

The Noodt 1819 edition of Röding's 1798 *Museum Boltenianum*

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Most molluscan systematists are aware of Peter Friedrich Röding's 1798 *Museum Boltenianum*, the inventory of the shell collection of Dr. Johann Friedrich Bolten. This inventory was published in hopes of finding a buyer for the entire collection. It was ignored by systematists for many years on the premise that it was a sales catalogue. It is not illustrated and contains many *nomina nuda* but also numerous taxa made available by references to published figures. Although Röding's names were used by some authors, primarily European, they were not universally accepted until 1926, when the *Museum Boltenianum* was ruled by the International Commission on Zoological Nomenclature (I.C.Z.N. hereafter) to be an available work in Opinion 96. That Opinion (I.C.Z.N. 1926) cited W. H. Dall's statement that "Bolten's names have been adopted by all first class workers in Conchology, and I know of only one man, a German, who objects to them." Dall's comment completely ignored H. A. Pilsbry's objection, also referenced in Opinion 96, to the use of Röding's names.

Additional confusion concerned the authorship. Some writers attributed *Museum Boltenianum* names to Bolten, as did Dall, while others attributed them to Röding. This was finally clarified in 1956 when P. F. Röding was determined to be the author by the I.C.Z.N. in Direction 48.

Not well known is the fact that no buyer was found for the Bolten collection *in toto*, and it was offered for sale at auction on 26 April 1819 by Johannes Noodt in Hamburg. Noodt issued a new edition of the inventory in which the numbers were rearranged and changed. Also, Noodt added four plates. The figures on the plates are accompanied by the inventory numbers, tying them to the species names and thus making the names

available. All of these names were included by Dall (1915) in his list of Röding's taxa but are indicated as nude names with no indication that they had been made available in 1819. Opinion 96 treated the 1819 Noodt work as a reprint of the 1798 publication although it is stated that copies were examined by the Commission Secretary. The available names in the Noodt catalogue are not listed by Sherborn (1922-1932).

Fischer (1859) wrote a short paper on the *Museum Boltenianum*, listing genera made available therein that had been adopted by some authors. Half of his paper is devoted to the Noodt edition for which he gives correct pagination and number of plates. Fischer makes no mention of the figures making some species names available. It appears that he had not seen the original Röding edition as at the end of his discussion he wrote:

"La préface est datée de 1798; elle est imprimée sur le même papier que première page qui porte le millésime 1819. Cette dernière date doit donc seule être adoptée."

[The preface is dated 1798 and is printed on the same paper as the first page that has the 1819 vintage. That date must therefore only be adopted.] Had Fischer seen both editions he would have been aware of the considerable difference in pagination and numbering.

When the *Museum Boltenianum* was first mentioned by Dall (1889: 302-303), he incorrectly stated that the contents of the two editions are the same. In 1915 he wrote considerably more about the two editions, noted the correct pagination of both and the presence of four plates in 1819, and reproduced the Introductions from both. Dall evidently did not realize that the figures in Noodt made some previously nude names available. The conventions used in Dall's Index are on page 3 of

the introduction. Only two are noted, one being an asterisk [*] used to denote synonyms (synonyms within the Röding work) and an obelisk [†; sometimes referred to as a “dagger”] to denote nude names. Not located is an explanation of a superscript “2” that appears in some species numbers in the Index [e.g., (1657²)]. There are species of *Nassa* on page 132 with similar text listings that are in the Index consecutively (*N. argiolus*, *caesia*, *flaveola*, *duplicata*, *harpa*) which are all indicated as nude names with no discernible reason for two of the five having the superscript number.

Dall also did not note differences in species names that were either changed by Noodt or by printer’s error, of which there are several. As an example, *Nassa ligata* in 1798 is *N. legata* in 1819. Errors of this type mean nothing for names that are not available. A different problem arises with *Cucullus annulus*, which was nude name in 1798 but was made available in 1819 as *C. annulas*. This would appear to be a case of “incorrect subsequent spelling,” but as *annulus* was not an available name that would not seem to apply. Should *annulas* be considered incorrect latinization and subject to emendation or should it be considered an arbitrary combination of letters and treated as a noun in apposition? As Noodt changed other names he made available (e.g., *taitensis* to *otaisensis*), it is difficult to treat *annulas* as an incorrect subsequent spelling. It is an unnecessary argument as it is a junior subjective synonym regardless of the spelling used.

Iredale (1921: 198) appears to have been the first to realize that Noodt made some Röding names available by figuring them. He published a list of the Noodt figures and their names without comment except to note that the figures are reversed. Iredale assigned plate numbers to the four plates but no numbers appear on the copies available. Since the publication of Iredale’s list only two Noodt names have been treated, both by Cernohorsky. Even the extensively revised lists of *Conus* species have failed to list *Cucullus* [= *Conus*] *annulas* Noodt, 1819 (as *annulus* in 1798).

As most of the figures on the Noodt plates are easily identifiable common species, it is unlikely that any names currently in use are threatened by any of them being senior synonyms. However,

there is a very real possibility that some of them, especially as they are not in Sherborn or other nomenclators, could enter into homonymy. For that reason the 17 figured species are listed here with comments. Only two of these nomina, *Vexillum gloriosum* and *Epitonium pulchellum*, have been mentioned since Iredale’s list appeared in 1921.

The species figured by Noodt are listed below. The first column gives the 1798 Röding reference and the second the 1819 reference. In these numbers [e.g. 7 N 73.66] the first number [7] is the page number in the book; the N is a convention used by Noodt to separate the page number from lot and species numbers; the next number [73.] is the lot number. The lots are numbered consecutively (1–1925 for gastropods and 1–484 for bivalves). The final number [66] is the number of the species within the genus. As Noodt changed some arrangements, the numbers do not agree with those of 1798 although the text is mostly unchanged. In his renumbering Noodt made at least one error. On page 6, his number 86.79 should have been 86.78.

The figures on Noodt’s four plates are reversed (mirror images). The plates are reproduced herein as published, numbered in accordance with Iredale. An additional plate has been compiled with the figures reversed back to their correct orientation. These figures are smaller but at original relative size.

	1798	1819	1798 name	1819 name (if different)
1	7 N 73.66	5 N 73.66	<i>Patella morio</i>	
2	8 N 86.78	6 N 86.79	<i>Patella oculus-cati</i>	
3	19 N 231.39	14 N 231.39	<i>Nerita maculata</i>	
4	44 N 555.65	31 N 555.65	<i>Cucullus annulus</i>	<i>Cucullus annulus</i>
5	81 N 1057.14	58 N 1037.14	<i>Trochus tectum-chinense</i>	
6	84 N 1093.6	59 N 1071.6	<i>Cidaris taitensis</i>	<i>Cidaris otaisensis</i>
7	88 N 1139.19	62 N 1117.19	<i>Turbo pulcherrimus</i>	
8	95 N 1226.48	67 N 1202.47	<i>Epitonium pulchellum</i>	
9	96 N 1245.1a	68 N 1221.1a	<i>Strombus palustris</i>	
10	102 N 1313.15	72 N 1288.15	<i>Lunatica taitensis</i>	
11	113 N 1451.17	79 N 1425.17	<i>Buccinum fenestratum</i>	
12	113 N 1462.23	80 N 1435.23	<i>Buccinum lamellosum</i>	
13	133 N 1671.5**	94 N 1686.5**	<i>Cantharus tribuloides</i>	
14	139 N 1749.9	98 N 1763.9	<i>Vexillum gloriosum</i>	
15	162 N 90.21	113 N 90.21	<i>Chlamys erminea</i>	
16	163 N 97.28	114 N 97.28	<i>Chlamys tentorialis</i>	
17	187 N 369.25	130 N 367.25	<i>Tellina solaris</i>	

These nomina will be discussed in the order listed above (which is their order in Röding).

1. *Patella morio* Noodt, 1819 is here considered to be a junior subjective synonym of *Cellana radians* (Gmelin, 1791).

2. *Patella oculuscati* Noodt, 1819 is here considered to be a junior subjective synonym of *Patella granularis* Linnaeus, 1758.

3. *Nerita maculata* Noodt, 1819 is a junior subjective synonym of *Nerita chamaeleon* Linnaeus, 1758 and a junior primary homonym of *Nerita maculata* Salis Marschlins, 1793. *Nerita maculata* Pease, 1868 is not affected as it is now placed in synonymy and not treated as valid.

4. *Cucullus* was introduced by Röding for species of *Conus*, of which it is a junior objective synonym. They are objective synonyms due to both having the same type species (see Winckworth, 1945:139). *Cucullus annulus* was a nude name in Röding, 1798. The name was made available, with a slightly different spelling, as *Cucullus annulus* Noodt, 1819. The nominal species *Cucullus annulus* Noodt, 1819 is here considered to be a junior subjective synonym of *Conus ventricosus* (Gmelin, 1791).

5. *Trochus tectumchinense* Noodt, 1819 is here considered a junior subjective synonym of *Pomaulax gibberosus* (Dillwyn, 1817).

6. *Cidaris taitensis* appeared as a nude name in Röding, 1798. It was made available as *C. otaisensis* Noodt, 1819 but misspelled by Iredale (1921: 198) as *C. otaitensis*. *Cidaris otaisensis* Noodt, 1819 is here considered to be a junior subjective synonym of *Tectarius tectumpersicum* (Linnaeus, 1758).

7. *Turbo pulcherrimus* Noodt, 1819 is considered to be a junior subjective synonym of *Maurea punctulata* (Martyn, 1784).

8. *Terebra pulchella* Deshayes, 1857 was stated by Cernohorsky (1969: 218) to be “(non *Epitonium pulchellum* Noodt, 1819)” without other comment or listing of Noodt in References Cited. *Terebra pulchella* Deshayes, 1857 is a synonym of *T. specillata* Hinds, 1844 fide Bratcher & Cernohorsky (1987: 151). The status of *Epitonium pulchellum* in the Epitoniidae was addressed by Aartsen & Giannuzzi-Savelli (1991: 5) who determined that under Article 59(c) [now 59.2] that *Epitonium pulchellum* (Bivona Bernardi, 1832) is not preoccupied by Noodt’s name as they are no longer in the same genus, and Bivona Bernardi’s name has not been replaced.

While the above eliminates any problems of homonymy, the question of synonymy remains. It is here considered that *Epitonium pulchellum* Noodt, 1819 is a junior subjective synonym of *Hastula strigilata* (Linnaeus, 1758).

9. *Strombus palustris* was attributed to Gmelin by Röding (as 1245.1), who also listed another lot, 1245.1a. This latter lot of two specimens was distinguished in both 1798 and 1819 only by the addition of “very rare”. It is noted that the primary lot 1245.1 consisted of 9 specimens in 1798, but only 7 in 1819; lot 1245.1a consisted of two specimens in both 1798 and 1819. This species is *Terebralia palustris* (Linnaeus, 1767). Noodt did not create a new binomen in 1819 as intimated by Iredale.

10. *Lunatica taitensis* Noodt, 1819 is considered to be a junior subjective synonym of *Turbo argyrostomus* Linnaeus, 1758.

11. *Buccinum fenestratum* Noodt, 1819 is undetermined and is considered to be a *nomen dubium*. It may be a neatly reticulate specimen of the variable *Argobuccinum pustulosum* (Solander in Lightfoot, 1786), but without a ventral view it is difficult to place it with confidence.

12. Although there is no authority given for *Buccinum lamellosum*, it is obviously *Nucella lamellosa* (Gmelin, 1791). It is here considered that the omission of attribution to Gmelin was a *lapsus* and that a new name was not created by Noodt, 1819.

13. *Cantharus tribuloides* Noodt, 1819 is considered to be *Pugilina cochlidium* (Linnaeus, 1758). This is a highly variable species, ranging from smooth to having strong coronations. These “spines” are only slightly exaggerated, if at all, in Noodt’s drawing. Röding (1798: 121) introduced the synonym *Fusus carnarius* referencing a somewhat less coronate figure.

14. *Vexillum gloriosum* Noodt, 1819 was placed in the synonymy of *Vexillum taeniatum* (Lamarck, 1811) by Cernohorsky (1970: 53). He had earlier (1966: 96) listed *V. gloriosum* Röding as a *nomen nudum* with a footnote: “This name was validated in 1819 in the second edition of the Museum

Boltenianum where the species is figured on plate 1.”

15. *Chlamys erminea* Noodt, 1819 is here considered to be a junior subjective synonym of *Flexopecten glaber* (Linnaeus, 1758).

16. *Chlamys tentorialis* Noodt, 1819 is here considered to be a junior subjective synonym of *Flexopecten flexuosus* (Poli, 1795).

17. *Tellina solaris* Noodt, 1819 is considered to be a junior subjective synonym of *Scutarcopagia linguafelis* (Linnaeus, 1758), three lots of which it precedes in the Catalogue. This lot may have been a slightly different color, but the figure indicates the fine scabrous sculpture of *S. linguafelis*.

In summary, the present placement of names made available by Noodt in 1819 are listed [≈ indicates subjective synonym]:

Patella morio Noodt, 1819

≈ *Cellana radians* (Gmelin, 1791)

Patella oculuscati Noodt, 1819

≈ *Patella granularis* Linnaeus, 1758

Nerita maculata Noodt, 1819

≈ *Nerita chamaeleon* Linnaeus, 1758

Cucullus annulus Noodt, 1819

≈ *Conus ventricosus* (Gmelin, 1791)

Trochus tectumchinense Noodt, 1819

≈ *Pomaulax gibberosus* (Dillwyn, 1817)

Cidaris otaitensis Noodt, 1819

≈ *Tectarius tectumpersicum* (Linnaeus, 1758)

Turbo pulcherrimus Noodt, 1819

≈ *Maurea punctulata* (Martyn, 1784)

Epitonium pulchellum Noodt, 1819

≈ *Hastula strigilata* (Linnaeus, 1758)

Strombus palustris is not attributable to either Röding or Noodt, as they attributed it to Gmelin. The species is *Terebralia palustris* (Linnaeus, 1767).

Lunatica taitensis Noodt, 1819

≈ *Turbo argyrostomus* Linnaeus, 1758.

Buccinum fenestratum Noodt, 1819

= *nomen dubium*

Buccinum lamellosum is not attributable to Noodt; it is *Nucella lamellosa* (Gmelin, 1791)

- Cantharus tribuloides* Noodt, 1819
 ≈ *Vasum turbinellus* (Linnaeus, 1758)
- Vexillum gloriosum* Noodt, 1819
 ≈ *Vexillum taeniatum* (Lamarck, 1811)
- Chlamys erminea* Noodt, 1819
 ≈ *Flexopecten glaber* (Linnaeus, 1758)
- Chlamys tentorialis* Noodt, 1819
 ≈ *Flexopecten flexuosus* (Poli, 1795)
- Tellina solaris* Noodt, 1819
 ≈ *Scutarcopagia linguafelis* (Linnaeus, 1758)

Acknowledgements

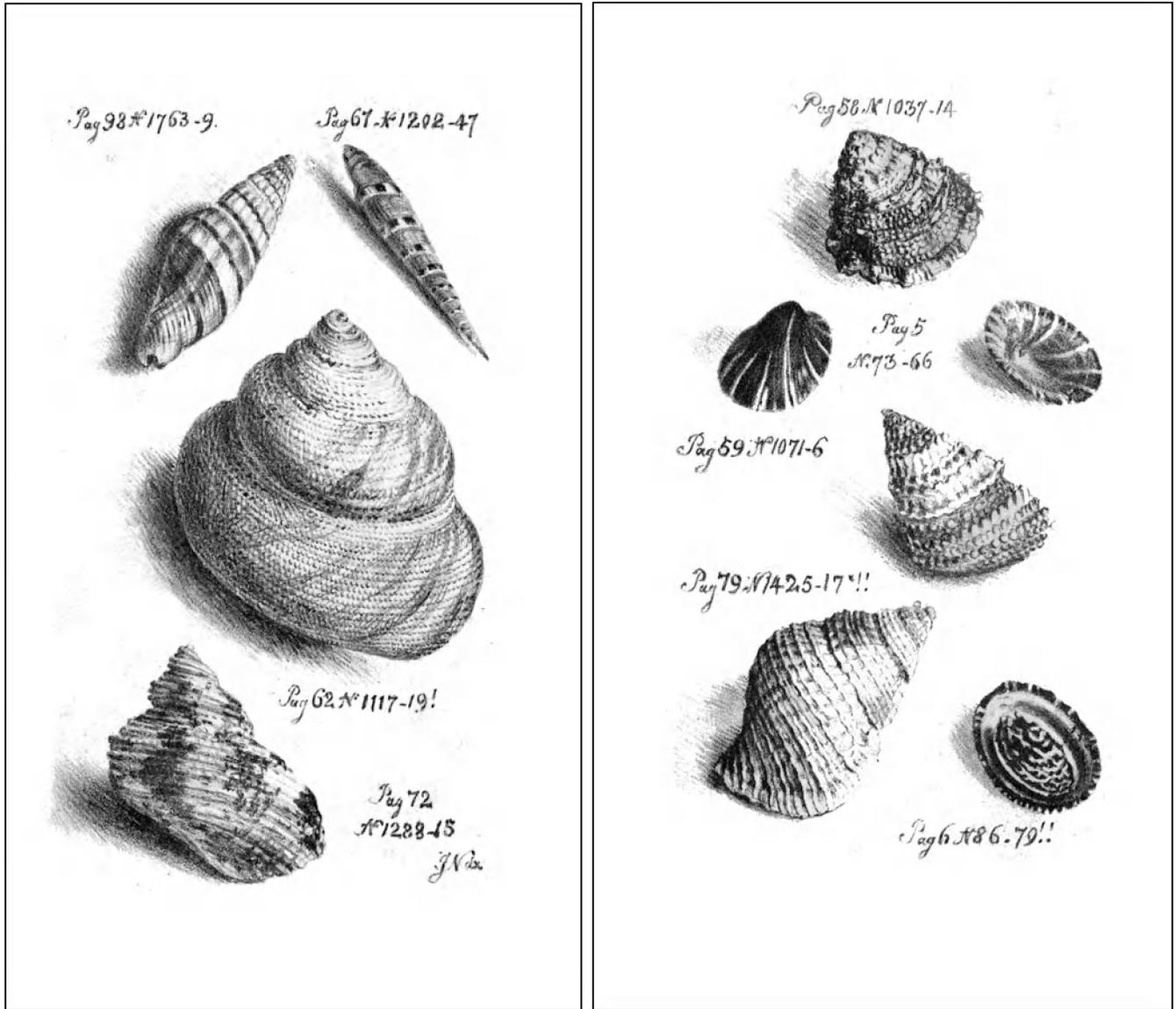
Appreciation is here expressed to a number of people who contributed to this paper. Copies of some pages of text and the plates were made available from the Smithsonian copy by M. G. Harasewych of the National Museum of Natural History, Washington, D.C. Helpful comments about the identification of the Noodt figures were offered by Gary Rosenberg of the Academy of Natural Sciences of Philadelphia, Philadelphia, Pennsylvania. Paul Callomon, also of the Academy, prepared the scans for reproduction herein and also offered comments about identification. Harry G. Lee, Jacksonville, Florida, corresponded concerning identifications and also read and commented on a draft. Thomas Eichhorst, Rio Rancho, New Mexico; John K. Tucker, Illinois Natural History Survey (retired), Champaign, Illinois; and H. H. Dijkstra, Sneek, The Netherlands, all offered comments on the identification of some figures and supplied information.

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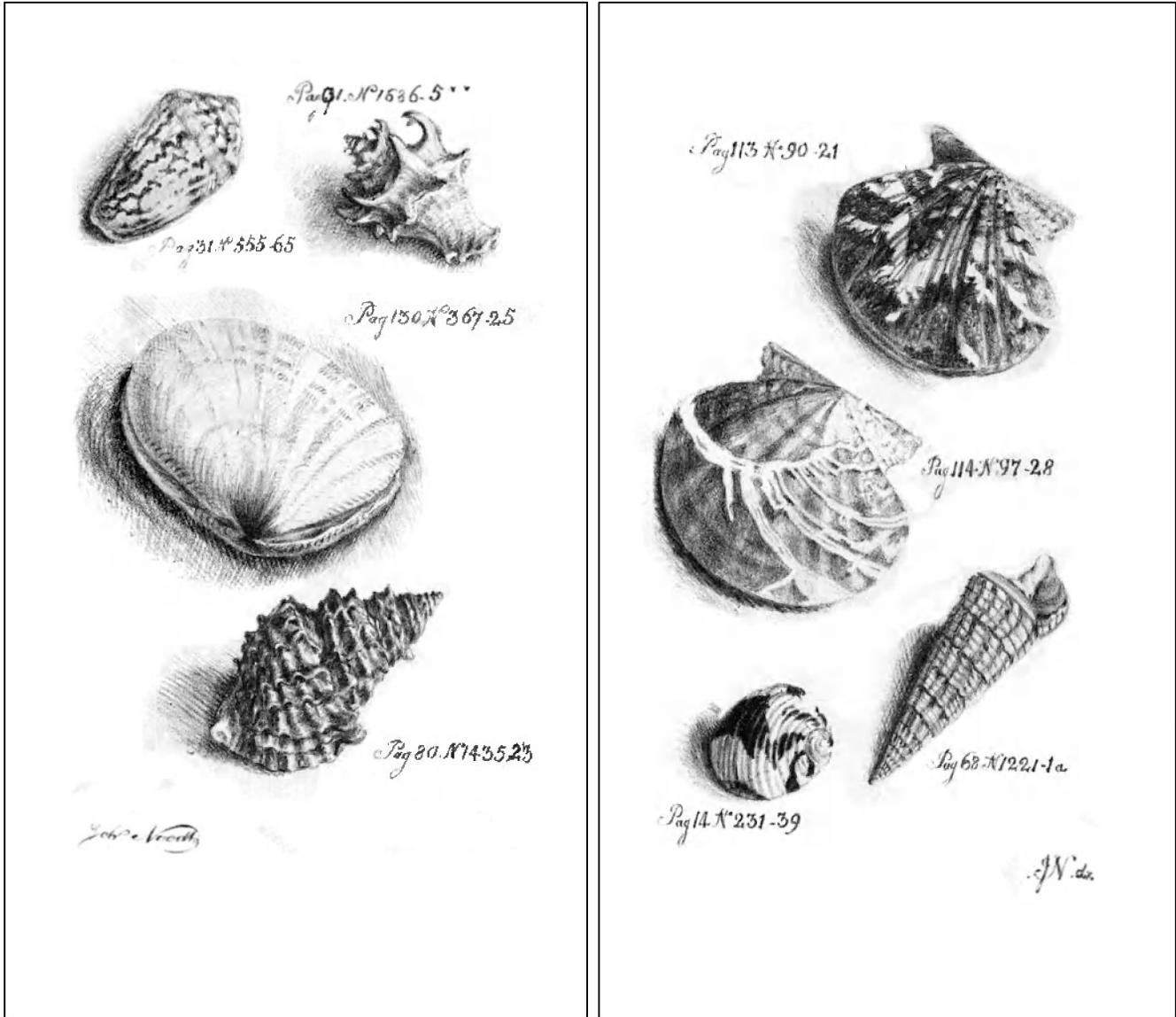
References cited

- Aartsen, J. J. van & Giannuzzi-Savelli, R. (1991) New names for well-known European marine Mollusca. *Bollettino Malacologico*, 27(1-4): 1-8.
- Bivona Bernardi, A. (1832) Caratteri di alcune nuove specie di conchiglie, estratti come sopra. *Effemeridi Scientifiche e Letterarie*, 2: 16-24.
- Bratcher T. & Cernohorsky W. O. (1987). *Living terebras of the world. A monograph of the recent Terebridae of the world*. American Malacologists, Melbourne, Florida & Burlington, Massachusetts. 240 pp.
- Cernohorsky, W. O. (1966) The mitrid genera and species established by P. F. Röding in the 'Museum Boltenianum'. *Journal of Conchology*, 26(2): 89-98.
- Cernohorsky, W. O. (1969) List of type specimens of Terebridae in the British Museum (Natural History). *The Veliger*, 11(3): 210-222.
- Cernohorsky, W. O. (1970) Systematics of the families Mitridae & Volutomitridae (Mollusca: Gastropoda). *Bulletin of the Auckland Institute and Museum*, i-iv, 1-190,
- Dall, W. H. (1889) [Reports on the results of dredging, under the supervision of Alexander Agassiz, in the Gulf of Mexico (1877-78) and in the Caribbean Sea (1879-80) by the U.S. Coast Survey Steamer "Blake", Lieut.-Commander C.D. Sigsbee, U.S.N., and Commander J.R. Bartlett, U.S.N., commanding.] XXIX. Report on the Mollusca. Part II. Gastropoda and Scaphopoda. *Bulletin of the Museum of Comparative Zoology*, 18, 1-492, pls. 10-40.
- Dall, W. H. (1915) An index to the Museum Boltenianum. *Smithsonian Publication* 2360: 1-64.
- Deshayes, G. P. (1857) Description d'espèces nouvelles de genre *Terebra*. *Journal de Conchyliologie*, 6: 65-102.
- Dillwyn, L. W. (1817) *A descriptive catalogue of Recent shells, arranged according to the Linnaean method; with particular attention to the synonymy*. John and Arthur Arch, London. i-xii + 1-1092 + [1-29 (index)] pp.

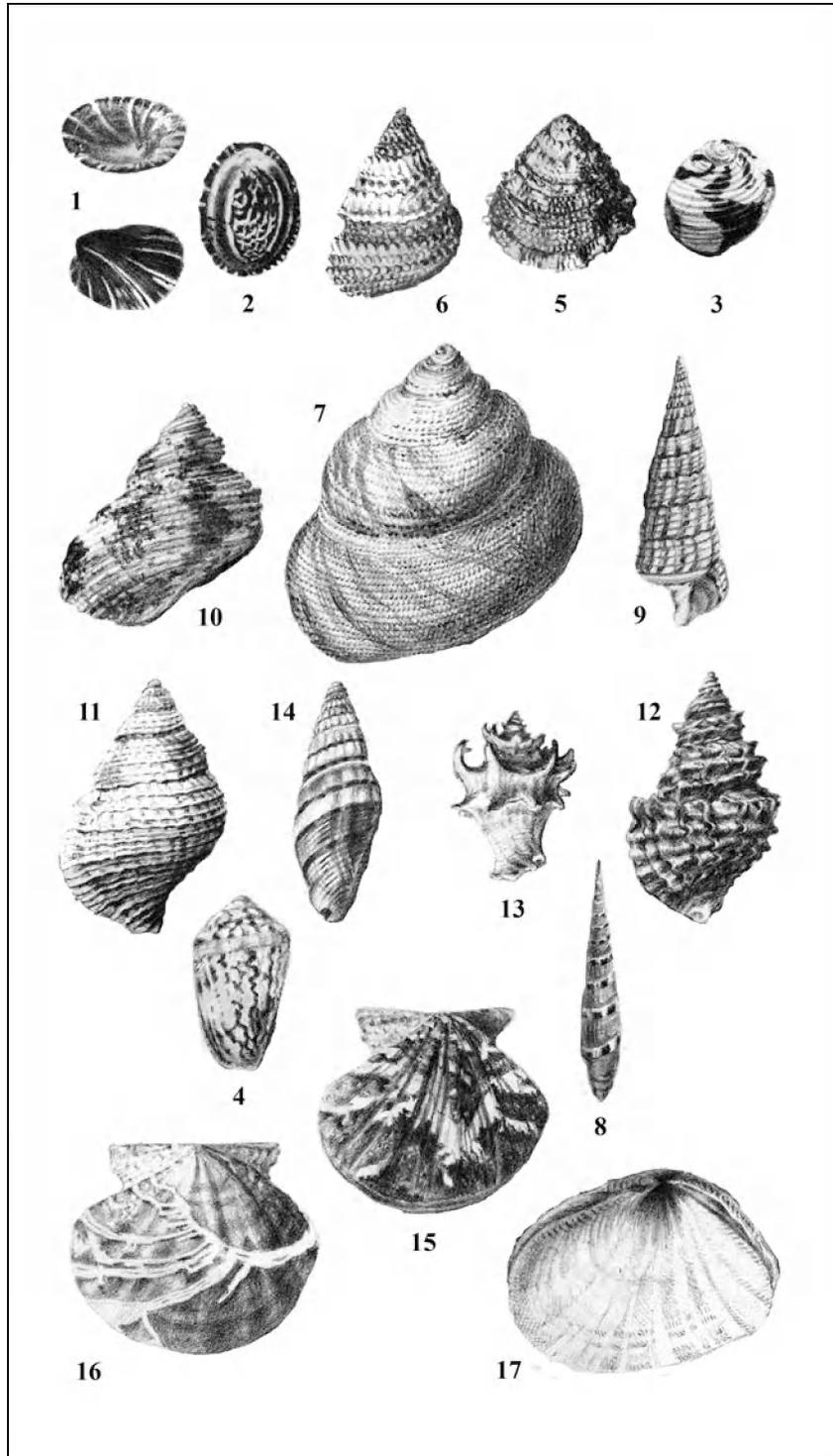
- Fischer, P. (1859) *Curiosités Bibliographiques. Museum Boltenianum. Journal de Conchyliologie*, 7(4): 206–208.
- Gmelin, J. F. (1791) *Caroli a Linnaeus Systema Naturae per regna tria naturae. Editio decima tertia*. Georg Emanuel Beer, Lipsiae. Vol. 1, pt. 6 (Vermes), 3,021–3,910.
- International Commission on Zoological Nomenclature (1926) Opinion 96. *Museum Boltenianum. Smithsonian Miscellaneous Collections*, 73: 16–18.
- International Commission on Zoological Nomenclature (1956) Direction 48. Determination of the authorship to be attributed to the work published anonymously in the year 1798 under the title *Museum Boltenianum* (Direction supplementary to Opinion 96). *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, 1, Section D, D11: 255–264.
- Iredale, T. (1921) Molluscan nomenclatural problems and solutions. No. II. *Proceedings of the Malacological Society of London*, 14(5/6): 198–208.
- Linnaeus, C. (1758) *Systema naturae per regna tria naturae. Editio decima, reformata. Vol. 1, Regnum animale*. Stockholm. 824 pp.
- Linnaeus, C. (1767) *Systema naturae per regna tria naturae. Editio duodecimo reformata. Regnum animale*. Stockholm. 1(2), 533–1,327.
- Martyn, T. (1784–89) *The universal conchologist exhibiting the figure of every known shell accurately drawn and painted after nature with a new systematic arrangement*. London. Frontispiece + [3] + 39 + [2] pp. + 80 pls.
- Noodt, J. (1819) *Museum Boltenianum : Verzeichnis der von dem gestorbenen J.F. Bolten...hinterlassenen vortrefflichen Sammlung Conchylien, Mineralien und Kunstsachen die am 26. April d.J., Morgens um 10 Uhr öffentlich verkauft werden sollen durch den Makler J. Noodt. Conrad Müller, Hamburg. [iv] + 156 pp. + 4 pls.*
- Pease, W. H. (1868) Descriptions of sixty-five new species of Marine Gasteropodæ, inhabiting Polynesia. *American Journal of Conchology*, 3(4): 271–297.
- Poli, G. S. (1791–95) *Testacea utriusque Siciliae eorumque historia et anatome*. Bodoni Ed., Parmae. 2 volumes. [1. 257 pp., 18 pls., 1791; 2. 234 pp., 20 pls., 1795].
- Röding, P. F. (1798) *Museum Boltenianum sive catalogus cimeliorum e tribus regnis naturae quae olim collegerat Joa. Fried Bolten, M.D.p.d. Pars Secunda continens conchyliam sive testacea univalvia, bivalvia & multivalvia*. Johan. Christi. Trappii., Hamburgi. viii + 199 pp. [Reprinted 1906 by Sherborn, C.D. & Sykes, E.R.; 1986 by American Malacological Union, Inc.]
- Salis Marschlins, C. U. von (1793) *Reisen in verschiedene Provinzen des Königsreichs Neapel*. Ziegler, Zürich & Leipzig. 442 + 4 pp, 8 pls.
- Sherborn, C. D. (1922–32) *Index Animalium sive index nominum quae ab A.D. MDCCLVIII generibus et speciebus animalium imposita sunt. Sectio Secunda. A kalendis Ianuariis, MDCCCI usque ad finem Decembris, MDCCCL*. British Museum (Natural History), London. cxlvii + 7,056 + 114 pp.
- Winckworth, R. (1945) The types of the Boltenian genera. *Proceedings of the Malacological Society of London*, 26(4–5): 136–148.



Plates 1 and 2 of Noodt, as numbered by Iredale



Plates 3 and 4 of Noodt, as numbered by Iredale



. The figures from Noodt, reversed to show correct chirality and numbered according to the present text. Reduced but at original relative sizes. No measurements were given by Röding or Noodt.

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