taxonomy: *Schizostoma wetumpkaense* (Tryon, 1873: 366); *Gyrotoma (Gyrotoma) leta incisa* (Hannibal, 1912: 182); *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).
- ornata** **Lea, *Goniobasis***. 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 337, pl. 54, fig. 18[†] (*Obs. on Unio* 12: 97). Lectotype USNM 118475 (Conasauga River, [Whitfield Co.,] Georgia) here selected. Taxonomy: *Elimia ornata* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941b: 6, 1944b: 44) ["Probably a hybrid of *G. gerhardtii* Lea and *caelatura* (Conrad)"].
- ornatella** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 326, pl. 38, fig. 181[†] (*Obs. on Unio* 9: 148). Holotype^{mo} USNM 118945 (Tennessee). Taxonomy: *Goniobasis formosa* (Tryon, 1873: 174); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- osculata** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 263; 1863a, *JANSP* 5: 296, pl. 37, fig. 126 (*Obs. on Unio* 9: 118). Possible syntypes USNM 119845 (Coosa River, Alabama). Taxonomy: *Goniobasis osculata* (Tryon, 1873: 302, 427, errata); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24).
- osculata** **'Anthony' Goodrich, *Melania***. 1939b, *OPUMMZ* (404): 4. ["error for *M. occulta* Anthony" (Turner, 1946)].
- ovalis** **Lea, *Melania***. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 25 (*Obs. on Unio* 4: 25). Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 57, sp. 448 (458). Syntypes USNM 118949 (Alabama). Taxonomy: *Goniobasis ovalis* (Tryon, 1873: 325);

- Gyrotoma* (*Goniobasis*) *leta* (Hannibal, 1912: 181); *Elimia haysiana* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 19) and *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).
- ovalis** Anthony, *Gyrotoma*. 1860, *PANSP*12: 65. Figured in Tryon, 1873, *Strepomatidae*. 363, fig. 686. Syntypes MCZ 50662 (Coosa River, Alabama) listed as "cotypes" in Turner (1946: 104). Taxonomy: *Schizostoma bulbosum* (Tryon, 1873: 361); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 20).
- oveliana 'Lea' Wheatley, Melania**. 1845, *Cat. Shells U.S.*: 26 [*nomen nudum*]. Published locality: "Alabama." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- ovoidea** Lea, *Melania*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 87, pl. 9, fig. 38^t (*Obs. on Unio* 4: 61). Holotype^{mo} USNM 118916 (Alexandria, [Rapides Parish,] Louisiana). Taxonomy: *Goniobasis ovoidea* (Tryon, 1873: 260); *Ambloxyus virginicus* (Hannibal, 1912: 175).
- ovoidea** Shuttleworth, *Gyrotoma*. 1845, *Mittheil. Nat. Gesell. Bern* (50): 88. Figured in Adams & Adams, 1858, *Genera* 1: pl. 32, fig. 4 and in Tryon, 1873, *Strepomatidae*. 356, fig. 673. No specific locality given. Taxonomy: *Schizostoma ovoideum* (Tryon, 1873: 356); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Gyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 20).
- ovularis** Menke, *Melania*. 1828, *Syn. Meth.*, 1st edition: 80; 1830, 2nd edition: 134. No type material examined. Published locality: "Hab. prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis* (*Leptoxis*) *praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1929: 14).
- ozarkensis** Call, *Goniobasis*. 1886a, *Bull. Wash. Coll. Lab. Nat. Hist.* 1: 189, pl. 7, figs. 1, 2^t, 3-10. Lectotype MCZ 175785 ([Blue Spring, Eminence,] Shannon County, Missouri) selected by Johnson (1975: 142). Taxonomy: *Elimia potosiensis ozarkensis* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924b: 45, 1939c: 4).
- pagoda** Lea, *Schizostoma*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 93, pl. 9, fig. 52^t (*Obs. on Unio* 4: 67). Lectotype USNM 119402 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Schizostoma pagoda* (Tryon, 1873: 365); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13, 1944b: 47).
- pagoda 'Lea' Reeve, Melatoma**. 1860, *Conch. Icon.* 12: pl. 1, sp. 1a-b. Figured specimen presumed to be in the BMNH not examined. Published locality: "Tuscaloosa, [Tuscaloosa County,] Alabama, United States, Dr. Budd." Taxonomy: *Schizostoma wetumpkaense* (Tryon, 1873: 366) and *Schizostoma buddii* (Tryon, 1873: 370); *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).
- pagodiformis** Anthony, *Melania*. 1854, *ALNHNY* 6: 106, pl. 3, fig. 6. Possible syntypes MCZ 161833 (Battle Creek, Tennessee) listed as "cotypes" in Turner (1946: 104). Taxonomy: *Goniobasis acutocarinata* (Tryon, 1873: 228); *Ambloxyus virginicus* (Hannibal, 1912: 176); unknown *Goniobasis* (Goodrich, 1940: 19).

- pallescens* Lea, *Melania*.** 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 89, pl. 9, fig. 43^t (*Obs. on Unio* 4: 63). Lectotype USNM 118950 (Maj. Green's Farm, Chester District, South Carolina) here selected. Taxonomy: *Goniobasis pallescens* (Tryon, 1873: 266); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).
- pallidula* Anthony, *Melania*.** 1854, *ALNHNY* 6: 115, pl. 3, fig. 15^t. Lectotype MCZ 74193 (Tennessee) here selected; incorrectly identified by Turner (1946: 104) as "holotype." Taxonomy: *Goniobasis pallidula* (Tryon, 1873: 224); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Lithasia (Angitrema) armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 3).
- pallidum* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 275, pl. 36, fig. 90^t (*Obs. on Unio* 9: 97). Lectotype USNM 122135 (Niagara Falls, [Niagara County,] New York) here selected. Taxonomy: *Pleurocera pallidum* (Tryon, 1873: 112); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera subulare* (Goodrich, 1917: 124); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2).
- papillosa* 'Anthony, MS' Reeve, *Melania*.** 1861, *Conch. Icon.* 12: pl. 59, sp. 467. Lecto- and paralectotypes designated from unnumbered lots in the BMNH (Florida) according to Chambers (1990: 254, fig. 3C). See discussion in Chambers (1990: 254, 258) regarding paralectotypes MCZ 50233 and MCZ 50234, reported as "cotypes" in Turner (1946: 104) and Clench & Turner (1956: pl. 2, fig. 9), respectively. Taxonomy: *Goniobasis papillosa* (Tryon, 1873: 151); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia boykiniana* (Chambers, 1990: 254)
- parkerii* Tryon, *Pleurocera* [new name for *Trypanostoma tortum* Lea].** 1873, *Strepomatidae*: 427 (errata). In Lea, 1862a, *PANSP* 14: 174 [as *Trypanostoma tortum*]; 1863a, *JANSP* 5: 275, pl. 36, fig. 89^t (*Obs. on Unio* 9: 97) [as *Trypanostoma tortum*]. Lectotype USNM 122144 ([Little] Uchee River, below Columbus, Georgia [Russell County, Alabama]) here selected. Taxonomy: *Pleurocera parkerii* (Tryon, 1873: 84); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Elimia boykiniana viennaensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).
- parvum* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 276, pl. 36, fig. 91 (*Obs. on Unio* 9: 98). No type material examined. Published locality: "Knoxville, President Estabrook; and French Broad River, East Tennessee, J. Clark." Taxonomy: *Pleurocera tenebrocinctum* (Tryon, 1873: 120); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- parva* Lea, *Goniobasis*.** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 297, pl. 37, fig. 129^t (*Obs. on Unio* 9: 119). Lectotype USNM 118915 (Georgia) here selected. Baker's (1964: 186) previous designation of ANSP 8700a as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. Contrary to Baker (1964), the specimen is not the one figured by Lea. Although it is labeled as being from the "original lot," it is not from the type locality. Taxonomy: *Goniobasis pallescens* (Tryon, 1873: 266); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia gerhardtii* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia*

modesta (Thompson, 2000: 16).

- parva** Wetherby, *Angitrema*. 1876, *Proc. Cincinnati Soc. Nat. Hist.* (1): 9, pl. 1, fig. 2. Syntypes UMMZ 137662 (Stones River, Rutherford County, Tennessee). Taxonomy: *Lithasia* (*Angitrema*) *armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59, 1940: 3).
- patula** Anthony, *Anculosa*. 1860, *PANSP* 12: 68. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 4, sp. 32 and in Tryon, 1873, *Strepomatidae*. 179, fig. 347[†] [*vide* Baker, 1964]. Lectotype ANSP 27661a [not examined] (Tennessee) selected by Baker (1964: 186) as "TSD now." Paralectotype MCZ 161890 listed as "cotypes" in Turner (1946: 104). Taxonomy: *Anculosa patula* (Tryon, 1873: 419); *Leptoxis* (*Mudalia*) *dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 20).
- paucicosta** Anthony, *Melania*. 1860, *PANSP* 12: 57. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 37, sp. 255. Syntypes MCZ 161844 (Tennessee). Idiotypes ANSP 120551a and MCZ 161813 reported as "TSD now" in Baker (1964: 186) and "cotypes" in Turner (1946: 105), respectively. Taxonomy: *Goniobasis paucicosta* (Tryon, 1873: 179); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- paucicostata** 'Anthony' Hannibal, *Melania*. 1912, *Proc. Mal. Soc. London* 10: 176 [error for *M. paucicosta* Anthony].
- paula** Lea, *Melania*. 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 244, pl. 35, fig. 48[†] (*Obs. on Unio* 9: 66) [as *Goniobasis*]. Lectotype USNM 119264 (Cahaba River, Alabama) here selected. Taxonomy: *Goniobasis paula* (Tryon, 1873: 232); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia cahawbensis cahawbensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3, 1941c: 13).
- paula** 'Anthony' Brot, *Melania*. 1862, *Cat. Syst.*: 40 [*nomen nudum*]. Turner (1946: 105) reported MCZ 161713 as "cotypes." Regardless, they have no type status. No locality given. Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269).
- paulensis** Adams, *Io*. 1915, *Mem. Nat. Acad. Sci.* 12: 12, pl. 1, fig. 3[†]; pl. 35, fig. 3. Holotype^{od} USNM 424980 (Clinch River, ca. 15 mi below St. Paul, [Scott County,] Virginia). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- paupercula** Lea, *Goniobasis*. 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 324, pl. 38, fig. 176[†] (*Obs. on Unio* 9: 146). Lectotype USNM 118923 (northern Alabama) here selected. Taxonomy: *Goniobasis paupercula* (Tryon, 1873: 192); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia paupercula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 19, 1940: 15).
- pennsylvanica** Pilsbry, *Goniobasis*. 1916, *Nautilus* 30: 4. Lectotype ANSP 73954a (Ohio River, Coraopolis, [Allegheny County,] Pennsylvania) selected by Baker (1964: 186) as "TSD now." Taxonomy: *Goniobasis pennsylvanica* (Goodrich, 1920: 74).
- perangulata** Conrad, *Melania*. 1849, *PANSP* 4: 154; 1850, *JANSP* 1: 278, pl. 38, fig. 6. Type material presumed to be in the ANSP not found by Baker (1964: 186). Published locality: "Inhabits Savannah River." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia carinifera*

- (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17).
- percarinata Conrad, *Melania*.** 1849, *PANSP* 4: 155; 1850, *JANSP* 1: 278, pl. 38, fig. 10. Type material presumed to be in the ANSP not found by Baker (1964: 186). Published locality: "Inhabits Savannah River." Taxonomy: *Goniobasis carinifera* (Tryon, 1873: 157); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17).
- perfusca Lea, *Melania*.** 1841c, *PAPS* 2: 82; 1844, *TAPS* 9: 18 (*Obs. on Unio* 4: 18). Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 47, sp. 354. Holotype^{mo} USNM 122192 (Calfkiller [River, White County,] Tennessee). Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269); *Ambloxus virginicus* (Hannibal, 1912: 175); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 7).
- pergrata Lea, *Melania*.** 1861c, *PANSP* 13: 122; 1863a, *JANSP* 5: 243, pl. 35, fig. 47[†] (*Obs. on Unio* 9: 65) [as *Goniobasis*]. Holotype^{mo} USNM 118924 (Coosa River, Alabama). Taxonomy: *Goniobasis pergrata* (Tryon, 1873: 338); *Gyroloma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4).
- pernodosa Lea, *Melania*.** 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 92, pl. 9, fig. 49[†] (*Obs. on Unio* 4: 66). Holotype^{mo} USNM 121544 (Cypress Creek, Tennessee [Florence, Alabama?]). Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- perstriata Lea, *Melania*.** 1852, *TAPS* 10: 296, pl. 30, fig. 2[†] (*Obs. on Unio* 5: 52). Lectotype USNM 118429 (Huntsville, [Scott County,] Tennessee) here selected. Taxonomy: *Goniobasis perstriata* (Tryon, 1873: 166); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia perstriata perstriata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1930a: 17, 1940: 16).
- picta Lea, *Melania*.** Renamed *M. picturata* Reeve.
- pictus Conrad, *Anculotus*.** 1834a, *New Fresh-Water Shells*: 62; 1834b, *Am. Jour. Sci.* 25: 342, pl. 1, fig. 15 [as *Anculosa picta*]. Syntypes ANSP 120960 (Alabama River, Alabama), erroneously listed by Baker (1964: 186) as "TOM." Taxonomy: *Anculosa picta* (Tryon, 1873: 415); *Leptoxis (Leptoxis) picta* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 14, 1941c: 24).
- picturata Reeve, *Melania* [new name for *M. picta* Lea, 1841 non Hinds, 1844].** 1860, *Conch. Icon.* 12: pl. 40, sp. 290, errata. Also in Lea, 1841c, *PAPS* 2: 82 [as *picta*]; 1844, *TAPS* 9: 19 (*Obs. on Unio* 4: 19) [as *picta*]. No type material examined. Published locality: "Holston River, East Tennessee. Prof. Troost, and S.M. Edgar." Taxonomy: *Pleurocera pictum* (Tryon, 1873: 119); *Ambloxus virginicus* (Hannibal, 1912: 175); *Pleurocera (Strepobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1940: 8).
- pilsbryi Goodrich, *Goniobasis* [new name for *Melania (Goniobasis) showalterii* Lea].** 1927, *Nautilus* 41: 58. Also in Lea, 1861c, *PANSP* 13: 120 [as *Melania showalterii*]; 1863a, *JANSP* 5: 220, pl. 34, fig. 4[†] (*Obs. on Unio* 9: 42) [as *Goniobasis showalterii*]. Lectotype USNM 119798 (Coosa River, Alabama) here selected. Goodrich (1927)

assigned *Lithasia showalterii* Lea, 1860 to the genus *Goniobasis*, reducing *Melania* (*Goniobasis*) *showalterii* Lea, 1861 to a secondary junior-homonym. This being the case, Goodrich (1927) renamed the latter as *Goniobasis pilsbryi*. Taxonomy: *Goniobasis showalterii* (Tryon, 1873: 309); *Cyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia pilsbryi* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1927: 58, 1936: 45, 1944b: 46).

***pilula* Lea, *Melania*.** 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 186, pl. 6, fig. 50 (*Obs. on Unio* 3: 24). No type material examined. Published locality: "Tennessee. Dr. Troost." Taxonomy: *Anculosa littorina* (Tryon, 1873: 384); *Anculosa littorina* (Goodrich, 1921b: 11); *Leptoxis* (*Leptoxis*) *praerosa* (Burch & Tottenham, 1980: 157; Burch, 1982: 138; Goodrich, 1940: 21).

***pinguis* Lea, *Melania*.** 1852, *TAPS* 10: 301, pl. 30, fig. 11 (*Obs. on Unio* 5: 57). Syntypes USNM 121219 (Lebanon, [Wilson County,] Tennessee). Taxonomy: *Anculosa pinguis* (Tryon, 1873: 409); *Lithasia* (*Lithasia*) *geniculata pinguis* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921b: 11, 1934a: 9, 1940: 5).

***pisum* Haldeman, *Leptoxis*.** 1847-1848, *Leptoxis*: 4, pl. 3, fig. 82. Improbable syntypes ANSP 125562 [not examined] (no locality given), one of which was incorrectly identified by Baker (1964: 186) as "TOM." Taxonomy: *Eurycalon crassa* (Tryon, 1873: 348); *Lithasia* (*Athearnia*) *crassa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 7).

***pittensis* Henderson, *Goniobasis acutifilosa*.** 1935a, *Nautilus* 48: 134, pl. 4, fig. 11 [left[†], right, middle]. Holotype^{od} UCM 12080-a [not examined] (Pitt River, Fall River Mills, between Mt. Lassen and Mt. Shasta, Shasta County, California). Taxonomy: *Juga* (*Calibasis*) *acutifilosa pittensis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).

***plana* (Jan.) Brot' Tryon, *Pirena*.** 1873, *Strepomatidae*: 62 [*nomen nudum* listed under *Pleurocera canaliculatum*].

***planispira* 'Anthony' Goodrich, *Anculosa*.** 1921b, *Nautilus* 35: 11 [error for *Melania planospira* Anthony].

***planogyra* Anthony, *Melania*.** 1854, *ALNHNY* 6: 111, pl. 3, fig. 11[†]. Also figured in Tryon, 1873, *Strepomatidae*: 105, fig. 199[†]. Lectotype MCZ 161776 (Alabama) here selected; identified by Tryon (1873: 105) as "the original type" and incorrectly reported as "holotype" in Turner (1946: 105). Taxonomy: *Pleurocera planogyrum* (Tryon, 1873: 105); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera pyrenellum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).

***planospira* Anthony, *Melania*.** 1854, *ALNHNY* 6: 123, pl. 3, fig. 24[†]. Lectotype MCZ 161750 (Kentucky) here selected; incorrectly identified by Turner (1946: 105) as "holotype." Taxonomy: *Anculosa planospira* (Tryon, 1873: 411); *Anculosa planospira* (Goodrich, 1921b: 11, 1927: 58); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 7, 1934a: 3, 1940: 7).

***planulata* 'Lea' Wheatley, *Anculosa*.** 1845, *Cat. Shells U.S.*: 28 [*nomen nudum*]. Published locality: "Alabama." Taxonomy: (Tryon, 1873: 421) [Doubtful and Spurious Species; "= *ampla*, Anthony?"].

***plebeius* Anthony, *Melania*.** "...emended spelling for *plebejus*" (Turner, 1946: 105).

***plebejus* 'Anthony' Gould, *Melania*.** 1851, *PBSNH* 3: 362. Figured in Reeve, 1861,

- Conch. Icon.* 12 (*Melania*): pl. 53, sp. 414 and in Tryon, 1873, *Strepomatidae*: 270, figs. 516, 518. Syntypes MCZ 161725 (Saline County, Arkansas) listed as "cotypes" in Turner (1946: 105), and MCZ 161994 figured in Tryon (1873). Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia potosiensis plebius* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1939c: 3).
- plebius 'Gould, 1850' Burch, *Elimia potosiensis*.** 1982, *Freshwater snails of North America*: 40, figs. 459-460 [error for *M. plebejus* Gould, 1851].
- plena Anthony, *Melania*.** 1854, *ALNHNY* 6: 121, pl. 3, fig. 21[†]. Lectotype MCZ 161763 (Alabama) here selected; incorrectly identified by Turner (1946: 105) as "holotype." Taxonomy: *Strephobasis plena* (Tryon, 1873: 44); *Pleurocera (Strephobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1940: 8).
- plicata Menke, *Melania*.** 1828, *Syn. Meth.*, 1st edition: 81; 1830, 2nd edition: 137. "Patriam ignoro."
- plicata 'Lea' Carpenter, *Melania*.** 1857, *Rep. Brit. Assoc.*: 211 [*nomen nudum*]. Published locality: "Oregon." Taxonomy: *Ambloxus pliciferus* (Hannibal, 1912: 178) ["error for *plicifera*"]. Although Hannibal (1912) explains Carpenter's (1857) reference to *M. plicata* Lea as an error for *M. plicifera* Lea, this is complicated by the fact that Carpenter (1857: 325) lists both of these names on the same page.
- plicatum Tryon, *Pleurocera*.** 1863, *PANSP* 15: 279, pl. 2, fig. 6[†]. Lectotype ANSP 27076a ([Cumberland River,] Nashville, [Davidson County,] Tennessee) here selected, erroneously listed by Baker (1964: 186) as "TOM." Taxonomy: *Pleurocera plicatum* (Tryon, 1873: 94); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1934b: 3, 1940: 9).
- plicata Wetherby, *Lithasia*.** 1876, *Proc. Cincinnati Soc. Nat. Hist.* (1): 9, pl. 1, fig. 1. Syntypes UMMZ 130661 ("Green River, Clay's Ferry, Jackson County, Kentucky," but Clay's Ferry is on the Kentucky River, Madison County). Taxonomy: *Lithasia plicata* (Goodrich, 1940: 7).
- plicata-striata Wetherby, *Goniobasis*.** 1876, *Proc. Cincinnati Soc. Nat. Hist.* (1): 10, pl. 1, fig. 3. Syntypes MCZ 149453 (Stones River, [Rutherford County,] Tennessee). Taxonomy: *Elimia plicatastriata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 16).
- plicatula Lea, *Melania*.** Renamed *M. deshayesiana* Lea.
- plicatus Conrad, *Anculotus*.** 1834a, *New Fresh-Water Shells*: 61, pl. 8, fig. 18. Type material presumed to be in the ANSP not found by Baker (1964: 186). Published locality: "Inhabits tributaries of the Tennessee river in Alabama..." Taxonomy: *Anculosa plicata* (Tryon, 1873: 381); *Leptoxis (Leptoxis) plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10).
- plicifera Lea, *Melania*.** 1839, *TAPS* 6: 93, pl. 23, fig. 90 (*Obs. on Unio* 2: 93). Syntypes USNM 119244 (Wahlamat, Oregon). Taxonomy: *Goniobasis plicifera* (Tryon, 1873: 211); *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) plicifera* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).
- ponderosa Anthony, *Melania*.** 1860, *PANSP* 12: 59. Figured in Tryon, 1873,

Streptomatidae: 66, fig. 128[†]. Lectotype MCZ 92970 (Tennessee) here selected; identified by Tryon (1873: 66) as "the original type" and incorrectly listed as "holotype" in Turner (1946: 105). The lot from which Baker (1964: 186) reported ANSP 125771 as a primary type ("TSD") is probably not valid type material. Taxonomy: *Pleurocera ponderosum* (Tryon, 1873: 66); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9).

porrecta **Lea, Goniobasis**. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 139, pl. 23, fig. 47[†] (*Obs. on Unio* 11: 95). Lectotype USNM 118834 (Gap Creek, near Cumberland Gap, [Claiborne County,] Tennessee) here selected. Baker's (1964: 186) designation of ANSP 27445a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), it is not the shell figured by Lea. Also, although the lot is labeled as coming from Lea, there is no evidence that these shells are better than idiosyncrasy. Taxonomy: *Goniobasis porrecta* (Tryon, 1873: 297); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia porrecta* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 13).

portellii **'Lea, MS' Reeve, Melania**. 1861, *Conch. Icon.* 12: pl. 55, sp. 427 [error for *M. postellii* Lea].

postellii **Lea, Melania**. 1858, *PANSP* 10: 166; 1863a, *JANSP* 5: 343, pl. 38, fig. 208[†] (*Obs. on Unio* 9: 165) [as *Goniobasis*]. Lectotype USNM 118433 (Altamaha River, Georgia) here selected. Taxonomy: *Goniobasis postellii* (Tryon, 1873: 154); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia catenaria postelli* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).

postellii **Lea, Trypanostoma**. 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 286, pl. 36, fig. 110[†] (*Obs. on Unio* 9: 108). Lectotype USNM 121630 (northern Alabama) here selected. Taxonomy: *Pleurocera postellii* (Tryon, 1873: 75); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera postelli* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).

posti **'Pilsbry & Johnson' Goodrich, Goniobasis**. 1942a, *OPUMMZ* (456): 3 [*nomen nudum* listed under synonymy of *Goniobasis catenaria cancellata*]. No specific locality given. Taxonomy: *Elimia floridensis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Clench & Turner, 1956: 127).

potosiensis **Lea, Melania**. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 184, pl. 6, fig. 45[†] (*Obs. on Unio* 3: 22). Lectotype USNM 119188 ([Potosi, Washington County,] Missouri) here selected. Taxonomy: *Goniobasis potosiensis* (Tryon, 1873: 253); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia potosiensis potosiensis* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1939c: 3).

powellensis **Adams, Io**. 1915, *Mem. Nat. Acad. Sci.* 12: 11, pl. 28, fig. 17[†]. Holotypend USNM 424976 (shoal below mill dam, Powell River, Olinger, [Lee County,] Virginia). Taxonomy: *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

praemorsa **'Say' Woodward, Anculotus**. 1856, *Manual*: 131, pl. 8, fig. 28 [error for *A. praerosa* Say].

praerosa **Say, Melania (Anculosa)**. 1821, *JANSP* 2: 177; 1858, Binney's reprint: 70. Figured in Haldeman, 1847-1848, *Leptoxis*: 2, pl. 1, figs. 1-18 and in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 2, sp. 16. Possible syntypes MCZ 292543 (Ohio

- [“...the falls of the Ohio” near Louisville, Jefferson County, Kentucky]). No type material found in the ANSP by Baker (1964: 186). Taxonomy: *Anculosa praerosa* (Tryon, 1873: 405); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1929: 10, 1940: 20).
- prairiensis** **Lea, Goniobasis**. 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 299, pl. 37, fig. 132[†] (*Obs. on Unio* 9: 121). Lectotype USNM 119649 (Big Prairie Creek, [Hale-Perry counties,] Alabama) here selected. Taxonomy: *Goniobasis grata* (Tryon, 1873: 261); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181).
- prasinata** **Conrad, Melania**. 1834b, *Am. Jour. Sci.* 25: 342, pl. 1, fig. 14; 1963, *Sterkiana* (9): 52. Idiotypes ANSP 26991 listed in Baker (1964: 186) as “TSD now” without evidence of their type status. Published locality: “Inhabits Alabama river...” Taxonomy: *Pleurocera prasinatatum* (Tryon, 1873: 81); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera prasinatatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8, 1941c: 12, 1944b: 43).
- prassinata ‘Conrad’ Lea, Melania**. 1863a, *JANSP* 5: 271 (*Obs. on Unio* 9: 93) [error for *M. prasinata* Conrad].
- prestoniana** **Lea, Goniobasis** [new name for *G. vanuxemii* Lea]. 1862b, *PANSP* 14: 265 [as *vanuxemii*]; 1863a, *JANSP* 5: 307, pl. 37, fig. 146[†] (*Obs. on Unio* 9: 129) [as *vanuxemii*]; 1864b, *PANSP* 16: 3, footnote; 1866b, *JANSP* 6: 137, footnote (*Obs. on Unio* 11: 93). Lea (1864b: footnote) substituted the trivial name *prestoniana* for *G. vanuxemii* because it was preoccupied by *Melania (Goniobasis) vanuxemii*. However, the sentence in which Lea (1864b, p. 3, footnote) announces the change in the name of *G. vanuxemii* is the first mention of *M. (G.) vanuxemii*, so the latter is actually the secondary junior homonym. Lectotype USNM 119311 (North Fork Holston River, Virginia) here selected. Taxonomy: *Goniobasis simplex* (Tryon, 1873: 250); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia simplex* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- procissa ‘Anthony’ Tryon, Goniobasis**. 1864, *PANSP* 16: 24 [error for *M. procissa* Anthony].
- procissa** **Anthony, Melania**. 1854, *ALNHNY* 6: 109, pl. 3, fig. 9. Lectotype MCZ 161849 (North Carolina) here selected. Idiotype MCZ 51326 listed as “holotype” in Turner (1946: 105). Taxonomy: *Goniobasis procissa* (Tryon, 1873: 139); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1927: 59, 1930a: 25, 1940: 5).
- producta** **Lea, Melania**. 1843b, *PAPS* 2: 243; 1844, *TAPS* 9: 28 (*Obs. on Unio* 4: 28). Syntype USNM 121605 (Tennessee). Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- proletaria** **Lea, Goniobasis**. 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 325, pl. 38, fig. 177[†] (*Obs. on Unio* 9: 147). Holotype^m USNM 119307 ([Tennessee River,] Florence, [Lauderdale County,] Alabama). Taxonomy: *Goniobasis continens* (Tryon, 1873: 188); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia interveniens* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 14, 1940: 15).
- propinqua** **Lea, Melania**. 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 234, pl. 34, fig. 29[†] (*Obs. on Unio* 9: 56) [as *Goniobasis*]. Lectotype USNM 119841 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis pupoidea* (Tryon, 1873: 300); *Gyrotoma*

(*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24) and *Elimia pupoidea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 21, 1941c: 16).

propria Lea, 1861, p. 118, *Melania*. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 229, pl. 34, fig. 21⁺ (*Obs. on Unio* 9: 51) [as *Goniobasis*]. Lectotype USNM 119822 (Alabama) here selected. Taxonomy: *Goniobasis propria* (Tryon, 1873: 336); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 4).

propria Lea, 1861, p. 123, *Melania*. Renamed *Goniobasis lepida* Lea.

protea Lea, *Melania*. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 83, pl. 9, fig. 28 (*Obs. on Unio* 4: 57) [as *proteus*]. No type material examined. Published locality: "Tuscaloosa, [Tuscaloosa County,] Alabama. B.W. Budd, M.D." Taxonomy: *Eurycaelon proteus* (Tryon, 1873: 344); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).

proxima Say, *Melania*. 1825, *JANSP* 5: 126; 1858, Binney's reprint: 115. Figured in Tryon, 1873, *Strepomatidae*: 288, fig. 555. Type material presumed to be in the ANSP not found by Baker (1964: 186). Published locality: "Professor Vanuxem obtained this species in a small brook [tributary to] the Catawba river, near Landsford, Chester district, South Carolina, and also in the Warm springs, Buncombe county North Carolina, and in the French Broad river, of the same county." Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia proxima* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17, 1942a: 6, 1950).

prudica Lea, *Melania*. 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 222, pl. 34, fig. 7 (*Obs. on Unio* 9: 44) [as *Goniobasis*]. Improbable lectotype ANSP 287550a (Yellowleaf Creek, [Shelby County,] Alabama) selected by Baker (1964: 186) as "TSD now." Baker's (1964) designation was likely made from invalid type material. Contrary to Baker (1964), it is not the figured specimen and was received from the C.M. Wheatley collection rather than from Lea. Taxonomy: *Goniobasis prudica* (Tryon, 1873: 305); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24).

pulchella 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 361. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 37, sp. 257. Syntypes MCZ 161728 listed as "cotypes" in Turner (1946: 105) and MCZ 161729 (*both* from Mad River, [Clark-Champaign Counties,] Ohio). Taxonomy: *Goniobasis pulchella* (Tryon, 1873: 259); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).

pulchella Lea, *Goniobasis*. Renamed *G. gouldiana* Lea.

pulcherrima Anthony, *Melania*. 1860, *PANSP* 12: 58. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 46, sp. 336 and in Tryon, 1873, *Strepomatidae*: 231, fig. 456. Lectotype ANSP 8692a (North Carolina) selected by Baker (1964: 186) as "TSD now" but not the shell figured in Tryon (1873). Paralectotypes MCZ 161830, listed as "cotypes" in Turner (1946: 105). Taxonomy: *Goniobasis pulcherrima* (Tryon, 1873: 230); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia proxima* (Burch &

- Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17).
- pulla* Lea, *Goniobasis*.** 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 130, pl. 23, fig. 32[†] (*Obs. on Unio* 11: 86). Holotype^{mo} USNM 119328 (Cumberland Gap, [Claiborne County,] Tennessee). Taxonomy: *Elimia clavaeformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- pumila* Lea, *Melania*.** 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 86, pl. 9, fig. 36 (*Obs. on Unio* 4: 60). Syntypes USNM 621264 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama). Taxonomy: *Strepobasis pumila* (Tryon, 1873: 42); *Pleurocera (Pleurocera) biteniata* (Hannibal, 1912: 172); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1934b: 3, 1940: 9).
- pumila* Lea, *Schizostoma*.** 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 252, pl. 35, fig. 57[†] (*Obs. on Unio* 9: 74) [as *pumilum*]. Lectotype USNM 119366 (Alabama) here selected. Baker's (1964: 187) designation of ANSP 124492a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), it is not the specimen figured by Lea. Also, the lot was received from C.M. Wheatley rather than Lea; although Wheatley was known to possess examples of this nomenclature (Ryder, [no date]), there is nothing to suggest that these are types. Taxonomy: *Schizostoma pumilum* (Tryon, 1873: 357); *Gyrotoma olivula excisa* (Hannibal, 1912: 182); *Gyrotoma pumilum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 14, 1944b: 47).
- pumila* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 279, pl. 36, fig. 96[†] (*Obs. on Unio* 9: 101). Lectotype USNM 122146 (Tennessee) here selected. Taxonomy: *Pleurocera pumilum* (Tryon, 1873: 134); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera (Strepobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).
- pumilus* Conrad, *Anculotus*.** 1834a, *New Fresh-Water Shells*: 62. Figured in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 6, sp. 45. No type material examined. Published locality: "Inhabits the Black Warrior river and Bayou Teche... communicated by Professor Greene, who supplied me with the specimen." Previous opinion: *Somatogyrus* sp. (Goodrich, 1922: 56).
- punicea* Lea, *Melania*.** 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 232, pl. 34, fig. 27 (*Obs. on Unio* 9: 54) [as *Goniobasis*]. Syntypes USNM 119793 (Coosa River, Alabama). Taxonomy: *Goniobasis punicea* (Tryon, 1873: 304); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).
- pupaeformis* Lea, *Goniobasis*.** 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 130, pl. 23, fig. 31[†] (*Obs. on Unio* 11: 86). Holotype^{mo} USNM 119811 (Coosa River, Alabama). Taxonomy: *Elimia pupaeformis* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1936: 56, 1944b: 46).
- pupoidea* Anthony, *Melania*.** 1854, *ALNHNY* 6: 104, pl. 3, fig. 3[†]. Lectotype MCZ 161714 (Alabama) here selected; incorrectly identified by Turner (1946: 105) as "holotype." Taxonomy: *Goniobasis pupoidea* (Tryon, 1873: 300); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia pupoidea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 20, 1941c: 16).
- purpurea* Lea, *Melania*.** 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 225, pl. 34, fig. 12[†]

- (*Obs. on Unio* 9: 47) [as *Goniobasis*]. Lectotype USNM 119848 (Alabama) here selected. Taxonomy: *Goniobasis purpurea* (Tryon, 1873: 335); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4) and *Elimia showalteri* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1941c: 20).
- purpurea** **Lea, Lithasia.** 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 340, pl. 54, fig. 23[†] (*Obs. on Unio* 12: 100). Lectotype USNM 121914 (Cahaba River, [Centreville, Bibb County,] Alabama) here selected. Taxonomy: *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).
- purpurella** **Lea, Goniobasis.** 1862b, *PANSP* 14: 269; 1863a, *JANSP* 5: 327, pl. 38, fig. 183[†] (*Obs. on Unio* 9: 149). Lectotype USNM 118927 (Caney Fork [Cumberland River, Tennessee] here selected. Taxonomy: *Goniobasis purpurella* (Tryon, 1873: 190); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).
- pybasii** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 289, pl. 36, fig. 115[†] (*Obs. on Unio* 9: 111). Lectotype USNM 122204 ([Tennessee River,] Tuscumbia, [Colbert County,] Alabama) here selected. Taxonomy: *Pleurocera pybasii* (Tryon, 1873: 71); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum moriforme* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- pybasii** **Lea, Goniobasis.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 313, pl. 37, fig. 157[†] (*Obs. on Unio* 9: 135). Lectotype USNM 119329 ([Tennessee River,] Tuscumbia, [Colbert County,] Alabama) here selected. Taxonomy: *Goniobasis pybasii* (Tryon, 1873: 177); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia pybasi* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 16, 1940: 15).
- pygmaea** **'Smith' Goodrich, Goniobasis.** 1936, *MPUMMZ* (31): 49, pl. 1, fig. 17[†]. Holotypend UF 86934 [not examined] (Coosa River, Three Island Shoals, Talladega County, Alabama). Taxonomy: *Elimia pygmaea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 49, 1944b: 46).
- pyramidatum** **Shuttleworth, Gyrotoma.** 1845, *Mittheil. Nat. Gesell. Bern* (50): 88. According to Goodrich (1944b: 47): "...[Coosa River] Ten Island Shoals, St. Clair County, Alabama, to the mouth of Yellowleaf Creek of Shelby County." Taxonomy: *Schizostoma pyramidatum* (Tryon, 1873: 365); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma pyramidatum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1924a: 9, 1944b: 47).
- pyramidatum** **'Shuttleworth' Hinkley, Schizostoma.** 1904, *Nautilus* 18: 41. No locality given. Taxonomy: *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).
- pyrenella** **Conrad, Melania.** 1834a, *New Fresh-Water Shells*: 52, pl. 8, fig. 5. Also figured in Tryon, 1873, *Strepomatidae*: 106, fig. 200[†]. Lectotype ANSP 26959 (Alabama) here selected; identified by Tryon (1873: 106) as "Conrad's type" and incorrectly listed as "TOM" in Baker (1964: 187). Taxonomy: *Pleurocera pyrenellum* (Tryon, 1873: 106); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 170); *Pleurocera pyrenellum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- quadrata** **Anthony, Gyrotoma.** 1860, *PANSP* 12: 65. Figured in Reeve, 1860, *Conch.*

- Icon. 12*(*Melatoma*): pl. 1, sp. 7, fig. 7b (not 7a, 8). Syntypes MCZ 50678 (Coosa River, Alabama) listed as "cotypes" in Turner (1946: 105). Baker's (1964) designation of ANSP 56775 as primary type ("TSD now") is invalid. There is no evidence of that shell being legitimate type material. Taxonomy: *Schizostoma incisum* (Tryon, 1873: 378); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma incisum* (Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- quadrincta* Lea, *Goniobasis*.** 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 131, pl. 23, fig. 33[†] (*Obs. on Unio* 11: 87). Also in Tryon, 1864, *PANSP* 16: 43 [*nomen nudum*]. Lectotype USNM 119312 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis quadrincta* (Tryon, 1873: 262); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia cahawbensis cahawbensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3, 1941c: 14) and *Elimia gerhardi* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).
- quadrivittata* Lea, *Melania*.** 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 226, pl. 34, fig. 15[†] (*Obs. on Unio* 9: 48) [as *Goniobasis*]. Lectotype USNM 119313 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis quadrivittata* (Tryon, 1873: 335); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 23).
- quadrosa* Rafinesque, *Pleurocera*.** 1831, *Enumeration and Account*: 3, sp. 21. No type material examined. Published locality: "Small streams of west Kentucky..." Taxonomy: *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 170).
- rapaeformis* Haldeman, *Leptoxis*.** 1847-1848, *Leptoxis*: 5, pl. 4, fig. 123. No type material examined. Published locality: "...la rivière Kenhuâa, branche de l'Ohio, dans la Virginie." Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis* (*Mudalia*) *dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 20).
- rara* Lea, *Melania*.** 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 220, pl. 34, fig. 3 (*Obs. on Unio* 9: 42) [as *Goniobasis*]. No type material examined. Published locality: "Coosa River, Alabama. E.R. Showalter, M.D." Taxonomy: *Goniobasis rara* (Tryon, 1873: 304); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24).
- rarinodosa* 'Anthony, MS' Reeve, *Melania*.** 1860, *Conch. Icon. 12*: pl. 38, sp. 268. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Lithasia obovata* (Tryon, 1873: 33); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 7, 1940: 6).
- recta* Anthony, *Gyrotoma*.** 1860, *PANSP* 12: 64. Figured in Reeve, 1861, *Conch. Icon. 12*(*Melatoma*): pl. 2, sp. 10. Syntypes MCZ 50685 (Coosa River, Alabama) listed as "cotypes" in Turner (1946: 105). Baker's (1964: 187) identification of ANSP 120768a as a primary type ("TOM") was not made from valid type material. Taxonomy: *Schizostoma constrictum* (Tryon, 1873: 373); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum*

(Burch & Tottenham, 1980: 149; Burch, 1982: 133).

rectum 'Anthony' Reeve, *Melatoma*. 1860, *Conch. Icon.* 12: pl. 1, sp. 7a (not 7b, 8) [as *quadratum*]. Type material presumed to be in the BMNH not examined. Published locality: "Alabama." Taxonomy: *Schizostoma salebrosum* (Tryon, 1873: 376); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

recta 'Anthony, MS' Reeve, *Io*. 1861, *Conch. Icon.* 12: pl. 3, sp. 18^t. Lectotype MCZ 50554 (Tennessee) here selected; incorrectly identified by Turner (1946: 105) as "holotype." Taxonomy: *Io spinosa* (Tryon, 1873: 7); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

regularis Lea, *Melania*. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 170, pl. 5, fig. 16^t (*Obs. on Unio* 3: 8). Lectotype USNM 122073 (Ocoee [District], Tennessee) here selected. Taxonomy: *Pleurocera regulare* (Tryon, 1873: 106); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera unciale unciale* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 12).

retusa 'Rafinesque' Haldeman, *Leptoxis*. 1847-1848, *Leptoxis*: 2 [listed and figured under *L. prerosa* (Say)].

rhombica Anthony, *Melania*. 1854, *ALNHNY* 6: 116, pl. 3, fig. 16^t. Lectotype MCZ 74185 (Tennessee) here selected; incorrectly identified by Turner (1946: 106) as "holotype." Taxonomy: *Goniobasis rhombica* (Tryon, 1873: 220); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 7).

rhombica 'Anthony, MS' Reeve, *Io*. 1861, *Conch. Icon.* 12: pl. 3, sp. 16^t. Lectotype MCZ 50557 (Tennessee) here selected and listed as "cotypes" in Turner (1946: 105). Taxonomy: *Io spinosa* (Tryon, 1873); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).

rigida Anthony, *Melania*. 1860, *PANSP* 12: 62. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 38, sp. 270 and in Tryon, 1873, *Streptomatidae*: 87, fig. 165^t. Lectotype ANSP 27350a (Tennessee) here selected; identified by Tryon (1873: 87) as "Mr. Anthony's type" and reported in Baker (1964: 187) as "TSD." Paralectotypes ANSP 27350 and MCZ 161770; the latter reported as "cotypes" in Turner (1946: 106). Taxonomy: *Pleurocera unciale* (Tryon, 1873: 85); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia arachnoidea arachnoidea* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 13).

roanense Lea, *Trypanostoma*. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 142, pl. 23, fig. 52^t (*Obs. on Unio* 11: 98). Lectotype USNM 121983 (Roane County, Tennessee) here selected. Taxonomy: *Pleurocera roanense* (Tryon, 1873: 108); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera (Strophobasis) curtum roanense* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 12, 1940: 8).

robulina 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 363. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Io*): pl. 2, sp. 15. Lectotype MCZ 51073 ([Caney Fork] Cumberland River, Tennessee) here selected; incorrectly identified by Turner (1946: 106) as "holotype." Taxonomy: *Angitrema jayana* (Tryon, 1873: 17); *Pleurocera (Pleurocera)*

- fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia (Angitrema) jayana* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 4).
- robusta** **Lea, *Melania***. 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 19 (*Obs. on Unio* 4: 19). Syntypes USNM 119317 (Coosa River, Alabama). Taxonomy: *Goniobasis laeta* (Tryon, 1873: 318); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).
- robusta** **Anthony, *Gyrotoma***. 1860, *PANSP* 12: 67. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melatomia*): pl. 2, sp. 14 and in Tryon, 1873, *Strepomatidae*: 376-377, fig. 709. Syntypes MCZ 50689 listed as "cotypes" in Turner (1946: 106) and ANSP 56771 reported as "TOM" by Baker (1964: 187). Tryon (1873: 376) identified his figure as "the type," but his figured shell is not the one identified by Baker (1964). Published locality: "Coosa River, Alabama." Taxonomy: *Schizostoma salebrosus* (Tryon, 1873: 376); *Gyrotoma (Gyrotoma) laeta incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- robusta** **Lea, *Io***. 1861d, *PANSP* 13: 393; 1863a, *JANSP* 5: 346, pl. 39, fig. 213[†] (*Obs. on Unio* 9: 168). Lectotype USNM 122022 (Tennessee River [Alabama?]) here selected. Taxonomy: *Pleurocera robustum* (Tryon, 1873: 61); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9).
- rogersii** **Conrad, *Melania***. 1835, *New Fresh-Water Shells*, Appendix: 7, pl. 9, fig. 7. Type material presumed to be in the ANSP not found by Baker (1964: 187). Published locality: "Inhabits with the preceding species [*Melania semicostata* Conrad]. It was given to me by Professor William B. Rogers..." Taxonomy: *Anculosa dilatata* (Tryon, 1873: 395); *Leptoxis (Mudalia) dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 19).
- romae** **Lea, *Goniobasis***. 1864c, *PANSP* 16: 111; 1866b, *JANSP* 6: 129, pl. 23, fig. 30 (*Obs. on Unio* 11: 85). Syntypes USNM 119294 (Rome, [Floyd County,] Georgia).
- rorata** **Reeve, *Melania***. 1860, *Conch. Icon.* 12: pl. 42, sp. 306. Type material presumed to be in the BMNH not examined. Published locality: "Alabama, United States." Taxonomy: *Pleurocera excuratum* (Tryon, 1873: 55); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- rostellatum** **Lea, *Trypanostoma***. 1862c, *PANSP* 14: 272; 1863a, *JANSP* 5: 353, pl. 39, fig. 225[†] (*Obs. on Unio* 9: 175). Lectotype USNM 121636 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera striatum* (Tryon, 1873: 126); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera canaliculatum alabamense* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- rostellata** **'Lea' Hannibal, *Goniobasis***. 1912, *Proc. Mal. Soc. London* 10: 177 [presumably referring to *Trypanostoma rostellatum*].
- rota** **Reeve, *Io***. 1860, *Conch. Icon.* 12: pl. 2, sp. 13. Type material presumed to be in the BMNH not examined. Published locality: "United States." Taxonomy: *Angitrema rota* (Tryon, 1873: 19); *Pleurocera (Pleurocera) fluviatilis armigera*

(Hannibal, 1912: 171); *Pachymelania aurita* (Goodrich, 1927: 57).

rubella **Lea, Goniobasis**. 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 332, pl. 38, fig. 191[†] (*Obs. on Unio* 9: 154). Lectotype USNM 119296 (near Murphy, Cherokee County, North Carolina) here selected. Taxonomy: *Goniobasis rubella* (Tryon, 1873: 285); *Ambloxus virginicus* (Hannibal, 1912: 176); ?*Elimia porrecta* (Burch & Tottenham, 1980: 139; Burch, 1982: 127; Goodrich, 1940: 14).

rubicunda **Lea, Melania**. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 235, pl. 34, fig. 32[†] (*Obs. on Unio* 9: 57) [as *Goniobasis*]. Lectotype USNM 119278 (Coosa River, Alabama) here selected. Baker's (1964) designation of ANSP 8747a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964) it is not Lea's figured specimen. The lot from which it was selected was received from Showalter rather than Lea. Taxonomy: *Goniobasis rubicunda* (Tryon, 1873: 313); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 27, 1941b: 4).

rubiginosa **Lea, Anculosa**. 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 20 (*Obs. on Unio* 4: 20). Figured in Haldeman, 1847-1848, *Leptoxis*: 3, pls. 2-3, figs. 59-70 and Reeve, 1860-1861, *Conch. Icon.* 12(*Anculotus*): pl. 2, sp. 12; pl. 6, sp. 47 [Tryon (1873: 387) includes both of these figures under the synonymy of *rubiginosa*, but Reeve (1861) says that only species 47 "...and not the shell given at Plate II, Fig. 12, is the true *A. rubiginosus*."]. Possible holotype^{mo} USNM 121706 (Black Warrior River, Alabama). Taxonomy: *Anculosa rubiginosa* (Tryon, 1873: 387); *Leptoxis (Leptoxis) plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10) or *griffithiana* (Goodrich, 1922: 29).

rubiginosa **Lea, Goniobasis**. 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 333, pl. 38, fig. 193[†] (*Obs. on Unio* 9: 155). Lectotype USNM 119297 (Oregon) but there is a note on the specimen label of the type by J.P.E. Morrison that the locality it wrong — probably North or South Carolina) here selected. Taxonomy: *Goniobasis rubiginosa* (Tryon, 1873: 215); *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) silicula* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 3).

rubricata **Lea, Goniobasis**. 1862b, *PANSP* 14: 271; 1863a, *JANSP* 5: 335, pl. 38, fig. 197[†] (*Obs. on Unio* 9: 157). Lectotype USNM 119299 (Tennessee) here selected. Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia proxima* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1940: 17).

rudens **Reeve, Melania**. 1860, *Conch. Icon.* 12: pl. 33, sp. 224. Type material presumed to be in the BMNH not examined. No locality given. Taxonomy: *Goniobasis silicula* (Tryon, 1873: 212); *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) silicula* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 3).

rufa **Lea non Phillippi, Melania**. Renamed *M. rufescens* Lea.

rufescens **Lea, Melania** [new name for *M. rufa* **Lea, 1841 non Phillippi, 1836**]. 1841a, *PAPS* 2: 12 [as *rufa*]; 1842b, *TAPS* 8: 167, pl. 5, fig. 8[†] (*Obs. on Unio* 3: 5) [as *rufa*]; 1843a, *PAPS* 2: 237; 1842b, *TAPS* 8: corrigenda (*Obs. on Unio* 3: corrigenda). Lectotype USNM 119222 (Mamma's Creek, Tennessee) here selected. Taxonomy: *Goniobasis rufescens* (Tryon, 1873: 290); *Ambloxus virginicus* (Hannibal, 1912: 175);

- Elimia teres* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 14).
- rufula Haldeman, *Melania*.** 1841a, *Monog. Limniades* 2: wrapper. Figured in Tryon, 1873, *Strepomatidae*. 279, fig. 539. Tryon (1873: 281) reported figuring a type, but that shell was not found in the ANSP by Baker (1964: 187). Published locality: "Lake Pepin [Minnesota and Wisconsin?]." Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175) [Authority given as Haldeman, Lea, 1841]; *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 30).
- rugosa Rafinesque, *Melania* (*Ambloxus*).** 1831, *Enumeration and Account*: 3, sp. 22. No type material examined. Published locality: "...streams of Cumberland Mountains." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species]; *Ambloxus virginicus* (Hannibal, 1912: 174).
- rugosa Lea, *Melania* [new name for *M. corrugata* Lea, 1841 non Lamarck, 1804].** 1841a, *PAPS* 2: 13 [as *corrugata*]; 1842b, *TAPS* 8: 177, pl. 5, fig. 30⁺ (*Obs. on Unio* 3: 15) [as *corrugata*]; 1843a, *PAPS* 2: 237; 1842b, *TAPS* 8: corrigenda (*Obs. on Unio* 3: corrigenda). Holotype^{mo} USNM 119298 (Tennessee). Taxonomy: *Goniobasis rugosa* (Tryon, 1873: 194); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).
- saffordi Lea, *Melania*.** 1852, *TAPS* 10: 300, pl. 30, fig. 10⁺ (*Obs. on Unio* 5: 56). Lectotype USNM 119232 (Lebanon, Wilson County, Tennessee) here selected. Taxonomy: *Goniobasis saffordi* (Tryon, 1873: 253); *Ambloxus virginicus* (Hannibal, 1912: 176); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 7).
- salebrosa Conrad, *Melania*.** 1834a, *New Fresh-Water Shells*: 51, pl. 4, fig. 5. Syntypes MCZ 51068 (Alabama). A note from J.G. Anthony indicates that 2 of the 5 specimens of this lot are genuine types. Baker's (1964: 187) designation of ANSP 124849a is invalidated by his own uncertainty. Taxonomy: *Angitrema salebrosa* (Tryon, 1873: 14); *Lithasia* (*Lithasia*) *salebrosa salebrosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1934a: 10, 1940: 4).
- salebrosa Anthony, *Gyrotoma*.** 1860, *PANSP* 12: 66. Figured in Reeve, 1860-1861, *Conch. Icon.* 12(*Melatoma*): pl. 1, sp. 7, fig. 8 (*not* 7a, b) [as *quadratum*]; pl. 2, sp. 15[†]. Lectotype MCZ 50687 (Coosa River, Alabama) here selected, incorrectly listed by Turner (1946: 106) as "holotype." Possible paralectotypes ANSP 56772. Baker's (1964: 187) identification of ANSP 56772a as a primary type ("TOM") is invalidated by the uncertain type status of that ANSP lot. Taxonomy: *Schizostoma salebrosum* (Tryon, 1873: 376); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- suavis 'Lea' Hannibal *Melania*.** 1912, *Proc. Mal. Soc. London* 10: 181 [error for *M. suavis* Lea].
- sayi Wood, *Strombus*.** 1828, Supplement to *Index Test.*: 14, pl. 4, fig. 24. No type material examined. Published locality: "North America." Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal,

- 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10).
- sayi Deshayes, *Melania*.** 1832, *Encyc. Meth.* 2: 427. No type material examined. Published locality: "Cette coquille se trouve abondamment dans l'Ohio et ses affluens." Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62).
- sayi 'Ward' Wheatley, *Melania*.** 1845, *Cat. Shells U.S.*: 27 [*nomen nudum*]. Published locality: "Ohio." Taxonomy: *Pleurocera canaliculatum* (Tryon, 1873: 62).
- scabrella 'Anthony' Goodrich, *Melania*.** 1941b, *OPUMMZ* (427): 4 [error for *M. scabrella* 'Anthony, MS' Reeve].
- scabrella 'Anthony, MS' Reeve, *Melania*.** Renamed *M. scabriuscula* Brot.
- scabriuscula Brot, *Melania* [new name for *M. scabrella* 'Anthony, MS' Reeve non Phillippi, 1847].** 1862, *Cat. Syst.*: 36. In Reeve, 1861, *Conch. Icon.* 12: pl. 51, sp. 388 [as *scabrella*]. Syntype MCZ 161841 (Georgia, United States), incorrectly listed by Turner (1946: 106) as "holotype." Taxonomy: *Goniobasis carinocostata* (Tryon, 1873: 164); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia carinocostata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4, 1941c: 13); *Elimia carinocostata* (Thompson, 2000: 20).
- sculptilis Lea, *Melania*.** 1852, *TAPS* 10: 297, pl. 30, fig. 3[†] (*Obs. on Unio* 5: 53). Lectotype USNM 119281 (Tennessee) here selected. Taxonomy: *Goniobasis sculptilis* (Tryon, 1873: 297); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- sculptilis 'Lea' Hannibal, *Melania*.** 1912, *Proc. Mal. Soc. London* 10: 176 [error for *M. sculptilis* Lea].
- sellersiana Lea, *Melania*.** 1852, *TAPS* 10: 299, pl. 30, fig. 8[†] (*Obs. on Unio* 5: 55). Lectotype USNM 119301 (Caney Fork [Cumberland River], Tennessee) here selected. Taxonomy: *Goniobasis coracina* (Tryon, 1873: 180); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia edgariana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1923: 119, 1940: 16).
- semicarinata Say, *Melania*.** 1829a, *New Harmony Dissem.* 2: 261; 1832, *Amer. Conch.* 1: pl. 47, fig. 4; 1840, Say's reprint: 16. Possible syntypes MCZ 4737 (Kentucky). Type material presumed to be in the ANSP not found by Baker (1964: 187). Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxyus virginicus* (Hannibal, 1912: 174); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- semicostata Conrad, *Melania*.** 1835, *New Fresh-Water Shells*, Appendix: 7, pl. 9, fig. 6. Also figured in Tryon, 1873, *Strepomatidae*: 191, fig. 373. Syntypes ANSP 27476 reported as "TSD(?)" by Baker (1964: 187). Tryon (1873: 376) identified his figure as "the type." None of the shells in Baker's (1964) syntype lot is the one figured by Tryon (1873). Published locality: "Inhabits streams in North Alabama." Taxonomy: *Goniobasis semicostata* (Tryon, 1873: 191); *Ambloxyus virginicus* (Hannibal, 1912: 175); species in doubt (Goodrich, 1930a: 23).
- semigradata Reeve, *Melania*.** 1861, *Conch. Icon.* 12: pl. 59, sp. 472. Possible syntypes MCZ 161924 (Alabama). Taxonomy: *Goniobasis semigradata* (Tryon, 1873: 164); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia caelatura lecontiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 5); *Elimia lecontiana*

- lecontiana* (Thompson, 2000: 29).
- semigranulosa* Deshayes, *Melanopsis*.** See *Melania nupera* Say non Say, 1830, pl. 8, middle figure.
- shastaensis* Lea, *Melania*.** 1856, *PANSP* 8: 80; 1863a, *JANSP* 5: 337, pl. 38, fig. 199[†] (*Obs. on Unio* 9: 159) [as *Goniobasis*]. Lectotype USNM 119283 (Shasta and Scott Rivers, California) here selected. Taxonomy: *Goniobasis silicula* (Tryon, 1873: 212); *Ambloxus pliciferus* (Hannibal, 1912: 178); *Juga (Juga) silicula* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 3).
- shastensis* 'Lea' Hannibal, *Melania*.** 1912, *Proc. Mal. Soc. London* 10: 178 [error for *shastaensis* Lea].
- shelbyensis* Lea, *Melania*.** 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 228, pl. 34, fig. 18[†] (*Obs. on Unio* 9: 50) [as *Goniobasis*]. Lectotype USNM 119854 (Yellowleaf Creek, [Shelby County,] Alabama) here selected. Taxonomy: *Goniobasis shelbyensis* (Tryon, 1873: 306); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24), *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 5), and *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).
- shortaensis* 'Lea' Wm. Cooper, *Melania*.** 1860, *Zool. Rept.* 3: 374 [*nomen nudum*]. Published locality: "Willopah river, Dr. Cooper." Taxonomy: *Ambloxus pliciferus* (Hannibal, 1912: 178) ["error for *Shastensis*"].
- showalteriana* Tryon, *Schizostoma* [new name for *S. showalterii* Lea].** 1873, *Strepomatidae*: 375, fig. 707. In Lea, 1864c, *PANSP* 16: 112 [as *showalterii*]; 1866b, *JANSP* 6: 149, pl. 23, fig. 56[†] (*Obs. on Unio* 11: 105) [as *showalterii*]. Holotype^{mo} USNM 119394 (Coosa River, Alabama). Taxonomy: *Schizostoma showalteriana* (Tryon, 1873: 375); *Gyrotoma (Gyrotoma) laeta incisa* (Hannibal, 1912: 182); *Gyrotoma ampla* (Goodrich, 1924a: 26); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- showalterii* Lea, *Anculosa*.** 1860a, *PANSP* 12: 93; 1863a, *JANSP* 5: 255, pl. 35, fig. 62[†] (*Obs. on Unio* 9: 77). Lectotype USNM 121727 (Coosa River, Alabama) here selected. Taxonomy: *Anculosa showalterii* (Tryon, 1873: 382); *Leptoxis (Leptoxis) showalteri* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 43, 1944b: 42).
- showalterii* Lea, *Schizochilus*.** 1860a, *PANSP* 12: 93; 1863a, *JANSP* 5: 246, pl. 35, fig. 49[†] (*Obs. on Unio* 9: 68) [as *Schizostoma*]. Lectotype USNM 119379 (Coosa River, Alabama) here selected. Taxonomy: *Schizostoma cariniferum* (Tryon, 1873: 353); *Gyrotoma olivula excisa* (Hannibal, 1912: 182); *Gyrotoma cariniferum* (Goodrich, 1924a: 16); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- showalterii* Lea, *Lithasia*.** 1860b, *PANSP* 12: 188; 1863a, *JANSP* 5: 262, pl. 35, fig. 72[†] (*Obs. on Unio* 9: 84). Figured earlier in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 54, sp. 421. Lectotype USNM 121911 (Cahaba River, Centreville, [Bibb County,] Alabama) here selected. Baker's (1964: 187) designation of ANSP 26881a as a primary type ("TSD now") is hereby ignored due to its ambiguity. Contrary to Baker (1964), it is not the specimen figured by Lea. The specimen was received from Showalter rather than Lea. Taxonomy: *Lithasia showalterii* (Tryon, 1873: 31); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Elimia*

showalteri (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1927: 58, 1941c: 20).

***showalterii* Lea, *Melania* (*Goniobasis*).** Renamed *Goniobasis pilsbryi* Goodrich.

***showalterii* 'Lea' Reeve, *Melatoma*.** 1861, *Conch. Icon.* 12: pl. 3, sp. 23. Figured specimen presumed to be in the MCZ not examined. Published locality: "Coosa River, Alabama, United States." Taxonomy: *Schizostoma pumilum* (Tryon, 1873: 357); *Cyrotoma excisum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 20).

***showalterii* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 293, pl. 36, fig. 122 (*Obs. on Unio* 9: 115). No type material examined. Published locality: "[Cahaba] River, Alabama, E.R. Showalter, M.D.; [Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama, Dr. Budd; Oostanaula River, Georgia, Rev. G. White and Bishop Elliott." Taxonomy: *Pleurocera showalterii* (Tryon, 1873: 71); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera showalteri* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

***showalterii* Lea, 1864, *Schizostoma*.** Renamed *S. showalteriana* Tryon.

***silicula* Gould, *Melania*.** 1847, *PBSNH* 2: 224; 1852, *U.S. Exploring Exped.* 12: 141, pl. 10, fig. 164-164a; 1862, *Otia Conch.*: 46. Syntypes MCZ 12137 (Nisqually [near present site of Tacoma, Washington]). Taxonomy: *Goniobasis silicula* (Tryon, 1873: 212); *Ambloxy pliciferus* (Hannibal, 1912: 178); *Juga* (*Juga*) *silicula* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1939c: 4, 1942b: 2).

***similis* Lea, *Goniobasis*.** 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 328, pl. 54, fig. 2 (*Obs. on Unio* 12: 88). No type material examined. Published locality: "Connesauga [*sic*] Creek, Whitfield County, Georgia, Major T.C. Downie." Taxonomy: *Elimia caelatura luteocella* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 2) and *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 37).

***simplex* Say, *Melania*.** 1825, *JANSP* 5: 126; 1858, Binney's reprint: 115. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 21, sp. 148. Baker (1964: 187) identified one of the shells of ANSP 120916 as the holotype ("TOM"). There is no evidence for their type status. Published locality: "...[Professor Vanuxem] obtained [it] in Virginia, in a stream running from Abingdon to Salt Works, and from the stream on which General Preston's grist-mill is situated, near the Salt Works, as well as in a brook running through the salt water valley, and discharging into the Holston river." Taxonomy: *Goniobasis simplex* (Tryon, 1873: 250); *Ambloxy virginicus* (Hannibal, 1912: 174); *Elimia simplex* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1929: 10, 1940: 16).

***simplex* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 277, pl. 36, fig. 94[†] (*Obs. on Unio* 9: 99). Lectotype USNM 121631 (Cincinnati, [Hamilton County,] Ohio) here selected. Taxonomy: *Pleurocera simplex* (Tryon, 1873: 132); *Ambloxy virginicus* (Hannibal, 1912: 177); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9)

***siskiyouensis* Pilsbry, *Melania acutifilosa*.** 1899, *Nautilus* 13: 65. Lectotype ANSP 73508a (headwaters of Fall River, Siskiyou County, California) selected by Baker (1964: 187) as "TSD now." Taxonomy: *Ambloxy pliciferus* (Hannibal, 1912: 178);

- Juga* (*Calibasis*) *acutifilosa siskiyouensis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1942b: 2).
- smaragdinus** **Reeve, *Anculotus***. 1860, *Conch. Icon.* **12**: pl. 3, sp. 23a-b. Type material presumed to be in the BMNH not examined. Published locality: "Alabama." Taxonomy: *Anculosa plicata* (Tryon, 1873: 381); *Leptoxis* (*Leptoxis*) *plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10).
- smithi** **Goodrich, *Anculosa***. 1922, *MPUMMZ* (7): 42, pl. 2, figs. 43-44[†]; pl. 3, fig. 26. Holotype^{od} UMMZ 10183 (Valley Creek, Toadvine, Jefferson County, Alabama [Black Warrior River drainage]). Taxonomy: *Anculosa smithi* (Goodrich, 1941b: 10).
- smithsoniana** **Lea, *Goniobasis***. 1864c, *PANSP* **16**: 112; 1866b, *JANSP* **6**: 137, pl. 23, fig. 44[†] (*Obs. on Unio* **11**: 93). Lectotype USNM 119305 (northern Georgia) here selected. Taxonomy: *Goniobasis smithsoniana* (Goodrich, 1935: 4); *Elimia caelatura infuscata* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 6).
- solida** **Lea, *Anculosa***. 1843b, *PAPS* **2**: 243; 1844, *TAPS* **9**: 29 (*Obs. on Unio* **4**: 29). Syntypes USNM 121910 (Alabama). Taxonomy: *Lithasia brevis* (Tryon, 1873: 37); *Pleurocera* (*Pleurocera*) *solida* (Hannibal, 1912: 172); *Elimia brevis* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1922: 56, 1936: 56).
- solida** **Lea, *Melania***. 1845, *PAPS* **4**: 166; 1848, *TAPS* **10**: 83, pl. 9, fig. 27 (*Obs. on Unio* **4**: 57); 1863a, *JANSP* **5**: 266, pl. 35, fig. 77 (*Obs. on Unio* **9**: 88) [as *Strephobasis*]. Syntypes USNM 118205 (Tennessee). Taxonomy: *Strephobasis curta* (Tryon, 1873: 40); *Pleurocera* (*Pleurocera*) *biteniata* (Hannibal, 1912: 172); *Pleurocera* (*Strephobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1940: 8).
- solidula** **Lea, *Melania***. 1861c, *PANSP* **13**: 121; 1863a, *JANSP* **5**: 230, pl. 34, fig. 23 (*Obs. on Unio* **9**: 52) [as *Goniobasis*]. Syntypes USNM 119792 (Yellowleaf Creek, [near its junction with Coosa River, Shelby County,] Alabama). Taxonomy: *Goniobasis solidula* (Tryon, 1873: 307); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia alabamensis* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1936: 24) and *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 38).
- sordida** **Lea, *Melania***. 1841a, *PAPS* **2**: 12; 1842b, *TAPS* **8**: 170, pl. 5, fig. 15 (*Obs. on Unio* **3**: 8). No type material examined. Published locality: "Tennessee. Dr. Troost." Taxonomy: *Goniobasis sordida* (Tryon, 1873: 269); *Ambloxus virginicus* (Hannibal, 1912: 175); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1934a: 3, 1940: 7).
- sparsus** **'Lea' Hannibal, *Goniobasis***. 1912, *Proc. Mal. Soc. London* **10**: 177 [error for *G. sparus* Lea].
- spartenburgensis** **Lea, *Goniobasis***. 1862b, *PANSP* **14**: 265; 1863a, *JANSP* **5**: 307, pl. 37, fig. 147[†] (*Obs. on Unio* **9**: 129) [as *spartenburgensis*]. Lectotype USNM 119262 (Spartanburg District, South Carolina) here selected. Taxonomy: *Goniobasis spartenburgensis* (Tryon, 1873: 225); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia catenaria dislocata* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1942a: 3).
- sparus** **Lea, *Goniobasis***. 1862b, *PANSP* **14**: 267; 1863a, *JANSP* **5**: 316, pl. 37, fig. 162[†] (*Obs. on Unio* **9**: 138). Lectotype USNM 119268 (Tennessee) here selected. Tax-

onomy: *Goniobasis sparus* (Tryon, 1873: 197); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 14).

***sphaericum* 'Anthony, MS' Reeve, *Melatoma*.** 1861, *Conch. Icon.* 12: pl. 2, sp. 8^t. Lectotype MCZ 50697 (Coosa River, Alabama) here selected; incorrectly identified by Turner (1946: 106) as "holotype." Taxonomy: *Schizostoma sphaericum* (Tryon, 1873: 364); *Gyrotoma olivula excisa* (Hannibal, 1912: 181); *Anculosa* sp. (Goodrich, 1922: 56, 1924a: 29).

***spillmanii* Lea, *Schizostoma*.** 1861a, *PANSP* 13: 54; 1863a, *JANSP* 5: 250, pl. 35, fig. 55^t (*Obs. on Unio* 9: 72). Lectotype USNM 119384 (Coosa River, Alabama) here selected. Taxonomy: *Schizostoma babylonicum* (Tryon, 1873: 369); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma spillmanii* (Goodrich, 1924a: 11); *Gyrotoma pyramidatum* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1944b: 47).

***spillmanii* Lea, *Strebobasis*.** 1861b, *PANSP* 13: 96; 1863a, *JANSP* 5: 264, pl. 35, fig. 74^t (*Obs. on Unio* 9: 86). Lectotype USNM 118197 (Tennessee River, [4 miles above] Chattanooga, [Hamilton County,] Tennessee) here selected. Taxonomy: *Strebobasis plena* (Tryon, 1873: 44); *Pleurocera* (*Pleurocera*) *biteniata* (Hannibal, 1912: 172); *Pleurocera* (*Strebobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).

***spillmanii* Lea, *Io*.** 1861d, *PANSP* 13: 394; 1863a, *JANSP* 5: 348, pl. 39, fig. 215^t (*Obs. on Unio* 9: 170). Lectotype USNM 121997 (Tennessee River [Alabama?]) here selected. Taxonomy: *Pleurocera excuratum* (Tryon, 1873: 55); *Pleurocera* (*Io*) *canaliculatum nobile* (Hannibal, 1912: 173); *Pleurocera canaliculatum excuratum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).

***spillmanii* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 271, pl. 36, fig. 82 (*Obs. on Unio* 9: 93). No type material examined. Published locality: "Noxubee River, Mississippi, Wm. Spillman, M.D., and Tennessee, J. Clark." Taxonomy: *Pleurocera spillmanii* (Tryon, 1873: 104); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

***spillmanii* Lea, *Goniobasis*.** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 302, pl. 37, fig. 138^t (*Obs. on Unio* 9: 124). Lectotype USNM 119263 (Tennessee River) here selected. Taxonomy: *Goniobasis spillmanii* (Tryon, 1873: 223); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia paupercula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 19, 1940: 15).

***spinalis* Lea, *Melania*.** 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 89, pl. 9, fig. 42^t (*Obs. on Unio* 4: 63). Holotype^m ANSP 26967 (Alabama) listed in Baker (1964: 187) as "TSD now." Taxonomy: *Pleurocera spinalis* (Tryon, 1873: 119); *Ambloxy virginius* (Hannibal, 1912: 175); "not seen" (Goodrich, 1941b: 8).

***spinella* Lea, *Goniobasis*.** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 298, pl. 37, fig. 130^t (*Obs. on Unio* 9: 120). Holotype^m USNM 119269 (Sycamore [Creek?], Claiborne County, Tennessee). Taxonomy: *Goniobasis spinella* (Tryon, 1873: 285); *Ambloxy virginius* (Hannibal, 1912: 177); *Elimia arachnoidea spinella* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 44).

***spinosa* Lea, *Io*.** 1834, *TAPS* 5: 112, pl. 19, fig. 79 (*Obs. on Unio* 1: 224). No type

material examined. Published locality: "Holston River, Washington County, Virginia. Professor Troost." Taxonomy: *Io spinosa* (Tryon, 1873); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

spirostoma Anthony, *Io*. 1860, *PANSP* 12: 70. Figured in Reeve, 1860, *Conch. Icon.* 12(*Io*): pl. 1, sp. 1 and in Tryon, 1873, *Strepomatidae*. 10, fig. 40. Syntype MCZ 50553 (Tennessee); incorrectly listed as "holotype" in Turner (1946: 106). Tryon (1873: 10) identified his figure as being "the type specimen." Taxonomy: *Io brevis* (Tryon, 1873); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).

spixiana Lea, *Melania* [new name for *M. tuberculata* Lea, 1831 non 'Wagner' Spix, 1827]. 1831a, *TAPS* 4: 101, pl. 15, fig. 31a,b[†] (*Obs. on Unio* 1: 111) [as *tuberculata*]; 1838a, *TAPS* 6: 93 (*Obs. on Unio* 2: 93). Also in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 54, sp. 422 [as *M. nodata*]. Reeve (1861), apparently unaware that Lea himself had renamed *M. tuberculata* Lea as *M. spixiana*, renamed it *M. nodata*. However, since Lea (1838a) corrected the problem of homonymy before Reeve did, Lea's name has priority, and Reeve's is relegated to synonymy. Lectotype USNM 121747 (Tennessee [River]) here selected. Taxonomy: *Angitrema stygia* (Tryon, 1873: 22); *Pleurocera (Pleurocera) fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia (Angitrema) armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 3).

spixiana 'Lea' Reeve, *Anculotus*. 1860, *Conch. Icon.* 12: pl. 4, sp. 33a-b. Type material presumed to be in the BMNH not examined. Published locality: "Tennessee, United States." Taxonomy: *Angitrema* (Tryon, 1873: 421) [Doubtful and Spurious Species].

spurca Lea, *Melania*. 1845, *PAPS* 4: 166; 1848, *TAPS* 10: 85, pl. 9, fig. 31[†] (*Obs. on Unio* 4: 59). Holotype^m ANSP 26964 (Alabama), listed as "TSD now" in Baker (1964: 187). Taxonomy: *Pleurocera lugubre* (Tryon, 1873: 115); *Ambloxyus virginicus* (Hannibal, 1912: 175); "not seen" (Goodrich, 1941b: 8).

squalida Lea, *Anculosa*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 92, pl. 9, fig. 50[†] (*Obs. on Unio* 4: 66). Lectotype USNM 121905 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Anculosa squalida* (Tryon, 1873: 418); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 20) and *Lithasia (Lithasia) salebrosa florentiana* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 4).

stearnsiana Call, *Goniobasis*. 1886b, *Proc. Davenport Acad. Sci.* 5: 6, fig. 3[†]. Lectotype MCZ 1660 (Dykes Creek, tributary to the Etowah River, Floyd County, Georgia) here selected; incorrectly identified by Johnson (1975: 143) as "holotype." Taxonomy: *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia caelatura stearnsiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 2, 1941b: 5); *Elimia leontiana stearnsiana* (Thompson, 2000: 34).

stewardsoniana Lea, *Goniobasis*. 1862b, *PANSP* 14: 272; 1863a, *JANSP* 5: 344, pl. 38, fig. 210[†] (*Obs. on Unio* 9: 166). Lectotype USNM 119270 ([Tennessee River,] Knoxville, [Knox County, Tennessee]) here selected. Taxonomy: *Goniobasis stewardsoniana* (Tryon, 1873: 144); *Gyrotoma (Goniobasis) olivula* (Hannibal, 1912: 181); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982:

- 45; Goodrich, 1927: 59, 1930a: 25, 1940: 5).
- straminea** **Lea, *Melania***. 1861c, *PANSP* 13: 121; 1863a, *JANSP* 5: 227, pl. 34, fig. 16[†] (*Obs. on Unio* 9: 49) [as *Goniobasis*]. Lectotype USNM 119809 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis luteola* (Tryon, 1873: 322); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 35, 1941c: 21).
- strenua** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 316, pl. 37, fig. 161[†] (*Obs. on Unio* 9: 138). Lectotype USNM 119265 (Benton [Calhoun] County, Alabama) here selected. Taxonomy: *Goniobasis carinocostata* (Tryon, 1873: 164); *Ambloxus virginicus* (Hannibal, 1912: 176); *Elimia carinocostata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4, 1941c: 13); *Elimia carinocostata* (Thompson, 2000: 20).
- striatula** **Lea, *Melania*** [new name for *M. striata* Lea, 1841 non Sowerby, 1814 and others]. 1841a, *PAPS* 2: 15 [as *striata*]; 1842b, *TAPS* 8: 186, pl. 6, fig. 49 (*Obs. on Unio* 3: 24) [as *striata*]; 1843a, *PAPS* 2: 237; 1842b, *TAPS* 8: corrigenda (*Obs. on Unio* 3: corrigenda). Possible syntype USNM 118448 (Tennessee). Taxonomy: *Goniobasis striatula* (Tryon, 1873: 203); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia striatula* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 13, 1941b: 3).
- striatula** '(Lea)' **Wheeler, *Goniobasis***. 1912, *Nautilus* 25: 126 [*nomen nudum*]. Published locality: "...from Big Spring Creek [Monte Sano, Madison County, Alabama]." Taxonomy: *Elimia perstriata perstriata* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 17).
- striatum** **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 294, pl. 36, fig. 124[†] (*Obs. on Unio* 9: 116). Lectotypes USNM 122141 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera striatum* (Tryon, 1873: 126); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera canaliculatum alabamense* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- strictum** **Lea, *Trypanostoma***. 1862c, *PANSP* 14: 272; 1863a, *JANSP* 5: 352, pl. 39, fig. 224[†] (*Obs. on Unio* 9: 174). Holotype^{ms} USNM 121992 ([Spartanburg District?] South Carolina). Taxonomy: *Pleurocera strictum* (Tryon, 1873: 101); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- stricta** '**Lea**' **Hannibal, *Goniobasis***. 1912, *Proc. Mal. Soc. London* 10: 177 [presumably referring to *Trypanostoma strictum*].
- strigillata** '**Muhlfeldt, MS**' **Tryon, *Melania***. 1873, *Strepomatidae*: 291 [*nomen nudum* introduced under synonymy of *Goniobasis virginica*].
- strigosa** **Lea, *Melania***. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 175, pl. 5, fig. 24[†] (*Obs. on Unio* 3: 13). Lectotype USNM 121603 (Holston River, Tennessee) here selected. Taxonomy: *Pleurocera strigosum* (Tryon, 1873: 118); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia strigosa* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 13).
- stygia** **Say, *Melania***. 1829a, *New Harmony Dissem.*, 17: 261; 1840, Say's reprint: 17. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 52, sp. 400. Type material presumed to be in the ANSP not found by Baker (1964: 188). Published locality:

- “...several were found in the Cumberland River, by Dr. Troost.” Taxonomy: *Angitrema stygia* (Tryon, 1873: 22); *Pleurocera (Pleurocera) fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia (Angitrema) armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 3).
- suavis** **Lea, *Melania***. 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 228, pl. 34, fig. 19[†] (*Obs. on Unio* 9: 50) [as *Goniobasis*]. Lectotype USNM 119805 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis culta* (Tryon, 1873: 321); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 4).
- subangulata** **Anthony, *Melania***. 1854, *ALNHNY* 6: 91, pl. 2, fig. 9. Lectotype MCZ 74203 (Alabama) here selected; incorrectly identified by Turner (1946: 106) as “holotype.” Taxonomy: *Goniobasis subangulata* (Tryon, 1873: 231); *Ambloxyus virginicus* (Hannibal, 1912: 176).
- subcarinata** **Wood, *Helix***. 1828, Suppl. to *Index Test.*: 21, pl. 7, fig. 13. No type material examined. No locality given. Taxonomy: *Anculosa carinata* (Tryon, 1873: 388); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1942a: 2).
- subcarinata** **Ravenel, *Melania (Anculosa)***. 1834, Cat.: 11 [*nomen nudum*]. Published locality: “Susquehannah [*sic*].” Taxonomy: (Tryon, 1873: 421) [Doubtful and Spurious Species; “= *dissimilis*?”].
- subcarinata** **‘Anthony, MS’ Reeve, *Melania***. Renamed *M. hybrida* Anthony.
- subcylindracea** **Lea, *Melania***. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 169, pl. 5, fig. 14[†] (*Obs. on Unio* 3: 7). Lectotype USNM 119184 (Tennessee) here selected. Taxonomy: *Goniobasis subcylindracea* (Tryon, 1873: 206); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia laqueata castanea* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 15).
- subglobosa** **Say, *Melania***. 1825, *JANSP* 5: 128; 1858, Binney’s reprint: 116. Figured in Haldeman, 1847-1848, *Leptoxis*: 3, pl. 2, figs. 40-58 and in Reeve, 1860, *Conch. Icon.* 12 (*Anculotus*): pl. 1, sp. 10. Type material presumed to be in the ANSP not found by Baker (1964: 188). Published locality: “...in the north fork of the Holston river, Virginia...” Taxonomy: *Anculosa subglobosa* (Tryon, 1873: 402, 421 [Doubtful and Spurious Species]); *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 157; Burch, 1982: 138; Goodrich, 1921b: 11, 1940: 20).
- subglobosa** **Lea, *Lithasia***. 1861a, *PANSP* 13: 55; 1863a, *JANSP* 5: 261, pl. 35, fig. 70[†] (*Obs. on Unio* 9: 83). Lectotype USNM 121786 (Tennessee) here selected. Taxonomy: *Angitrema subglobosa* (Tryon, 1873: 15); *Lithasia (Lithasia) salebrosa subglobosa* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 4).
- sublirata** **Conrad, *Melania***. 1850, *JANSP* 1: 277, pl. 38, fig. 1. Neotype UF 271349 (Savannah River, below Savannah Rapids Dam, ca. 9 mi N of Augusta, Columbia County, Georgia) selected by Thompson (2000: 46, figs. 94-95[†]). Taxonomy: *Goniobasis sublirata* (Tryon, 1873: 146); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia catenaria catenaria* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1929: 29, 1942a: 2); *Elimia caelatura* (Thompson, 2000: 42).
- subrhombrica** **Lea, *Goniobasis***. 1864c, *PANSP* 16: 111; 1866b, *JANSP* 6: 132, pl. 23, fig. 34[†] (*Obs. on Unio* 11: 88). Lectotype USNM 119274 (Hay [Hog] Creek, [north-ern] Georgia) here selected. Taxonomy: *Elimia gerhardti* (Burch & Tottenham,

- 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).
- subrobustum** **Lea, Trypanostoma**. 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 141, pl. 23, fig. 50† (*Obs. on Unio* 11: 97). Holotype^m USNM 121572 (Holston River, Knoxville, [Knox County,] Tennessee). Taxonomy: *Pleurocera subrobustum* (Tryon, 1873: 110); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- subsolida** **Lea, Melania**. 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 168, pl. 5, fig. 12† (*Obs. on Unio* 3: 6). Lectotypes USNM 119277 (Tennessee) here selected. Taxonomy: *Goniobasis simplex* (Tryon, 1873: 250); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia simplex* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- substricta** **Haldeman, 1840, Melania**. See *M. conica* Say.
- substricta** **Haldeman, Melania**. 1844, *Monog. Limniades* 7: wrapper. Possible syntype ANSP 120616 (Tennessee); incorrectly identified by Baker (1964: 188) as "TOM." Taxonomy: *Goniobasis obtusa* (Tryon, 1873: 168); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- subulæforme** **Lea, Trypanostoma**. 1862a, *PANSP* 14: 174; 1863a, *JANSP* 5: 289, pl. 36, fig. 116† (*Obs. on Unio* 9: 111). Lectotype USNM 122203 ([Tennessee River,] Knoxville, [Knox County,] Tennessee) here selected. Taxonomy: *Pleurocera subulæforme* (Tryon, 1873: 89); *Pleurocera unciale unciale* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- subulæformis** **'Lea' Hannibal, Goniobasis**. 1912, *Proc. Mal. Soc. London* 10: 177 [presumably referring to *Trypanostoma subulæforme* Lea].
- subularis** **Lea, Melania**. 1831a, *TAPS* 4: 100, pl. 15, fig. 30 (*Obs. on Unio* 1: 110). Syntype USNM 121973 (Niagara River, [New York]). Taxonomy: *Pleurocera subulare* (Tryon, 1873: 88); *Ambloxus virginicus* (Hannibal, 1912: 174); *Pleurocera subulare* (Goodrich, 1917: 124); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2).
- subulare** **'Lea' Hannibal, Trypanostoma**. 1912, *Proc. Mal. Soc. London* 10: 177 [presumably referring to *Melania subularis* Lea].
- succinulata** **'Anthony' Gould, Melania**. 1851, *PBSNH* 3: 363. Possible syntypes MCZ 31066 (Ohio [Clifty Creek [Bartholomew-Decatur counties], near Madison, Indiana *vide* Turner, 1946]) reported as "lectotype" in Turner (1946: 106). Taxonomy: *Goniobasis semicarinata* (Tryon, 1873: 278); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia semicarinata* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 18).
- sugillata** **Reeve, Melania**. 1860, *Conch. Icon.* 12: pl. 44, sp. 319. Type material presumed to be in the BMNH not examined. Published locality: "Alabama." Taxonomy: *Pleurocera unciale* (Tryon, 1873: 85); *Ambloxus virginicus* (Hannibal, 1912: 176).
- sulcata** **Swainson, Ceriphasia**. 1840, *Treatise on Malacology*: 342, fig. 38. No type material examined. No locality given. Taxonomy: *Pleurocera (Pleurocera)*

- canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10).
- sulcata** **Lea, Goniobasis**. 1868a, *PANSP* 20: 151; 1868b, *JANSP* 6: 329, pl. 54, fig. 3 (*Obs. on Unio* 12: 89). No type material examined. Published locality: "Cahawba [*sic*] River, Alabama, Dr. Showalter." Taxonomy: *Elimia olivula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1941c: 21).
- sulcata** **'Smith' Goodrich, Anculosa**. 1922, *MPUMMZ* (7): 46, pl. 2, fig. 45[†]; pl. 3, fig. 20. Holotype^{od} UMMZ 10184 (Coosa River, Ten Island Shoals, St. Clair County, Alabama). Taxonomy: *Anculosa sulcata* (Goodrich, 1922: 46, 1944b: 42).
- sulcosa** **Menke, Melania**. 1828, *Syn. Meth.*, 1st edition: 81; 1830, 2nd edition: 136. No type material examined. "Patriam ignoro." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- sulcosa** **Lea, Melania**. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 185, pl. 6, fig. 48 (*Obs. on Unio* 3: 23). Holotype^{mo} USNM 119247 (Tennessee). Taxonomy: *Goniobasis sulcosa* (Tryon, 1873: 294); *Ambloxus virginicus* (Hannibal, 1912: 175); *Pleurocera uncialis uncialis* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- sulcosus** **'Anthony, MS', Reeve, Anculotus**. 1861, *Conch. Icon.* 12: pl. 6, sp. 44[†]. Lectotype MCZ 73953 (Alabama) here selected; incorrectly identified by Turner (1946: 106) as "holotype." Taxonomy: *Anculosa showalterii* (Tryon, 1873: 382); *Leptoxis (Leptoxis) showalteri* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 43).
- sulculosa** **Menke, Paludina**. 1828, *Syn. Meth.*, 1st edition: 80. No type material examined. Published locality: "Prope Cincinatti [*sic*] [Hamilton County, Ohio], ad fluvium Ohio." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- sulculosa** **'Menke' Tryon, Melania**. 1873, *Strepomatidae*: 340 [error for *M. sulcosa* Menke].
- surgillata** **'Reeve' Hannibal, Melania**. 1912, *Proc. Mal. Soc. London* 10: 176 [error for *M. sugillata* Reeve].
- suturalis** **Haldeman, Melania**. 1840b, Suppl. to *Monog. Limniades* 1. Figured in Tryon, 1873, *Strepomatidae*: 183, fig. 357. Syntype USNM 12115 (Ohio). Taxonomy: *Goniobasis suturalis* (Tryon, 1873: 183); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia boykiniana viennaensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).
- sycamoreñse** **Lea, Trypanostoma**. 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 283, pl. 36, fig. 104[†] (*Obs. on Unio* 9: 105). Holotype^{mo} USNM 122780 ([Sycamore Creek?], Claiborne County, Tennessee). Taxonomy: *Pleurocera sycamoreñse* (Tryon, 1873: 94); *Ambloxus virginicus* (Hannibal, 1912: 177); *Pleurocera uncialis uncialis* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).
- symmetrica** **Haldeman, Melania**. 1842, *Monog. Limniades* 4: wrapper. Figured in Reeve, 1860, *Conch. Icon.* 12 (*Melania*): pl. 45, sp. 328. Improbable lectotype ANSP 120564a ([Roanoke River,] Virginia) selected by Baker (1964: 188) as "TSD now" from material received in the C.M. Wheatley collection. Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia symmetrica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a:

6).

symmetrica Conrad, *Melania*. Renamed *M. conradi* Brot.

tabulata Anthony, *Melania*. 1854, *ALNHNY* 6: 118, pl. 3, fig. 18. No type material examined. Published locality: "Tennessee." Taxonomy: *Goniobasis tabulata* (Tryon, 1873: 230); *Ambloxy virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1927: 60, 1940: 6).

taeniatus Conrad, *Anculotus*. 1834a, *New Fresh-Water Shells*: 63. Figured in Haldeman, 1847-1848, *Leptoxis*: 3, pl. 3, figs. 71-73 and in Reeve, 1861, *Conch. Icon.* 12(*Anculotus*): pl. 6, sp. 50, not pl. 2, sp. 15. Possible lectotype ANSP 27620a [not examined] ([Alabama River, Claiborne,] Alabama) selected by Baker (1964: 188) as "TSD now." Taxonomy: *Anculosa taeniata* (Tryon, 1873: 408); *Leptoxis (Leptoxis) taeniata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 25, 1941c: 23, 1944b: 41).

taeniolata Anthony, *Melania*. 1860, *PANSP* 12: 59. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 51, sp. 392 and in Tryon, 1873, *Strepomatidae*: 319, fig. 615[†]. Lectotype ANSP 122402a [not examined] (Coosa River, Alabama) selected by Baker (1964: 188) as "TSD now" and listed by Tryon (1873: 318) as "the type." Paralectotype MCZ 161718 listed as "holotype" in Turner (1946: 107). Taxonomy: *Goniobasis laeta* (Tryon, 1873: 318); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).

taitiana Lea, *Melania*. 1841a, *PAPS* 2: 11; 1842b, *TAPS* 8: 165, pl. 5, fig. 5 (*Obs. on Unio* 3: 3). No type material examined. Published locality: "Alabama River at Claiborne [Monroe County, Alabama]. Judge Tait." Taxonomy: *Goniobasis proxima* (Tryon, 1873: 287); *Ambloxy virginicus* (Hannibal, 1912: 175); *Elimia taitiana* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1942a: 5).

tecta Anthony, *Melania*. 1854, *ALNHNY* 6: 105, pl. 3, fig. 4. Syntypes MCZ 161685 (Congress Lake, [Stark County,] Ohio) listed "cotypes" in Turner (1946: 107). Taxonomy: *Goniobasis tecta* (Tryon, 1873: 237); *Ambloxy virginicus* (Hannibal, 1912: 176); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 31).

tenebrocincta Anthony, *Melania*. 1860, *PANSP* 12: 58. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 38, sp. 271 and in Tryon, 1873, *Strepomatidae*: 121, fig. 227[†]. Lectotype MCZ 161848 (Tennessee) here selected, incorrectly listed in Turner (1946: 107) as "holotype." Paralectotypes ANSP 27044, one of which was incorrectly listed by Baker (1964: 188) as "TSD." Taxonomy: *Pleurocera tenebrocinctum* (Tryon, 1873: 120); *Ambloxy virginicus* (Hannibal, 1912: 176); *Pleurocera uncialae uncialae* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12)

tenebrosa Lea, *Melania*. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 176, pl. 5, fig. 26[†] (*Obs. on Unio* 3: 14). Lectotype USNM 119236 (Tennessee) here selected. Taxonomy: *Goniobasis tenebrosa* (Tryon, 1873: 179); *Ambloxy virginicus* (Hannibal, 1912: 175).

tenebrosa Lea, *Io*. 1841b, *PAPS* 2: 34; 1844, *TAPS* 9: 17 (*Obs. on Unio* 4: 17). Figured in Reeve, 1860, *Conch. Icon.* 12(*Io*): pl. 1, sp. 3 and in Tryon, 1873, *Strepomatidae*: 5, fig. 28[†]. Holotype^{mo} USNM 119354 (Tennessee). Taxonomy: *Io fluvialis* (Tryon, 1873: 4); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluvialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 3).

- tenebrosa** **Lea, Goniobasis.** Renamed *G. whitfieldensis* Lea.
- tenebrovittata** **Lea, Goniobasis.** 1862b, *PANSP* 14: 264; 1863a, *JANSP* 5: 301, pl. 37, fig. 136[†] (*Obs. on Unio* 9: 123). Lectotype USNM 119249 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis tenebrovittata* (Tryon, 1873: 263); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia fascians* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1941b: 5).
- tenera** ‘**Anthony, MS**’ **Reeve, Melania.** 1861, *Conch. Icon.* 12: pl. 53, sp. 407. Syntypes MCZ 36218 (Alabama) listed as “cotypes” in Turner (1946: 107). Taxonomy: *Goniobasis tenera* (Tryon, 1873: 264); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Elimia cahawbensis cahawbensis* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3, 1941c: 13).
- tennesseense** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 280, pl. 36, fig. 100[†] (*Obs. on Unio* 9: 103). Lectotype USNM 121579 (Tennessee) here selected. Taxonomy: *Pleurocera opaca* (Tryon, 1873: 135); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Goniobasis sordida incurta* (Goodrich, 1927: 59); *Lithasia* (*Lithasia*) *obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 7).
- teberralis** **Lea, Melania.** 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 178, pl. 6, fig. 32[†] (*Obs. on Unio* 3: 16). Lectotype USNM 119253 (Tennessee) here selected. Taxonomy: *Goniobasis teres* (Tryon, 1873: 208); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1940: 14).
- teberrale** **Lea, Trypanostoma.** 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 339, pl. 54, fig. 22 (*Obs. on Unio* 12: 99). No type material examined. Published locality: “Jackson County, Alabama, W. Spillman.” Taxonomy: *Pleurocera brumbyi* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- teres** **Lea, Melania.** 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 176, pl. 5, fig. 27[†] (*Obs. on Unio* 3: 14). Lectotype USNM 119251 (Tennessee) here selected. Taxonomy: *Goniobasis teres* (Tryon, 1873: 208); *Ambloxyus virginicus* (Hannibal, 1912: 175); *Elimia teres* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 14).
- teretria** **Thompson, Elimia.** 2000, *Walkerana* 11: 6-7, fig. 4[†]. Holotypend UF 260982 (Coldwater Springs, 5.7 mi W of Oxford, Calhoun County, Alabama).
- textilosa** **Anthony, Melania.** 1854, *ALNHNY* 6: 101, pl. 2, fig. 20[†]. Lectotype MCZ 161740 (Georgia) here selected, incorrectly identified by Turner (1946: 107) as “holotype.” Taxonomy: *Goniobasis harpa* (Tryon, 1873: 319); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia carinocostata* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1941b: 4, 1941c: 13).
- thorntonii** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 170; 1863a, *JANSP* 5: 284, pl. 36, fig. 106[†] (*Obs. on Unio* 9: 106) [as *thorntonii*]. Lectotype USNM 121629 ([Tennessee River,] Tuscumbia Lake, Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera thorntonii* (Tryon, 1873: 72); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9).
- thorntonii** **Lea, Goniobasis.** 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 320, pl. 38, fig. 168[†] (*Obs. on Unio* 9: 142) [as *thorntonii*]. Lectotype USNM 119254 ([Tennessee

- River,] Tuscumbia, [Colbert County,] Alabama) here selected. Taxonomy: *Goniobasis thorntonii* (Tryon, 1873: 199); *Ambloxy virgimicus* (Hannibal, 1912: 177); *Elimia nassula* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1930a: 3) and *Elimia pybasi* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1940: 15).
- timidus** Goodrich, *Goniobasis mutabilis*. 1942a, *OPUMMZ* (456): 5. Holotype^{od} UMMZ 49210 (spring 2 mi SE (not NW) of Hawkinsville, Pulaski County, Georgia [Altamaha River drainage]). Taxonomy: *Elimia mutabilis timidus* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1942a: 5).
- tintinabulum** 'Lea' Goodrich, *Anculosa*. 1940, *OPUMMZ* (417): 20 [error for *tintinnabulum* Lea].
- tintinnabulum** Lea, *Anculosa*. 1845, *PAPS* 4: 167; 1848, *TAPS* 10: 93, pl. 9, fig. 51^t (*Obs. on Unio* 4: 67). Lectotype USNM 121666 ([Black Warrior River,] Tuscaloosa, [Tuscaloosa County,] Alabama) here selected. Taxonomy: *Anculosa subglobosa* var. *tintinnabulum* (Tryon, 1873: 402); *Leptoxis (Leptoxis) plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10) and *Leptoxis (Leptoxis) praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 11, 1940: 20).
- torquata** Lea, *Melania*. 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 27 (*Obs. on Unio* 4: 27). Holotype^{mo} USNM 122187 (Tennessee). Taxonomy: *Pleurocera alveare* (Tryon, 1873: 50); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera alveare* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1934b: 3, 1940: 9).
- torrefacta** 'Smith' Goodrich, *Anculosa*. 1922, *MPUMMZ* (7): 27, pl. 2, figs. 50^t, 51; pl. 3, fig. 11. Holotype^{od} UMMZ 10189 (Coosa River, Weduska Shoals, Shelby County, Alabama).
- torta** Lea, *Melania*. 1845, *PAPS* 4: 165; 1848, *TAPS* 10: 84, pl. 9, fig. 30 (*Obs. on Unio* 4: 58). Syntypes USNM 119255 (Big Creek, Lawrence County, Tennessee). Taxonomy: *Pleurocera tortum* (Tryon, 1873: 117); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Elimia laqueata tortum* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 9, 1940: 15).
- tortum** Lea, *Trypanostoma*. Renamed *Pleurocera parkerii* Tryon.
- torulosa** Anthony, *Melania*. 1854, *ALNHNY* 6: 110, pl. 3, fig. 10^t. Holotype^{mo} MCZ 79295 (Sinking Spring near Loudon, [Loudon County,] Tennessee). Taxonomy: *Goniobasis acutocarinata* (Tryon, 1873: 228); *Ambloxy virgimicus* (Hannibal, 1912: 176); *Elimia claviformis* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).
- tuomeyi** 'Lea' Goodrich, *Trypanostoma*. 1940, *OPUMMZ* (417): 10 [error for *T. tuomeyi* Lea].
- tuomeyi** 'Lea' Goodrich, *Lithasia*. 1940, *OPUMMZ* (417): 4 [error for *L. tuomeyi* Lea].
- tracta** 'Anthony' Gould, *Melania*. 1851, *PBSNH* 3: 361. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 55, sp. 429^t. Lectotype MCZ 119098 (Ohio [Tanner's Creek, Dearborn County, Indiana]) here selected, incorrectly identified by Turner (1946: 107) as "holotype." Taxonomy: *Pleurocera elevatum* (Tryon, 1873: 95);

Ambloxyus virginicus (Hannibal, 1912: 175); *Pleurocera subulare* (Goodrich, 1917: 124); *Pleurocera acuta acuta* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1939b: 2).

***translucens* Anthony, *Goniobasis*.** 1865, *Am. J. Conch.* 1: 36, pl. 1, fig. 1-2[†]. Lectotype ANSP 8578 (Canada) here selected, erroneously reported by Baker (1964: 188) as "TOM." Paralectotype MCZ 31068, incorrectly listed by Turner (1946: 107) as "holotype." Taxonomy: *Goniobasis translucens* (Tryon, 1873: 261); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia livescens livescens* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1939b: 4, 1945: 32).

***trilineata* Say, *Melania*.** 1829b, *New Harmony Dissem.* 2: 277; 1840, Say's reprint: 19. Figured in Haldeman, 1847-1848, *Leptoxis*: 5, pl. 5, figs. 134-144, in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 5, sp. 43, fig. 41b. Possible lectotype ANSP 27590a (Ohio River [Falls of the Ohio, Louisville, Jefferson County, Kentucky]) selected by Baker (1984: 188) as "TSD now." Paralectotype MCZ 316294, listed by Tryon (1873: 402, fig. 797) as "Mr. Say's type in the possession of Mr. Anthony." Taxonomy: *Anculosa trilineata* (Tryon, 1873: 400); *Leptoxis (Mudalia) trilineata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1929: 14, 1940: 20).

***tripartita* Reeve, *Melania*.** 1860, *Conch. Icon.* 12: pl. 48, sp. 364. Type material presumed to be in the BMNH not examined. Published locality: "...without a doubt, a United States species..." Taxonomy: *Goniobasis tripartita* (Tryon, 1873: 203); *Ambloxyus virginicus* (Hannibal, 1912: 176); unknown *Goniobasis* (Goodrich, 1940: 19); *Elimia curvicostata* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1942a: 5).

***trivittata* DeKay, *Anculotus*.** 1843, *Zool. N.Y.* 5: 102, pl. 7, fig. 137. No type material examined. Published locality: "...obtained from Cranesport..." Taxonomy: *Anculosa carinata* var. *b* (Tryon, 1873: 389); *Leptoxis (Mudalia) carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9, 1942a: 2).

***trivittata* Reeve, *Melania*.** 1861, *Conch. Icon.* 12: pl. 54, sp. 420. Type material presumed to be in the MCZ not examined. Published locality: "Alabama, United States." Taxonomy: *Lithasia brevis* (Tryon, 1873: 37); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Elimia brevis* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1936: 56).

***trivittatum* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 282, pl. 36, fig. 102[†] (*Obs. on Unio* 9: 104). Lectotype USNM 122168 (Tombigbee River, Mississippi) here selected. Taxonomy: *Pleurocera trivittatum* (Tryon, 1873: 73); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

***trochiformis* Conrad, *Melania*.** 1834a, *New Fresh-Water Shells*: 56, pl. 8, fig. 11[†]. Possible syntype ANSP 122553 [not examined] (northern Alabama) incorrectly listed by Baker (1964: 188) as "TOM." Taxonomy: *Goniobasis trochiformis* (Tryon, 1873: 216); *Pleurocera trochiformis* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 12).

***trochulus* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 282, pl. 36, fig. 103[†] (*Obs. on Unio* 9: 104). Holotype^{mo} USNM 122164 (Holston River, Tennessee). Taxonomy: *Pleurocera trochulus* (Tryon, 1873: 137); *Pleurocera (Pleurocera)*

canaliculatum (Hannibal, 1912: 171); *Pleurocera* (*Strophobasis*) *curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 6, 1940: 8).

troostiana **Lea, *Melania***. 1838a, *TAPS* 6: 92, pl. 23, fig. 86 (*Obs. on Unio* 2: 92). Syntype USNM 119256 (Mossy Creek, Jefferson County, Tennessee). Taxonomy: *Goniobasis troostiana* (Tryon, 1873: 296); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia troostiana* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1928b: 31, 1940: 13).

troostiana **Lea, *Anculosa***. 1841b, *PAPS* 2: 34; 1844, *TAPS* 9: 15 (*Obs. on Unio* 4: 15). Figured in Haldeman, 1847-1848, *Leptoxis*: 4, pl. 3, fig. 81 [as *Leptoxis troostiana*] and in Reeve, 1860, *Conch. Icon.* 12(*Anculotus*): pl. 4, sp. 30. No type material examined. Published locality: "Tennessee. Professor Troost." Taxonomy: *Anculosa troostiana* (Tryon, 1873: 409); *Anculosa troostiana* (Goodrich, 1921b: 11); *Leptoxis* (*Mudalia*) *dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 19).

troostii **Lea, *Trypanostoma***. 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 285, pl. 36, fig. 107[†] (*Obs. on Unio* 9: 107). Lectotype USNM 122205 ([Tennessee River,] Florence, [Lauderdale County,] Alabama) here selected. Taxonomy: *Pleurocera troostii* (Tryon, 1873: 67); *Pleurocera* (*Pleurocera*) *canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9) and *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

troostiana **'Lea' Haldeman, *Leptoxis***. See *Anculosa troostiana* Lea.

tryoni **Lewis, *Anculosa***. 1871, *Am. J. Conch.* 6: 221, pl. 12, fig. 8. Also figured in Tryon, 1865-1866, *Am. J. Conch.* 2: 133, figs. 101-102 [as *A. tæniata* Conrad]. Syntypes UMMZ 42513, MCZ 52100, and MCZ 133013 (Holston River, [Concord, Knox County] Tennessee). Taxonomy: *Anculosa tryoni* (Goodrich, 1921b: 11); *Leptoxis* (*Leptoxis*) *praerosa* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 20).

tryoniana **Lea, *Goniobasis***. 1862b, *PANSP* 14: 272; 1863a, *JANSP* 5: 342, pl. 38, fig. 207[†] (*Obs. on Unio* 9: 164). Lectotype USNM 118460 (Oostanaula River, Rome, [Floyd County,] Georgia) here selected. Taxonomy: *Goniobasis decorata* [in part] (Tryon, 1873: 141) and *Goniobasis caelatura* [in part] (Tryon, 1873: 143); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 181); *Elimia caelatura caelatura* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1935: 2, 1936: 31, 1941b: 5); *Elimia lecontiana decorata* (Thompson, 2000: 34).

tuberculata **Lea, *Melania***. Renamed *M. spixiana* Lea.

tuberculata **Lea, *Anculosa***. 1841c, *PAPS* 2: 83; 1844, *TAPS* 9: 21 (*Obs. on Unio* 4: 21). Figured in Haldeman, 1847-1848, *Leptoxis*: 3, pl. 2, figs. 35-39 [as *Leptoxis plicata*]. Holotype^{mo} presumed lost. Published locality: "[Black] Warrior River, Alabama. Dr. Brumby." Taxonomy: *Anculosa plicata* (Tryon, 1873: 381); *Leptoxis* (*Leptoxis*) *plicata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 40, 1941b: 10).

tuberculata **'Lea' Adams & Adams, *Io***. 1858, *Genera* 1: 300. No locality given. Taxonomy: *Angitrema stygia* (Tryon, 1873: 22).

tuomeyi **Lea, *Lithasia***. 1861a, *PANSP* 13: 55; 1863a, *JANSP* 5: 259, pl. 35, fig. 68[†] (*Obs. on Unio* 9: 81). Holotype^{mo} USNM 121749 (northern Alabama). Since this

- nominum is based on a single specimen, Baker's (1964: 188) designation of ANSP 26914 as a primary type ("TSD now") is invalid. Taxonomy: *Angitrema tuomeyi* (Tryon, 1873: 16); *Lithasia (Lithasia) salebrosa florentiana* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 4).
- tuomeyi** **Lea, Trypanostoma.** 1862a, *PANSP* 14: 171; 1863a, *JANSP* 5: 287, pl. 36, fig. 111 (*Obs. on Unio* 9: 109). No type material examined. Published locality: "North Alabama, Prof. Tuomey; Florence, [Lauderdale County,] Alabama, Rev. G. White." Taxonomy: *Pleurocera tuomeyi* (Tryon, 1873: 103); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- tuomeyi** **Lea, Goniobasis.** 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 311, pl. 37, fig. 153 (*Obs. on Unio* 9: 133). No type material examined. Published locality: "North Alabama, Prof. M. Tuomey." Taxonomy: *Goniobasis tuomeyi* (Tryon, 1873: 169); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia paupercula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1930a: 19, 1940: 15).
- turbinata** **Lea, Anculosa.** 1861a, *PANSP* 13: 54; 1863a, *JANSP* 5: 254, pl. 35, fig. 60⁺ (*Obs. on Unio* 9: 76). Lectotype USNM 119655 (northern Alabama) here selected. Taxonomy: *Eurycaelon crassa* (Tryon, 1873: 348); *Leptoxis (Athearnia) crassa anthonyi* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1931: 4, 1940: 21).
- turgida** **Haldeman, Anculosa (Mudalia).** 1840b, Suppl. to *Monog. Limniades* 1; 1847-1848, *Leptoxis*: 5, pl. 5, fig. 151. No type material examined. Published locality: "1'Alhabama." Taxonomy: *Anculosa melanoides* (Tryon, 1873: 399); *Leptoxis (Leptoxis) melanoides* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 51, 1941b: 10).
- turgida** **Lea, Melania.** 1841c, *PAPS* 2: 82; 1844, *TAPS* 9: 18 (*Obs. on Unio* 4: 18). Lectotype ANSP 27067 (Holston River, Tennessee) selected by Baker (1964: 188) as "TSD now." Taxonomy: *Pleurocera turgidum* (Tryon, 1873: 133); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera (Strepobasis) curtum curtum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 5, 1940: 8).
- turrita** **Anthony, Io.** 1860, *PANSP* 12: 69. Figured in Reeve, 1861, *Conch. Icon.* 12(*Io*): pl. 3, sp. 19a⁺, b and in Tryon, 1873, *Strepomatidae* 11, fig. 41⁺. Holotype^{mo} MCZ 50555 (Tennessee). Taxonomy: *Io turrita* (Tryon, 1873: 11); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviatilis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- ucheensis** **Lea, Goniobasis.** 1862b, *PANSP* 14: 270; 1863a, *JANSP* 5: 334, pl. 38, fig. 194⁺ (*Obs. on Unio* 9: 156). Lectotype USNM 119259 (Little Uchee [Creek, Russell-Lee counties,] Alabama, near Columbus, Georgia) selected by Chambers (1990: 262). Taxonomy: *Goniobasis symmetrica* (Tryon, 1873: 232); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Elimia ucheensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).
- umbilicata** **Wetherby, Anculosa.** 1876, *Proc. Cincinnati Soc. Nat. Hist.* (1): 11, pl. 1, fig. 4. Syntypes MCZ 136613 (Stones River, [Rutherford County,] Tennessee). Taxonomy: *Leptoxis (Leptoxis) umbilicata* (Burch & Tottenham, 1980: 156; Burch,

1982: 43; Goodrich, 1921b: 11, 1940: 21).

umbonata **Lea, Goniobasis**. 1864b, *PANSP* 16: 3; 1866b, *JANSP* 6: 150, pl. 23, fig. 64[†] (*Obs. on Unio* 11: 106) [as *Eurycælon umbonatum*]. Lectotype USNM 119657 (Cumberland River, [Smith's Shoals,] Tennessee) here selected. Taxonomy: *Eurycælon umbonatum* (Tryon, 1873: 346); *Lithasia (Lithasia) geniculata geniculata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 5).

unakensis **Adams, Io**. 1915, *Mem. Nat. Acad. Sci.* 12: 13, pl. 1, fig. 8; pl. 47, fig. 4[†]. Holotype^{od} USNM 424983 (Nolichucky River, Indian Camp on river bank, Broylesville, [Washington County,] Tennessee). Taxonomy: *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).

uncialis **Haldeman, Melania**. 1842, *Monog. Limniades* 4: wrapper. Figured in Reeve, 1861, *Conch. Icon.* 12(*Melania*): pl. 55, sp. 435. Possible lectotype ANSP 26995a ([Beaver Creek?] Tennessee) selected by Baker (1964: 189) as "TSD now." Taxonomy: *Pleurocera unciale* (Tryon, 1873: 85); *Ambloxus virginicus* (Hannibal, 1912: 175); *Pleurocera unciale unciale* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 12).

undosa **Anthony, Melania**. 1854, *ALNHNY* 6: 124, pl. 3, fig. 25. Also figured in Tryon, 1873, *Strepomatidae*. 34, fig. 76[†]. Lectotype MCZ 58407 (Nolin River, Kentucky) here selected; incorrectly identified by Turner (1946: 107) as "holotype." Taxonomy: *Lithasia obovata* (Tryon, 1873: 33); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1929: 6, 1934a: 3, 1940: 6).

undulata **Say, Melania**. 1829a, *New Harmony Dissem.* 2: 261; 1840, Say's reprint: 17. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 42, sp. 307. Possible syntypes ANSP 125100 [not examined] (Ohio?), erroneously identified by Baker (1964: 189) as "TOM." Taxonomy: *Pleurocera undulatum* (Tryon, 1873: 54); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 170); *Pleurocera canaliculatum undulatum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 9).

undulata **Tryon, Goniobasis**. 1866, *Am. J. Conch.* 2: 5, pl. 2, fig. 4. No valid type material examined. Published locality: "Georgia." Possible idiochrome ANSP 27444a incorrectly listed by Baker (1964: 189) as "TSD now." That specimen is not the one figured by Tryon (1866) nor did it come from the published type locality. Taxonomy: *Goniobasis undulata* (Goodrich, 1928c: 67); *Elimia arachnoidea arachnoidea* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1940: 13).

univittata **Lea, Trypanostoma**. 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 145, pl. 23, fig. 58[†] (*Obs. on Unio* 11: 101). Holotype^{mo} USNM 121996 (Cahaba River, Alabama). Taxonomy: *Pleurocera univittatum* (Tryon, 1873: 112); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

valida **Anthony, Melania**. 1860, *PANSP* 12: 59. Figured in Reeve, 1860, *Conch. Icon.* 12(*Melania*): pl. 43, sp. 317 and in Tryon, 1873, *Strepomatidae*. 107, fig. 203. Syntypes ANSP 27070 (Tennessee); one of which is possibly the shell identified by Tryon (1873: 107) as "Mr. Anthony's original type specimen" and listed in Baker (1964: 189) as "TSD." Paralectotypes ANSP 27070 and MCZ 161774, the

- latter listed by Turner (1946: 107) as "cotypes." Taxonomy: *Pleurocera validum* (Tryon, 1873: 107); *Ambloxyus virginicus* (Hannibal, 1912: 176); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 9).
- vanhyningiana Goodrich, Goniobasis.** 1921a, *OPUMMZ* (91): 2, pl. 1, figs. 2^t, 2a. Holotype^{od} UMMZ 133336 (creek below Seminole Springs, Lake County, Florida). Taxonomy: *Elimia catenaria vanhyningiana* (Burch & Tottenham, 1980: 132; Burch, 1982: 33; Goodrich, 1928b: 30, 1942a: 3).
- vanuxemiana Lea, Melania.** 1843b, *PAPS* 2: 242; 1844, *TAPS* 9: 25 (*Obs. on Unio* 4: 25). Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 57, sp. 452 (462). Holotype^{mo} lost. Lea (1844) described only a single specimen and reported that shell to be in the cabinet of E. Foreman, M.D. Published locality: "Alabama. E. Foreman, M.D." Taxonomy: *Goniobasis vanuxemiana* (Tryon, 1873: 312); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia vanuxemiana* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1936: 25, 1941b: 4, 1944b: 45).
- vanuxemii Lea, Trypanostoma.** 1862a, *PANSP* 14: 175; 1863a, *JANSP* 5: 280, pl. 36, fig. 98^t (*Obs. on Unio* 9: 102). Lectotype USNM 121645 (South Carolina) here selected. Taxonomy: *Pleurocera vanuxemii* (Tryon, 1873: 121); *Ambloxyus virginicus* (Hannibal, 1912: 177); *Pleurocera parvum* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 11).
- vanuxemii Lea, Goniobasis.** Renamed *G. prestoniana* Lea.
- vanuxemii Lea, Melania (Goniobasis).** 1864b, *PANSP* 16: 3, footnote [*nomen nudum*]; 1866b, *JANSP* 6: 137, footnote (*Obs. on Unio* 11: 83) [*nomen nudum*]. Published locality: "...Col. Preston's Salt Works in Western Virginia."
- variabilis Lea, Anculosa.** 1841b, *PAPS* 2: 34; 1844, *TAPS* 9: 15 (*Obs. on Unio* 4: 15). Figured in Tryon, 1873, *Streptomatidae*: 391, fig. 754-756, 757^t, 758. Lectotype USNM 121670 (Roanoke River, [Lafayette, Montgomery County] Virginia) here selected. Taxonomy: *Anculosa carinata* var. *a* (Tryon, 1873: 388); *Leptoxis* (*Mudalix*) *carinata carinata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 9, 1942a: 2).
- variabilis Lea, Io.** 1861d, *PANSP* 13: 393; 1863a, *JANSP* 5: 347, pl. 39, fig. 214^t (*Obs. on Unio* 9: 169). Lectotype USNM 121953 (Tennessee River [Alabama?]) here selected. Taxonomy: *Pleurocera moniliferum* (Tryon, 1873: 57); *Pleurocera* (*Io*) *canaliculatum nobile* (Hannibal, 1912: 173); *Pleurocera nobile nobile* (Burch & Tottenham, 1980: 164; Burch, 1982: 46; Goodrich, 1940: 10).
- varians Lea, Melania.** 1861c, *PANSP* 13: 120; 1863a, *JANSP* 5: 219, pl. 34, fig. 2 (*Obs. on Unio* 9: 41) [as *Goniobasis*]. No type material examined. Published locality: "Coosa River, Alabama. E.R. Showalter, M.D." Taxonomy: *Goniobasis varians* (Tryon, 1873: 140); *Gyrotoma* (*Goniobasis*) *olivula* (Hannibal, 1912: 180); *Elimia varians* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941c: 15).
- variata Lea, Melania.** 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 224, pl. 34, fig. 11^t (*Obs. on Unio* 9: 46) [as *Goniobasis*]. Lectotype USNM 118756 (Coosa River, Montevallo, Bibb County, Alabama [Montevallo is neither in Bibb County nor near the Coosa]) here selected. Taxonomy: *Goniobasis variata* (Tryon, 1873: 324); *Gyrotoma* (*Goniobasis*) *leta* (Hannibal, 1912: 181); *Elimia variata* (Burch &

Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1941c: 22).

- varicosa* 'Ward' Haldeman, *Melania*. Renamed *M. livida* Reeve.
- vauxiana* Lea, *Goniobasis*. 1862b, *PANSP* 14: 265; 1863a, *JANSP* 5: 309, pl. 37, fig. 150 (*Obs. on Unio* 9: 131). No type material examined. Published locality: "Coosa River, Alabama, Prof. Brumby." Taxonomy: *Goniobasis vauxiana* (Tryon, 1873: 242); *Ambloxus virginicus* (Hannibal, 1912: 177).
- venusta* Lea, *Melania*. 1841a, *PAPS* 2: 15; 1842b, *TAPS* 8: 187, pl. 6, fig. 52[†] (*Obs. on Unio* 3: 25). Holotype^{mo} USNM 121793 (Tennessee). Taxonomy: *Lithasia venusta* (Tryon, 1873: 28); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Angitrema) armigera* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1921c: 59) and *Lithasia (Lithasia) geniculata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1934a: 10, 1940: 5).
- venustum* Lea, *Trypanostoma*. 1864c, *PANSP* 16: 112; 1866b, *JANSP* 6: 151, pl. 23, fig. 66[†] (*Obs. on Unio* 11: 107). Holotype^{mo} USNM 121943 (Big Prairie Creek, [Hale-Perry counties,] Alabama). Taxonomy: *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).
- venusta* Lea, *Goniobasis*. 1868a, *PANSP* 20: 152; 1868b, *JANSP* 6: 336, pl. 54, fig. 17[†] (*Obs. on Unio* 12: 96). Holotype^{mo} USNM 118801 (Coosa River, Alabama). Taxonomy: *Elimia gerhardti* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).
- verrucosa* Rafinesque, *Pleurocera*. 1820, *Annals of Nature*: 11. Figured in Tryon, 1873, *Strepomatidae*: 24, fig. 59-63. No type material examined. Published locality: "...the lower parts of the Ohio." Taxonomy: *Angitrema verrucosa* (Tryon, 1873: 24); *Pleurocera (Pleurocera) verrucosa* (Hannibal, 1912: 170); *Lithasia (Angitrema) verrucosa* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 5).
- verrucosa* Reeve, *Io*. 1860, *Conch. Icon.* 12: pl. 1, sp. 2. Type material presumed to be in the BMNH not examined. Published locality: "Tennessee, United States." Taxonomy: *Io fluviialis* (Tryon, 1873: 4); *Pleurocera (Io) fluviatilis* (Hannibal, 1912: 172); *Io fluviialis* (Burch & Tottenham, 1980: 152; Burch, 1982: 41; Goodrich, 1940: 2).
- versa* Lea, *Goniobasis* [new name for *Melania blanda* Lea]. 1861c, *PANSP* 13: 122 [as *Melania blanda*]; 1863a, *JANSP* 5: 242, pl. 35, fig. 44[†] (*Obs. on Unio* 9: 64) [as *Goniobasis blanda*]; 1864b, *PANSP* 16: 3, footnote; 1866b, *JANSP* 6: 137, footnote (*Obs. on Unio* 11: 93). Also in Tryon, 1873, *Strepomatidae*: 163, fig. 372 [as *Goniobasis lei*]. Tryon (1873), apparently not realizing that Lea (1864) himself had renamed *Melania (Goniobasis) blanda* Lea, 1861 as *G. versa*, assigned to it the specific epithet *lei*. Since Lea's redesignation preceded Tryon's, *G. lei* Tryon is demoted to the status of objective synonym. Holotype^{mo} USNM 118802 (Yellowleaf Creek, [Shelby County,] Alabama). Taxonomy: *Goniobasis lei* (Tryon, 1873: 163); *Cyrotoma (Goniobasis) olivula* (Hannibal, 1912: 180); *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 44).
- versipellis* Anthony, *Melania*. 1860, *PANSP* 12: 60. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Melania*): pl. 56, sp. 436 and in Tryon, 1873, *Strepomatidae*: 178, fig. 345[†]. Lectotype MCZ 161809 (Tennessee) here selected; identified by Tryon (1873: 178) as "Mr. Anthony's type specimen." Paralectotypes MCZ 316295 (*ex* 161809) listed in Turner (1946: 108) as "cotypes." Baker (1964: 189) listed ANSP 122560a

- [not seen] as a primary type ("TSD"). Taxonomy: *Goniobasis versipellis* (Tryon, 1873: 178); *Ambloxy virginicus* (Hannibal, 1912: 176); *Lithasia* sp. (Goodrich, 1940: 7).
- vesicula** **Lea, *Melania***. 1861c, *PANSP* 13: 118; 1863a, *JANSP* 5: 242, pl. 35, fig. 45[†] (*Obs. on Unio* 9: 64) [as *Goniobasis*]. Holotype^{mo} USNM 119813 (Alabama). Taxonomy: *Goniobasis vesicula* (Tryon, 1873: 162); *Elimia cylindracea* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 37) and *Lithasia (Lithasia) geniculata geniculata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 5).
- vestita** **Conrad, *Melania***. 1834a, *New Fresh-Water Shells*: 57, pl. 8, fig. 12. Also figured in Tryon, 1873, *Streptomatidae*: 114, fig. 217. Syntypes ANSP 27058 ([Greene Co.,] Alabama); one of which was incorrectly listed by Baker (1964: 189) as "TOM." Taxonomy: *Pleurocera vestitum* (Tryon, 1873: 114); *Ambloxy virginicus* (Hannibal, 1912: 175); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 7, 1941c: 11, 1944b: 43).
- vicina** **Anthony, *Melania***. 1854, *ALNHNY* 6: 114, pl. 3, fig. 14[†]. Lectotype MCZ 74201 (Alabama) here selected; incorrectly identified by Turner (1946: 108) as "holotype." Taxonomy: *Goniobasis vicina* (Tryon, 1873: 225); *Ambloxy virginicus* (Hannibal, 1912: 176); *Lithasia (Lithasia) obovata* (Burch & Tottenham, 1980: 160; Burch, 1982: 44; Goodrich, 1940: 6).
- viennaensis** **Lea, *Goniobasis***. 1862b, *PANSP* 14: 267; 1863a, *JANSP* 5: 315, pl. 37, fig. 160[†] (*Obs. on Unio* 9: 137). Lectotype USNM 118743 (Pennahatchee Creek, near Vienna, Dooly County, Georgia) selected by Chambers (1990: 262, fig. 4C). Taxonomy: *Goniobasis viennaensis* (Tryon, 1873: 184); *Ambloxy virginicus* (Hannibal, 1912: 177); *Elimia boykiniana viennaensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).
- virens** **Lea, *Paludina***. 1838a, *TAPS* 6: 91, pl. 23, fig. 93 (*Obs. on Unio* 2: 91). No type material examined. Published locality: "Wahlamat, near its junction with the Columbia River, Professor Nuttall." Taxonomy: *Leptoxis virens* (Haldeman, 1847-1848: 5); *Amnicola* (Tryon, 1873: 421) [Doubtful and Spurious Species].
- virens** **Anthony, *Melania***. 1854, *ALNHNY* 6: 93, pl. 2, fig. 11[†]. Lectotype MCZ 74194 (Tennessee) here selected; incorrectly identified by Turner (1946: 108) as "holotype." Taxonomy: *Goniobasis saffordi* (Tryon, 1873: 253); *Ambloxy virginicus* (Hannibal, 1912: 176); *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 18).
- virens** **Lea, *Schizostoma***. 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 253, pl. 35, fig. 59[†] (*Obs. on Unio* 9: 75). Lectotype USNM 119378 (Coosa River, Alabama) here selected. Taxonomy: *Schizostoma incisum* (Tryon, 1873: 378); *Gyrotoma incisum* (Goodrich, 1924a: 23); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).
- virgata** **Lea, *Melania***. 1841a, *PAPS* 2: 13; 1842b, *TAPS* 8: 175, pl. 5, fig. 25[†] (*Obs. on Unio* 3: 13). Holotype^{mo} USNM 119207 (Tennessee). Taxonomy: *Anculosa subglobosa* var. *tintinnabulum* (Tryon, 1873: 402); *Leptoxis (Mudalia) virgata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1921b: 10, 1940: 20).
- virginicum** **Gmelin, *Buccinum***. 1791, *Syst. Nat.*: 3505. Also in Say, 1819, *Nicholson's Encyc.*: pl. 2, fig. 4 [as *Paludina*]; 1832, *Amer. Conch.* 1: pl. 47, fig. 2 [as *Melania*];

1824, App. to Long's Exped. 2: 265 [as *Melania*]. Baker (1964: 189) invalidly designated ANSP 27379a as a primary type ("TSD now"). Gmelin's published locality: "...in Virginiae fluviiis." Say's published locality: "Falls of Niagara." Taxonomy: *Goniobasis virginica* (Tryon, 1873: 290); *Ambloxus virginicus* (Hannibal, 1912: 174); *Elimia virginica* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1942a: 5).

***virgulata* Lea, *Melania*.** 1861c, *PANSP* 13: 119; 1863a, *JANSP* 5: 223, pl. 34, fig. 9^f (*Obs. on Unio* 9: 45) [as *Goniobasis*]. Lectotype USNM 118735 (Coosa River, Alabama) here selected. Taxonomy: *Goniobasis virgulata* (Tryon, 1873: 327); *Gyrotoma (Goniobasis) laeta* (Hannibal, 1912: 181); *Elimia bullula* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 28, 1941b: 5) and *Elimia laeta* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1936: 47).

***viride* Lea, *Trypanostoma*.** 1862a, *PANSP* 14: 172; 1863a, *JANSP* 5: 291, pl. 36, fig. 119^f (*Obs. on Unio* 9: 113). Lectotype USNM 122020 (Tennessee) here selected. Taxonomy: *Pleurocera troostii* (Tryon, 1873: 67); *Pleurocera (Pleurocera) canaliculatum* (Hannibal, 1912: 171); *Pleurocera canaliculatum canaliculatum* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1929: 10, 1940: 9).

***viridicata* Lea, *Goniobasis*.** 1862b, *PANSP* 14: 268; 1863a, *JANSP* 5: 322, pl. 38, fig. 172^f (*Obs. on Unio* 9: 144). Lectotype USNM 118737 (Grayson County, Kentucky) here selected. Taxonomy: *Goniobasis viridicata* (Tryon, 1873: 189); *Ambloxus virginicus* (Hannibal, 1912: 177); *Elimia laqueata laqueata* (Burch & Tottenham, 1980: 138; Burch, 1982: 36; Goodrich, 1930a: 7, 1940: 14).

***viridis* Rafinesque, *Melania (Ambloxus)*.** 1831, *Enumeration and Account*: 3, sp. 23. No type material examined. Published locality: "...from Licking River." Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species]; *Ambloxus virginicus* (Hannibal, 1912: 175).

***viridis* Lea, *Melania*.** 1841a, *PAPS* 2: 12; 1842b, *TAPS* 8: 172, pl. 5, fig. 19^f (*Obs. on Unio* 3: 10). Lectotype ANSP 27594 ([Ohio River,] Cincinnati, [Hamilton County,] Ohio) selected by Baker (1964: 189) as "TSD now." Taxonomy: *Anculosa trilineata* var. *viridis* (Tryon, 1873: 400); *Anculosa viridis* (Goodrich, 1921b: 10); *Leptoxis (Mudalia) trilineata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1929: 16, 1940: 20).

***viridistriatis* Lea, *Goniobasis*.** 1864b, *PANSP* 16: 4; 1866b, *JANSP* 6: 140, pl. 23, fig. 48^f (*Obs. on Unio* 11: 96) [as *viridistriata*]. Lectotype USNM 118413 (Flint River, Georgia) selected by Chambers (1990: 254, fig. 6G). Taxonomy: *Elimia boykiniana albanyensis* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1942a: 4).

***viridula* Lea, *Io*.** Renamed *Pleurocera leaii* Tryon.

***viridula* Anthony, *Melania*.** 1854, *ALNHNY* 6: 84, pl. 2, fig. 2. Also figured in Tryon, 1873, *Streptomatidae*: 125, fig. 236. Syntypes MCZ 161780; incorrectly listed as "holotype" in Turner (1946: 108). Tryon (1873: 126) identified his figured specimen as "Mr. Anthony's type." Published locality: "Tennessee." Taxonomy: *Pleurocera viridulum* (Tryon, 1873: 125); *Ambloxus virginicus* (Hannibal, 1912: 176); *Pleurocera viridulum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1940: 11).

- viridula* **Anthony, Anculosa**. 1860, *PANSP* 12: 68. Figured in Reeve, 1861, *Conch. Icon.* 12 (*Anculotus*): pl. 4, sp. 34 and in Tryon, 1873, *Strepomatidae*: 420, fig. 837[†]. Lectotype MCZ 161790 (Tennessee) here selected; identified by Tryon (1873: 420) as “the original type.” Idiotypes MCZ 161789 erroneously reported as “cotypes” in Turner (1946: 108). Baker (1964: 189) incorrectly reported ANSP 27644a [not examined] as a primary type (“TSD”) and the shell figured by Tryon (1873). Taxonomy: *Anculosa viridula* (Tryon, 1873: 420); *Anculosa viridula* (Goodrich, 1921b: 11); *Leptoxis (Mudalia) dilatata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1940: 20).
- vittata* **Anthony, Melania**. 1854, *ALNHNY* 6: 89, pl. 2, fig. 7. Syntypes MCZ 50246 and MCZ 50247 (both White County, Georgia), the former listed as “holotype” in Turner (1946: 108). Taxonomy: *Goniobasis vittata* (Tryon, 1873: 159); *Ambloxyx virginicus* (Hannibal, 1912: 176); *Elimia carinifera* (Burch & Tottenham, 1980: 131; Burch, 1982: 32; Goodrich, 1941b: 2, 1941c: 17); not *Elimia carinifera* (Thompson, 2000: 15).
- vittata* **‘Rafinesque’ Binney, Melania**. 1860, *Check List*: 10, sp. 295 [*nomen nudum*]. No locality given. Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].
- vittata* **Lea, Anculosa**. 1860b, *PANSP* 12: 188; 1863a, *JANSP* 5: 256, pl. 35, fig. 63[†] (*Obs. on Unio* 9: 78). Lectotype USNM 121726 (Coosa River, Wetumpka, [Elmore County,] Alabama) here selected. Taxonomy: *Anculosa vittata* (Tryon, 1873: 411); *Leptoxis (Leptoxis) vittata* (Burch & Tottenham, 1980: 156; Burch, 1982: 43; Goodrich, 1922: 53, 1944b: 43).
- vittata* **Lea, Lithasia**. 1862c, *PANSP* 14: 273; 1863a, *JANSP* 5: 354, pl. 39, fig. 226 (*Obs. on Unio* 9: 176). Syntypes USNM 121920 (Coosa and Cahaba rivers, Alabama). Taxonomy: *Lithasia vittata* (Tryon, 1873: 30); *Pleurocera (Pleurocera) solida* (Hannibal, 1912: 172); *Goniobasis vittata* (Goodrich, 1927: 58); *Elimia bellula* (Burch & Tottenham, 1980: 140; Burch, 1982: 37; Goodrich, 1936: 39).
- vittatella* **Lea, Goniobasis**. 1863b, *PANSP* 15: 155; 1866b, *JANSP* 6: 134, pl. 23, fig. 38[†] (*Obs. on Unio* 11: 90). Lectotype USNM 118740 (Cumberland Gap, [Claiborne County,] Tennessee) here selected. Baker’s (1964: 189) previous designation of ANSP 27456a as a primary type (“TSD now”) is hereby ignored as a result of its ambiguity. The selected shell, contrary to Baker (1964), is not the figured specimen. Although that lot was received from Lea, there is no evidence that the shells are better than idiotypes. Taxonomy: *Goniobasis vittatella* (Tryon, 1873: 283); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Elimia porrecta* (Burch & Tottenham, 1980: 134; Burch, 1982: 34; Goodrich, 1940: 14).
- wahlamatensis* **‘Lea’ Binney, Melania**. 1860, *Check List*: 10, sp. 296 [*nomen nudum*]. No locality given. Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species, “Mr. Lea has not used this name for any of the Strepomatidæ, but he has used it for an *Anodonta*.”]; *Ambloxyx pliciferus* (Hannibal, 1912: 178) [authority given as ‘Lea’ Carpenter, 1857 (*nomen nudum*)].
- walkeri* **‘Smith’ Goodrich, Gyrotoma**. 1924a, *MPUMMZ* (12): 25, pl. 2, figs. 30-32[†]. Holotype^{od} UMMZ 27438 (Coosa River, Cedar Island, Chilton County, Alabama). Taxonomy: *Gyrotoma incisum* (Goodrich, 1924a: 25, 1944b: 48); *Gyrotoma*

excisum (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

walkeri Goodrich, *Pleurocera*. 1928a, *OPUMMZ* (192): 14, pl. 2, fig. 13, 15[†], 16-17. Holotype^{od} UMMZ 37452 (Sequatchie River, Jasper, Marion County, Tennessee).

Taxonomy: *Pleurocera* (*Strophobasis*) *walkeri* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1928a: 14, 1940: 8).

warderiana Lea, *Melania*. 1841a, *PAPS* 2: 14; 1842b, *TAPS* 8: 185, pl. 6, fig. 47[†] (*Obs. on Unio* 3: 23). Lectotype USNM 118741 (Cedar Creek, Russell County, Virginia) here selected. Taxonomy: *Goniobasis simplex* (Tryon, 1873: 250); *Ambloxus virginicus* (Hannibal, 1912: 175); *Elimia simplex* (Burch & Tottenham, 1980: 142; Burch, 1982: 38; Goodrich, 1940: 17).

wardiana 'Lea' Wheatley, *Melania*. 1845, *Cat. Shells U.S.*: 27 [error for *M. warderiana* Lea].

wetumpkaensis Lea, *Schizostoma*. 1860b, *PANSP* 12: 187; 1863a, *JANSP* 5: 251, pl. 35, fig. 56[†] (*Obs. on Unio* 9: 73) [as *wetumpkaense*]. Lectotype USNM 119362 (Coosa River, Wetumpka, [Elmore County,] Alabama) here selected. Taxonomy: *Schizostoma wetumpkaense* (Tryon, 1873: 366); *Gyrotoma* (*Gyrotoma*) *leta incisa* (Hannibal, 1912: 182); *Gyrotoma pagodum* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1924a: 13).

wheatleyi Lea, *Goniobasis*. Renamed *G. jonesi* Goodrich.

wheatleyi Tryon, *Angitrema*. 1866, *Am. J. Conch.* 2: 4, pl. 2, fig. 1. Syntypes ANSP 26923 [not examined] (Elk River, Winchester, [Franklin County,] Tennessee); one of which was incorrectly identified by Baker (1964: 189) as "TOM." Taxonomy: *Angitrema wheatleyi* (Tryon, 1873: 21); *Pleurocera* (*Pleurocera*) *fluviatilis armigera* (Hannibal, 1912: 171); *Lithasia* (*Angitrema*) *lima* (Burch & Tottenham, 1980: 162; Burch, 1982: 45; Goodrich, 1940: 4).

wheatleyi Lea, *Lithasia*. 1866a, *PANSP* 18: 133; 1868b, *JANSP* 6: 341, pl. 54, fig. 25[†] (*Obs. on Unio* 12: 101). Lectotype USNM 121788 (Cahaba River, Alabama) here selected. Taxonomy: *Elimia clara* (Burch & Tottenham, 1980: 148; Burch, 1982: 40; Goodrich, 1941c: 19).

wheatleyi Lea, *Trypanostoma*. 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 338, pl. 54, fig. 21[†] (*Obs. on Unio* 12: 98). Lectotype USNM 122029 (Coosa River, Alabama) here selected. Taxonomy: *Pleurocera prasinatum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

wheatleyi Lea, *Schizostoma*. 1868a, *PANSP* 20: 153; 1868b, *JANSP* 6: 342, pl. 54, fig. 27[†] (*Obs. on Unio* 12: 102). Holotype^{mo} USNM 119385 (Coosa River, Alabama). Taxonomy: *Gyrotoma spillmani* (Goodrich, 1924a: 11); *Gyrotoma excisum* (Burch & Tottenham, 1980: 149; Burch, 1982: 133).

whitfieldensis Lea, *Goniobasis* [new name for *G. tenebrosa* Lea]. 1868a, *PANSP* 20: 151 [as *tenebrosa*]; 1868b, *JANSP* 6: 330, pl. 54, fig. 6[†] (*Obs. on Unio* 12: 90). Holotype^{mo} USNM 118473 (Conasauga River, [Whitfield County,] Georgia). Taxonomy: *Elimia caelatura luteocella* (Burch & Tottenham, 1980: 144; Burch, 1982: 39; Goodrich, 1935: 2, 1941b: 5); *Elimia leontiana luteocella* (Thompson, 2000: 33-34).

whitei Lea, *Trypanostoma*. 1862a, *PANSP* 14: 173; 1863a, *JANSP* 5: 273, pl. 36, fig. 85[†] (*Obs. on Unio* 9: 95). Lectotype USNM 122137 (Lafayette [Walker?] County, Georgia) here selected. Baker's (1964: 189) previous designation of ANSP 26942a

as a primary type ("TSD now") is hereby ignored as a result of its ambiguity. The selected shell, contrary to Baker (1964), is not the figured specimen. Although that lot was received from Lea, there is no evidence that the shells are better than idiotypes. Taxonomy: *Pleurocera whitei* (Tryon, 1873: 128); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Pleurocera vestitum* (Burch & Tottenham, 1980: 166; Burch, 1982: 47; Goodrich, 1941b: 8).

whitei Lea, *Goniobasis*. 1862b, *PANSP* 14: 266; 1863a, *JANSP* 5: 310, pl. 37, fig. 151⁺ (*Obs. on Unio* 9: 132). Lectotype USNM 118795 ([northern?] Georgia) here selected. Taxonomy: *Goniobasis whitei* (Tryon, 1873: 218); *Ambloxyx virginicus* (Hannibal, 1912: 177); *Elimia gerhardti* (Burch & Tottenham, 1980: 136; Burch, 1982: 35; Goodrich, 1941b: 3); *Elimia modesta* (Thompson, 2000: 16).

yrekaensis Henderson, *Goniobasis*. 1935a, *Nautilus* 48: 97, pl. 4, figs. 3^t, 4. Holotype^{od} UCM 17735-a (Shasta River, 4 mi above junction with Klamath River, between Yreka and Hornbrook, Siskiyou County, California).

zebra Anthony, *Anculosa*. 1860, *PANSP* 12: 69. Figured in Reeve, 1861, *Conch. Icon.* 12(*Anculotus*): pl. 6, sp. 52. Syntypes MCZ 161794 (Alabama). There is no evidence that the lots selected by Baker (1964: 189) and Turner (1946: 108), ANSP 124898 and MCZ 161793, respectively, contain better than idiotypes. Taxonomy: *Anculosa zebra* (Tryon, 1873: 415); *Leptoxis (Leptoxis) picta* (Burch & Tottenham, 1980: 154; Burch, 1982: 42; Goodrich, 1922: 14, 1941c: 24).

zonalis 'Rafinesque' Binney, *Melania*. 1860, *Check List*: 10, sp. 298 [*nomen nudum*]. No locality given. Taxonomy: *Goniobasis* (Tryon, 1873: 340) [Doubtful and Spurious Species].

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