

BOOK NOTES.

By TOM IREDALE.

Read 10th March, 1922.

SUMMARY.

On P. L. S. Müller's Molluscan Names.
 Pennant's British Zoology.
 Wodarch and Mawe.
 Lamarck's "Hist. Anim. s. Vertèb."
 Lessons on Shells.
 Da Costa.
 Renier.
 Reeve's "Elements of Conchology".
 Wood's "General Conchology".
 O. G. Costa: "Oss. Zool. Is. Pantelleria."

ON P. L. S. MÜLLER'S MOLLUSCAN NAMES.

WHEN Sherborn drew up his first part of the "Index Animalium" he included many doubtful names. This was the correct policy because the recognition of many books was *sub judice*. Since then practically all the outstanding items have been settled, and the present note deals with one such.

In his Bibliography (p. xxxii) Sherborn included

- "Knorr, G. W. Les Delices des yeux, ou Coll. gén. Coquill. 6 vols.
 4to. Nuremb. 1760-1773. [No n.spp.]
 ——— Delic. nat. Selectæ. (Ed. Müller) 2 pts. 8vo.
 ——— ——— Munich. 1766-67.
 ——— ——— (Ed. Walch) fo. Nürnberg. 1778."

From this entry the first-named well-known work would appear to have been re-edited by Müller, and consequently many new names might be anticipated. In Sherborn's index one meets with such entries as "Cylinder P. L. S. Müller, Del. Nat. i. 1766, 129.—G."

Turris P. L. S. Müller, Del. Nat. i. 1766, 129.—G."

The latter entry recently attracted the attention of my friend, Mr. Chas. Hedley, who wrote for information since the book was not available to him.

I was deputed to investigate, and give my results herewith. Knorr published a series of paintings of shells with descriptions in vernacular. On account of their favourable reception a second series was issued, and then a third, to which he added a "Postface" apologizing for lack of systematic treatment because most "amateurs" followed their own system. A fourth series was called for, and then he co-ordinated the shells previously figured with Rumph's System and also with Linné's System, of which the tenth and twelfth editions were both quoted. Two more parts were published, and then the shells in these two systematized as before.

As noted by Sherborn, no new specific or generic names appear. The Mullerian work has nothing much to do with this. The title-page begins "Deliciæ Naturæ Selectæ . . . von G. W. Knorr fortgesetzt von Dessen Erben von Philipp Ludwig Statius Müller 'with French translation by M. V. de la Blaquiere.'" It is a work in two large folio volumes, published at Nürnberg in 1766-1767. The work covers every branch of the animal and mineral kingdom, and is not solely a conchological work as the well-known Knorrian work is. The text is in parallel columns in German and French, and only pp. 33-60 deal with shells, explaining plates B to B vi.

Pages 127-132 are devoted to a "Register" in German, a "Table" in French, while p. 129 covers the seven plates dealing with shells. Throughout the work no systematic treatment appears, and though Müller writes of genera, he was not using the word in our sense.

The explanations to the figures of shells on p. 129 are all in the vernacular, but sometimes a Latin equivalent is given and these were quoted by Sherborn as already cited.

The complete list of figures is forty-eight, and the following Latin equivalents are added: *Nautilus crassus Rumphii*, *Nautilus papyraceus*, *Harpago Rumphii*, *Pecten R.*, *Buccinum*, *Lagena R.*, *Rapa R.*, *Chama squamata R.*, *Mitra episcopalis R.*, *Voluta musicalis R.*, *Tellina violacea R.*, *Alata*, *Cylindus* (in the other column *Cylinder*) *maximus*, *Porcellana montosa R.*, *Turris babylonica R.*, *Avicula*, *Ostreum plicatum majus R.*, *Pinna*, *Fusus brevis*, *Tribulus R.*, *Voluta arenata R.*, *Patella*, *Buccinum tutonis R.*, *Cymbium R.*, *Cymbium*, *Buccinum ampullatum List. Ellis*, and *Vespertilio* and *Melicera R.*

It is obvious that Müller is simply quoting the Rumphian Latin name, and that none of these names has any validity in our modern nomenclatural usage.

Walch's edition is also different, though a reprint of the preceding. After Müller's name on the title-page appears: "von neuen übersehen, verbessert, und mit einer Vorrede begleitet von Johann E. J. Walch." It is all in German, and was published at Nürnberg in 1778. The text is rewritten with a full synonymy to previous workers, such as Aldrovandi, Rumph, Pallas, Linné, etc., but is no more systematic in the text than the previous one. The plates are the same and the "Register" is the same, but to each figure is added the Linnean name. No new names appear, and when the Linnean ones are seen alongside the Rumphian ones the latter were never considered at all.

A Dutch translation of Knorr's work was published at Amsterdam in 1770-5, and there is also apparently a Dutch translation of Müller's work as shown by the following entry:—

"Knorr (G. W.) and Müller (P. L. S.). *Deliciæ Naturæ Selectæ*, of Uitgelezen Kabinet van Natuurlyke Natur Zeldzaamheden. About 90 large coloured plates, large folio, calf. Dordrecht, 1771."

PENNANT'S BRITISH ZOOLOGY.

The fourth edition of this work contains many new species of mollusca, and as there may be trouble in connection with the quotations cited, I have drawn up this note.

In the Bibliography of the "Index Animalium", 1758-1800, Sherborn included—

"Pennant, T. Brit. Zool. Ed. 4. 4 vols. 8vo. Warrington, 1776 and 1777. [In vol. 4 P. uses binominals.]"

Upon referring to the copy in the British Museum (Natural History), which was an octavo as cited by Sherborn, I found my references did not agree with Sherborn's as given in the body of the work. I then found there was also a quarto edition, and, strangely enough, a copy of this had been examined by Sherborn in making up his index. The page quotations entirely disagree, and I made out a complete list of the new names from the Brit. Mus. 8vo edition, and have collated them with a quarto copy kindly lent me by my friend Mr. A. E. Salisbury.

In the Catalogue of the Library of the British Museum (Natural History) Mr. B. B. Woodward has carefully noted the two editions, and in his synonymy of British Non-Marine Mollusca he tells me he is carefully noting each reference. As the Library Catalogue is not in the hands of every conchologist, I give here the pagination of the principal entries.

In the Journal of Conchology, vol. xiv, April, 1913, E. A. Smith gave an account of the Pennant Collection of British Shells (pp. 38-41), noting the types still extant, and now preserved in the British Museum (Natural History).

With regard to this fourth edition the frontispiece of vol. i is headed "British Zoology. Class I Quadrupeds. London. Printed for Benj. White. MDCCLXXVI," while the title-page states: "British Zoology. | Vol. i. | Class I. Quadrupeds. | II. Birds. | Fourth Edition. | Warrington: | Printed by William Eyres, | for | Benjamin White, at Horace's Head, Fleet-Street, London. | MDCCLXXVI."

The Preface, covering eighteen pages, is dated Downing, 1st March, 1776. The titles of vols. ii and iii agree with different classes indicated and without the words Fourth Edition.

Salisbury's copy is interesting because in the first volume on the back of p. xxix is a list of "Errata", and then the words below: "The Book-binder is requested to place the Plates according to the numbers affixed to the figures which refer to the descriptions," and then there is a duplicate p. xxix with, on the back, a longer list of "Errata" and "The Book-binder . . ." omitted. Then follows "Plates to British Zoology. Vol. I Quarto", and positions given. At the end of vol. iii, on the back of p. 371, is a list of "Errata" and the notice: "In May next will be published, British Zoology, Class V, By Thomas Pennant Esq; containing about Ninety

Elegant Plates of the Shell and Crustaceous Animals of Great Britain, with descriptions. *N.B.* This work will be published both in Quarto and Octavo," and another p. xxix and errata for the first volume. There is no title-page like those of the preceding volumes, but instead a page like the frontispieces of the former, but differing in that it states vol. iv, and the date is "London, Printed for Benj. White, MDCCLXXVII," and this is followed by a dedication "To the Dutchess Dowager of Portland, this work is dedicated, as a grateful acknowledgement of the many favors conferred by Her Grace on her most obliged, and most obedient humble servant, Thomas Pennant. Downing, March 1, 1777." There is no list of plates, but at the end of the index, p. 136, is added: "N.B. The Binders are requested to place all the Plates at the End."

The names I have noted read:—

			Qto ed.	8vo ed.
			page	page
<i>Chiton crinitus.</i>	Tab. xxxvi, f. 1	Aberdeen.	60	71
<i>marginatus.</i>	2.	Scarborough.	60	71
<i>lavis.</i>	3.	West Ross-shire.	61	72
<i>Pholas parvus.</i>	xl, f. 13.	Common.	65	77
<i>Mya dubia.</i>	xliv.	Weymouth. P.C.	69	82
<i>Solen pellucidus.</i>	xlvi, f. 23.	Anglesea. B.M.	71	84
<i>Tellina fragilis L.</i>	Not figured.	No loc.	73	86
<i>depressa.</i>	Tab. xlvii, f. 27.	—	73	87
<i>crassa.</i>	xlvi, f. 28.	— B.M.	73	87
<i>rugosa.</i>	lvii, f. 34.	Weymouth.	75	88
<i>cornubiensis.</i>	Based on Borlase, tab. xxviii, f. 23.		75	89
<i>Venus rugosa.</i>	Tab. lvi, f. 50.		81	95
<i>undata.</i>	lv, f. 51.		81	95
<i>sinuosa.</i>	lv, f. 51A.	Weymouth. P.C.	81	95
<i>rhomboides.</i>	lv, f.	B.M.	83	97
<i>ovata.</i>	lvi, f. 56.	B.M.	83	97
<i>Pecten subrufus.</i>	lx, f. 63.	B.M.	86	100
<i>obsoletus.</i>	lxi, f. 66.	B.M.	87	102
<i>lavis.</i>	Not figured.	Anglesea.	87	102
<i>Mytilus incurvatus.</i>	Tab. lxiv, f. 74.	Anglesea.	95	111
<i>pellucidus.</i>	lxiii, f. 75.	Anglesea. B.M.	95	112
<i>umbilicatus.</i>	lxv, f. 76.	Anglesea. B.M.	95	112
<i>curtus.</i>	lxiv, f. 76A.	Weymouth. P.C.	96	112
<i>Pinna fragilis.</i>	lix, f. 80.	Weymouth. P.C.	97	114
<i>ingens.</i>	Not figured.	Farther Hebrides.	98	115
<i>Bulla cylindracea.</i>	Tab. lxx, f. 85.	B.M.	100	117
<i>patula.</i>	lxx, f. 85A.	Weymouth. P.C.	101	117
<i>Voluta jonensis.</i>	lxxi, f. 87.	I. of Jona.	101	117
<i>Buccinum striatum.</i>	lxxiv, f. 91.		105	121
<i>minutum.</i>	lxxix.		105	122
<i>Murex carinatus.</i>	lxxvii, f. 96.	P.C.	107	123
<i>costatus.</i>	lxxix.	Anglesea.	108	123
<i>acuminatus.</i>	lxxix.		108	123
<i>Trochus exasperatus.</i>			109	126
<i>terrestris.</i>	lxxx, f. 108.	Cumberland.	111	127
<i>Turbo tumidus.</i>	lxxxii, f. 110.	Cambridgeshire.	111	128
<i>tuberculata.</i>	lxxxii, f. 111.	Coast of Northum-berland. B.M.	112	128

			Qto ed.	8vo ed.
			page	page
<i>Turbo albus.</i>	Tab. lxxix.		113	130
<i>lævis.</i>	lxxix.	Anglesea.	113	130
<i>fasciatus.</i>	lxxii, f. 19.	Anglesea. B.M.	114	131
<i>ulvæ.</i>	lxxxvi, f. 120.	Flintshire. B.M.	114	132
<i>Helix nana.</i>	lxxxiii, f. 125.	B.M.	116	133
<i>rufescens.</i>	lxxxv, f. 127.	B.M.	116	134
<i>hortensis.</i>	lxxxiv, f. 129.	B.M.	118	136
<i>pellucida.</i>		Shropshire.	120	138
<i>lævigatum ? L.</i>	lxxxvi, f. 139.	Inhabits ponds.	121	140
<i>Patella depressa.</i>	lxxxix, f. 146.	B.M.	124	142
<i>intorta.</i>	xc, f. 148.	Anglesea.	125	143
<i>lævis.</i>	xc, f. 151.	Banff.	125	144

The letters "P.C." I have attached to those Pennant definitely stated were in the Portland Cabinet, while the letters "B.M." have been placed against those which Smith definitely recognized as the figured specimens, now in the British Museum. As Smith observed, probably many of the missing shells were figured from the cabinets of other collectors, of which one instance is noted, i.e. of *Pinna ingens*, which was in the collection of Dr. Walker, at Moffat. As recorded in these *Proceedings* (Vol. XI, 1915, p. 333), Laskey wrote concerning *Voluta jonensis*: "it is well known Pennant figured his shell from this collection."

An interesting case, comparable with the now historical one of *Helix rufescens* Pennant (Ann. Mag. Nat. Hist., Ser. VIII, vol. xi, pp. 263-4, 1913), is that of "*Helix lævigatum ?*" Pennant refers to "Lin. Syst. 1250, No. 709." Linné's *Helix lævigata* was described from unknown habit, and no figure was cited, and has been rejected as indeterminate. In the Conchological Society's List of British Marine Mollusca, 2nd ed., 1902, No. 391, Pennant's name is used as the basis of *Velutina lævigata*, an extraordinary conclusion. If Linné's name were unacceptable, Pennant's name was inutile, but, moreover, Pennant's data reads "Inhabits ponds", and the figure seems to be that of a *Lymnæa*, i.e. *pereger*. Further, before Pennant's usage, O. F. Müller in the Zool. Dan. Prodr., 1776, p. 242, had provided *Bulla velutina* based on a Danish shell for the Velutina, and, consequently, the name would be *Velutina velutina* (O. F. Müller, 1776), and this is in accord with the usage of the best continental workers.

It may be as well noted here that "A New Edition" was published in 1812 under the signature of "The Editor". The identity of the editor has been guessed at, so that it is important to record that the proofs of this new edition are preserved in the British Museum (Natural History) Library, and that the editor was Thos. Pennant's son, David Pennant. This edition is also in four volumes, published in London, and I have only seen it in octavo.

The Mollusca occur in the fourth volume, and the whole of Montagu's discoveries are included, as well as those of J. Adams and other writers, but I have not noticed anything of novelty.

The plates appear to be the same re-drawn with the vernacular names and references inscribed thereon.

WODARCH AND MAWE.

As an episode in the study of conchology the works of these two writers may be cited.

In 1820 appeared: "An Introduction to The Study of Conchology, describing The Orders, Genera, and Species of Shells; their most prominent characteristics, and usual mode of classification. With observations on the nature and properties of the animals; and directions for collecting, preserving, and cleaning shells. By Charles Wodarch. London: Published by Longman, Hurst, Rees, Orme, and Browne, Paternoster Row; and by J. Mawe, No. 149, Strand. 1820."

My copy is in the original boards, and on the back of the cover is labelled: "Introduction to Conchology. Coloured Plates, Price 12s."

It is a small octavo, the preface, contents, introduction, and classification occupying twenty-four pages, the text proper 120 pages, and there are four coloured plates showing sixty-three figures.

There is a couple of pages of advertisement sewn in at the front from which I note: "Just published, By J. Mawe 149, Strand. A Treatise on Shells, with plates, price 7s., written strictly after the system of Linnæus, describing the characters of the orders, genera, and species; with an extensive catalogue of names under each genus: to which is added, the best mode of cleaning and preserving shells." This work seems at present unavailable.

Then appeared "Wodarch's Introduction . . . Second Edition, Revised and considerably Enlarged by J. Mawe . . . 1822", with an "Advertisement to the Second Edition. The alterations in this edition, consist in the introduction of some species which were unknown at the time of Linnæus; the division of the genera into classes, whereby the different characters of the genus may be more readily recognised: the addition of the English names to many of the species; a comprehensive nomenclature of the terms used in Conchology; and lastly, by the embellishment of three new plates; the Frontispiece showing four genera of spiral shells, and the two others exhibiting the hinges of Bivalves, and displaying the peculiarities of some particular shells. J. Mawe. 149 Strand. Feb. 1822."

The contents and glossary of terms used in conchology take up fifteen pages; the introduction, classification, and text proper extending to 152 pages. My copy in original boards is lettered on the back: "Elementary Treatise on Conchology with Plates, colored."

The frontispiece has seven coloured figures: *Buccinum dimidiatum*, *B. subulatum*, *Strombus fusus*, *Murex colus nicobaricus*, *M. colus*,

Turbo imbricatus, and *T. exoletus* or *cinctus*. Of the plates at the end the first has been re-drawn, the second to fourth are the same as in the first edition but differ in the coloration, whilst the fifth and sixth are new.

Then there is a "Third Edition, with considerable Additions and Alterations", dated on the title-page 1825.

The contents and glossary run to only thirteen pages; there is no advertisement; the classification appears as chapter iii of the introduction, and this and the text proper occupies 140 pages only. The frontispiece is the same as in the preceding, and so are the other six plates, although the first plate has been modified and the coloring of many shells differs appreciably.

In 1827 was published "A New Edition, with considerable Additions and Alterations", the only alteration I have noted being a new frontispiece with five figures, *Voluta lyrica*, *Voluta zebra* (two varieties), *Conus zebra*, and *Conus coccineus*, the text and other plates being the same.

I also have the "Fourth Edition, with considerable Additions and Alterations", dated 1832, which has an "Advertisement to the Fourth Edition". This, with the title-page, blank pages, etc., and two pages of contents, occupies pp. i-xii. Then the glossary, introduction, and text proper are continuously paged from 1-149, and the six plates at the end are the same as in the preceding edition. There is an entirely new frontispiece, showing three figures only, of *Murex foliatus*, *Murex regius*, and *Murex radix*. These figures are very fine and appear to be the work of a Sowerby, but are not signed, but the plate is lettered: "Published by J. Tennant, late S. Mawe, 149, Strand."

There also seems to be a fourth edition, dated 1831, which may be the same as this or may be different.

LAMARCK'S "HIST. ANIM. S. VERTÈB."

The above abbreviation is about the best known in malacological literature, so that a note on the "Troisième Edition", hitherto unrecorded, seems of sufficient importance for publication.

The first and second editions constitute the basis of recent conchological work and are well known, the first in seven volumes dating from 1815 to 1822, the second by Deshayes and Milne-Edwards dates from 1835 to 1845. Both are published in Paris and are in small octavo.

I have acquired a "Troisième Edition, revue et augmentée de notes présentant les faits nouveaux dont la science s'est enrichie jusqu'à ce jour; par MM. G. P. Deshayes et H. Milne Edwards", published at "Bruxelles. Meline, Cans et Compagnie". It is in three volumes, large octavo in double column, and bears dates 1837, 1839, 1839. The authorship suggests this may be simply a reprint of the well-known second edition, but the dates appeared

peculiar. I have not yet collated it page by page, but I think that it must have been published in livraisons, and that these appeared after the Paris print, probably without any addition. The date 1837 on the title-page of the first volume may be the date of the first livraison, as the date 1839 on the title-page of the third is certainly not the date of the completion of that volume. Towards the end Reeve's "*Conchologica Systematica*" and his "*Conchologica Iconica*" are quoted, the former being first published in 1842, the latter in 1843. Apparently the project was not a success, since this third volume completes the work, a general index to the three volumes being given, yet the whole of the Mollusca have not been treated of. Upon examination I find that these three volumes may coincide with the nine volumes of the second edition, the ninth volume being published in November, 1843, and its end agreeing with the completion of the third. The reconciliation is more difficult than it appears at first because the volumes of the second edition appeared somewhat erratically. The dates of publication of the first two editions appear in Sherborn's Bibliography to the second part of his *Index Animalium*, but I here reproduce the dates of acknowledgment from the *Bibl. France* :—

	Ackn'd B.F., 1st ed.	2nd ed.	3rd ed.
Vol. I.	June 3, 1815.	March 7, 1835	Vol. I, title-page, 1837.
II.	April 13, 1816.	Aug. 15, 1835	
III.	Sept. 7, 1816.	Feb. 8, 1840	
IV.	April 5, 1817.	Jan. 2, 1836	Vol. II, title-page, 1837.
V.	July 25, 1818.	Dec. 30, 1837	
VI. {Pt. I.	July 31, 1819. }	March 7, 1835	
{Pt. II.	May 4, 1822. }		Vol. III, title-page, 1839.
VII.	Sept. 21, 1822.	Jan. 23, 1836	
VIII.		June 23, 1838	
IX.		Nov. 18, 1843	
X.		Nov. 9, 1844.	
XI.		Jan. 3, 1845.	

The inclusion of the matter for the third volume of the second edition, which did not appear until 1840 in the first volume of the third edition, which bears the date 1837, is just as puzzling as the date of the third volume, 1839, with contents dating to 1843.

"LESSONS ON SHELLS."

A little book was published with the title "*Lessons on Shells*, as given to children between the ages of eight and ten, in a Pestalozzian School, at Cheam, Surrey", by the author of "*Lessons on Objects*, illustrated by Ten Plates, drawn from Nature", in 1832. The Preface is signed by "C. Mayo, Cheam, June 15, 1832". Among the list of books consulted appears "*The Conchologist's Companion*". The lessons are really good and the children must have been precocious who digested the matter provided, if of the ages stated. The plates are quite well drawn, and on this account are quoted by Deshayes in Lamarck's *Histoire*.— On discovering this I prepared this note as

being of interest. I also can add that I have acquired a "Second Edition", published in 1838, which has a little more technical matter added, the intelligence of the children having apparently been thought capable of comprehending still more difficult items. "The Conchologist's Companion," by Mary Roberts, was published in 1834, with a Baxter type frontispiece, but I have not hitherto heard of an edition in 1832.

DA COSTA.

In these *Proceedings*, Vol. XI, p. 307, 1915, I published a note entitled "On Humphrey's Conchology", wherein I gave some details of a scrap of a "Conchology" which had been credited to "Humphrey" or to "Da Costa" or to both, and concluded that I leaned to the authorship by Da Costa.

In the *Scientific Monthly* for January, 1922, pp. 67-82, our member Professor J. D. A. Cockerell has published a delightful account of "Dru Drury, an Eighteenth Century Entomologist", reprinting correspondence of great interest. Since the article is not likely to be seen by many malacologists, I have ventured to transcribe a note regarding Da Costa which seems to explain some of the mystery regarding the above publication. It is unfortunate that this information is of a scandalous nature, but I think its importance will suffice for apology.

Writing to Dr. Pallas on 12th November, 1767, Drury stated: "Another piece of news I must inform you of is M. Da Costa is going to publish plates of nondescript animals--shells, insects, etc., in periodical numbers, five plates, with their descriptions being a complete number." Later, again writing to Dr. Pallas under date 28th February, 1768, Drury commented: "I sincerely lament with you ye fall of ye Aurelian Society, there wanted but two or three good members to have made it become respectable, but Da Costa's temper and principle was sufficient to overturn a Kingdom. I imagine ere this you have heard of his *Fate*. If not, I will tell you. He is no longer Librarian to ye Royal Society. He is dismissed from thence with ignominy and disgrace. (Here Drury gives details.) Hence ye periodical work he intended to publish, which I mentioned in my last, is entirely stopt; the circumstance I must own I am very sorry for on account of Natural History in general. But if it can not be promoted by men of better principles than him it is better perhaps for it to lye dormant."

However, on 14th January, 1770, when writing to Dr. Pallas, Drury added: "I mentioned in one of my letter's Da Costa's affair. He is now confined in ye King's Bench Prison at ye instance of Royal Society, and has been there near a year, from whence, I imagine, he will never return. He is at present engaged in writing a history of shells which he hopes will make its appearance this summer."

Apparently this "history of shells" refers to the "Numbers of a Conchology" published anonymously, which I was inclined to credit to Da Costa. From the fact that Elements of Conchology was issued in 1776, and the British Conchology in 1778, both under Da Costa's name, it is possible that Da Costa did get his release from the King's Bench Prison, though I cannot, at present, assert that as a fact.

RENIER.

Although some of Renier's species appear in the British List, no malacologist in the last fifty years has confirmed the data, and this is not surprising since the only known copies appear to be in the Library of the University of Padua, Italy. These were loaned to Sherborn for use in the preparation of the second part of his Index Animalium, and under his supervision photographic copies were made.

These copies have been used by me at my leisure in the preparation of the following notes. Three items are included: the first being entitled "Tavola alfabetica delle Conchiglie Adriatiche, nominate dietro il Sistema di Linneo, edizione di Gmelin". The title-page and flyleaf are missing or blank leaves, the Tavola first page being followed by p. vi and the pages numbered to xiii. The Tavola is a list of specific names numbered consecutively as to species and varieties, species, and new species, the totals reading 588, 444, and 95 respectively. The majority of the new names are *nomina nuda*, footnotes identifying these new species sometimes citing recognizable figures, but more often stating "Non descritto, nè figurato", and in many cases "Prossimo al" or "Assomiglia al", which I treat as *nomina nuda*. Since some of the latter have been utilized as valid names, I have collated the ninety-five names claimed as new by Renier, placing together the *nomina nuda* and citing separately the valid names. The *nomina nuda* are *Chiton subdivisus*, *Mya punctulata*, *Solen candidus*, *Solen conversus*, *Tellina aperta*, *Tellina muricata*, *Tellina orbiculata*, *Tellina senata*, *Cardium clodiense*, *Cardium fornicatum*, *Cardium planatum*, *Mastra triangula*, *Venus bottarii*, *Ostrea foliacea*, *Ostrea nivea*, *Ostrea elongata*, *Mytilus dentatus*, *Mytilus denticulatus*, *Mytilus zonarius*, *Conus epaticus*, *Voluta buccinata*, *Voluta conoidea*, *Voluta minima*, *Voluta terna*, *Buccinum granulatum*, *Buccinum immaculatum*, *Buccinum trochiforme*, *Murex costulatus*, *Murex maculatus*, *Murex politus*, *Murex roseus*, *Murex vulpeculus*, *Trochus chienichinus*, *Trochus hyacinthinus*, *Trochus spiralis*, *Trochus triqueter*, *Turbo amatistinus*, *Turbo craticulatus*, *Turbo fasciatus*, *Turbo lavis*, *Helix littoralis*, *Helix strigilata*, *Helix triqueter*, *Patella fissa*, *Patella lavissima*, *Patella membranacea*, *Patella squamulata*, *Dentalium lineare*, *Serpula colon*, *Serpula tetragona*, *Sabella calamus*, *Sabella gelatinosa*, and *Sabella membranacea*.

The valid names, as to introduction, appear to be :—

<i>Lepas perforata</i>	based on	Ginnani, p. 42, T. xxx, f. 178.
<i>Tellina subtilissima</i>		"Ela Tellina angulata di Olivi."
<i>Arca gualtieri</i>		Gualtieri, T. 87, f. G.
<i>Conus errosus</i>		Gualt., T. 825, f. G.
<i>fortis</i>		Described.
<i>listeri</i>		Lister, Tav. 765, f. 14.
<i>Bulla haliotoidea</i>		<i>Bulla spelta</i> Olivi (not Gmelin).
<i>Buccinum costulatum</i>		Gualt., T. 43, f. P.
<i>craticulatum</i>		List., T. 967, f. 22.
<i>denticulatum</i>		List., T. 962, f. 15a et Kirc. 3, f. 35.
<i>sudarovich</i>		List., T. 964, f. 49.
<i>Murex bicolor</i>		Gualt., T. 55, f. c. Ottimissime.
<i>carinatus</i>		List., T. 927, f. 14a.
<i>elabiatus</i>		List., T. 924, f. 16b; T. 939, f. 34a.
		Gualt., T. 56, f. L.
<i>exasperatus</i>		List., T. 836, f. 62.
		List., T. 1024, f. 90.
<i>granulosus</i>		Gualt., T. 56, f. F.
<i>oblongus</i>		Described.
		Gualt., T. 52, f. H. Ottima.
		List., T. 926, f. 20.
		Argenv., T. 33, f. A. 7. Abbastanza buone.
<i>reticulatus</i>		List., T. 925, f. 17.
		Gualt., T. 52, f. H.
<i>varicosus</i>		List., T. 1019, f. 82.
<i>Trochus aglietti</i>		Gualt., T. 63, f. 1.
<i>areolatus</i>		List., T. 618, f. 4; T. 648, f. 43.
<i>attenuatus</i>		List., T. 648, f. 42.
<i>strigilatus</i>		Gualt., T. 61, f. M.
<i>turbinatus</i>		Gualt., T. 62, f. I.
<i>virescens</i>		Gualt., T. 61, f. I.
<i>Turbo tessellatus</i>		Gualt., T. 62, f. G.
<i>unidentatus</i>		Gualt., T. 4, f. R.
<i>Helix aurita</i>		List., T. 20, f. 16.
<i>conica</i>		Gualt., T. 4, f. I.
<i>conoidea</i>		List., T. 61, f. 58.
<i>costulata</i>		List., T. 116, f. 11.
<i>dimidiata</i>		Gualt., T. 6, f. I, F.
<i>fabria</i>		Born vignette, p. 364, f. C.
<i>incurva</i>		Ginn., Tom. ii, T. 1, f. 5. Buona.
		Argenv., T. 61, f. 10. Ottima.
		Combina bene arco con la figura di
		Gualt., T. 5, f. 4, seconda.
<i>lineata</i>		List., T. 85, f. 85.
<i>olivi</i>		È l' <i>Helix Petholata</i> di Olivi.
<i>terebra</i>		List., T. 110, f. 4. Argenv., T. 65, f. 4, 5.
<i>turgidata</i>		List., T. 139, f. 44, 45.
<i>vianelli</i>		List., T. 78, f. 79, 78.
<i>Nerita fasciata</i>		List., T. 561, f. 8.
<i>Dentalium incurvum</i>		Described.

Some of the preceding names are invalid, being preoccupied, but their usage in every case must be worked out from the data given. Thus, in the British List appears *Eulima incurva* (Renier), on whose authority I know not. Renier's *Helix incurva* refers to three figures, which are those of species of *Lymnaea*, and in his later

Tavola there is included a *Lymnaea incurva* (Renier), which fixes it. How the name ever became attached to a species of *Eulima*, a shell so different, I do not at present understand. Some names otherwise in use are *nomina nuda* in Renier.

The second item is headed "Prospetto della Classe der Vermi nominati e ordinati secondo il Sistema di Bosc", and is consecutively paged with the preceding, pp. xv-xxvii, p. xiv being blank. B. B. Woodward in the Cat. Books Brit. Mus. (Nat. Hist.) gives a note: "These two were issued together in 1804, and are the sole parts extant of a projected 'Prodromo' (Meneghini's introduction to Renier's 'Osservazioni postume', etc., *q.v. infra*). According to Bonola ('Della Bibliog. Malacol. Italiana dissert. inaug.', p. 39), the former had been issued previously in 1788." Bonola's statement is quite wrong, because this Tavola is founded on Gmelin, whose work was not published until 1791, moreover Olivi is quoted throughout, and Olivi's work appeared in 1792.

In this second item the Mollusca (*i.e.* shell-less molluscs) include the new genera *Discoïdes* and *Aglaia*, the latter of which is in usage, but the former does not appear to be described sufficiently for exact recognition at this place.

Among the Vermes Renier included *Serpula*, *Spirorbis*, a new genus *Scolixedion* and *Dentalium*.

The third item consists of eight tables with the title-page missing, but B. B. Woodward quotes it from Engelmann as "Tavola per servire alla classificazione e conoscenza degli Animali", 1807. The first table is headed "Regno Animale. Classificazioni Generali di Linneo, di Cuvier, di Lamarck, e di Virey". The second is entitled "Regno Animale. Classificazione generale secondo i caratteri zoometrici". This is apparently Renier's own scheme, and eleven classes are diagnosed, Politrini, Polipi, Radiale, Vermi, Molluschi, Crostacer, Insetti, Pesci, Rettili, Uccelli, and Mammali.

The prior six tables deal with the first five, Molluschi following in two tables, *Dentalium* remaining with *Serpula* and *Spirorbis* among the Vermi.

The two tables covering the Molluschi are remarkable in that a scheme like that of Poli is utilized, a separate generic name being used for the animal and shell. While Poli named the animal and added *-derma* for the generic name of the shell, Renier has preserved the name given previously for the shell, and has named the animal separately by adding *-genus* to the shell, thus he wrote:—

"Nome generico dei Molluschi	Nome generico delle Conchiglie
<i>Teredigenus</i>	<i>Teredo</i> ."

I conclude such nomination is unacceptable in systematic work based on a binomial or binary scheme. All the names ending in *-genus* are new, but in addition there are a few entirely new names such as *Hirundigenus* for *Avicula*, *Arenarigenus* vel *Scolixedion* for

Arenaria and *Marginelligenus*, *Marginella*, *Cystigenus*, *Cystia*, *Imisigenus*, *Imisia*, *Planospirigenus*, *Planospira*, quoting the last as of Fauj. He also included Lamarck's *Marginelligenus*, *Marginella*, but his own name was given to a bivalve placed between *Planocuna* and *Lima* and followed by *Pedum*, *Cystia*, and *Imisia*. Renier also includes his Mollusca, previously placed under Vermes, in this class Molluschi.

The reference of many names to Renier appears to be based on essays by Nardo, but of course the names can only be attributed to the later introduction, and cannot be carried back to the date of Renier, when they are not recognizable by the data given by Renier himself. Thus *Tellina serrata* Renier appears as a doubtful constituent of the British fauna, but *Tellina serrata* Renier is a *nomen nudum*; a second instance is *Solen candidus* Renier, often quoted in connection with *Solecurtus scopula*, Turton, but now rejected, which also proves to be a *nomen nudum* in Renier.

REEVE'S "ELEMENTS OF CONCHOLOGY".

In these *Proceedings*, Vol. XII, 1916, p. 44, Reynell gave some notes concerning the first publication of this work. He pointed out that ten parts came out, then ten years elapsed and then six more parts completed the work. He gave the title-page and contents of the parts and dates of publication as then known. I have now procured the original ten parts as issued complete save the front wrapper of part ix. The advertisements on the wrappers prove to contain much information of value. Thus on the wrapper of No. 1 is published: "To be completed in Twelve numbers. No. 1 on the 1st of March," and includes the title-page "Initiamenta Conchologica. 1846" and the preface dated Feb. 20, 1846. The wrapper of part iv bears different advertisements "in twelve monthly parts" "three of which are now published." On the wrapper of part vi the same appears, but an inset states "a moiety is before the public". Advertisements of the "Conchologica Iconica" provide better data, as it is stated that this was "Published monthly on 1st day of every month, the first part on Jan. 1, 1843", and this appears to be correct. From criticism of these and other announcements, it appears that the "Elements" soon suffered for I reckon out the dates of publication approximately as follows: Pt. i, 1st March, 1846; Pt. ii, 1st April, 1846; Pt. iii, 1st May, 1846; Pt. iv, June, 1846; Pt. v, July, 1846; Pt. vi, December, 1846; Pt. vii, May, 1847; Pt. viii, January, 1848; Pt. ix, August, 1848; and Pt. x, January, 1849.

It is fortunate that the names are practically all *nomina nuda*, the few requiring attention being those of the figured specimens. No species credited to Reeve himself appears until Part v, when *Cyllene grayi*, p. 65, pl. iii, f. 12, and *Phos cumingii*, p. 67, pl. iii, f. 16, are included. In Part vi *Oriscia dennisoni*, p. 84, pl. vii, f. 35, is figured.

Part viii includes *Fasciolaria persica*, p. 119, pl. xi, f. 45; *Turbinella imperialis*, p. 121, pl. x, f. 48; *Fastigiella* (n.g.) *carinata*, p. 122, pl. x, f. 46; *Cerithium nobile*, p. 125, pl. xii, f. 59; and *Triphoris grandis*, p. 127, pl. xii, f. 55.

Part ix includes: *Stylifer pyramidalis*, p. 129, pl. xii, f. 56; *Turritella picta*, p. 131, pl. xi, f. 51; *Phasianella venusta*, p. 132, pl. xii, f. 58; *Elenchus circulatus*, p. 113, pl. xii, f. 57; *Bankivia purpurascens*, p. 133, pl. xii, f. 61; *Littorina pulchra*, p. 135, pl. xii, f. 60; *Margarita pulchella*, p. 136, pl. xiv, f. 69, 70; *Trochus modestus*, p. 139, pl. xiii, f. 67; *Morulus*, p. 140; *M. cidaris*, p. 141, pl. xiii, f. 63; and *Solarium maculatum*, p. 144, pl. xiii, f. 62.

Part x includes *Monopterygia cinerea*, p. 148, pl. xv, f. 76; *Rissoa cumingii*, p. 151, pl. xv, f. 75; and *Tornatella coccinata*, p. 154, pl. xiv, f. 72.

Probably the most interesting item is Reeve's introduction of *Bankivia* as of Deshayes, figured in the *Traité Élem. de Conch.*, pl. lxx, f. 8, years previously (plate dated 1839), but never named. It is usually credited to Krauss, who published it as of Beck in the same year as Reeve, but undoubtedly earlier. S. P. Woodward (Man. Moll., p. 144) in 1851 attributed *Bankivia* to Menke.

WOOD'S "GENERAL CONCHOLOGY".

This is a well-known work, dated 1815, but it does not appear generally known that it was issued in parts. I have before me a front cover, 4 pp. advertisement dated April, 1814, 16 pp. letterpress, and five coloured plates. The wrapper bears the wording: "No. 1. | Price Five Shillings. | General | Conchology; | or, | a description of | Shells, | arranged according to the Linnæan System, | and | Illustrated with Plates, accurately Drawn and Coloured from Nature, | By William Wood, F.R.S. and L.S., etc. | London: | Published by John Booth, Duke Street, | Portland Place. | A few Copies are printed upon a larger Paper, Price 7s. per Number. | Printed by B. R. Howlett, 10, Frith Street, Soho. |" The text deals with part of the genus *Chiton* only, the first three plates figuring Chitons, the last two *Lepas*. Apparently this part was issued in April or May, 1814.

Further information as to the issue of this work is now required, since new species occur throughout.

O. G. COSTA: "OSS. ZOOL. IS. PANTELLERIA."

Some years ago I endeavoured to trace this reference without success, no copy being available at the British Museum (Natural History), and Agassiz referred it to "Ann. Sci. Nat.," 1830, vol. xix. I could not find any mention of such a paper as Costa's in any "Ann. Sci. Nat." available. Mr. Tomlin has now shown me a copy of the tract and allowed me to make the following notes, for which I thank him.

The title-page bears the wording: " Osservazioni Zoologiche | intorno | ai Testacei | dell'Isola di Pantelleria. | Lettera | del dottor Oronzio-Gabriele Costa | al chiarissimo | signor D. Giovanni Gussone | Botanico de ' Giardini di Casa e Siti Reali di S.M. il Re | delle Due Sicilie, ec. ec. | Napoli, | Dallo Tipografia della Minerva | 1829. | "

There is no suggestion as to any other publication than as a separate tract. It consists of twelve pages, the first eight covering the title-page and introduction, the pages 8-12 dealing with a " Catalogo de' Testacei dell' I. di Pantalarea ". This Catalogue contains some new species, and I have collated the following: p. 8, *Lucina decussata*; p. 10, *Emarginula elongata*, *Emarginula solidula*, *Ancylus*? *gussonii*; p. 11, *Littorina carulea* = *basterotii* Payr. = *carulescens* Lam., and *Sigaretus*? *vitreus*; and on p. 12 is a new species of *Pleurotoma* described, but unnamed specifically.

The variation in the spelling of Pantelleria is remarkable, for, in addition to the two quoted, two or three more variants occur.

NOTE ON THE *TROCHUS FLAVIDUS*, *T. PALLIDULUS*, AND *T. FLAMMIGER* OF DUNKER.

By J. R. LE B. TOMLIN, F.E.S.

Read 9th June, 1922.

THESE three species were described by Dunker in the Proceedings of the Zoological Society for 1856, pp. 354-5, from unique specimens in the Cuming Collection, all of unknown locality.

All three types belong to *Calliostoma* and have a familiar Mediterranean facies, and a careful examination leaves room for but little doubt that they have been " doctored ", or, at any rate, very drastically cleaned.

Trochus flavidus, which Dunker compares with *dubius*, Phil., is inseparable from this latter. Similarly, *T. pallidulus* is the same as *laugieri*, Payr.—the species with which Dunker compares it. *T. flammiger* is compared with *pallidulus*; it is merely another unnecessary synonym of *laugieri*.
