

24. Vis buccinée. *Terebra vittata*.

T. testâ conico-acutâ, subturrâ, albido-corned vel cinereo-cornu-lescente; anfractibus convexis, striis impressis tenuibus distantibus cinctis, supernè bicingulatis; cingulis plicato-granulosis; fauce fulvo-fuscescente.

Buccinum vittatum. Lin. Gmel. p. 3506. n°. 134.

Lister, Conch. t. 977. f. 34.

Petiv. Gaz. t. 98. f. 15.

Klein, Ostr. t. 7. f. 121.

Knorr, Vergn. 6. t. 36. f. 4.

Favanne, Conch. pl. 40. fig. C 2.

Schroëtter, Einl. in Conch. 1. t. 2. f. 7. icon optima.

Martini, Conch. 4. t. 155. f. 1461. 1462.

Terebra vittata. Encyclop. pl. 402. f. 4. a. b.

Habite l'Océan indien. Mon cab. Espèce en quelque sorte moyenne entre les buccins et les vis; néanmoins la longueur de la spire, comparée à celle de l'ouverture, décide son genre. Longueur totale, 2 pouces une ligne.

LAH 1822 p 291

vittatum. 134. B. testa substriata: sutura anfractuum duplici crenulata.

Adansf. Seneg. 1. t. 4. f. 2. Rafel.

List. Conch. t. 977. f. 34.

Klein ostrac. t. 7. f. 121.

Knorr Vergn. 6. t. 36. f. 4.

Martin. Conch. 4. t. 155. f. 1461. 1463.

Schroet. inn. Bau Conch. t. 3. f. 8.

Einl. in Conch. 1. p. 352. t. 2. f. 7.

β) Adansf. Seneg. 1. t. 4. f. 1. Miran.

List. Conch. t. 977. f. 33.

Martin. Conch. 4. t. 155. f. 1468. 1469. et t. 157. f. 1491.

γ) Martin. Conch. 4. t. 155. f. 1470.

δ) Knorr Vergn. 5. t. 22. f. 5.

Martin. Conch. 4. t. 155. f. 1471.

Habitat in mari Africam et Indiam alluente, testa ultra 2 pollices longa, nunc ex caerulefcente cinerea: cingulis albis,

nunc alba: anfractibus extremis rubellis, cinereis aut caerulefcentibus, ovato-turrata, striis transversis remotis; apertura ampla: margine nitido albo. Gmel 91 p 350

EXCLUDENDÆ.

T. VITTATA, Lamarck, Encyclop. pl. 402, f. 4, a. b. HND 446 p 116

BUCCINUM VITTATUM.

Linæ. S. N. Sp. 483.

Germ. Die gekerbte Nadel.

Testa ventricoso-turrata, transversim striata, sutura anfractuum duplicato-crenulata.

LISTER Hist. Conch. tab. 977. f. 34.

KLEIN Meth. ostrac. tab. 7. f. 121.

MARTINI Conch. Kab. IV. tab. 155. f. 1461.

Testa ovato-turrata; Anfractus striis transversis incis, parallelis, ad futuram superiorem vero serie duplici crenularum cincti; Apertura ovata subtus effusa; Labrum integrum, solidum; Labium replicatum, adnatum. Color lividus.

Long. 1. poll. 9. lin. lat. 8. lin.

Patria ignota.

BORN 1778 p 264

1208 | 33 E Vittatum. Die Kopfnadel. Gmel. Buccinum vittatum sp 134. 3 St

RSD 1798 p 94

vittatum. 483. B. testa turrata substriata, sutura anfractuum duplici crenulata.

Klein. ostr. t. 7. f. 121.

Habitat - - - F. Zoega.

Testa ex ovato turrata, albida, remote transversaliter striata. Sutura duplicata, vix triplicata, articulato crenata, anfractus distinguens. LINNE 1767 p 116

VITTATA (1)
BOSC 1701 ← L'INITI
EXCLUDENDÆ
NOTIN B & C 87
Vittata (Terebra), Lam. Enc. Méth., pl. 402, f. 4 a-b.
= Bullia, Manual, vol. iv, 39
T40W1885
TEREBRA VITTATA, Lamk.
C'est un Buccin (B. vittatum, Linn.) du groupe de Bullia de M Gray.
D 254 1853 p 321

Excludendæ.
134. TEREBRA VITTATA.
Buccinum vittatum, Linnæus.
Eburna monilis, Schumacher.
Terebra buccinoidea, Blainville.
Bullia vittata, Gray.
Leiodomus vittata, Swainson. HND 446 p 116

G. VIII. 6. Buccinum G. VIII. 6. Die gekerbte Nadel.
vittatum. te Nadel.

Linæ. S. N. Sp. 483.

Testa ventricoso turrata, Die bäuchig getürmte Schale transversim striata, sutura an- te ist in die Quere gefreiset, fractuum duplicato crenulata, und an der Muth zweifach ge- ferbet.

List. Hist. Conch. l. 4. f. 15. f. 34.

Klein. Meth. Ostr. t. 7. f. 121.

Mart. Conch. Konch IV. 195. t. 1461. f.

BORN 1778 p 259

Vis miran, *Terebra vittata*.
Presque striée; la jonction des tours de spire doublement crénelée.

Buccinum vittatum. Linn. — Lister, tab. 977. fig. 33, 34. Adanson, pl. 4. fig. 1 et 2.

Martini, 4. tab. 155. fig. 1461. 1463. 1468. 1469, 1470.

Se trouve sur les côtes d'Afrique et dans les mers de l'Inde. Bosc 1701 p 11

BOSC 1801 p 15

Buccinum vittatum p. 225

1767, Systema naturae, ed. 12, p. 1206, no. 483.

LOCALITY: Not given.

"B. testa turrita substriata, sutura anfractuum duplici crenulata... Testa ex ovata turrita, albida, remote transversaliter striata. Sutura duplicata, vix triplicata, articulata crenata, anfractus distinguens.

The only criticism that could be made of this excellent description is the use of the phrase "vix triplicata." It would have been more accurate to say "saepe triplicata," as many specimens of the shell have the sub-sutural tubercles divided into three rows instead of two. The synonymy consists of a single figure (Klein, pl. 7, fig. 121) which entirely conforms to the description and shows a reasonably accurate picture of the *Bullia vittata* of all authors. The species may therefore be said to be descriptively and pictorially defined. In the manuscript notes for Linnaeus' proposed "revised twelfth edition" he added a further figure (Petiver, pl. 98, fig. 15). This shows a *Bullia* which is either *vittata* or its close congener *B. livida* Reeve, 1846, *vide* Hanley (1855, p. 261).

Reeve (1843-1878, vol. 3, *Bullia*, pl. 2, sp. 9), in discussing *vittata*, was not so confident of the exclusiveness of the Linnaean diagnosis. He said: "Two species appear to have been confounded under this head by Linnaeus and subsequent authors; that which I retain to represent it, answers best to the Linnaean diagnose [*sic*] and is the one figured in the 'Encyclopédie méthodique,' and by Kiener; the other species, which follows under the name *B. livida*, is that figured by Martini and De Blainville." I do not know whether Reeve based his opinion as to the composite nature of the Linnaean diagnosis on the phrase "vix triplicata" or on some other feature of the description. In any case *livida* is readily distinguishable from *vittata*, and I can see nothing in either Linnaeus' description or his figures that points to the former species. The color of *livida* is a brilliant blue in a fresh specimen and the aperture is a deep brown, whereas *vittata* is of a dirty white color with a light brown or yellow aperture. From the point of view of sculpture, the shoulder of the body whorl in *livida* has a single row of short rugae, and on the spire all whorls are so thickly tuberculate that one might describe them as "pebbled," whereas in *vittata* the subsutural band consists ordinarily of a double row of tubercles on both body whorl and spire, although, as said above, this number is not constant, many specimens showing three rows, or, rather, a single band of short rugae divided by shallow sulci into three rows of papillae.¹

¹ In a fair proportion of specimens of *vittata* the double row of tubercles has apparently coalesced into a single row of short rugae. *Buccinum vittata* is also distinguishable from *livida* by the presence of a pronounced varix on the body whorl of some specimens, a feature I have not observed in *livida*.

Born (1780, p. 264) published a satisfactory description of *B. vittatum*, although he supplied no figure. Schröter's figure (1783-1786, vol. 1, p. 352, pl. 2, fig. 7) is the best that appeared for many years. Indeed, Lamarck called it "icon optimum."

Chemnitz described the species twice. In 1780 (1780-1795, vol. 4, p. 305, pl. 155, figs. 1461-1462) he described what he called *Turbo oro patulo*, but referred it to the *B. vittatum* of Linnaeus and cited also the Klein and Petiver figures cited in the "Systema." His locality was Tranquebar. The figures are unmistakably *Bullia*. Although figure 1461 has the color of *livida*, figure 1462 is *vittata*. In 1795 (*op. cit.*, vol. 11, p. 92, pl. 188, figs. 1814-1815) Chemnitz described the species under the Linnaean name but mentioned only one row of tubercles instead of two, using the expression "unica tantum serie crenularum in sutura anfractuum cincta." His two figures show this error, if error it be, as he may have used as his model a specimen in which the two rows have coalesced, as mentioned in my preceding footnote, or the figures may be bad figures of *livida* which omit the multiple tuberculation of the spire. On page 94 of the same volume Chemnitz lists a "Varietas notabilis Buccini vittati," which is described as having decussate sculpture instead of the simple and shallow spiral lines of *vittata*. His figure shows this sculpture very clearly (pl. 188, fig. 1816) and pictures a shell considerably narrower and more *Terebra*-like than *vittata*. Dillwyn (1817, vol. 2, p. 466) cited this latter figure for his "variety" of *B. vittatum*, describing it in some detail. I am unfamiliar with any *Bullia* or *Terebra* conforming to this description and figure. Chemnitz located it on the Malabar coast.

Schumacher (1817, p. 206) not only removed the species from *Buccinum*, placing it in the genus *Eburna* Lamarck, 1801,¹ but changed the specific name to *monilis*, a name that has not been adopted. Lamarck (1822, vol. 7, p. 291) again changed the generic name, placing it in *Terebra* Bruguière, 1789. This placement was followed by Deshayes and Milne-Edwards (1835-1845, vol. 10, p. 251), who, however, added a disapproving footnote: "This shell does not belong in the genus *Terebra*: although more elongated than the majority of the Buccins, it is in that genus that it should be placed." This placement is somewhat more realistic than that used either by Schumacher or Lamarck, but the species is definitely separable from *Buccinum* as well. It is now included in the genus *Bullia* Griffith, 1834.²

In addition to the figures mentioned above, the species is well figured in the "Tableau encyclopédique" (pl. 402, figs. 4a, b) and in Sowerby (1852, pl. 20, fig. 427).

An unmarked specimen is present in the Linnaean collection in London. The species was not described in the "Museum Ulricaë."

¹ This is not *Eburna* Lamarck, 1822, which, being a homonym, is replaced by *Babylonia* F. Schlüter, 1838.

² In Griffith's edition of Cuvier (Griffith and Pidgeon, 1834) the name *Bullia* is proposed in the legend to plate 7, for figure 8. There is no description. In the "Explanation of Plates" (p. 596) the name is misspelled "*Bullaë*." In addition to the complication brought about by the misspelling, I question the advisability of basing a generic name on a mere plate heading. I have already, in a previous part of this series of papers, expressed my feeling in regard to the validation by the Commission of the "plate-heading" generic names attributed to Bruguière. The Griffith authorship of *Bullia* has, however, been accepted by Thiele (1931, p. 322) and followed by other authors and museums, and, as its validity is legalized by the Commission's ruling by implication, it must stand. DODGE 1956

VITTATA (2)
LINNE 1767

EXCLENDAE

EXCLUENDAE

VITTATUM. 141. Shell turreted, and striated transversely; whirls with a double crenulated suture on the upper margin.

Buccinum vittatum. *Linnaeus Syst. Nat.* p. 1206. *Martini*, iv. p. 305. t. 155. f. 1461 to 1463. *Born Mus.* p. 264. *Schroeter Einl.* i. p. 352. t. 2. f. 7, and *Inn. Bau Conch.* p. 52. t. 3. f. 8. *Gmelin*, p. 3500. *Schreibers Conch.* i. p. 168. *Chemnitz*, xi. p. 92. t. 188. f. 1814 and 1815.

Lister Conch. t. 977. f. 34. *Petiver Gaz.* t. 98. f. 15.

Klein Ost. t. 7. f. 121. *Favanne*, t. 40. f. C2.

Variety. Elongated, and marked with decussated striæ.

Chemnitz, xi. p. 94. t. 188. f. 1816.

Inhabits the coasts of Ceylon. *Chemnitz*.

Shell generally about an inch and a half long, and more than one-third as broad, of a dull bluish white or pale livid colour, mixed sometimes with a tinge of red. The variety figured by *Chemnitz* is marked with longitudinal as well as remote transverse striæ, and the breadth scarcely exceeds one-fourth of the length.

Dilw. 1817 p. 146

24. Vis buccinée. *Terebra vittata*. Lamk. (1) ^{p. 251}

T. testâ conico-acutâ, subturritâ, albido-cornâ vel cinereo-cærulescente; anfractibus convexis, striis impressis tenuibus distantibus cinctis, supernè bicingulatis: cingulis plicato-granulosis; fauce fulvo-fuscescente.

Buccinum vittatum. *Lin. Syst. nat. éd. 12.* p. 1206. *Gmel.* p. 3500. n° 134.

Lister. Conch. t. 977. f. 34.

Petiv. Gaz. t. 98. f. 15.

Klein. Ostracol. t. 7. f. 121.

Favanne. Conch. pl. 40. fig. C. 2.

Knorr. Verg. 6. t. 36. f. 4.

Buccinum vittatum. *Schroëter. Einl. in Conch.* 1. p. 352. n° 46. t. 2. f. 7. *icon optima.*

Martini. Conch. 4. t. 155. f. 1461, 1462.

Terebra vittata. *Encyclop.* pl. 402. f. 4. a. b.

* *Vis buccin.* *Blainv. Malac.* pl. 16. f. 3.

* *Perry. Conch.* pl. 31. f. 1.

* *Eburna monilis.* *Schum. Nouv. Syst.* p. 206.

* *Buccinum vittatum.* *Born. Mus.* p. 264.

* *Id.* *Dilw. Cat.* t. 2. p. 646. n° 141.

* *Id.* *Kiener. Spec. des Coq.* p. 25. n° 26. pl. 9. f. 29.

* *Wood. Ind. Test.* pl. 24. f. 138.

Habite l'Océan indien. Mon cabinet. Espèce en quelque sorte moyenne entre les Buccins et les vis; néanmoins la longueur de la spire, comparée à celle de l'ouverture, décide son genre. Longueur totale: 2 pouces une ligne. D 27.2 1846 p. 252

(1) Cette coquille n'appartient pas au genre *Terebra*; quoique plus allongée que la plupart des Buccins, c'est dans ce genre cependant qu'elle doit prendre place. M. Kiener dans ses planches donne le nom de Buccin Vis à cette espèce: dans le texte, on la trouve sous celui de Buccin granuleux, nom attribué dans les planches à une coquille dont l'auteur a fait plus tard une variété de la première. M. Kiener prend mon *Buccinum melanoides* pour une variété de celui-ci; mais il se trompe, ce *Melanoides* a des caractères qui lui sont propres. On doit approuver M. Kiener d'avoir fait passer ces espèces parmi les Buccins; mais, contrairement à son opinion, il faut les regarder comme trois espèces distinctes. D 27.2 1846 p. 251