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Sussex.

Produced by 'The Conchological Society of Great Britain and Ireland'

MORE AUTOBIOGRAPHY

Scene, a sandy shore at a small village in the county Down, Northern Ireland. Time, a hot August day in 1914. Characters, a large man, a small girl, and a minute Yorkshire Terrier dog. All dawdling along the shore, picking up assorted bits and pieces. Then the child found a single purple valve of Chlamys varia and from that day on was a dedicated conchologist. The 6-year-old child was myself, the man my patient father who encouraged my inexplicable taste for conchology. I have the shell still.

N. F. McMillan

SYSTEMATICS SEWN UP

We all know who it was made the very controversial remark that

"That which we call a rose

By any other name would smell as sweet",

and it is possible that the lines were written with a certain amount of personal feeling, since the indications are that Shakespeare had far more trouble naming his plays than writing them; where it is not possible to bestow on the play the name of its principal character, you will note that the titles are uninspired to the point of helplessness.

Beware therefore if, as a lesser mortal than Shakespeare, (I hope I write without overmuch presumption), the duty devolves upon you to name a shell; for the pitfalls are many and almost the whole of the subject of systematics consists of investigating the reasons why scientists should not have named animals and plants as they did. Once a name is in print it may not be ignored but however frivolously conceived, unless it can be proved to run counter to the Rules of Nomenclature, it must be entered permanently upon the synonymy of the creatures to which it is meant to apply. Undoubtedly in the past (and even, regrettably enough in fairly recent times), there have been scientists with a most irresponsible attitude to the naming of shells - and no doubt, of other creatures as well. Species have been described on the evidence of a single beach-worn valve, even on nothing but an operculum, but the main pitfalls and gins which beset our paths are perhaps provided by the zoologists who have siezed upon chance small variations, usually in an inherently variable group, and given them new names. It is not truly possible to give a specific name to a shell, with any honest conviction that the name is correctly applied, unless one has seen such a collection of specimens from various localities that one can be sure of, and can describe or figure, the full range of variation of the newly suggested species. Only if the thing is utterly and obviously different from all known forms may one dare to describe it on the basis of one or two specimens, leaving (rather unhappily) an assessment of the reasonable variability of the species to be assessed by someone when more examples of the thing turn up. Neither a splitter nor a lumper be, but let the shells, in sufficient quantity, speak for themselves.

One conchologist, in reviewing a few melanid snails obtained from Lake Nyasa in the early days, ascribed them to about forty species divided among four genera which he described as new. Most of the shells were just slight variations of the normal forms, and there are certainly not more than six species, all in the genus Melanoides.

One hopes that one day a brave worker will resolve to revise and monograph the family Thiariidae in which these shells occur; when such a star arises on the conchological horizon he will, on the conclusion of his work, deserve some scientific equivalent of the George Cross, for true it is that the conclusions of most of those who have laboured on this (and many another)

family, provide little help to the man who now attempts to put things in order, but rather they have, by the very energy of their over hasty conclusions, made his task so difficult as to be well-nigh hopeless.

Perhaps you believe that your new shell belongs to some genus which has not yet been described; be advised - try and get somebody a long way off, whom you do not know very well, to undertake the work. A great many genera have been described in the animal kingdom - certainly over a million, I imagine - and if your name has been used once before, for whatever kind of creature, then your name is invalid. There are lists of course, but they take a great deal of going through before you can be sure of yourself, remembering always, that there are those who do go through them for the academic pleasure of pointing out scientists' mistakes in such matters. The South American snail subgenus Microborus, as readers of the Journal of Conchology will know, recently had to be renamed Austroborus, as the name was found to have been previously bestowed on a beetle. The well known genus Cerastus has now, by an ingeniously minimal adjustment, to be known as Cerastua, and Sarama Godwin-Austin 1908, preoccupied by a Pyralid, was renamed Rasama by Laidlaw. Examples are commoner than you might think.

What you may do to avoid this trap is to think up a name so horrible in its ingenuity that you may be morally certain that nobody else could ever have used it before. The result however, is unlikely to be euphonious. Kerkophorus, Limicolariopsis, etc., belong to this category, and I think, even Scrobs, while the excruciating Halolimnohelix is certainly unlikely to have been given to anything but a snail with an inferiority complex.

Another fairly safe thing you can do is to invent a name of your own, not derived from Latin nor any other language, and which neither means, nor is intended to mean, anything at all. There is no objection to this. Clanculus, for instance, is an honourable example, and Vanikoro, which is supposed to have been inspired by some native word, and is hence classified as 'barbarous'.

Perhaps it is merely a species which you wish to name, and in certain ways your task this time is easier. You must be quite sure that an identical name has not been given to any other species within the genus, and that your proposal cannot offend any personal, moral or religious susceptibilities; jehoveh for instance, has been rejected. It may strike you at first glance that the names given to shells are in latin - in fact you may have heard some people speak respectfully of the 'latin names'. In actual fact this is not so; many names are horrible mongrels of latin and greek. No objection can be raised to names in other languages such as arabic for instance (asghar Biggs) and others, by employing the names of deserving scientists with unsuitable patronymics, nod haughtily at the latin usage by adding a letter or two at the end to reach agreement in gender with the generic name. As examples I give you macgillivrayi and milne-Edwardsi. Few Romans would recognise such flights of fancy, and when it comes to desmoulinsiana or deslongchampsia, I am uncertain whether to pronounce them in 'latin' or in their native tongue. I cannot recollect anybody naming a species after Tapparone-Canevari, Moquin-Tandon or Della Chiaje.

Such tongue twisters are necessarily frequent, and goodness knows how many people have been put off the study of zoology by them. They engender a suspicious attitude at least in my own obstinately perverse type of mind, which persists in considering even the honest latin name Ena montana more likely to refer to a female American film star than to a snail; I would however, be the first to admit that the reverse would certainly be true of Ena obscura. When confronted with Aoteadrilla wanganuiensis Hutton or Axymene waipipicola (Webster), the mind refuses to function further. I am waiting for a valid species of the genus Helix to turn up in the hope that some young scientist may happily bestow upon it the good latin appendage felix.

Many will no doubt consider all this an egregiously frivolous attitude to the learned science of systematics, but I must repeat that cavalier treatment is by no means rare. It was Iredale for instance, perhaps because he had temporarily run out of names, and wishing to pay tribute to his wife, who named a shell berylsma; another rather stunted little holotype became possessed of the label pooretchia. Beware, however; as you probably know, there is an International Commission on Nomenclature which sits on these

things; and although some have expressed their opinion that it does not sit hard enough, it does have its limits. As Mayr points out in the standard work on the subject, names impossible of pronunciation such as Aaages or Zyzzzyra, or which sound identical when pronounced (as cocana and kokana of Kearfott 1907), or which are merely saucy like Polychisme, Peggychisme and Nanichisme (Kirkaldy 1904), are not to be regarded as sufficiently responsible to uphold the reputation of zoology among the sciences. For a similar reason the Commission, taking a deep breath, threw out Cancelloidokytodermogammarus (Loveninskytodermogammarus) loveni Dybowski 1926. Luckily, these last few examples were not culled from the phylum Mollusca.

Suppose your new Pisidium or what-not is slightly larger or rougher than any known before. You could call it maximus or colossus or spinissimus and the name would probably be valid, but think of the difficulties you bequeath to a successor, possibly not yet born, who finds a larger or more prickly species still, and who has by you been denied the use of any superlatives. Your shell may be the first to come from China perhaps, or Japan, and sinensis or japonicus might be excellent trivial names but for the possibility that a dozen more species may yet be discovered from the same areas, none of them more or less 'japonicus' than yours. Lots of creatures have in fact, been named after New Zealand, for instance, but the latinised forms of this delightful country bring to mind the devil in being legion. They include novaezealandiae, neozelanicus, zelandica, zeelandona, zelandiae, novozelandica, zealandicus, novozealandica and novoseelandica among the molluscs alone.

It may occur to you if you have read this far, that the field for naming shells is not as wide as might have been thought; or alternatively that I am presenting the situation in a mood of disenchantment. How then, you are entitled to ask, can we safely and effectively name our new discoveries? This in fact, I am quite unable to tell you. Perhaps after all it was a good idea of Bourguignat's to name species after his friends' daughters, just because they were beautiful girls; for myself, it may yet come about that I shall have a shell or two to name during the rest of my conchological career, and I have no ideas in store for these, let alone any to throw away on other people. It might be for me, a fine idea to name my next shell munchauseni - at least I should be sure of somebody quickly and automatically relegating it to the synonymy.

SOME ETYMOLOGY

While the meanings of most generic and specific names can be readily ascertained from a Latin dictionary or Greek lexicon, or are based on geographical or personal names, the derivations of some are less obvious. This article is concerned with some of the names of British Recent non-marine Mollusca, native or introduced. Names originating with Leach (or Prideaux MSS.) and some of Gray's are particularly puzzling; several of them seem to be make-up words of no significance. Arianta recalls Ariantus, King of Scythia, and Abida (or Abidah) was a son of Midian (genesis 25:4, 1 Chronicles 1:33); Abydos is a less likely suggestion, and Winckworth ventured "ab Ida," from Ida. It has been conjectured that Azeca is from Azekah, a city of Judah, and Iamina (Jamina) might be from Hebrew jamin, right hand. Theba, originally spelt Teba by Leach, seems hardly likely to be from Thebai or Thebes, nor Balaea (Balea) from Hebrew baali, my lord, or Gk. balios, spotted or dappled. Ena has defied all speculation, unless it is the name of a girl friend. Phytia Gray might be from Gk. phytios, productive, or perhaps an anagram or lapsus calami (not unknown for Gray) of Pythia, the Delphic priestess (cf. Helix pythia Müller); that Gray was partial to anagrams is shown by Milax and Malino (probably a misprint for Malix), anagrams of Limax. The suggestion that Assiminea Fleming commemorates the oriental scholar J. S. Assemani is scarcely convincing. Cernuella Schluter is more likely a misprint for Cornuella, diminutive of cornu (cf. Cornu copiae Born), than a derivative of cernuus, nodding or bowing. Carychium Müller may be a diminutive of Doric caryx, whelk or herald, or a combination of Gk. caryon, nut, and chion, snow, i.e. white. The derivation of Galba from Lat. galbus, yellow, is more likely than from galba, which meant either a kind of grub or larva, or a fat belly.

In some cases the derivation seems clear, but the reason for the choice less so. Bithynia was a province of Asia Minor, but why Leach gave the name

to Helix truncatula L., in a book about China, remains a mystery. The introduced Lymnaea catascopium Say derives its specific name from a Greek word meaning "look-out ship," from catascopos, spying or exploring. Menetus means steadfast or patient, and Hippeutis is a horseman or rider. Vallonia, according to Risso, is goddess of the valleys, Zenobia (Zenobiella) was Queen of Palmyra, and Marpessa was daughter of Evenus and wife of Idas. Why a genus of slugs, Arion, should be named after the bard of Lesbos is not apparent. Liberta means a freed woman or manumitted female slave, but why did Westerlund bestow the name on a little hairy snail?

The derivation of most other names is less speculative and usually unequivocal, though some call for a little explanation. Peringia Paladilhe was "dediée à la famille Pering de Londres." The specific name lagotis seems to be compounded of Gk. lagos, hare, and otis, genitive of ous, ear, on the analogy of myosotis, mouse-ear. Planorbis acronicus derives its specific name from Acronius lacus, Bodensee or Lake Constance. Lauria was a compliment to the author's niece, Laura Gray. Cecilioides looks like a hybrid word from Lat. caecilia, blindworm, and Gk. eidōs, form, appropriate to a sightless, subterranean snail. Vertigo genesii Gredler was originally collected above St. Genesie or Jenesien, near Bozen, South Tyrol. Canon J. Goodall (1760-1840), Headmaster, then Provost, of Eton, is commemorated by two specific names. Laciniaria comes from a Low Latin word meaning plaited, from lacinia, a fragment of cloth or lappet, and Retinella is from Gk. retine, gum or resin. Cepaea is from Gk. cepos, garden, so that C. hortensis is a garden snail twice over. Both Pomatias and pomatia stem from Gk. poma, lid, in reference to the operculum of the former and to the winter epiphragm of the "Roman Snail." Hygromia is doubtless a variant of Hygromanes Férussac, from Gk. hygros, moist, and maiomai, seek, or possibly mainomai, be mad. Ponentina is from Portuguese ponente (poente), west, and Monacha, from Gk. monachos, solitary, hence a monk, is an allusion to the Carthusian monastery of La Chartreuse (Helix cartusiana Müller is the type species). The slug Agriolimax caruanae is dedicated to Dr. A. A. Caruana Gatto, secretary to the University of Malta. Pisidium conventus was so named because Clessin described it at a meeting or congress (at Munich); conventus is the genitive of a fourth declension Latin noun, so does not "agree" with the second declension neuter noun Pisidium. Dreissena honours Jean Henri Dreissens (also spelt Driessens and Dreissen) of Maaseik, Limburg (see Internat. Comm. Zool. Nomencl., Opinion 351).

Among introduced aliens, Eobania has been derived from Gk. eos, dawn, and Hungarian banat, a district governed by a viceroy (ban), signifying eastern Rumelia (now S. Bulgaria). Ancomena is from Gk. ancos, bend, and mene, moon, i.e. crescent moon, no doubt suggested by Selenites Fischer. Finally, Seminolina, though distastefully reminiscent of a milk pudding, is actually derived from the Seminole, a tribe of Indians settled in Florida.

1. Many members will know that the Journal of Conchology Vol. 24 nos. 5, 6 and 7 are out of print. The Society has been able to purchase a few of these scarce numbers and they may now be had from the Hon. Sec. on a first-come first-served basis at 10/- per number.

2. Publications Received.

a. Pacific Northwest Shell News, Vol. III, nos. 5 and 6. Always a lively little publication, this improves with every issue and the enterprise of its Editor, Tom Rice of the Pacific Northwest Shell Club, makes itself obvious throughout: the issues are now being excellently printed by amateurs of the Club; and besides items of Club News and articles in lighter vein, always contain something of real scientific value from this ecologically fascinating part of the world.

b. 'Poirieria' This is the organ of the Conchology section of the Auckland Institute and Museum, New Zealand. Vol. 1 parts 5 and 6 have been received and, as might have been expected, contain some excellent articles by specialists, not only on local shells, but on those from other parts of the world as well. Although a duplicated organ, illustrations are usually included which are quite above the usual standard for this type of work. Individual issues are not named or headlined in any way which seems a pity as it might lead to mis-filing. The Editor too, is retiring and fails to include his (or her) name. Proceedings of the Section, announcements, etc., are appended in a 'Newsletter'.

c. 'Aquatica' This publication consists of miscellaneous research notes published by the Aquatic Research Institute, recently established at the Port of Stockton, California, U.S.A. Research will be mainly on fish and fisheries mostly in the Asian and Indo-Pacific areas, and a second Journal, 'Aquatic Science', is soon to be issued for longer articles.

d. 'A Preliminary List of the South African Marine Shells from False Bay to the Pondoland-Natal Border'. This is a duplicated list, excellently set out, with known localities for each species, and bears every indication of accuracy as far as the latest information can provide it. It will be of immense help to anyone who studies or collects South African marine mollusca, and one wishes that such lists were available for many more areas of the world. It has been compiled by D. H. Kennelly, conchologist to the East London Museum, who is of course, one of our members; copies may be had by sending 25 cents (South African) to the East London Museum, South Africa. (Price equivalent to about 2/6d.)

1. New Species of African Marine Mollusca. Dr. K. H. Barnard, "Deep-sea Mollusca from the region south of Madagascar," Investigational Report No. 44, Department of Commerce and Industries, Republic of South Africa, published in "Commerce & Industry", April 1963, contains descriptions of 23 new species, and the same author's "Deep sea Mollusca from west of Cape Point, South Africa", Ann. S. Afr. Mus. Vol. 46, part 17, has another 21 new species.

2. International Commission on Zoological Nomenclature.

(a) Notice is given of the possible use by the International Commission of its plenary powers in connection with the following cases, full details of which will be found in Bull. Zool. Nomencl. Vol. 20, part 5:

Z.N.(S.) 459. Designation of a type species for Crassispira Swainson, 1840 (Gastropoda).

Z.N.(S.) 1567. Suppression of Conus candidus Born, 1778 (Gastropoda).

Anyone who wishes to comment upon either of the above cases should do so in writing, and in duplicate, before 21st. April 1964, to the Secretary, International Commission on Zoological Nomenclature, c/o. British Museum (Natural History), Cromwell Road, S.W.7.

(b) Notice is given of the possible use by the International Commission of its plenary powers for the suppression of Naiadites elongatus Dawson, 1860 (Bivalvia), as a nomen dubium, reference No. Z.N.(S.) 1604; see Bull. Zool. Nomencl. Vol. 20, part 6. Any comments should be sent in duplicate before 6th. June 1964 to the Secretary, Internat. Comm. on Zool. Nomencl., British Museum (Nat. Hist.), Cromwell Road, S.W.7.

(c) Notice is given of the possible use by the International Commission of its plenary powers in connection with the following cases, full details of which will be found in the Bulletin of Zoological Nomenclature, Vol. 21, part 1:

(1) Suppression of Doris lacinulata Müller, 1776, Doris fasciculata Müller, 1776, and Limax minimus Forskal, 1775; grant of precedence to Cuthonidae Odhner, 1934, over Tergipedidae Bergh, 1889. Z.N.(S.) 1044.

(2) Designation of a type species for Eubranchus Forbes, 1838; suppression of the generic names Ethalion Risso, 1826, Amphorina Quatrefages, 1844, Galvina Alder & Hancock, 1855, and several dubious specific names. Z.N.(S.) 1102.

(3) Suppression of Cavolina Bruguiere, 1791, and emendation to Cavolinia of the generic name Cavolina Abildgaard, 1791. Z.N.(S.) 1103.

(4) Suppression of Cratena Bergh, 1864. Z.N.(S.) 1105.

(5) Suppression of Diaphoreolis Iredale & O'Donoghue, 1923, and Doris pennata Gmelin, 1791. Z.N.(S.) 1106.

All the above are in the class Gastropoda. Anyone who wishes to comment upon any of the above cases should do so in writing and in duplicate before 25th. September 1964; each comment should bear the reference number of the case in question. All communications to be addressed to The Secretary, International Commission on Zoological Nomenclature, C/o., British Museum (Natural History), Cromwell Road, London, S.W.7.

3. An announcement has been received from the American Museum of Natural History of the opening of a new shell exhibition. This is to be known as the Evelyn Miles Keller Memorial Exhibition, and is presumably to be a permanent feature of the Museum.

The collection is stated to consist of more than two hundred examples of shells, displayed so as to show to the best advantage their diversity of shape,

colour and texture, and one gathers that the specimens are almost entirely indo-pacific marine shells. There are in addition, models of the Cephalopoda, and many photographs of the shells are available.

4. Correspondent Wanted.

Mr. E. Dalvean Jnr., [REDACTED] Victoria, Australia, Member of the Malacological Society of Australia, wishes to sell or exchange local shells for European or other areas. Fossils are also of interest.

5. Oldham Natural History Museum is anxious to acquire specimens of British Marine species. Anybody willing to help may obtain lists by writing to L. N. Kidd, Esq., Wernerth Park Study Centre, Frederick Street, Oldham, Lancashire.

6. Please note the Compiler's change of address. The new address is given at the head of this 'Newsletter', and is the same as his permanent address.

7. Wanted. "The Conchologist", Vol. I, also "Journal of Malacology", any volumes or odd parts except Vols. 3, 8, and Vol. 4 parts 2 and 4. Mrs. N. F. McMillan, [REDACTED] Bromborough, Cheshire.

8. Subscriptions There are far too many subscriptions outstanding. Accounts have to be paid and unless all members remit early in the year a lot of unnecessary work and expense is caused. About a quarter of the members had not paid on the 16th. April.

Sinistral specimens of normally dextrally coiled shells, and dextral abnormalities of sinistral species, have always appealed to collectors on account of their rarity. Abnormally coiled shells, though never frequent, are less rare in some species than in others. Amongst freshwater shells sinistrorsity is most frequent in Lymnaea peregra, the inheritance of which has been studied by Boycott and others. King Lane pond, Leeds, used to be celebrated for sinistral peregra, and there are records from Tooting, Hale Moss, Scarborough, Durham, Woodhall Bridge and York. This abnormality is infrequent amongst freshwater snails: the following records are mainly culled from the Journal of Conchology. Viviparus viviparus: Bardsley, Lancashire (10:148, 18:329), R. Foss, York (22:170), London, Holocene (23:294). V. contectus: Beswick, Lancs. (11:224, 12:68), Kessingland, Suffolk (19:121). Valvata piscinalis: Budworth Mere, Cheshire (11:268), Hunstanton, Norfolk (7:174), Creswell Crags, 2 specimens, and a reference to one from Sunbury (4:145). V. antiqua: Dierden's Pit, Pleistocene, Kennard coll. Bythinella scholtzi (Amnicola taylori): Stockport canal, Reddish (15:283, 16:28). Lymnaea glabra: Scarborough (12:108, 191). L. stagnalis: Kenn Moor, Somerset (9:199), Doncaster (7:40). L. auricularia (13:26). Reversed coiling is also recorded for Physa fontinalis, Barnes Common (5:220) and P. acuta (13:25), and for three species of Planorbis: P. planorbis, Wye, Kent (3:232), P. leucostoma, Tenby (11:235) and Sutton Coldfield (8:377, 384), and P. laevis, Aldeburgh (18:317).

Amongst land snails, sinistrorsity is most frequent amongst some of the larger Helicidae, such as Helix aspersa, H. pomatia, H. nemoralis (especially at Bundoran), H. hortensis and Helicella virgata. In some species it is unknown. The following records, mostly from J. Conch., are of rarer occurrences. Acme fusca: N.W. Donegal (13:151), Bristol (Jeffreys, British Conchology, 1:309), Tramore Strand, Donegal (16:80), Dingle (15:52; Irish Nat. 24:33), Broughton, Lincs. (20:158), Northfleet (24:27); some of these are subfossil. Succinea oblonga: S. Perthshire (7:367). Cochlicopa lubrica, Rugby (17:33). Pyramidula rupestris: A. S. Kennard, Proc. Malac. Soc. 16:110, no locality. Vertigo antivertigo: Southwell, Notts., Holocene (24:232). V. substriata: Shipley Glen, Yorks. (11:200). Pupilla muscorum: Abersoch, Caernarvon (11:11), Weymouth (24:19). Lauria cylindracea: Torquay (12:295), near Hexham (23:259). Ena obscura: Danebury, Hants. (16:100). Helicodonta obvoluta: Ditcham (8:428, 12:13, 16:44). Helicigona lapicida: Linton (Taylor's Monograph, 3:391). Arianta arbustorum: Buxton (5:225), Derbyshire (11:235), Maidwell, Northants. (11:330), Denford, Northants. (14:27), Uxbridge, Holocene (Taylor's Monog. 3:442). Trichia striolata: Haddon, Northants. (11:281), Peterborough (13:14), Chipstead, Surrey (22:94). T. hispida: King's Langley, Herts., Holocene (18:130), Thornton Dale, Pickering (19:141, pl. 4, fig. 1), West Blatchington, Sussex (19:286), Scarborough (Naturalist, Spring 1953), Cambridge, Holocene, and Coldingham near Eyemouth

(Taylor's Monog. 4:33). Monacha cantiana: 13:25 (see also 16:40). Helicella caperata: Stanwick, Northants. (11:170), Woolacombe, Devon (13:20, 16:80), Lewes (13:45), Scarborough (12:249), North Devon (12:288), Frinton-on-sea (14:27), Bassenthwaite Hause (8:158). H.itala: Northants. (13:26), Bundoran (9:265, 22:263), Water Newton, Hunts. (14:102); see Taylor's Monog., 4:132. Cochlicella acuta: Tenby (9:151, 211). Punctum pygmaeum: Barnwell Abbey, Pleistocene (Taylor's Monog. 3:160). Discus rotundatus: Burnham Beeches (12:237), Castleton, Derbyshire (18:329), Chiswick (8:170), Aghaderg, Loughbrickland, Co. Down (6:39); see Taylor's Monog., 1:108. Vitrea crystallina: Copford, Holocene, Kennard coll. Oxychilus draparnaldi: Coulsdon, Surrey (18:320). Retinella radiatula: Broughton, Lincs., Holocene, Kennard coll. R. nitidula: Saxlingham Thorpe, Norfolk (22:271).

Dextral Clausiliidae: Clausilia bidentata: Skipton (13:274, 22:263), Slammanan, Stirling (4:265), Lincolnshire (Arch. Moll. 60:47). C. dubia: Ingleton (22:263). Laciniaria biplicata: Cambridge (22:263).

The above records are only of British non-marine Gastropoda and make no claim to be comprehensive. Sinistral Vallonia pulchella is recorded from Poland (22:263), Oxychilus cellarius from Pennsylvania (7:388, Nautilus, Dec. 1893, 90) and Sweden (24:138), Zonitoides nitidus from France and Vitrina pellucida from Geneva; see Science Gossip, 1897:262.

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