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## ALBERT GALLATIN WETHERBY: MALACOLOGY AT THE CINCINNATI SOCIETY OF NATURAL HISTORY AND IN OHIO (1843-1896)

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**Abstract:** The development of malacology in Ohio (1843-1896), especially at the Cincinnati Society of Natural History, is discussed, and the new species of mollusks described by its members: T. H. Aldrich, W. Doherty, G.W. Harper, C.R. Judge, and A.G. Wetherby are listed. Syntypes of the following are in the Museum of Comparative Zoology: *Patula bryanti* Harper; and *Angitrema angulata*, *Planorbis duryi*, *Helicodiscus fimbriatus*, *Angitrema parva*, *Lithasia plicata*, *Goniobasis plicatastriata*, and *Anculosa umbilicata*, all Wetherby. Specimens of *Somatogyrus trothis* Doherty, 1878 are probable paralectotypes.

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In 1802 its seven hundred inhabitants incorporated Cincinnati, Ohio as a town. When the "New Orleans," the first steamboat on western waters, passed by in 1811, a new era was opened. By 1819, Cincinnati was a city of over 10,000 and by 1829 it was a busy port on the Ohio River with steamboat building as an important industry. Cincinnati College and the Medical College of Ohio, both founded in 1819, were each first in their field in the new West. The Western Museum, founded as a stock company which opened to the public in 1820, was one of the earliest museums in the United States. Amongst those who helped prepare the original exhibits of natural history were Dr. Daniel Drake, "the Benjamin Franklin of Ohio," immortalized by Juetner (1909), the colorful French Count Joseph Dorfeuille, who became curator, and John James Audubon, the now well-known ornithologist. Audubon's grist mill in Henderson, Kentucky had just failed, so he accepted the job of taxidermist with a regular salary. However, before he labored himself out of a job, he left for New Orleans, leaving his wife Lucy and sons temporarily in Cincinnati, where Lucy taught school. Subsequently they joined him in New Orleans, where he did some of his best bird drawings, before leaving for England, where his elephant folio, *Birds of America*, was published. By 1823, the stockholders realized that the Museum was not profitable, and since there were no buyers, they gave it to Count Dorfeuille. His only obligation was to admit original subscribers and their families to the Museum free of charge. He obviously intended to make a living from it by adding his own collections and by the purchase of one from Kentucky. An amusing inventory of the museum was published in "The Cincinnati Literary" on March 13, 1824, in the form of a poem. This poem, partially reprinted by Kellogg (1945: 5) who, quoting a contemporary's account, mentioned Dorfeuille's high standing as a scientist and educator, and as "a cyclopedia of popular knowledge who



gave didactic addresses on languages, books, birds, and I know not what besides.” The press of the period noted repeatedly that this French aristocrat, a nephew of the Duchess de Richelieu, was also appreciated for his musical skill and his knowledge of the fine arts as well as science.

Sometime during 1825, Dorfeuille was visited by that most remembered of the so-called “forgotten naturalists,” Constantine Samuel Rafinesque (1783-1840), who had previously visited Audubon in Henderson, Kentucky. Audubon later described an eccentric guest as having destroyed his Cremona violin whilst cavorting about stark naked in the guest room trying to knock down a cloud of bats he thought were a new species. There was no doubt as to whom he was referring, since at the time he gave Rafinesque the descriptions of several fantastic animals, among them the diamond-backed stone fish. Rafinesque published these descriptions, giving full credit to Audubon who, in the end, received more opprobrium for them than did Rafinesque. Like Audubon and Dorfeuille, Rafinesque was polylingual and had given lectures in French, Spanish, and Italian. In his autobiography, Rafinesque (1836: 77) mentioned that he gave public lectures of his discoveries at Dorfeuille’s Museum. He also visited John Cleves Symmes (1780-1829; Horsman, 2000), named after his uncle the land speculator of southwestern Ohio (Smith, 1985). Symmes’s theory of concentric spheres and polar openings was to lead, somewhat indirectly, to the United States Exploring Expedition (1839-1842). Rafinesque (1819) had already described some fifty species of freshwater bivalves from the Ohio River proper in a monograph published in Brussels. Isaac Lea, who was to describe freshwater and land shells from 1828-1874, received as a starter a small barrel of shells from his brother, Thomas G. Lea, whose mercantile interests were in Cincinnati (Scudder, 1885: ix). Before Thomas died in 1844, Isaac described about the same number of Unionidae



from the general area as had Rafinesque. Many of his beautifully delineated taxa have since been taken to be synonyms of the latter's often rather sketchedly defined ones. Among those who Rafinesque (1836:93) accused of ignoring his work were Daniel H. Barnes (1785-1828; Fairfield, 1887; 94-96); Isaac Lea (1792-1886; Scudder, 1885, vii-lvii); and Thomas Say (1787-1834; Weiss and Zeigler, 1831). The same accusation was lodged against Samuel Prescott Hildreth (1783-1863; Abbott, 1973: 115) of Marrietta, Ohio, who was born in Methuen, Massachusetts, became a respected physician, and published numerous papers on medicine, as well as on the freshwater shells found near his home in Marrietta, Ohio (1828).

In 1827, the reputation of the Queen City drew Mrs. Frances Trollope (1780-1863), mother of the famous author, Anthony Trollope, even though malaria and cholera were prevalent and would be for years to come. In Cincinnati, Mrs. Trollope continued her disastrous three-year struggle to wrest a fortune from the frontier. Here she met and liked Dorfeuille and had something pleasant to say about him and his museum in the midst of her otherwise vitriolic attack on American life. "He is a man of taste and science, but a collection formed strictly according to their dictates would by no means satisfy the western metropolis." Thus she excused him for having wax figures and for constructing, "a pandemonium in the upper story...one of the most amusing exhibitions imaginable (Trollope, 1832)." On an upper floor open only after dark with dim artificial light was the "infernal Regions," or Dorfeuille's Hell, which contained tableaux representing scenes from Dante. The exhibit was constructed with the aid of Hiram Powers who would later become a famous sculptor. It was described in detail by Thomas Trollope (1887), also a son of Mrs. Trollope, who had seen it as a stripling. Dorfeuille took time to send Isaac Lea several



new species of land snails which he had collected locally and which were named after him. Weiss and Zeigler (1931:155) quote a letter written in 1834 by Thomas Say, from New Harmony, Indiana, where he was producing his *American Conchology* (1830-1834), to Dorfeuille ordering more type from a foundry in which the latter must have had an interest.

In 1835, unable to eke out sufficient living from the museum, Dorfeuille gave the newly formed Western Academy of Sciences 10,000 natural history specimens and a large library. He was Curator of this new institution until he removed to New York in 1837 to open up a new Inferno. The original Inferno, closed for renovations, reopened in 1838 but by 1853 had faded away.

Along with Dr. Hildreth, also writing on Ohio mollusks was Jared Potter Kirtland (1793-1877; Albrecht, 1985) of Cleveland, who too was a physician. Originally from Connecticut, Dr. Kirtland was a Yale graduate. He had taught at the Ohio Medical College in Cincinnati, and later was a founder of the Cleveland Medical College. As a naturalist, Dr. Kirtland is best remembered as an ornithologist and as a founder of the Cleveland Museum of Natural History. He also wrote an important paper on sexual differences in the Unionidae and made the first official list of the shells of Ohio.

Benjamin Tappan (1773-1857), a native of Massachusetts, studied at Yale and later became a lawyer. He settled in Ravenna Township, which he founded, and later practiced law at Steubenville, where he was a partner with Edwin M. Stanton who became President Lincoln's Secretary of War. Whilst his contribution to Ohio malacology was modest, Dr. Hildreth, who visited him, mentioned that, "the freshwater shells amount to nearly 100 species, the great number of which are peculiar to our streams. The family of the Unios alone contains about 90 species, all natives of the western waters." Tappan and



Hildreth were among the 30 founding members of the Historical and Philosophical Society of Ohio in Columbus during February 1831. When he became a U.S. Senator from Ohio, Tappan was active in the formation of the Smithsonian Institution and in superintending the results of the United States Exploring Expedition (1839-1842).

Joseph Sullivant (1809-1884; Abbott, 1973: 164) of Columbus, published a list of the shells in his cabinet (1838). Henry Moores (1812-1895), originally from Hudson, New York, but who lived in Columbus from 1852-1896, made a collection of Recent and fossil North American shells which became the nucleus of the now outstanding freshwater mollusk collection, created by David H. Stansbery, of the Museum of Biological Diversity at the Ohio State University also in Columbus. The Hildreth collection is also there, the largest segment of which was received from Marrietta College in 1979. With the exceptions mentioned, Cincinnati was the center of malacological activity in Ohio, though a modest one, during the Nineteenth Century.

The Western Academy produced only an anonymous "official" list of unios in 1849. By this time, John Gould Anthony, originally from Providence, Rhode Island, had been active in the institution since its inception and remained so until 1863 when he moved to Cambridge, Massachusetts to become an Assistant in Charge of Shells at Louis Agassiz's Museum of Comparative Zoology. His papers on the Ohio molluscan fauna are included here. A complete list of his works, as well as a biography, was written by Turner (1946). Anthony held offices of Secretary, Librarian, and Curator of the Western Academy. On various occasions, meetings were held in his home. He had probably become acquainted with Agassiz when the latter was in Cincinnati for the meeting of the American Association for the Advancement of Science in 1851.



At this meeting, Dr. Kirtland from Cleveland demonstrated with a display of shells a confirmation of his paper of 1834 in which he had claimed that freshwater mussels consisted of males and females. Previously thought to be hermaphroditic individuals, males and females had sometimes been classified as different species. Agassiz stated that he and the leading German scientists in this field were entirely of Kirtland's view. Kirtland (1840) also described the byssus by which young mussels attach themselves to stream bottoms.

After selling his extensive shell collection to the Portland Society of Natural History, Jesse Wedgwood Mighels moved from his native Maine to Cincinnati in 1847 to become Professor of Obstetrics and Diseases of Women and Children. He was well known to Dr. Daniel Drake, who commented favorably on his medical papers (Juettner, 1901: 319). Mighels probably made the acquaintance of John G. Anthony with whom he had formerly corresponded. Though he made no malacological contributions while in Ohio, he much lamented the destruction by fire in 1854 of the collection he had previously sold to the Portland Society, (Johnson, 1948).

Another New Englander who settled in Chillicote, Ohio and became a corresponding member of the Western Academy in 1835, was Alexander Bourne of Wareham, Massachusetts, who, as early as 1823, was in Ohio building canals. The effect these thousands of miles of waterways might have on the fauna was then of no interest. Benjamin Tappan was one of the Canal Commissioners.

The records of the Western Academy of Science are scant, but among its founders was Robert Buchanan (1797-1879: Graham, *et al*, 1880) who served as its President for a number of years. Buchanan gave money, books, and his collection to the Academy. With the gradual demise of the Academy, a new group formed the Cincinnati Society of



Natural History in 1870 which took over the decayed collections and small purse of the older institution.

In February 1874, A.G. Wetherby wrote to J. G. Anthony in Cambridge, Massachusetts, "I see many of your labels among the specimens [of Buchanan], and I can see where a part of your 49 years has aided *others* as it now aids me." He also mentioned in it a letter he had received from Isaac Lea, who said that if his "species are synonyms no person will rejoice more than himself to see them eliminated" (Departmental Collection).

The University of Cincinnati, the first municipal university chartered in Ohio under the earliest municipal university statute in the United States, was founded, as was the Society of Natural History, in 1870. Among the institutions included in it were Cincinnati College and Drake's Medical College of Ohio. Buchanan served as President for over 20 years and remained so until his death.

Papers by members of the new Society were published in *The Cincinnati Quarterly Journal of Science*, volumes 1 and 2 (1874-1875), a commercial venture, largely devoted to the rich local paleontology. One short article on malacology by C. S. Miller appeared, a paper previously read before the Society, as well as two by W.W. Calkins, a member of the Chicago Academy of Sciences, on the Mollusca of Illinois.

The first and only large bequest the Society ever received was a gift of \$50,000 in 1875. This allowed the Society of Natural History to publish its first and only number of its Proceedings during January, 1876, in which Albert Gallatin Wetherby (1833-1902) described five new species of Strepomatidae (=Pleuroceridae). A month later, Wetherby and his friend, George Harper, published privately a list of shells found in the vicinity of Cincinnati. From then until 1894, Wetherby contributed numerous papers on Recent mollusks and paleontology to *The*



*Journal of the Cincinnati Society of Natural History.* Wetherby was born in Pittsburgh, Pennsylvania in 1833, and while still a boy, his parents moved to Cleveland, Ohio where he was educated through college. In 1861, he moved to Cincinnati to become Principal of the Woodburn Public School. His talent in natural history led to his appointment as Professor to the new University of Cincinnati in 1870. It was said that his enthusiasm for his favorite studies was such that the chairs of both Botany and Geology were added to his duties, and after six years of being overworked, he reluctantly resigned. He held several positions before 1886, when he became manager of a large tract of land belonging to the Roan Mountain Steel and Iron Company. His home in Magnetic City, North Carolina was located in a beautiful valley, about 3000 feet above sea level, surrounded by towering mountains, where he and his wife entertained visiting naturalists. It was here, among descendants of Oliver Cromwell, who had gone into the mountains to hide from the wrath of Charles II, that Wetherby pursued his interest in land snails, which he published in the *Journal of the Society*. He also made numerous contributions to geology, paleontology, and botany, as attested by his friend George W. Harper (1902), but these are beyond our interest here. Harper was principal of the Cincinnati Woodward High School, became President of the Society of Natural History, and continued its interest in mollusks.

In 1882, Arthur Fairfield Gray (1855-1944) of Watertown, Massachusetts, spent that year building a large manufacturing plant in Cincinnati, and while there his interest in malacology led to his publishing a list of all of the works on the subject pertaining to Ohio until 1881 in the *Journal* (Johnson, 2002).

In 1889, Truman Heminway Aldrich (1848-1932; Abbott, 1973: 59) described several new species from Borneo. These had been supplied to him by William



Doherty, one of Wetherby's high school student compilers of the Anonymous List (1876). The penultimate paper was by Frank Collins Baker (1867-1943) then listed as a member of the Chicago Academy of Sciences. The last paper remotely malacological was published in 1906 by Kindahl with the esoteric title, "Orthography of the names of naiades." Regarding this last paper, one is reminded of the old story of a meeting of the International Zoological Society where it was agreed that the topic for the following year would be the elephant. The British came back with a volume, *Hunting the elephant with gun and camera*, the French with *La vie sexuelle d'elephant*, and the Germans with two volumes on the etymology of the word "elephant".

With no further large gifts ever received, the Society struggled on. A depressing article appeared regarding its future in its Journal (22, no. 2) in 1917. It was not until 1945 that the fourth and final number of volume 22 of the Journal appeared. The Junior Society published Proceedings during 1930 and 1931 and even a Guide Booklet to the Conchological Exhibit, by Albert D. Loring, Curator of Conchology, Junior Society of Natural Sciences. What became of it and the collection, listed by James (1885), which included syntypes of the taxa described by Wetherby and others, is unknown. It is probable, however, that it is part of the Museum of Natural History and Science, housed in the Cincinnati Museum Center since 1995, located in what was once the magnificent art deco Union Terminal. Several requests for information about the shell collection have gone unanswered. The International Code of Zoological Nomenclature (2000) 74.7.3 requires that, "to be valid, a lectotype designation made after 1999 must contain an express statement of the purpose of the designation." Should lectotypes be required for any of the taxa described by A. G. Wetherby, the



syntypes in the Museum of Comparative Zoology meet the requirements of Recommendation 74D.

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### Biographical and Historical References

- Abbott, R. Tucker, 1973. American Malacologists. American Malacologists: Falls Church, Virginia. pp. 1-494.
- Albrecht, Jr., Carl W. 1985. Profile: Jared Potter Kirtland. Timeline, Ohio Historical Society **2** (2): 44-49 (April-May).
- Benton, Nicholas [editor] 2000. Memoir of Alexander Bourne (1786-1849) of Indian Neck Wareham, Massachusetts and Chillicothe, Ohio. Middlesex House: New York, p. 124.
- Dexter, Ralph W. 1971. Benjamin Tappan, Jr. (1773-1857) as a naturalist and a malacologist. *Sterkiana* **41**: 45-49 (March).
- Fairfield, H. L. 1887. A history of the New York Academy of Sciences formerly the Lyceum of Natural History. New York, pp. i-xii, 1-190.



- Fenneman, Nevin M. 1917. The museum situation in Cincinnati. *Journal of the Cincinnati Society of Natural History* **22** (2): 28-41 (November).
- Graham, George, R. B. Moore, J. A. Warder. 1880. Report in memory of Robert Buchanan. *Journal of the Cincinnati Society of Natural History* **3** (2): 74-78 (July).
- Harper, George W. 1902. Albert G. Wetherby. *The Nautilus* **16** (1): 10-12 (May).
- Hendrickson, Walter B. 1945. The Western Academy of Natural Sciences of Cincinnati. *Isis* **37** (3, 4): 138-145.
- Horsman, Reginald. 2000. Captain Symme's journey to the center of the earth. *Timeline, Ohio Historical Society* **17** (5): 2-13. [September-October].
- Johnson, Richard I. 1997. Maine's Portland Society of Natural History. *Northeastern Naturalist* **4** (3): 189-196.
- Johnson, Richard I. 2002. Arthur Fairfield Gray (1855-1944), his malacological contributions. *Occasional Papers on Mollusks* **6** (80): 135-147 (March).
- Juettner, Otto. 1909. Daniel Drake and his followers. Historical and biographical sketches. Havrey Publishing Company: Cincinnati, p. 496.
- Kellogg, Elizabeth R. 1945. Joseph Dorfeuille and the Western Museum. *Journal of the Cincinnati Society of Natural History* **22** (4): 1-29 (April).
- Kirtland, Jared P. [in] Juettner, Otto, 1909. Daniel Drake and his Followers, Harvey Publishing Company: Cincinnati. pp. 171-174.
- Mayfield, Harold F. 1965. Jared Potter Kirtland, Pioneer Ornithologist of Ohio. Department of Natural History. The Ohio Historical Society. Columbus, Ohio. p. 8 (August).
- Rafinesque, Constantine S. 1820. *Monographie des Coquilles bivalves fluviatiles de la rivière Ohio, contenant douze genres et soixante-huit especes.*



- Annales Générales des Sciences Physiques, Bruxelles  
**5**: 287-322. pls. 80-82.
- Rafinesque, Constantine S. 1831. Continuation of a monograph of the bivalve shells of the river Ohio and other rivers of the Western states...Philadelphia. pp. 1-8 (October).
- Rafinesque, C. S. 1836. A life of travels. F. P. Turner: Philadelphia. Reprinted in: *Chronica Botanica*, 1944 **8** (2): 392-360.
- Say, Thomas, 1830-34 [38]. American conchology, or descriptions of the shells of North America, illustrated with colored figures. New Harmony, Indiana. 7 parts. 68 col. pls. with letterpress.
- Scudder, Newton P. 1885. The published writings of Isaac Lea. *Bulletin of the United States National Museum* **23**: lix, 278.
- Smith, Dwight L. 1988. John Cleves Symmes. *Timeline Ohio Historical Society* **5** (2): 20-23 (April-May).
- Trollope, Frances M. 1832. Domestic manners of the Americans. By Mrs. Trollope. Whittaker, Treacher & Co.: London.
- Trollope, Thomas A. 1887. What I remember. R. Bentley: London.
- Turner, Ruth D. 1946. John Gould Anthony with a bibliography and catalogue of his species. *Occasional Papers on Mollusks* **1** (8) 81-108, pl. 15 (July); 1954, *ibid* **1** (18): 442 (August).
- Weiss, Harry B. and Grace M. Zeigler. 1931. Thomas Say: Early American Naturalist. Charles C. Thomas: Springfield, Illinois and Baltimore, Maryland.



Bibliography of Albert Gallatin Wetherby on Recent Malacology, other members of the Cincinnati Society of Natural History, and from Ohio (1843-1896).

Anonymous, 1849. Western Academy. Catalogue of the Unios, Alasmodontas and Anodontas of the Ohio River and its northern tributaries, adopted by the Western Academy of Natural Science, of Cincinnati, Ohio. J. A. and U. P. James: Cincinnati, pp. 19 (January). Lists 67 species with synonymy.

McMillan and Fogan (1966: 20) suggested that Charles Moore Wheatley (1822-1882) was the author of the above mentioned catalogue since they found a note on the back of the title page of a copy of it which read, "Mr. Wheatley seems to have given up the shells. I could not procure a copy of his catalogue here but beg you will accept my only copy." Johnson (1959: 72) listed two papers by Wheatley, a privately printed *Catalogue of the shells of the United States, with their localities*, published in 1842, and a second edition which appeared in 1845. From the early 1850's, and for many years thereafter, Isaac Lea described many new species of fresh water shells received from Wheatley. In his *Synopsis* (1871), he included both Wheatley *Catalogues* (pp. 168, 169) in the bibliography as well as the Western Academy one anonymously (p. 171). One might assume that if anyone knew the authorship of the Western Academy Catalogue, it would be Lea and that peradventure the author of the quoted note affixed it to the wrong "Catalogue," except that the Preface of the Anonymous (1876) list of Cincinnati mollusks acknowledges indebtedness to "the old catalogues of Kirtland, *Wheatley* [author's italics], Anthony, and Shaffer."



- Anonymous, 1876. List of Mollusca existing in the neighborhood of Cincinnati. Publications of the O.G. B. III (August) L.A. Burdsal, Printer. Cincinnati, pp. [12 including title page]. "This list was compiled by C.R. Judge; William Doherty; L.A. Burdsal, the printer; and perhaps other pupils of the Woodward High School. It appeared under the *nom de plume* 'Our Geological Boys' (Johnson: 1916: 57). It contains 211 species, some of which are referred to as possible variations of other species." (Gray, 1883: 52).
- Anonymous, 1877. Note on *Hyalina milium*. Jour. Cincinnati Soc. Nat. Hist. **1** (1): 23 (April).
- Aldrich, Truman H. 1889. Notes upon a collection of shells from Borneo with descriptions of new species. Jour. Cincinnati Soc. Nat. Hist. **12** (1): 23-26 (April).
- Anthony, J.G. [no date] List of land and fresh-water shells found chiefly in the vicinity of Cincinnati. pp. [2]. List only of 173 species.
- Anthony, J.G. 1843. Catalogue of the terrestrial and fluviatile shells of Ohio, Cincinnati. pp. [2] (January 1). Second edition. Lists 163 species with numerous synonyms.
- Baker, Frank C. 1996. On the correct position of the aperture in *Planorbis*. Jour. Cincinnati Soc. Nat. Hist. **19** (1): 45-47 (August).
- Baker, Frank C. 1900. Notes on a collection of Pleistocene shells from Milwaukee, Wisconsin. Jour. Cincinnati Soc. Nat. Hist. **19** (5): 175-177 (January).
- Burdsal, L.A. 1876. See under: Anonymous.
- Byrnes, R.M. 1872. List of land and fresh water shells found in the vicinity of Cincinnati; also, the Unionidae of the Ohio River and its northern tributaries within the state of Ohio. [pp. 3] (December).
- Byrnes, R.M. 1881. *Sphaerium occidentale* Prime, *Vivipara contectiodes* Say. Jour. Cincinnati Soc. Nat. Hist. **4** (4): 345 (December).



- Calkins, W.W. 1874. Freshwater Mollusca, found in the vicinity of Chicago, Illinois. The Cincinnati Quarterly Journal of Science **1** (3): 242-244 (July).
- Calkins, W.W. 1874. Notes on the Molluscan fauna of northern Illinois. The Cincinnati Quarterly Journal of Science **1** (4):321-325 (October).
- Calkins, W.W. 1875. Mollusca. The Cincinnati Quarterly Journal of Science **2**(1): 95 (January).
- Doherty, William. 1876. See under: Anonymous.
- Doherty, William. 1878. Description of two new gastropods. Quarterly Journal of Conchology. **1**(15): 341-342, pl. 4 (May).
- Doherty, William. 1878. Remarks on a dentate variety of *Conulus fulvus*, Drap. Quarterly Journal of Conchology **1** (15): 344-345 (May).
- Gray, Arthur F. 1883. [in] F.W. Langdon, Bibliography of the Cincinnati Fauna. Bibliography of the conchology of Ohio. Jour. Cincinnati Soc. Nat. Hist. **6** (1): 39-53 (April).
- Harper, George W. and A.G. Wetherby, 1876. Catalogue of the land and fresh water Mollusca, found in the immediate vicinity of Cincinnati, O[hio]. Cincinnati, pp. 1-5 (February).
- Harper, George W. 1881. Description of a new species of *Patula* and remarks upon a *Hyalina*. Jour. Cincinnati Soc. Nat. Hist. **4** (3): 258-259, figs. 1,2. (October).
- Harper, George W. 1886. Catalogue of the Unionidae of the Mississippi Valley. Jour. Cincinnati Soc. Nat. Hist. **9** (1): 10-14 (April).
- Harper, George W. 1895. Catalogue of land and fresh water shells found in the vicinity of Cincinnati prepared for the use of beginners. Jour. Cincinnati Soc. Nat. Hist. **19** (1,2):89-104 (April-July).
- Harper, George W. 1900. Albert G. Wetherby. The Nautilus **16** (1):10-12 (May).



- Hildreth, Samuel P. 1828. Observations on, and descriptions of the shells, found in the waters of the Muskingum River, Little Muskingum and Duck Creek, in the vicinity of Marietta, Ohio. *American Journal of Science* **14**: 276-291, figs. (July).
- James, Joseph F. 1885. Catalogue of the specimens in the collection of the Cincinnati Society of Natural History. *Jour. Cincinnati Soc. Nat. Hist.* **8** (1): 31-48 (April).
- Johnson, Charles W. 1916. Notes [List of Mollusca...] See under: Anonymous, 1876. *The Nautilus* **30** (5): 57 (September).
- Johnson, Richard I. 1959. The Charles M. Wheatley collections. *The Nautilus* **73** (2):72-73 (October).
- Judge, Charles R. 1876. See under: Anonymous.
- Judge, Charles R. 1877. *Pupa cincinnatiensis*, n.s. *Jour. Cincinnati Soc. Nat. Hist.* **1** (1): 39-40, fig. (April).
- Judge, Charles R. 1878. [reprinted as] Description of a new species of *Pupa*. *Quarterly Journal of Conchology* **1** (15): 343, fig. (May).
- Kirtland, Jared P. 1834. Observations on the sexual characteristics of the animals belonging to Lamarck's family of naiades. *American Journal of Science* **26**: 117-120.
- Kirtland, Jared P. 1838. Report on the Zoology of Ohio [Mammalia, Birds, Reptiles, Fishes, Testacea, Crustacea]. 21<sup>st</sup> Geological Report, State of Ohio. pp. 157-200. [Testacea, pp. 197-200].
- Kirtland, Jared P. 1840. Fragments of natural history. n. 1. Habits of the naiades. *American Journal of Science* **39** (1): 164-168 (April-June).
- [Langdon, F.W.] Editor, 1881. *Vivipara contectoides*, Say. *Jour. Cincinnati Soc. Nat. Hist.* **4** (4):345 (December).
- Lea, Isaac. 1879. A synopsis of the family Unionidae, 4<sup>th</sup> edit. Henry C. Lea: Philadelphia, pp. xxx, 25-184.



- Lindahl, Joshua. 1906. Orthography of the names of naiades. Jour. Cincinnati Soc. Nat. Hist. **20** (5): 235-243 (February).
- McMillan, Nora F. and M. Fogan. 1966. Anonymous catalogue of Ohio River Unios. The Nautilus **81** (1) 20-21 (July).
- Miller, C. A. 1874. Remarks on *Unio sayii* and *Unio camptodon*, before the Cincinnati Society of Natural History at the meeting in May, by Dr. C.A. Miller. Cincinnati Quarterly Journal of Science **1** (3):244-247 (July).
- Shaffer, David H. [1840]. A complete list of land and fresh water shells, found in the immediate vicinity of Cincinnati, Ohio. [2 pp.] 4to.
- Sullivant, Joseph. 1838. An alphabetical catalogue of shells, fossils, minerals, and zoophytes, in the cabinet of Jos. Sullivant, Columbus, Ohio. pp. 38.
- Tappan, Benjamin. 1839. Description of some new shells. American Journal of Science **35** (2): 268-269, pl. 3 (January).
- Wetherby, Albert G. 1876. Remarks on the variation in form of the family Strepomatidae with descriptions of new species. Proceedings of the Cincinnati Society of Natural History, no. **1**: 1-12, 1 pl. (January).
- Wetherby, Albert G. and G. W. Harper, 1876. Catalogue of the land and fresh water mollusca, found in the immediate vicinity of Cincinnati, O[hio]. Cincinnati, pp. 1-5 (February). [A. G. Wetherby 2<sup>nd</sup> author].
- Wetherby, Albert G. 1877. Review of the genus *Tulotoma*, with remarks on the geographical distribution of the North American Viviparidae. The Quarterly Journal of Conchology **1** (11): 207-215 (May).
- Wetherby, Albert G. 1878. Terrestrial mollusca of Texas. The American Naturalist **12** (3):184-185, fig. (March).



- Wetherby, Albert G. 1878. On the deformities of some Tennessee Helices. *Journal of the Cincinnati Society of Natural History* **1**: 154-158 (October).
- Wetherby, Albert G. 1879. Notes on some new or little known North American Limnaeidae. *Jour. Cincinnati Soc. Nat. Hist.* **2**(2):93-100; *ibid.* **2**(3): 161 (October).
- Wetherby, Albert G. 1880, 1881. Some notes on American land shells. [I]. *Jour. Cincinnati Soc. Nat. Hist.* **3** (1): 33-40; 1880. (April); *ibid* [II] **4**(1): 323-335: 1881 (December).
- Wetherby, Albert G. 1881. On the geographical distribution of certain fresh water mollusks of North America, and the probable causes of their variation. *Jour. Cincinnati Soc. Nat. Hist.* **3** (4) 317-324 (January); **4** (2) 156-165. (July).
- Wetherby, Albert G. 1882. Directions for collecting and preparing land and fresh water shells. *Jour. Cincinnati Soc. Nat. Hist.* **5** (1) 44-51 (April).
- Wetherby, Albert G. 1882. The distribution of *M. margaritifera*. *The American Naturalist* **16** (8): 675-676 (August).
- Wetherby, Albert G. 1893. Natural History notes from North Carolina. Notes on some land shells of Roan Mountain and vicinity. *Jour. Cincinnati Soc. Nat. Hist.* **16** (2); 87-93 (October).
- Wetherby, Albert G. 1894. *Ibid.* The land shells of Roan Mountain and vicinity, continued. II *Jour. Cincinnati Soc. Nat. Hist.*, **16** (4); 209-216 (March).
- Wetherby, Albert G. 1894. *Ibid.* The land shells of Roan Mountain and vicinity, continued. III *Jour. Cincinnati Soc. Nat. Hist.* **17** (2) 69-77 (July).
- Wetherby, Albert G. 1894. A few notes on *Helix appressa*. *The Nautilus* **8** (2): 14-16 (June).
- Wetherby, Albert G. 1894. A few notes on *Helix tridentata*. *The Nautilus* **8** (4): 43-45 (August).



- Wetherby, Albert G. 1895. New records of reversed American Helices. *The Nautilus* **9** (8): 94 (December).
- Wetherby, Albert G. 1911. Locality for *Polygyra (Triodopsis) obstricta* Say. [From a letter to H. A. Pilsbry about 1889]. *The Nautilus* **25** (5): 60 (September).
- Wheatley, Charles M. 1849. See under: Anonymous.

Recent molluscan taxa described in the Proceedings and Journal of the Cincinnati Society of Natural History and other Recent ones described elsewhere by members of the Society (1876-1889)

#### Abbreviations

- ANSP—Academy of Natural Sciences of Philadelphia, Pennsylvania
- BSNH—Boston Society of Natural History, Boston, Massachusetts
- CSNH—Cincinnati Society of Natural History, Cincinnati, Ohio
- MCZ—Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts
- MHNG—Muséum d'histoire naturelle, Genève, Switzerland
- UMMZ—Museum of Zoology, The University of Michigan, Ann Arbor, Michigan
- USNM—National Museum of Natural History, Smithsonian Institution, Washington, District of Columbia.

Listed alphabetically by author.

#### **Aldrich, Truman H.**

The location of the types of any of the species described by Aldrich, listed below, is unknown.



*broti* Aldrich, *Alycaeus* 1889, Jour. Cincinnati Soc. Nat. Hist. **12** (1): 25, pls. 3, figs. 2, 2a, 2b (Kusan and Penggiron districts in southeastern Borneo and from the Kinan and Kiwa Rivers). Two dead syntypes.

*dohertyi* Boettger [in] Aldrich, *Clausilia* (*Euphaedusa*) 1889, Jour. Cincinnati Soc. Nat. Hist. **12** (1): 26, pl. 3, fig. 4, 4a-4c (South East Borneo). [No mention as to disposition of specimens].

*kusana* Aldrich, *Trochomorpha* 1889, Jour. Cincinnati Soc. Nat. Hist. **12** (1): 24, pl. 3, fig. 3, 3a, 3b (Kusan and Penggiron districts in south eastern Borneo and from the Kinan and Kiwa Rivers). Seven syntypes.

*lacunoides* Aldrich, *Paludomus* 1889, Jour. Cincinnati Soc. Nat. Hist. **12** (1) 23, pl. 3, figs. 1, 1a-1c (Kusan and Penggiron districts in south eastern Borneo and from the Kinan and Kiwa Rivers). Twenty syntypes.

### **Doherty, William.**

*morseana*, Doherty, *Cioneila* (*Zua*) 1878, Quarterly Journal of Conchology **1** (15): 342, pl. 4, fig. 2 (Kenton County, Kentucky and Hamilton County, Ohio) No collections named, presumably ANSP, Wetherby, J. Lewis and Doherty, not mentioned as in CSNH by James (1885). Listed as, *Cioneila lubrica morseana* Doherty by Pilsbry, 1948, Land of Mollusca of North America **2** (2): 1049, who found no type material.

*trothis* Doherty, *Somatogyrus* 1878, Quarterly Journal of Conchology **1** (15): 341, pl. 4, fig. 1 (on stones in the Ohio River, above the mouth of the Five-mile Creek Campbell County, Kentucky, also leaves in Five-mile Creek). Mentioned as in the collections of ANSP. A. G. Wetherby, J. Lewis, and Doherty, not mentioned as in CSNH by James (1885). Lectotype ANSP 57027a designated by Baker, 1964, Proceedings of the Academy of Natural Sciences of Philadelphia **116** (4): 177, labeled as a synonym of *Somatogyrus aureus*



Tryon 1865. Two probable paralectotypes MCZ number 323751 from UMMZ 70032 ex B. Walker collection labeled, "mouth of Five-mile Cr., Campbell Co., Ky." The original label has not been retained and the one in the handwriting of Calvin Goodrich does not bear Walker's catalogue number. While it is impossible to identify the source of the specimens, the accuracy of the rather obscure locality argues that they are more than topotypes.

**Harper, George W.**

*bryanti* Harper, *Patula* 1881, Proc. Cincinnati Soc. Nat. Hist. 4 (3): 258, figs. 1, 1a (Mitchell County, North Carolina); Wetherby, 1881, *ibid.* p. 328. Not mentioned by James (1885) as in the CSNH. Two syntypes MCZ 61570 from Wetherby, to Thomas Bland, ex A. F. Gray collection.

**Judge, Charles R.**

*cincinnatiensis* Judge, *Pupa* 1878. Jour. Cincinnati Soc. Nat. Hist. 9 (1): 10, fig. (both sides of the Ohio River, near Cincinnati [Hamilton Co., Ohio]). Syntype CSNH *teste* (James: 1885: 44); also in personal collection and that of James Lewis, Mohawk, New York [both probably lost].

**Wetherby, Albert G.**

None of the syntypes mentioned by Wetherby as in the United States National Museum could be located (R. Hershler, pers. comm., 2000).

*angulata* Wetherby, *Angitrema* 1876, Proc. Cincinnati Soc. Nat. Hist. no 1: 11, pl. 1, fig. 5. (Stone River, Rutherford Co. Tennessee). Nineteen syntypes MCZ 1409 from Wetherby, ex Richard E. Call collection; 21 syntypes MHNG, ex Brot collection.



- copei* Wetherby, *Helix* or *H. vultuosa copei* 1878, The American Naturalist **12**:185, text figs. (Under logs in pine woods twenty miles north of Beaumont, Hardin County, Texas). Lectotype ANSP 82316, the figured type, designated by Pilsbry, 1940, Land Mollusca of North America **1** (2): 820, fig. 484 a, b.
- duryi* Wetherby, *Planorbis (Helisoma)* 1879, Journal Cincinnati Soc. Nat. Hist. **2**(2): 99, fig. 4 (Everglades of Florida; among the shells received from the Miami County). *Helisoma duryi* (Wetherby) F. C. Baker, 1945, Molluscan Family Planorbidae, pl. 33, figs. 11, 13, 14, pl. 103, figs. 20-31, pl. 104, figs. 1-7. Syntype MCZ 4507 from Charles Dury ex R. E. Call collection.
- fimbriatus*, *Helicodiscus* 1881, Jour. Cincinnati Soc. Nat. Hist. **4**(4): 331 (gorge of the Tellico River, Monroe Co., Tennessee). Syntype [not located] figured by Binney, Bull. Mus. Comp. Zool. **4**(8): 148, pl. 1 fig. D. Four syntypes MCZ 1723 from Wetherby, ex Richard E. Call collection and 6 syntypes MCZ 15296 from Wetherby in E.R. Mayo collection ex BSNH.
- hecoxi* Wetherby, *Ariolimax columbiana* 1880, Jour. Cincinnati Soc. Nat. Hist. **3** (1): 38 (Santa Cruz, California). Not preserved [nomen nudum]. See: Pilsbry, 1948, Land Mollusca of North America **2** (2): 715, note 40.
- parva* Wetherby, *Angitrema* 1876, Proc. Cincinnati Soc. Nat. Hist. no 1:9, pl. 1, fig. 2 (Stone River, Rutherford Co., Tennessee). Fourteen syntypes MCZ 1421 from Wetherby, ex R. E. Call collection; 11 syntypes MHNG, ex Brot collection.
- perfragilis* Wetherby, *Zonites*: 1881, Jour. Cincinnati Soc. Nat. Hist. **4** (4): 326 [nomen nudum]; 1894, *ibid.* **16**: 215 (Rutherford County, Tennessee) Types lost, *teste* Wetherby. *Mesophix* (?) *perfragilis* (Wetherby); Pilsbry, 1946, Land Mollusca of North America **2** (1): 327 ("in a sink-hole in a cedar glade on the





Johnson, Richard Irwin. 2002. "Albert Gallatin Wetherby: Malacology at the Cincinnati Society of Natural History and in Ohio (1843-1896)." *Occasional papers on mollusks* 6(79), 109–133.

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