

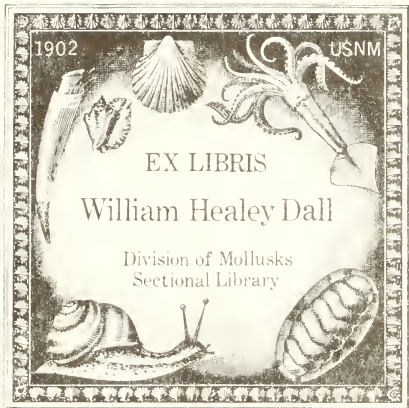
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JOHN BROOKS HENDERSON

CONCHOLOGIA ICONICA:

OR,

ILLUSTRATIONS

OF THE

SHELLS OF MOLLUSCOUS ANIMALS.

VOL. IX.

CONTAINING MONOGRAPHS OF THE GENERA

SPONDYLUS.
NERITINA.

NATICA.
NAVICELLA.
SIPHONARIA.

NERITA.
LATIA.

BY

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"The works of God are so worthy of their author, that besides the impresses of his wisdom and goodness that are left as it were upon their surfaces, there are a great many more curious and excellent tokens and effects of Divine artifice in the hidden and innermost recesses of them; and these are not to be discovered by the perfunctory looks of oiscitant and unskilful beholders; but require, as well as deserve, the most attentive and prying inspection of inquisitive and well-instructed considerers. And sometimes in one creature there may be I know not how many admirable things, that escape a vulgar eye, and yet may be clearly discerned by that of a true naturalist."—*Boyle*.

LONDON:

LOVELL REEVE, HENRIETTA STREET, COVENT GARDEN.

1856.



JOHN EDWARD TAYLOR, PRINTER,
LITTLE QUEEN STREET, LINCOLN'S INN FIELDS.

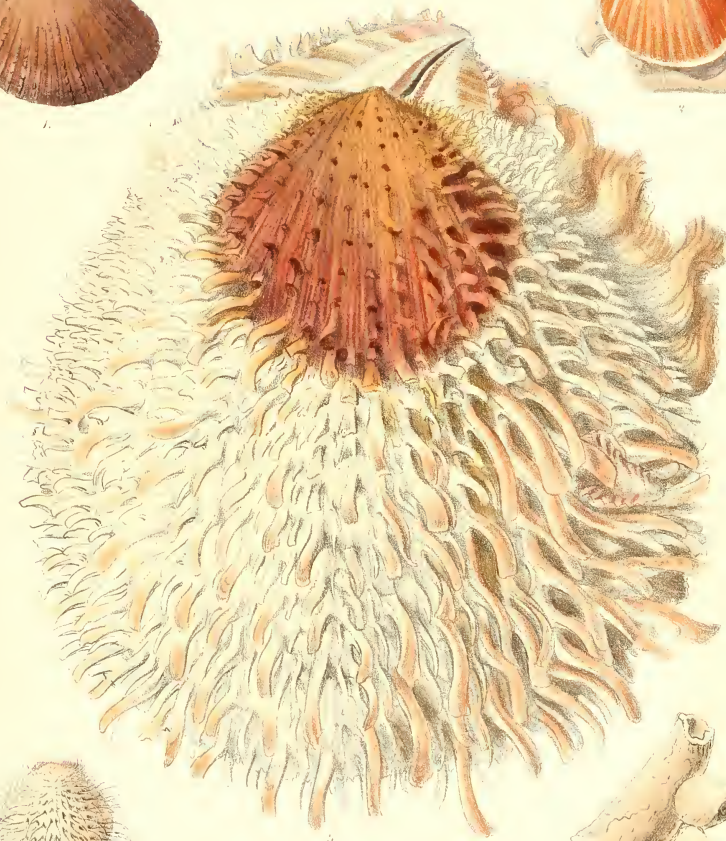
MONOGRAPH

OF THE GENUS

S P O N D Y L U S .

— Not a *skill*.

But shows some touch, in freckle, streak, or stain,
Of His unrivalled pencil."—*Carper*.



SPONDYLUS.

PLATE I.

Genus SPONDYLUS, Linnæus.

Testa affixa, inequaliculis, irregularis, plus minus auriculata, radiatum striata et lirata, rora costata, coriæ muricata et spinosa; umbonibus equalibus, arcu cardinali peraequali, planâ, ætute productiore, peculiariter separatis. Cardio dentibus duobus solidis, reflexis in utriusque valvâ, validè intersertis, lignumtuta in cavitate inter se recipientibus. Impressio muscularis sublateralis.

Shell attached, inequivalve, irregular, more or less auriculated, radiately striated and ridged, rarely ribbed, variously prickled and spined; umboes equal, peculiarly separated by a very large flat hinge area, more and more produced with age. Hinge with two solid reflected teeth in each valve, strongly interlocking, and receiving the ligament between them. Muscular impression sublateral.

The *Spondylus*, or Thorny Oyster, is one of the earliest known shells. When Aristotle occupied himself with philosophic interest in describing the animals of the Mediterranean, the *S. gædæopus* lived, as now, in all its royal panoply of purple and white, and the name adopted by Linnæus when engaged upon the grand formula of nomenclature which has become the law of naturalists, was that of the old philosopher of Greece, namely, Σπὸνδύλος. The species added to this genus in modern times are comparatively few; Lamarck numbered twenty-one; Sowerby, in his recent monograph in 'Thesaurus Conchyliorum,' only thirty-four, and I have but two or three to add. The species are mostly well known to collectors, all having an attractive interest from their singularity of form and beauty of colouring. Their growth is peculiar and extremely irregular, varying according to the circumstances of their place of attachment; it may be remarked, however, that it is on the upper valve that the shell develops its truest specific character.

The *Spondyli* are confined to no particular locality. Limited as they are in species, they are distributed very generally over the globe south of the latitude of the Mediterranean. There are no species on the coast of Britain.

Species 1. (Mus. Cuming.)

SPONDYLUS PACIFICUS. *Spond. testâ obliquè latè trigonâ, compressâ, radiatim tenuè imbricato-striatâ et lirata,*

liris subcorticâ flexuosis, tenuissimè squamatis, squamis interdum ferè obsolete; rubiâ vel roseâ, interdum albidâ, minio radiatâ.

THE PACIFIC SPONDYLUS. Shell obliquely broadly triangularly compressed, radiately finely imbricately striated and ridged, ridges somewhat twistedly flexuous, very finely scaled, scales sometimes almost obsolete; ruddy or rose-coloured, sometimes whitish, rayed with vermillion.

Hab. Lord Hood's Island, Pacific Ocean; Cuming.

This species has been sometimes regarded as a variety of *S. andus* which follows, but it is uniformly distinguished by a characteristic obliquely triangular compressed growth, rayed with exceedingly fine squamate ridges and striae. Mr. Cuming possesses it in several varieties.

Species 2. (Mus. Cuming.)

SPONDYLUS NUDUS. *Spond. testâ subelongato-trigonâ, gibbosâ, umbones versus rotundato-angulâ, radiatim densè striatâ et interdum liratâ, stria vix imbricatis, sublateralibus, liris posticis versus marginem interdum squamatis, auriculis brevibus; eisdè minâ, liris albis revoatis plerumque radiatis.*

THE NUDED SPONDYLUS. Shell somewhat elongately triangular, gibbous, rotundately swollen towards the umboes, radiately densely striated and sometimes ridged, striae scarcely imbricated, nearly smooth, posterior ridges sometimes scaled towards the margin. auricles smooth; bright scarlet, generally rayed with distant white lines.

CHEMNITZ, Conch. Cab. vol. xi. p. 235. pl. 203. f. 1989. 1990.

Hab. Mauritius and Philippine Islands; Cuming.

A richly painted vermillion shell, mostly rayed at rather distant intervals with white lines. It is at once distinguished from the preceding species by its elevated regular gibbous growth, and absence of scales, except in advanced specimens at the ends of the posterior ridges.

Species 3. (Mus. Cuming.)

SPONDYLUS VARIANS. *Spond. testâ oblongo-orbiculari, convexo-depressâ, subregulari, spinis brevibus squamatis copiosè radiatâ, spinis validè irregularibus, cuticâ*

superiori prope umbonem liris parvis acutis tribus squamis distantibus radiatâ, valvâ inferiori plerumque multo foliolâ et coarctatâ; albâ, circa umbonem purpureo-roseo et aurantio tinctâ, liris tribus parvis radiatibus saturatioribus.

THE VARIABLE SPONDYLUS. Shell oblong-orbicular, convexly depressed, somewhat irregular, copiously rayed with very irregular short squamate spines, upper valve rayed near the umbo with three small sharp sealed ridges, lower valve generally much foliated and chambered; white, stained around the umbo with purple-rose and orange, the three small radiating ridges being darker in colour.

SOWERBY, Appendix to Catalogue of Polynesian Shells collected by Mr. Stutchbury.

Spondylus Delessertii, Chenu.

Hab. Pacific Islands.

This fine species is distinguished in all its stages of growth by three widely separated fine squamate ridges radiating from the umbo, of a darker red tint than the surrounding colour of the shell. It is of very irregular growth, sometimes depositing a series of basal laminae in the lower valve one over the other, and hermetically closing water in the chambers, in which state, often of great size, it is known to collectors by the name of the Water Spondylus.

Species 4. (Mus. Cuming.)

SPONDYLUS CILIATUS. *Spind. testâ suborbiculari, tenui, convexo-depressâ, liris eximie radiatâ, liris spinis*

tenuibus submembranaceis longis erectis copiose aculeatis, liris interstitiis subtilissimè dense striatis; stramineo-albâ, purpurascente sparsim punctatâ.

THE CILIATED SPONDYLUS. Shell suborbicular, thin, convexly depressed, rayed with fine ridges, ridges copiously thorned with rather long, erect, thin, submembranaceous spines, interstices between the ridges very finely densely striated; straw-tinged white, sparingly dotted with light purple.

BRODERIP, Pro. Zool. Soc. 1833, p. 5.

Hab. Lord Hood's Island, Pacific Ocean (found on the reefs attached to a piece of coral); Cuming.

Copiously ciliated throughout with long erect spines, which are exceedingly thin and have a submembranaceous character.

Species 5. (Mus. Cuming.)

SPONDYLUS GUSSONI. *Spind. testâ ovali, subgibbâ, umbones versus subattenuatâ, radiatum striatâ, striis minutè imbricatis; albâ.*

GUSSON'S SPONDYLUS. Shell oval, rather gibbous, a little attenuated towards the umbones, radiately striated, striae minutely imbricated; white.

COSTA, Philippi, Enum. Moll. Sicil. vol. i. p. 87.

Spondylus minutus, Chenu.

Spondylus albidus, Broderip.

Hab. Mediterranean.

Of small gibbous size, with somewhat the aspect of a *Terebratula*, attached mostly in groups.

SPONDYLUS.

PLATE II.

Species 6. (Mus. Cuming.)

SPONDYLUS LEUCACANTHA. *Spond. testā orbiculari, vel subtrigono-ovata, crassiusculā, ventricosā, costis sex principatibus radiatā, costis spinis squamatis elongatis subserpatis irregularibus arcuatis, interstitiis minutè imbricatis-striatis, liris tribus aculeato-squamatis; croceo-rubrā vel vicidè minio-rubrā, spinis albis.*

THE WHITE-SPINED SPONDYLUS. Shell orbicular or somewhat triangularly ovate, rather thick, ventricose, rayed with six principal ribs, ribs armed with irregular slightly arched elongated squamate spines, interstices minutely imbricately striated, with three thorny squamate ridges; yellowish-red or bright scarlet-red, spines white.

BRODERIP, Pro. Zool. Soc. 1833, p. 5.

Hab. Island of La Plata, West Columbia.

A very rare and beautiful species at once distinguished by its pure white arcuately squamate spines springing out of a deep ochre or vermilion-red ground.

Species 7. (Mus. Cuming.)

SPONDYLUS SINENSIS. *Spond. testā subtrigono-orbiculari, depressiusculā, valdè irregulari, radiatim multistriatā et interdum costatā, profundè squamulā, squamis versus marginem unguis mucronis et planipalmatis, et plus minus lateratiler contortis; spaldico-carnēā, circa umbonem palliā sanguineo-ubulātā, interdum albā, purpureo sparsim variegatā.*

THE CHINESE SPONDYLUS. Shell somewhat triangularly orbicular, rather depressed, very irregular, radiately many-striated and sometimes ribbed, profusely scaled, scales more numerous towards the margin and flatly palmated, and more or less twisted on one side; fawn-flesh, clouded with pale blood-colour about the umbos, sometimes white, sparsely variegated with purple.

SOWERBY, Thesaurus Conch. vol. i. p. 427, pl. 87. f. 32-34.

Hab. China.

Distinguished by a peculiar fawn-flesh colour, with no marking except a little faint clouding of blood-smear about

the umbo. The shell is extremely irregular in growth, and the spines mostly terminate in a characteristic palmate contortion.

Species 8. (Mus. Cuming.)

SPONDYLUS VARIEGATUS. *Spond. testā suborbiculari, Pectiniiformi, gibbosā, subangulati, radiatim costatā et striatā, costis spinis longiusculis recurvis armatā; albā, lineis angulato-flexuosis purpureo-fuscis pictā.*

THE VARIEGATED SPONDYLUS. Shell somewhat orbicular, Pecten-shaped, gibbous, nearly equivalve, radiately ribbed and striated, ribs armed with rather long recurved spines; white, painted with angularly flexuous purple-brown lines.

CHEMNITZ, Conch. Cab. vol. vii. pl. 45. f. 464.

Eadem, Spondylus muricatus, Chemnitz.

Hab. Amboyna.

A very characteristic feature in this species are the angularly flexuous purple-brown lines with which it is more or less profusely painted upon a white ground. The valves are nearly alike, and the spines mostly curved backwards.

Species 9. (Mus. Cuming.)

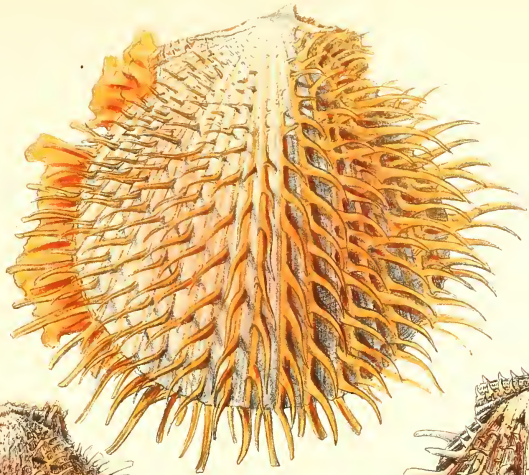
SPONDYLUS PRINCEPS. *Spond. testā subrotundatā, crassā, interdum ponderosā, radiatim costatā et liratā, costis lirisque copiosè squamato-spinosā, spinis valdè irregularibus, nunc posticè nunc anticè distortis; intensè corallo-rubrā.*

THE PRINCE SPONDYLUS. Shell somewhat rounded, thick, sometimes ponderous, radiately ribbed and ridged, ribs and ridges copiously squamately spined, spines very irregular, distorted sometimes in a posterior direction, sometimes anteriorly; deep coral-red.

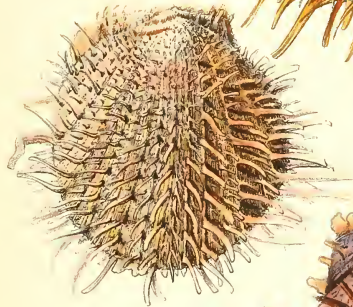
BRODERIP, Pro. Zool. Soc. 1833, p. 4.

Hab. Island of Plata, West Columbia (found attached to coral rocks at the depth of seventeen fathoms); Cuming.

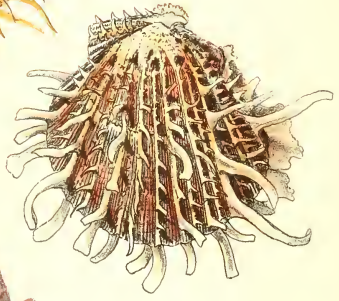
Chiefly distinguished from *S. pictorum*, to which it is nearly allied by the irregular laterally inclined contortions of the spines, and deep coral-red colour.



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SPONDYLUS.

PLATE III.

Species 10. (Mus. Cuming.)

SPONDYLUS AURANTIUS. *Spand. testâ subcontorto-ovata, ventricosinisculâ, radiatim multicosulatâ, costis superficialibus, spinis breviusculis acutis copiosè muricatis; vicè aurantiâ, circa umbonem albâ, immaculatâ, plus minus deundatâ.*

THE ORANGE SPONDYLUS. Shell somewhat twistedly ovate, rather ventricose, radiately many-ribbed, ribs superficial, copiously prickled with rather short sharp spines; bright orange, around the umboes unspotted white, more or less denuded of spines.

LAMARCK, Anim. sans vert. vol. vii. p. 190.

Hab. Seychelle Islands.

This well-known species is chiefly distinguished from its nearest ally *S. Butleri*, by the sharp curved prickly character and abundance of the spines, and by the absence of marking in the vicinity of the umbo.

Species 11. (Mus. Cuming.)

SPONDYLUS MULTISETOSUS. *Spand. testâ ovata, tenuiculâ, irregulari, radiatim densè striatâ et liratâ, liris spinis tenuibus brevibus armatis, et copiosè minutè muricatis; purpurascens-carnèâ, cracco undique plus minus obscure maculatâ, circa umbonem sanguineo nebulatâ, valdè muricatâ.*

THE MANY-BRISTLED SPONDYLUS. Shell ovate, rather thin, irregular, radiately densely striated and ridged, ridges armed with short thin spines and copiously minutely prickled; purple-flesh, more or less obscurely spotted throughout with yellow, clouded with blood-smears, and very prickly about the umbo.

Hab. Philippine Islands; Cuming.

It is a striking characteristic of this species to be everywhere crowded with small prickles, in addition to the prickly spines.

Species 12. (Mus. Cuming.)

SPONDYLUS MUS. *Spand. testâ trigono-orbiculari, gibbosâ, subirregulari, radiatim striatâ et liratâ, liris subtilissimulis, spinis longiusculis, irregularibus, ad terminum contorto-spathulatis sparsis acutâ; purpurascens, hic illic saturatè nebulatâ, circa umbonem albâ, spinis albis.*

THE MOUSE SPONDYLUS. Shell triangularly orbicular, gibbous, somewhat irregular, radiately striated and ridged, ridges rather distant, sparingly armed with rather long irregular spines, twistedly spatulate at the end; light purple, here and there dark-clouded, white around the umbo, spines white.

Hab. Philippine Islands; Cuming.

Of swollen growth, distinguished by half-a-dozen principal ribs, out of which the spines spring in a peculiar contorted manner, and become spatulate at the extremity.

Species 13. (Mus. Cuming.)

SPONDYLUS GEDAROPUS. *Spand. testâ oblongo-orbiculari, radiatim densè striatâ et liratâ, striis granulato-asperis, liris squamato-spinosis et muricatis, spinis valdè irregularibus, praeviscè contortis, hic illic truncatis; calvâ superiori undique intense purpureâ, calvâ inferiori albâ, aurantio partim linctâ.*

THE ASS'S FOOT SPONDYLUS. Shell oblong-orbicular, radiately densely striated and ridged, striae granularly roughened, ridges squamately spined and prickled, spines very irregular, promiscuously twisted, here and there truncated; upper valve everywhere deep purple, lower valve white, partially tinged with orange.

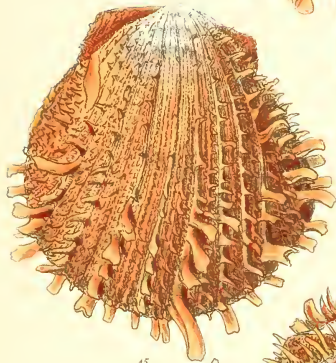
LINNEUS, Syst. Nat. 12th edit. p. 1136.

Hab. Mediterranean.

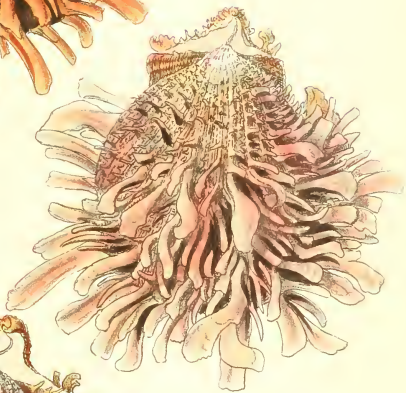
This well-known species has a very characteristic plan of sculpture, and is readily distinguished by its peculiar contrast of colouring; the upper valve being of a uniform rich purple, whilst the lower valve is white, partially tinged with orange.



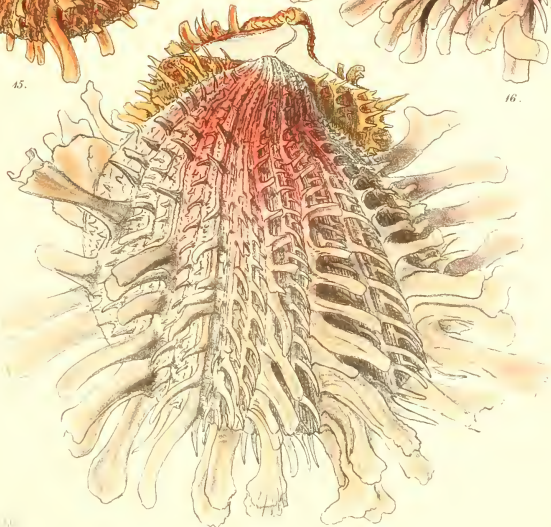
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Pl. IV. 14.

Pl. IV. 16.

SPONDYLUS.

PLATE IV.

Species 14. (Mus. Cuming.)

SPONDYLUS BUTLERI. *Spond. testâ trigono-ovata, radiatim striatâ et lirata, liris cerasus marginem obsolete, prope umbonem obscure squamato-muricatis, deinde spinosis, spinis subnullis, latis, parvis, promiscuè contortis; purpureo-nigricante, circa umbonem nebulatâ, spinis ciccide aurantiis.*

BUTLER'S SPONDYLUS. Shell triangularly ovate, radiately striated and ridged, ridges obsolete towards the margin, obscurely squamately pricked near the umbo, then spined, spines rather large, broad, few, promiscuously twisted; purple-blackish, clouded around the umbo, spines bright orange.

Hab. Philippine Islands; Cuming.

Uniformly distinguished from *S. aurantius* by its more regular Pecten-shape growth and blackish ground-colouring, and by the broad straggling character of the spines, which are much fewer in number and more distant.

Species 15. (Mus. Cuming.)

SPONDYLUS MULTIMURICATUS. *Spond. testâ ovata, gibbosa, subrotâ, irregulari, radiatim dense elevato-striatâ, striis nudique acutè squamato-muricatis, spinis paucis, brevis, rotundè irregularibus; ciccide coccineo-aurantiâ, circa umbonem albâ, purpureo pallidè maculatâ.*

THE MANY-PRICKLED SPONDYLUS. Shell ovate, somewhat gibbous, rather rude, irregular, radiately densely elevately striated, striae everywhere sharply squamately pricked, with a few short very irregular spines; bright scarlet-orange, white, faintly spotted with purple around the umbo.

Hab. Philippine Islands; Cuming.

A shell of somewhat rude growth, of a bright scarlet-orange colour throughout, everywhere covered with minute prickly scales, interspersed with a few irregular short spines.

Species 16. (Mus. Cuming.)

SPONDYLUS BARBATUS. *Spond. testâ subtrigono-ovata,*

radiatim conspicuè lirata et striatâ, liris squamato-muricatis, raris marginem dense spinosis, spinis nunc angustis, parvis, nunc latè squamato-spathulatis, variè contortis; pallidè spolicè, carneo-roseo plus minus luctâ, prope umbonem intensè rufo sparsum punctatâ.

THE BEARDED SPONDYLUS. Shell somewhat triangularly ovate, radiately conspicuously ridged and striated, ridges squamately pricked, densely spined towards the margin, spines now narrow, small, now broadly squamately spathulate, variously twisted; light fawn-colour, more or less stained with flesh-rose, sparingly dotted near the umbo with deep red.

Hab. Philippine Islands; Cuming.

Of the same peculiar typical character as *S. sinensis*, from which it differs, nevertheless, specifically in detail of sculpture. The spines are of a curiously mixed kind, some being small and narrow, others broadly squamately spathulate and contorted.

Species 17. (Mus. Cuming.)

SPONDYLUS AMERICANUS. *Spond. testâ ovata, nunc Pecteniformi, nunc rotè gibbosa, radiatim striatâ et lirata, liris sex principalibus squamato-spinosis, spinis interdum longis, ad terminum foliaceo-palmatis, liris parvis intermedis plus minus muricatis; albâ, circa umbonem purpureo-vel coccineo-rufo.*

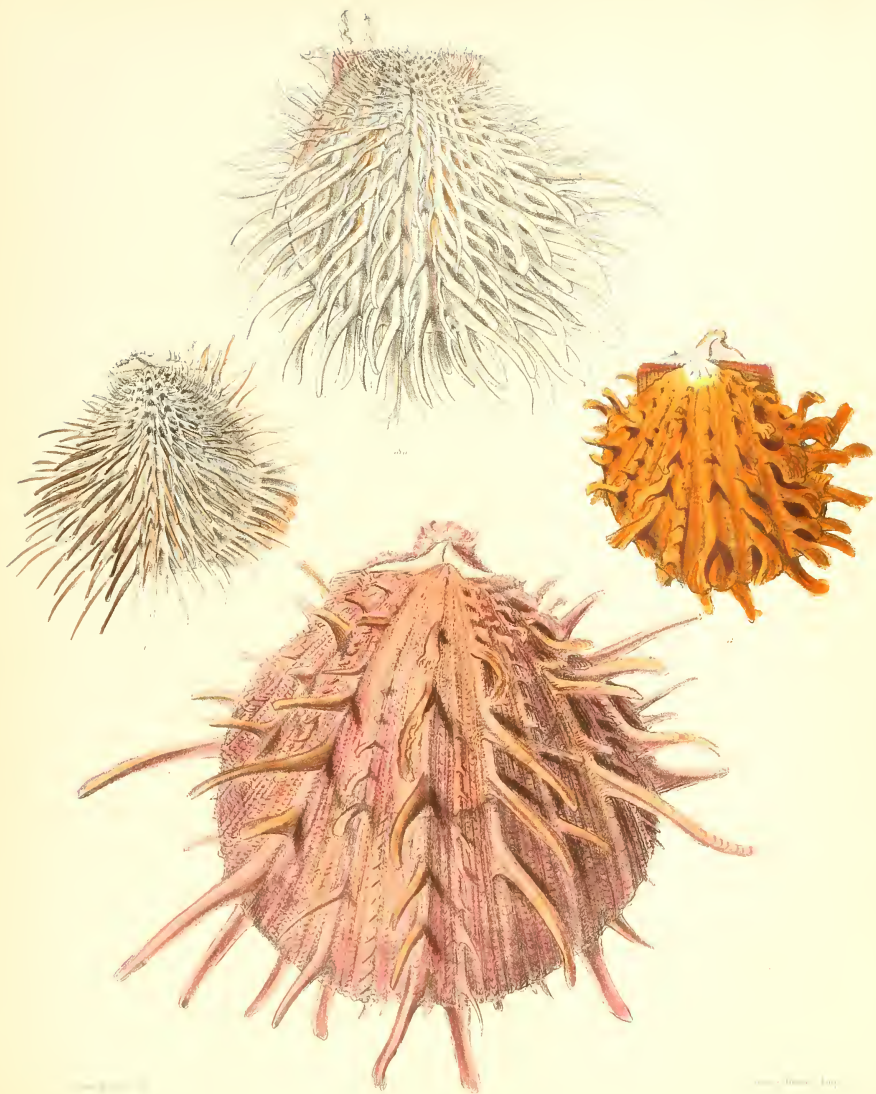
THE AMERICAN SPONDYLUS. Shell ovate, sometimes Pecten-shaped, sometimes rudely gibbous, radiately striated and ridged, six principal ridges squamately spined, spines sometimes long and foliaceously palmated at the end, ridges small, more or less prickly: white, purple or scarlet-red around the umbo.

LAMARCK, Anim. sans vert. vol. vii. p. 185.

Endem. *Spondylus arachnoides, longispina, et avicularis, Lamarck.*

Hab. Bermudas.

This well-known species varies extremely in growth, being sometimes rudely gibbously formed, with the spines crowded and irregular, as in the specimen here figured, sometimes with the spines fewer and more regular, and much longer.



SPONDYLUS.

PLATE V.

Species 18. (Fig. a, b, Mus. Cuming.)

SPONDYLUS PLURISPINOSUS. *Spood. testā ovatā, radiatū subobscure tiratā, liris profusè spiniosis, spinis attenuatis prelongis, hic illic prominè carentis, spinis circa umbonem numerosis, minutis; candidā, circa umbonem fusco-nigro punctatā, spinis interdum circitè aurantiis.*

THE MANY-SPINED SPONDYLUS. Shell ovate, radiately somewhat obscurely ridged, ridges profusely spined, spines attenuated, very long, here and there prominently curved, spines around the umbo numerous, minute; white, dotted around the umbo with brown-black, spines sometimes bright orange.

Encyclopédie Méthodique, pl. 194. f. 1.

Hab. Philippine Islands; Cuming.

This species, it will be seen, is quite distinct from *S. aurantius*, the spines being more delicately attenuated and much more numerous, while the shell is characterized in the young state by a multitude of fine prickles, interspersed at the base with brown-black spots.

Species 19. (Mus. Cuming.)

SPONDYLUS CROCEUS. *Spood. testā ovatā, ventricosā, valvis subæquantibus, rudè irregulariter costatis, costis retusis, hic illic squamatis, squamis brevibus, latiusculis, eandè irregularibus, interdum spatulatis; undique circitè aurantiis-croceis.*

THE YELLOW SPONDYLUS. Shell ovate, ventricose, valves nearly equal, rudely irregularly ribbed, ribs blunt, here and there squamate, scales short, rather broad, very irregular, sometimes spatulate, everywhere bright orange-yellow.

CHEMNITZ, Conch. Cab. vol. 7. p. 77. pl. 45. f. 463

Hab. Moluccas.

A shell of somewhat gibbous growth, rudely spatulate, lately scale-spined, of a uniform rich orange-yellow colour throughout.

Species 20. (Mus. Cuming.)

SPONDYLUS REGIUS. *Spood. testā ovatā, ventricosā, valvis æquantibus, radiatim costatis et liris, liris minute aculeato-squamatis, costis spinis solidis longissimis armatis, areā cardinali parvā; purpurascens-roseā, spinis interdum albidis.*

THE ROYAL SPONDYLUS. Shell ovate, ventricose, valves equal, radiately ribbed and ridged, ridges minutely prickly scaled, ribs armed with very long solid spines, cardinal area small; purple-rose, spines sometimes whitish.

LINNEUS, Syst. Nat. (12th edition), p. 1136.

Hab. Sooloo Islands; Cuming.

This fine species, admirably figured by Chemnitz, is of deep ventricose growth, with the valves of equal form and of similar sculpture. It is of a rich purple rose-colour with the spines sometimes inclining to white.



SPONDYLUS.

PLATE VI.

Species 21. (Mus. Cuming.)

SPONDYLUS FLABELLUM. *Spind. testâ latè trigonâ, flabel-
liformi, subtus concavo-planâ, supra radiatim obscure
liratâ, liris principalibus peculiariter rudè brevisqua-
matis, squamis hic illic plus minus obsoletis, areâ car-
dinali rorampâ; purpurascete-rufâ.*

THE LITTLE FAN SPONDYLUS. Shell broadly triangular,
fan-shaped, concavely flattened beneath, radiately
obscurely ridged above, principal ridges peculiarly
rudely short-scaled, scales here and there more or
less obsolete, cardinal area very large; purple-red.

Hab. —?—

Characterized in all its stages of development by a pe-
culiar fan-shaped growth, and by a stunted character of
sculpture on the radiating ridges.

Species 22. (Mus. Cuming.)

SPONDYLUS CANDIDUS. *Spind. testâ suborbiculari, valdè
irregulari, areâ cardinali latiusculâ, radiatim liriatâ,
liris radiibus, subflexuosis, gemmato-imbriicatis, inter-
stitiis striatis; candidâ, carne-tinctâ, liris interdum
vividè roseis.*

THE WHITE SPONDYLUS. Shell somewhat orbicular, very
irregular, cardinal area rather broad, radiately ridged,
ridges rude, rather flexuous, bead-imbriicated, inter-
stices striated; white, flesh-tinged, ridges sometimes
bright rose.

LAMARCK, Anim. sans vert. vol. vii. p. 185.

Hab. Australia. Lord Hood's Island; Cuming.

The name given to this species, from discoloured speci-
mens, is rather an unfortunate one, the ridges being char-
acterized in fine examples by a particularly bright rose
colour. The ridges, which are of an extremely irregular
flexuous growth, are delicately begemmed throughout
with close-set imbrications.

Species 23. (Mus. Cuming.)

SPONDYLUS TENUISPINOSUS. *Spind. testâ orbiculari, sub-
tus concavâ, conspicuè spinosâ et spatulato-squamatâ,
supra planâ, radiatim multistriatâ et liriatâ, liris pro-
fusè spinosis, spinis plerumque minutis, peculiariter
erectis; albâ, valdè superiori aurantio-roseo variè
tinctâ et maculatâ.*

THE FINE-SPINED SPONDYLUS. Shell orbicular, concave
beneath, conspicuously spined and spatulately scaled,
flat above, radiately many-striated and ridged, ridges
profusely spined, spines generally minute, peculiarly
erect; white, upper valve variously stained and spotted
with orange-rose.

SOWERBY, Thesaurus Conch. vol. i. p. 121. pl. 87. f. 37.

Hab. Island of Zebu, Philippines; Cuming.

Covered with a multitude of delicate prickly spines, pec-
uliarly erect in their development.

Species 24. (Mus. Cuming.)

SPONDYLUS PICTORUM. *Spind. testâ trigono-ovata, ra-
diatim costatâ, costis sæ principalibus fortiter lingu-
lato-spinosis, interstitiis sececostatis, costis parvis, brevi-
spinosis; vividè aurantio-rufâ.*

THE PAINTERS' SPONDYLUS. Shell triangularly ovate,
radiately ribbed, six principal ribs strongly lingu-
lately spined, interstices six-ribbed, ribs small, short-spined;
bright orange-red.

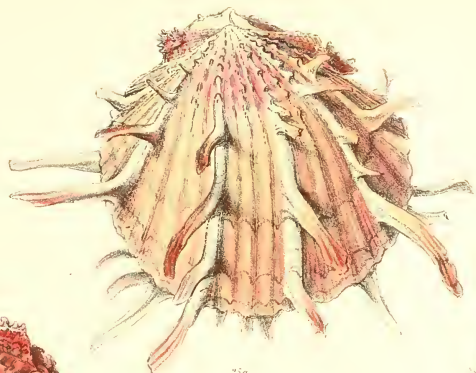
CHEMNITZ, Conch. Cab. vol. vii. p. 94. pl. 69. f. E. F.

Spindylus crassisquamatus, Lamarck.

Spindylus dubius, Broderip.

Hab. Island of Plata, West Columbia (found attached to
coral rocks at the depth of seventeen fathoms);
Cuming.

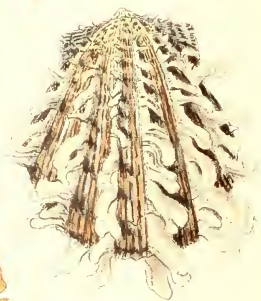
Two very characteristic features in this fine species are
the regularity of its plan of sculpture, and its rich orange-
red colour.



25a



25b



25c

SPONDYLUS.

PLATE VII.

Species 25. (Fig. *or. b*, Mus. Cuming.)

SPONDYLUS FOLIACEUS. *Spod. testâ orbiculari, eadê gibbosâ, valvis subæqualibus, radiatim costatâ, costis latis, obtusis, subsuperficialibus, longitudinaliter sulcatis, sex principalibus spinosis, spinis interdum distantibus prælongis, interdum brevioribus, pulcherrimè fimbriatis-spathulatis; albidâ, purpurascute-roseo plus minus vicinè pictâ.*

THE FOLIATED SPONDYLUS. Shell orbicular, very gibbous, valves nearly equal, radiately ribbed, ribs broad, obtuse, somewhat superficial, longitudinally grooved, six principal ribs spinous, spines sometimes distant, very long, sometimes shorter and beautifully fimbriately spatulate; whitish, more or less vividly painted with purple-rose.

CHEMNITZ, Conch. Cab. vol. vii. p. 85. pl. 46. f. 472, 473.
Spondylus multilamellatus, Lamarek.

Spondylus Petroseleum, Sowerby.

Hab. Philippine Islands; Cuming.

This species, of which a very characteristic figure appears in Chemnitz' 'Conchylien Cabinet,' is finished with large distant spines, sometimes beautifully fimbriately spatulate at the extremity.

Species 26. (Mus. Cuming.)

SPONDYLUS DUCALIS. *Spod. testâ trigono-ovata, valvis subæqualibus, radiatim dense serrato-striatis, costis sex principalibus superficialibus, squamis amplis spathulatis*

confectis regulariter arantibus; squamis albis, stris interstitialibus cæruleo-nigro lineatis et punctatis.

THE DUCAL SPONDYLUS. Shell triangularly ovate, valves nearly equal, radiately densely serrately striated, six principal ribs superficial, closely regularly armed with large scales; scales white, interstitial striae stained and dotted with blue-black.

CHEMNITZ, Conch. Cab. vol. vii. p. 89. pl. 47. f. 477, 478

Spondylus spatagus, Chemnitz.

Spondylus spathuliferus, Lamarek.

Hab. Philippine Islands; Cuming.

Variable rather in growth, but always distinguished by the contrast of the rows of white scales upon the blue-grey ground of the interstices.

Species 27. (Mus. Cuming.)

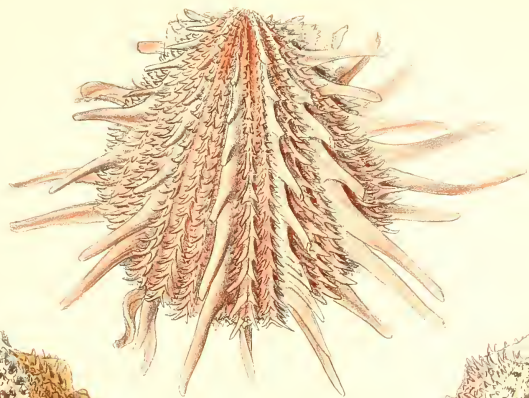
SPONDYLUS LINGUA-FELIS. *Spod. testâ oblongo-ovata, depressiusculâ, spinis parvis brevibus, subsquamulatis, undique dense aculeatis; fusco-nervatâ, circa umbonem interdum purpurascute-roseo lineatâ.*

THE CAT'S-TONGUE SPONDYLUS. Shell oblong-ovate, rather depressed, everywhere densely prickled with small short subsquamate spines; brownish-orange, sometimes tinged with purple-rose around the umbo.

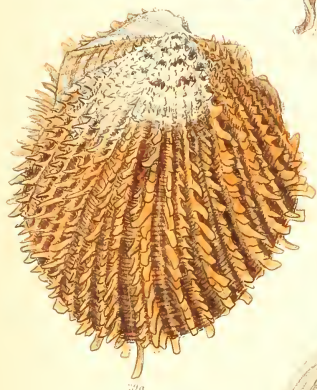
SOWERBY, Pro. Zool. Soc. 1847

Hab. ——— ?

Curiously distinguished by its flat-spread oblong growth, prickled throughout with small close-set spines.



26



27



28



29

SPONDYLUS.

PLATE VIII

Species 28. (Mus. Cuming.)

SPONDYLUS IMPERIALIS. *Spoud. testā trigono-ovata, subcompressā, calce equalibus, radiatia crebricostata, umbro nigro principalibus longispinosis, spinis fortibus oppressis, interstitiis tricostatis, costis squamis acutis densè aculeatis; roseo-carnæa.*

THE IMPERIAL SPONDYLUS. Shell triangularly ovate, rather compressed, valves equal, radiately closely ribbed, six principal ribs long-spined, spines stroug, appressed, interstices three-ribbed, ribs densely set with sharp prickly scales; rose-flesh colour.

CHENU, Couch. Illus. p. 6. pl. 26. f. 2, 3.

Hab. China.

This very beautiful, but not uncommon species, is very closely allied to *S. regius*, and is characterized by the same plan of sculpture, but the shell is uniformly more compressed, and the prickly scales of the interstitial ribs more sharply developed.

Species 29. (Fig. a, b, Mus. Cuming.)

SPONDYLUS ZONALIS. *Spoud. testā ovata, valdè irregulari, profusè radiatia lirata, iris plus minus obsoletis radiè flexuosis, brevisquamatis, squamis irregulariter orbentis, circa umbonem magis aculeatis; albâ, nigropunctatâ, deinde purpureo aut fusco concentricè zonatâ, squamis interdum aurantio-luteis.*

THE ZONED SPONDYLUS. Shell ovate, very irregular, profusely radiately ridged, ridges more or less obso-

lete, rudely flexuous, short-scated, scales irregularly prickly, more prickly round the umbo; white, black-spotted, then concentrically zoned with purple or brown, scales sometimes orange-yellow.

CHENU, Illus. Couch. pl. 7. f. 3 and 4.

Spodylus heriucens, Chenu.

Hab. Mauritius, Australia, and Philippine Islands

Of rude flexuous growth, promiscuously bristled throughout with irregular short prickly scales.

Species 30. (Mus. Cuming.)

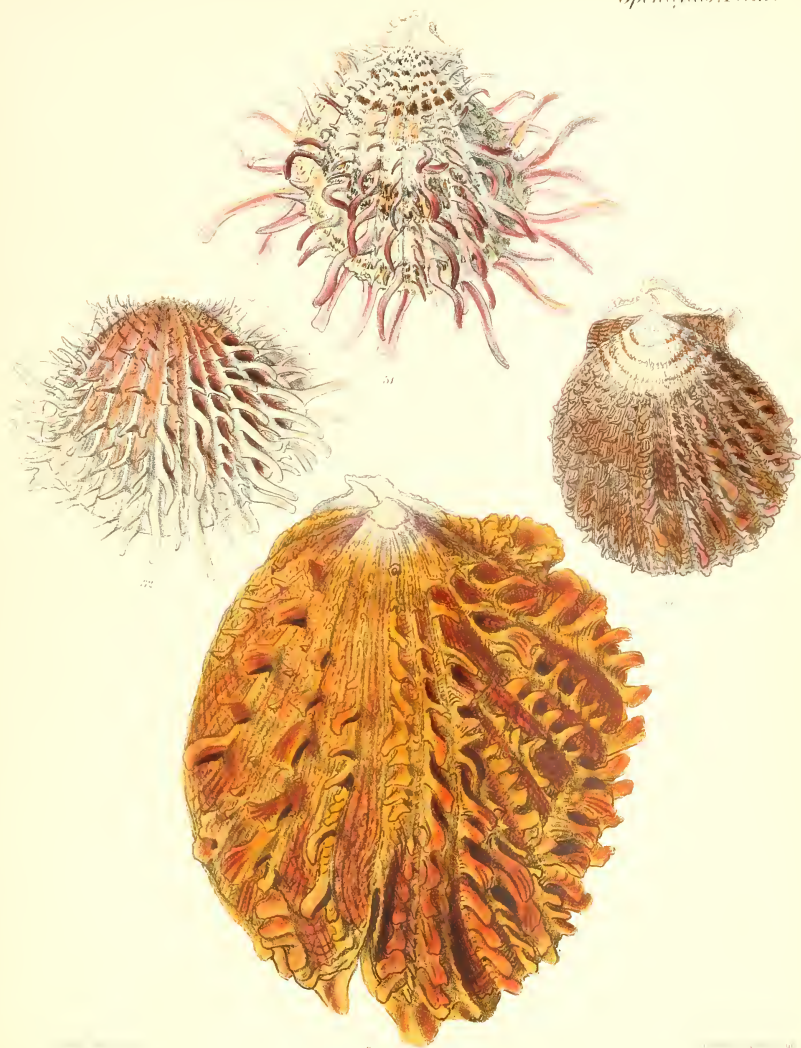
SPONDYLUS LAMARCKII. *Spoud. testā ovata, Pecteniformis, irregulari, radiatia costatâ, costis obtusis, substansibus, radiè flexuosis, levibus, aculeis parvis prope umbonem; cerebiscente-albâ, purpureo-radiatâ, limbo interno intenso purpureo.*

LAMARCK'S SPONDYLUS. Shell ovate, Pecten-shaped, irregular, radiately ribbed, ribs obtuse, rather distant, rudely flexuous, smooth, with a few small prickles near the umbo; bluish-white, purple-rayed, inner lip deep purple.

CHENU, Couch. Illus. p. 6. pl. 9. f. 4.

Hab. —?

A very characteristic *Pecten*-like species, chiefly distinguished by its comparatively smooth, widely rayed, flattened ribs; but liable to be confounded with worn specimens of *S. ducalis*.



SPONDYLUS.

PLATE IX.

Species 31. (Mus. Cuming.)

SPONDYLUS VIRGINEUS. *Spind. testâ subtrigono-ovata, irregulari, radiatim lirate, liris alternis spinis exivis armatis, spinis longiusculis, pronisuscè incurvis, spinis valvæ inferioris fortioribus, longioribus; albida, ferrugineo-fusco prope umbonam maculatâ, spinis purpurascensibus.*

THE MAIDEN SPONDYLUS. Shell somewhat triangularly ovate, irregular, radiately ridged, alternate ridges armed with delicate spines, spines rather long, promiscuously curved inwards, spines of the under valve stronger and longer; whitish, spotted with rust-brown near the umbo, spines light purple.

Hab. Philippine Islands; Cuming.

A very delicate, white, rust-spotted shell, profusely ornamented with conspicuous gracefully curved pinkish-purple spines.

Species 32. (Mus. Cuming.)

SPONDYLUS ALBIBARBATUS. *Spind. testâ latè orbiculati, valvâ superiori gibboso-convexâ, radiatim multicostatâ, costis superficialibus, spinosis; fusco-rufescente, costis spinisque albis.*

THE WHITE-BEARDED SPONDYLUS. Shell broadly orbicular, upper valve gibbously convex, radiately many-ribbed, ribs superficial, spined; brownish-red, ribs and spines white.

Hab. Philippine Islands; Cuming.

Characterized by a profusion of white spines, protruding from white superficial ribs upon a decided brownish-red ground.

Species 33. (Mus. Cuming.)

SPONDYLUS TENEBROSUS. *Spind. testâ oblongo-ovata, depressiusculâ, irregulari, radiatim copiosè elevatè striatâ, striis aculeatis, sparsim squamatis; ferrugineo-fusca, albipunctatâ, circa umbonem alba.*

THE DUSKY SPONDYLUS. Shell oblong-ovate, rather depressed, irregular, radiately copiously elevated striated, striae prickly, sparsely squamate; ash-brown, dotted with white, white around the umbo.

Hab. Moreton Bay, Australia; Strange.

Of rather rude growth, beset with short prickles and a few scales. Of a white-speckled ash-brown, white round the umbo.

Species 34. (Mus. Cuming.)

SPONDYLUS LIMBATUS. *Spind. testâ oblongo-ovata, regulari, radiatim densè striatâ et lirate, liris superficialibus densè palmato-squamatis, squamis rotatis, regularibus; intus aurantio-rufa, squamis interdum plus aurantibus, intus aurantio-rufa latè limbata.*

THE BORDERED SPONDYLUS. Shell oblong-ovate irregular, radiately densely striated and ridged, ridges superficial, densely palmately scaled, scales rotate, irregular; deep orange-red, scales sometimes lighter orange, interior broadly bordered with orange-red.

SOWERBY, Thesaurus Couch. vol. i. p. 427. pl. 88. f. 51.

Hab. Panama and Mazatlan.

Chiefly characterized by its orange-red colour, the scales being not unfrequently of a lighter colour, and by its broad orange-red border in the interior.



35a



36



b



37

SPONDYLUS.

PLATE X

Species 35. (Mus. Cuming.)

SPONDYLUS (CUMINGI). *Spind. testa suborbiculari, depressoconvexa; radiibus densis subricento-livida, costis squamis proaequalibus subdistansibus, costis squamis, squamis longis, fimbriis interstitibus palantibus, ad latera squamis et sic fimbriata, truncato-culata.*

CUMINGI. *SPONDYLUS*. Shell nearly orbicular, rather depressed, radiately densely subricently ridged with five principal rather distant ribs, ribs spined, spines long, strong, sometimes palmated, curiously fimbriated at the sides; orange-red.

SOWERBY, *Pro. Zool. Soc.* 1847, p. 86.

Hab. Japan.

This species, which is intimately allied to the *S. regius* and *superciliis*, is beautifully characterized by a peculiar imbricated structure along the sides of the spines.

Species 36. (Mus. Cuming.)

SPONDYLUS CAMURUS. *Spind. testa subtriangul., irregulari, depressa, radiatim costata, costis rufis squamatis, squamis erectis, interstitibus subricento-strintis; culicibus-oblis, hic illic purpureo-culicibus lineata et sinuata.*

THE CRUMPLED SPONDYLUS. Shell somewhat triangular, irregular, depressed, radiately ribbed, ribs rudely

scaled, scales green, convexities minutely striated, chalk-white here and there stained and spotted with purple-violet.

Hab. Philippine Islands, Cuming.

Of white chalk-like aspect, smooth here and there with purple-violet, irregular in growth, rayed with rows of short erect scale-like spines.

Species 37. (Mus. Cuming.)

SPONDYLUS UNICOLOR. *Spind. testa subtriangul. irregulari, crassa, valde gibbosa, costatim costata et livata, costis loricis radiibus, irregularibus, promiscue obtuse squamatis, squamis depressè palantibus, interstitibus crallo-culata.*

THE ONE-COLOURED SPONDYLUS. Shell somewhat obliquely triangular, nearly equivalve, thick, very gibbous, radiately ribbed and ridged, ribs and ridges rude, irregular, promiscuously obtusely scaled, scales depressly palmate; deep coral-red.

SOWERBY, *Pro. Zool. Soc.* 1847, p. 86.

Hab. — ?

A solid gibbous shell, nearly equivalve, of rather oblique growth, beset with four or five rows of irregular distortedly palmated scales, the intermediate ridges being sculptured with smaller scales, more crowded towards the margin.



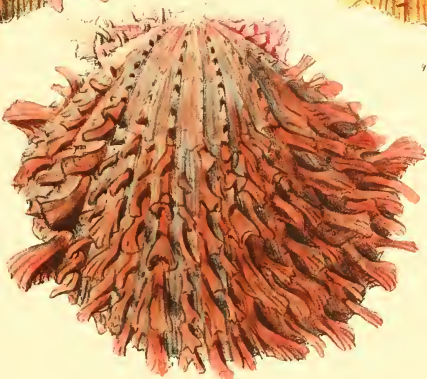
38



39



40



41

Spondylus

Spondylus

SPONDYLUS.

PLATE XI.

Species 38. (Mus. Cuming.)

SPONDYLUS GILVUS. *Spond. testâ subtriangulo-acuta, eme globosâ, radiatim superficialiter lirata, liris quatuor distantibus obsolete obtuse squamatis; intense livido-rufa, versus umbonam coccinea.*

THE BRICK-COLOURED SPONDYLUS. Shell somewhat triangularly ovate, rudely globose, radiately superficially ridged, four distant ridges obsolete obtusely sealed; deep livid red, scarlet towards the umbo.

Hab. Guadeloupe.

A rude gibbous species, of a deep livid purplish-red, almost denuded of sculpture beyond the traces of four rows of obtuse worn scales.

Species 39. (Mus. Cuming.)

SPONDYLUS ERINACEUS. *Spond. testâ gibboso-globosa, subquadrata, radiatim tenuilirata, liris crenulatis, costis quinque principalibus in utraque valvâ, squamis erectis palmatis irregularibus dense unguitis; rufescente-crocâ, squamis saturatè rufis.*

THE HEDGEHOG SPONDYLUS. Shell gibbously globose, nearly equivalve, radiately finely ridged, ridges eremulated, with five principal ribs in both valves, beset with irregular erect palmate scales; ridges yellow, scales darker red.

Hab. West Indies.

A nearly equivalve shell, of a peculiar reddish-saffron colour, characterized on both sides with five rows of erect reddish scales.

Species 40. (Mus. Cuming.)

SPONDYLUS ICTERICUS. *Spond. testâ subquadrata, valvâ inferiori valde convexâ, superiore subplanatâ, radiatim tenuilirata, liris quatuor principalibus subdistinctis, sparsim squamatis; croceo-rufis, ad umbonam maculata.*

THE JAUNDICED SPONDYLUS. Shell oblong-ovate, lower valve deeply convex, upper valve nearly flat, radiately finely ridged, four principal ridges rather distant, sparsely sealed; yellowish-red, spotted at the umbo.

Hab. Bermuda.

Of a peculiar gamboge-red colour, with little indication of sculpture.

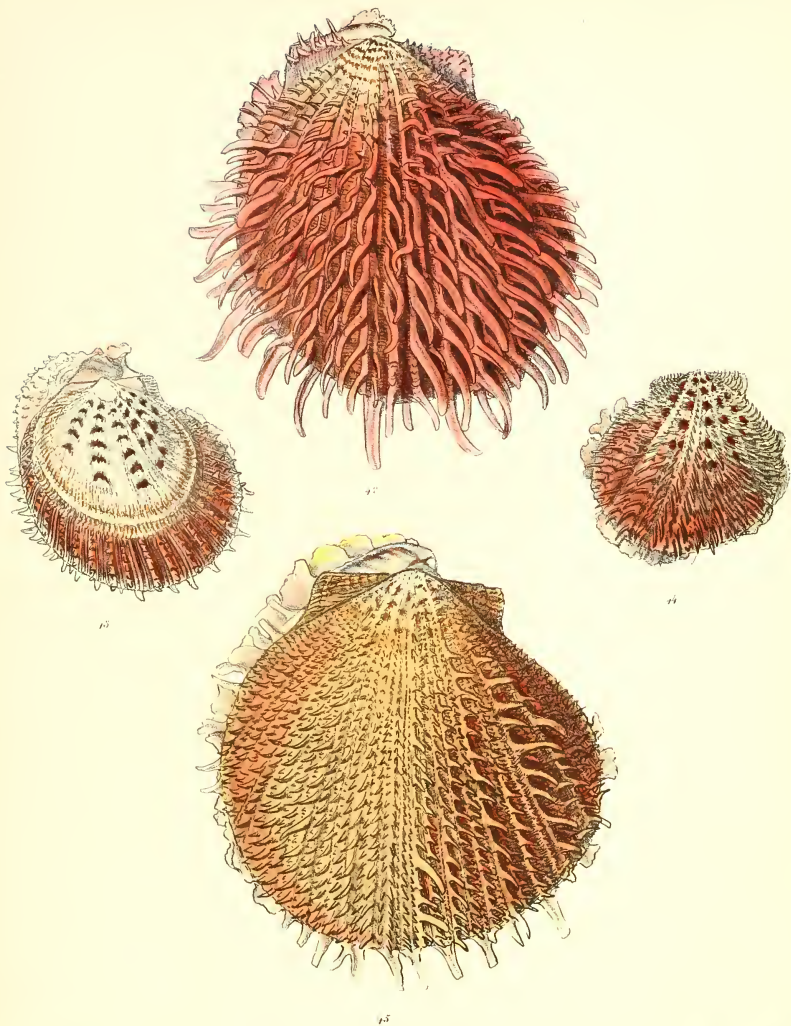
Species 41. (Mus. Cuming.)

SPONDYLUS BASILICUS. *Spond. testâ suborbiculari, subdepressâ, valvâ superiori convexâ, radiatim lirata et striatâ, squamis frondosis profuse ornatâ; intense purpureo-roseo-rufa.*

THE PRINCELY SPONDYLUS. Shell suborbicular, rather depressed, upper valve convex, radiately ridged and striated, profusely beset with frondose scales; deep purple-red.

Hab. ———?

This shell, which was considered to be a variety of *S. princeps*, is well characterized by its depressly convex growth, and by the peculiar frondose development of the spines.



SPONDYLUS.

PLATE XII.

Species 42. (Mus. Cuming.)

SPONDYLUS HYSTRIX. *Spoud. testâ ocatâ, radiatim liratâ et striatâ, spinis curvatis longiusculis nudique densè muricatâ; purpurascente-carnèâ, ad umbonem submaculatâ.*

THE PORCUPINE SPONDYLUS. Shell ovate, radiately ridged and striated, densely prickled throughout with rather long curved spines; purplish flesh-colour, slightly mottled at the umbo.

Hab. Philippine Islands; Cuming.

Armed as profusely with rather long curved spines as *S. aurantius*, but uniformly distinguished amongst other characters by its peculiar purple flesh-colour.

Species 43. (Mus. Cuming.)

SPONDYLUS OCELLATUS. *Spoud. testâ obliquè ovatâ, valvâ superiori planiusculâ, radiatim multistriatâ, striis undique acutè muricatis; albâ, versus marginem rufescente-cinereâ, prope umbonem ferrugineo-nigro ocellatâ.*

THE EYED SPONDYLUS. Shell obliquely ovate, upper valve rather flat, radiately many-striated, striae everywhere sharply prickled; white, reddish-ash towards the margin, ocellated with rusty-black near the umbo.

Hab. Philippine Islands; Cuming.

Of rather oblique growth, delicately sculptured throughout with sharp erect prickles.

Species 44. (Mus. Cuming.)

SPONDYLUS COCCINEUS. *Spoud. testâ obliquè subimbricatâ, tenuiculâ, radiatim tenuiliratâ et striatâ, nudique profusè muricatâ; albâ, versus marginem coccineo-purpurascente lineatâ, ad umbonem maculis coccineè radiatâ.*

THE CRIMSON-DYED SPONDYLUS. Shell obliquely orbicular, rather thin, radiately finely ridged and striated, everywhere profusely prickled; white, stained with crimson-purple towards the margin, conspicuously rayed with spots from the umbo.

LAMARCK, Anim. sans. vert. vol. vii. p. 188.

Hab. Philippine Islands; Cuming.

A delicately prickled species, chiefly characterized by its purple-stained and rayed painting.

Species 45. (Mus. Cuming.)

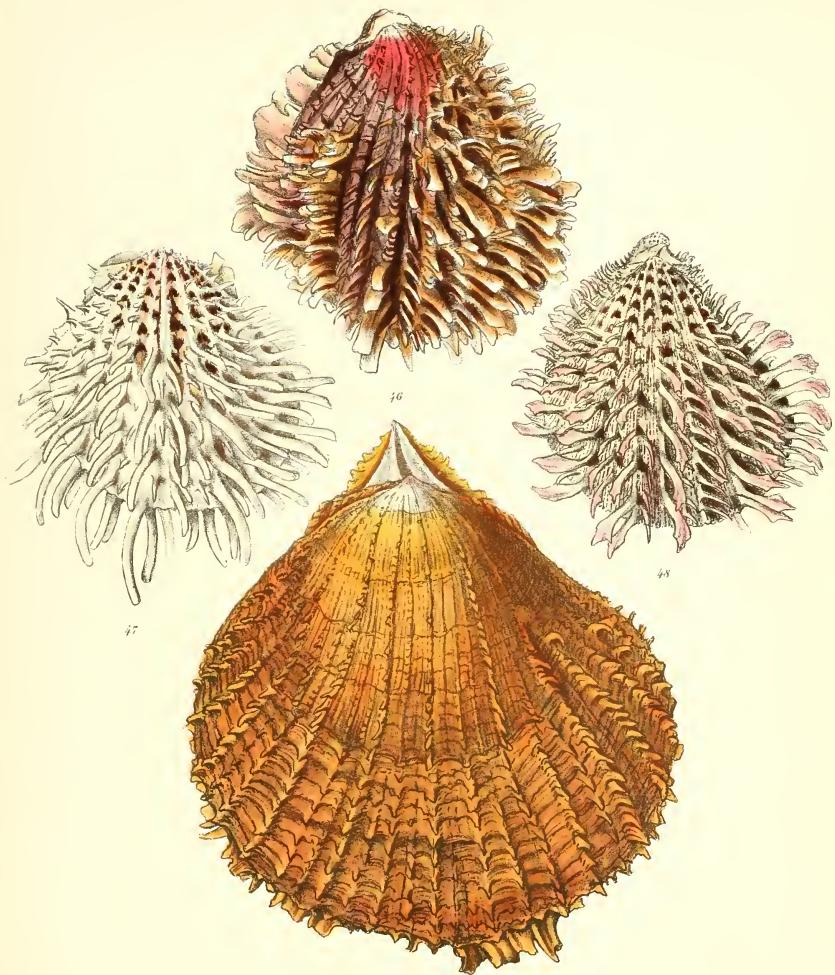
SPONDYLUS ASPERRIMUS. *Spoud. testâ triangulo-ocatâ, plano-concavâ, densè radiatim liratâ, liris nudique acutatis; carneo-fuscâ, albâ, rufo-maculatâ prope umbonem, aculeis interdum albidis.*

THE VERY ROUGH SPONDYLUS. Shell triangularly ovate, flatly convex, densely radiately ridged, ridges everywhere sharply prickled; flesh-brown, white, spotted with red next the umbo, prickles sometimes whitish.

SOWERBY, Pro. Zool. Soc. 1847, p. 87.

Hab. Philippine Islands; Cuming.

Very closely finely ridged throughout, the ridges being copiously beset with sharp prickles.



SPONDYLUS.

PLATE XIII.

Species 46. (Mus. Cuming.)

SPONDYLUS COMPTONIUS. *Spind. testâ oblongo-ovata, costis concentricis dense serratis et liris. Uffe auriculato-squamis spinosis interstitiis erectis, unguibus serratis; umbone subulato, squamis pallide strigatis.*

THE DORSETSHIRE SPONDYLUS. Shell oblong-ovate, rather thick, densely ribbed and ridged, ridges prickly-spined, ribs thickly widely scaled, scales erect, concave; purple-red, scales pale straw-colour.

LAMARCK, Anim. sans vert. vol. vii. p. 190

Spondylus multicaudatus, Chem.

Hab. West Indies.

It is impossible to determine which is the species Lamarck had in view for his *S. longicaudatus*, either by his description or reference to Chemnitz. The shell here figured having been selected by Mr. Sowerby as the type of *S. longicaudatus*, it may, in this state of uncertainty, be fairly retained.

Species 47. (Mus. Cuming.)

SPONDYLUS CASTES. *Spind. testâ depressè ovata, convexo umbone subulato, radiis liris et striatâ, liris longis plano-depressis copiosè armatis; candidâ, unguibus ferrugineo-fuscis prope umbonem radiatim tinctâ.*

THE CHASTE SPONDYLUS. Shell depressly ovate, rather attenuated towards the umbo, radiately ridged and striated, ridges copiously armed with long slightly depressed spines; white, stained near the umbo with rays of rust-brown spots.

Hab. Philippine Islands; Cuming.

A delicate profusely spined species, distinguished by the thinly flattened structure and depressed position of the spines.

Species 48. (olim Mus. Sowerby.)

SPONDYLUS FRAGILIS. *Spind. testâ tenui, ovali, tenuissimè striatâ, auriculis parvis; squamis erectis, tenuis, numerosis, pulvatis, subtrevis per series sex principibus, alternis unguibus, aculeatis dispositis; interstitiis imbricatis; colore pallidissimiâ fudrâ, prope umbonem unguibus fuscis interruptim radiato, ad interstitiis punctato, ad squamas roseo-tincto; calca inferiori acubatâ, inter spinas scabrientiâ.*

THE FRAGILE SPONDYLUS. Shell thin, oval, very finely striated, auricle small; scales erect, thin, numerous, palmated, subdivided in six principal rows, alternately smaller, prickly; interstices imbricated; very light fulvous, interruptedly rayed near the umbo with brown spots, dotted at the interstices, stained with rose at the scales; lower valve prickly, rough between the spines.

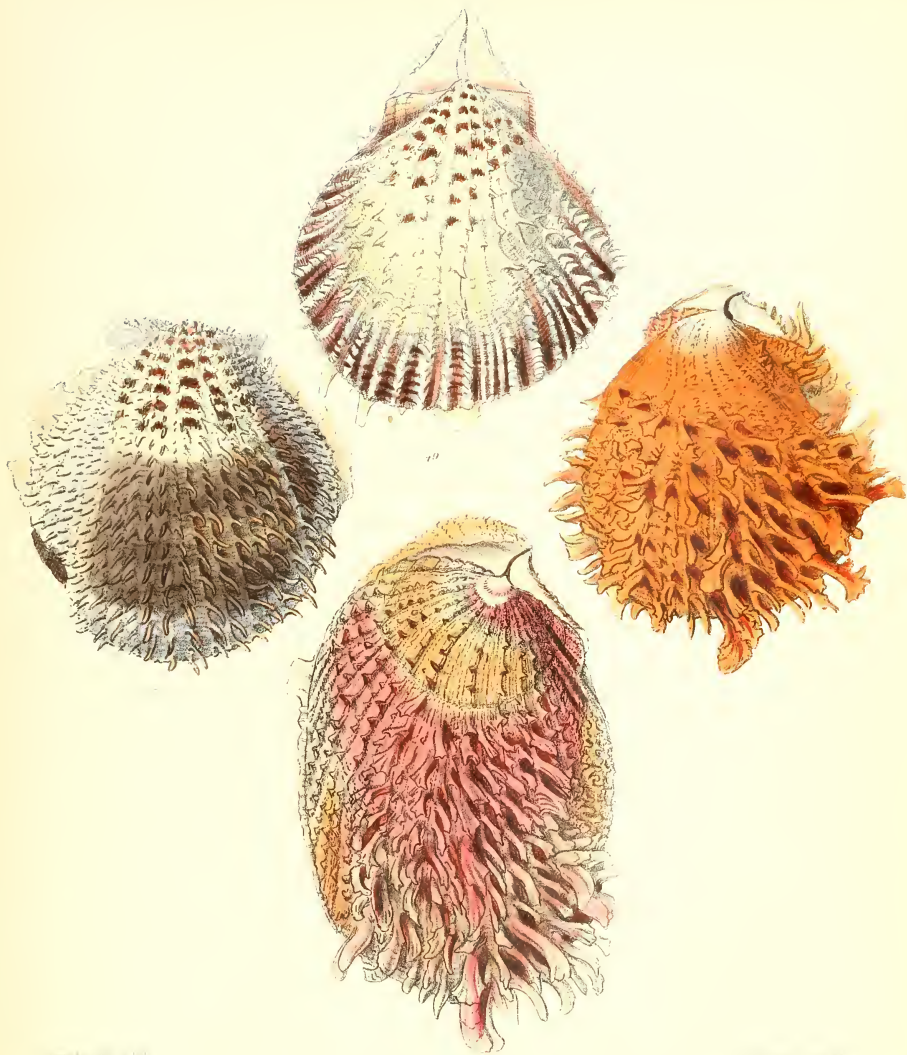
SOWERBY, Thesaurus Conch. vol. i. p. 426.

Hab. —?

The accompanying figure is enlarged from a reduced representation, in Sowerby's 'Thesaurus Conchyliorum,' of a shell formerly in the collection of the late Mr. G. B. Sowerby, Sen. The description is also quoted from the same work.

Fig. 216. (Mus. Cuming.)

A fine adult specimen of *S. flabellum* figured at Pl. VI in a young state.



SPONDYLUS.

PLATE XIV.

Species 49. (Mus. Cuming.)

SPONDYLUS SPECTRUM. *Spond. testā trigono-ovata, irregulari, radiatum tenuilirata, liris aculeis brevibus angularis promiscue armatis; alba, versus marginem fuscā inter liras, circa umbonem nigra maculata.*

THE SPECTRE SPONDYLUS. Shell triangularly ovate, irregular, radiately finely ridged, ridges promiscuously armed with short angular prickles; white, brown towards the margin between the ridges, spotted with black around the umbo.

Hab. Philippine Islands; Cuming.

Of a rude triangularly ovate form, rayed with fine ridges, beset throughout with short angular prickles, which towards the margin become more dense and appressed one upon the other.

Species 50. (Mus. Cuming.)

SPONDYLUS NICOBARICUS. *Spond. testā ovata, convexo-depressa, radiatum striata, aculeis erectis natisque ornata; alba, purpureo-fusca partim tincta, circa umbonem maculis purpureo-nigris radiata.*

THE NICOBAR SPONDYLUS. Shell ovate, convexly depressed, radiately striated, beset throughout with erect prickles; white, partially stained with purple-brown, rayed with purple-black spots round the umbo.

CHEMNITZ, Conch. Cab. vol. vii. pl. 45. f. 469, 470.

Hab. Philippine Islands; Cuming.

Covered throughout with short erect prickles, and rayed in a characteristic manner with purple-black spots.

Species 51. (Mus. Cuming.)

SPONDYLUS RAMOSUS. *Spond. testā ovata, subdepressa, subirregulari, radiatum tenuilirata, liris spinis ramosis armatis; ciccide croceo-nurruata.*

THE BRANCHED SPONDYLUS. Shell ovate, rather depressed, somewhat irregular, radiately finely ridged, ridges ornamented with branched spines; bright saffron-orange.

Hab. West Indies.

Chiefly distinguished by the elegantly branched growth of most of the spines.

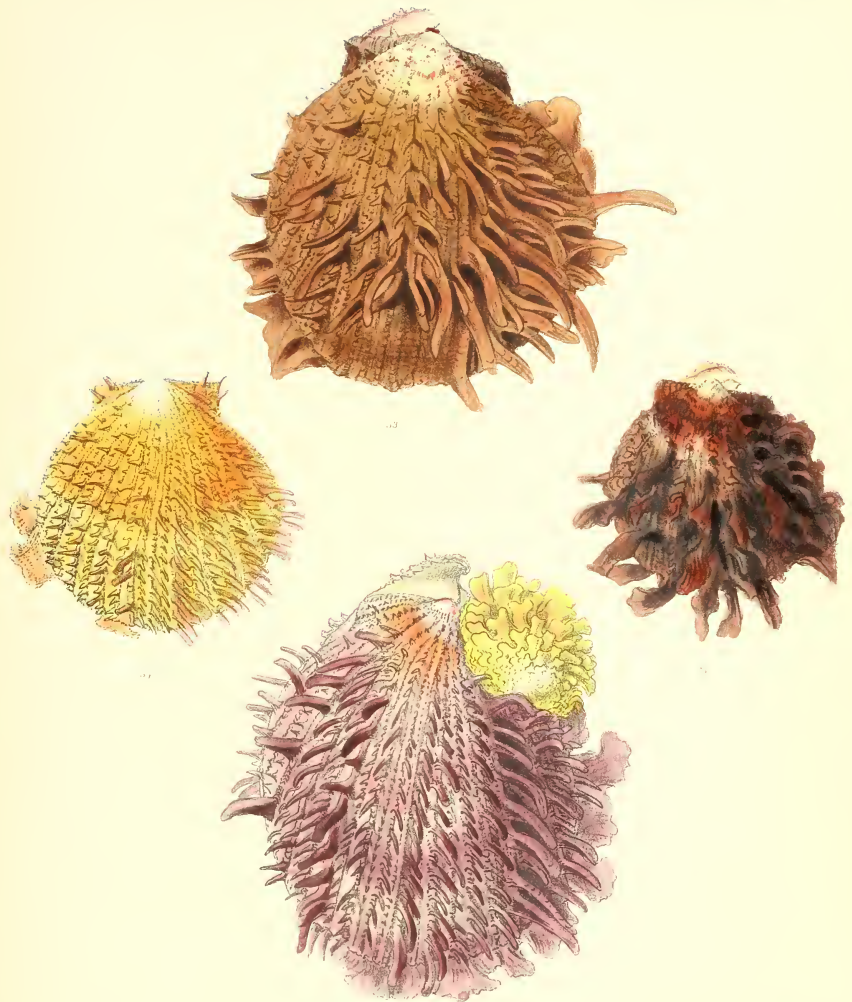
Species 52. (Mus. Cuming.)

SPONDYLUS RADULA. *Spond. testā ovata, radiatum tenuilirata, liris subdistantibus, interstitiis striatis, dense promiscue ramoso-spinosa; carneo-albida, purpureo-rufa plus minus tincta.*

THE RASP SPONDYLUS. Shell ovate, radiately finely ridged, ridges rather distant, striated in the interstices, densely promiscuously branch-spined; flesh-white, more or less stained with purple-red.

Hab. Tehuantepec, West Mexico; Captain Dare.

The leading characteristic feature of this species is a dense promiscuous covering of spines, some small and prickly, others palmately branched.



SPONDYLUS.

PLATE XV.

Species 53. (Mus. Cuming.)

SPONDYLUS SETIGER. *Spond. testā ovatā, convexo-depressā, radiatim levitā, liris fortiter spinosis, spinis valde irregularibus, subconcentricè dispositis; rubicunda, vix subfusca alba, sanguineo-maculatā.*

THE BRISTLED SPONDYLUS. Shell ovate convexly depressed, radiately ridged, ridges strongly spined; very irregular, spines arranged somewhat concentrically; ruddy brown, white, blood-spotted, about the umbō.

Hab. Philippine Islands.

Of a peculiar ruddy brown colour, ornamented with strong very irregular spines, ranged somewhat concentrically.

Species 54. (Mus. Cuming.)

SPONDYLUS ELECTRUM. *Spond. testā suborbiculari, v. ovato-depressā, radiatim tenuiter et striatā, liris intricato-spinosis, spinis numerosis, parvis, rubicundo-aurantiā, spinis saturatioribus.*

THE AMBER SPONDYLUS. Shell suborbicular, convexly depressed, radiately finely ridged and striated, ridges prickly spined, spines numerous, small; reddish-orange, spines darker in colour.

Hab. West Indies.

A delicate convexly depressed orbicular species, rayed

with very fine ridges of small prickly spines, the whole being of a semitransparent amber-orange colour.

Species 55. (Mus. Cuming.)

SPONDYLUS IMBUTUS. *Spond. testā suborbiculari, irregulari, vix striatā, vix aculeatā et squamatā, squamis palmato-ramosis, depressè curvatis; intense purpureo-rufā.*

THE DYED SPONDYLUS. Shell suborbicular, irregular, scarcely striated, rudely prickled and scaled, scales palmately branched, depressly curved; deep purple-red.

Hab. — ?

A shell of somewhat rude growth, of a deep burnt-red colour, armed with a few fine prickles and palmately branched scales, depressly bent forwards.

Species 56. (Mus. Cuming.)

SPONDYLUS CUNEUS. *Spond. testā oblongo-ovatā, radiatim levitā et striatā, liris subconfortis, irregularibus undiqvè promiscuè spinosis; purpureo-rufā.*

THE WEDGE SPONDYLUS. Shell oblong-ovate, radiately ridged and striated, ridges rather close-set, irregularly promiscuously spined throughout; purple-red.

Hab. West Indies.

Of a characteristic purple-red colour, beset rather closely with irregularly spined ridges.



28 f.



37.



38.



29

SPONDYLUS.

PLATE XVI

Fig. 28 b. (Mus. Cuming.)

The very elegant shell here represented is a white variety of *S. imperialis*, in which the spines are unusually elongated.

Species 57. (Mus. Cuming.)

SPONDYLUS VIOLACEUS. *Spond. testâ subtrigono-ovatâ, solidiusculâ, gibbosâ, radiatum liratâ et striatâ, liris spinis brevibus fortibus subdistantibus armatis; albida, purpurascens-violaceo plus minus tinctâ.*

THE VIOLET SPONDYLUS. Shell somewhat triangularly ovate, rather solid, gibbous, radiately ridged and striated, ridges armed with short strong rather distant spines; whitish, more or less tinged with purple-violet.

Hab. — ?

A rather solid gibbous Pecten-shaped shell, armed at distant intervals with spines, peculiarly short and strong.

Species 58. (Mus. Cuming.)

SPONDYLUS USTULATUS. *Spond. testâ ovatâ, densè radiatione liratâ, liris principalibus plano-squamatis, squamis spathulatis, numerosis, regularibus, liris intermediis tenuispinosis; intensè ustulato-rubidâ, infra squamas albâ.*

THE BURNT SPONDYLUS. Shell ovate, densely radiately ridged, the principal ridges flatly scaled, scales spatulate, numerous, regular, intermediate ridges finely spined; rich burnt-red, white beneath the scales.

Hab. Bermudas.

Chiefly distinguished by its regular rows of flat spatulate scales, the shell being of a rich burnt-red colour, except at the root of the scales, where it is white.

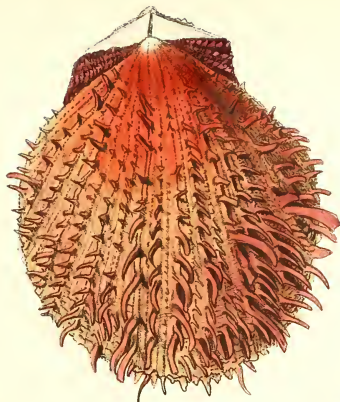
Species 59. (Mus. Cuming.)

SPONDYLUS VEXILLUM. *Spond. testâ subtrigono-ovatâ, planiusculâ, radiatum liratâ, liris distantibus, squamis spathulatis armatis, interstitiis tenuistriatis, sparsim spinosis; rufescente-spathiceâ, sanguineo circumbohem undulatâ.*

THE FLAG SPONDYLUS. Shell somewhat triangularly ovate, rather flat, radiately ridged, ridges distant, armed with spatulate scales, interstices finely striated, sparsely spined; reddish-fawn, waved with blood-red round the umbo.

Hab. Bermudas.

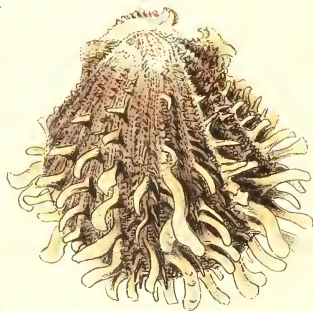
Of a peculiar reddish-fawn tint of colour, rayed with distant rows of spatulate scales, the interstices between which are loosely set with prickly spines.



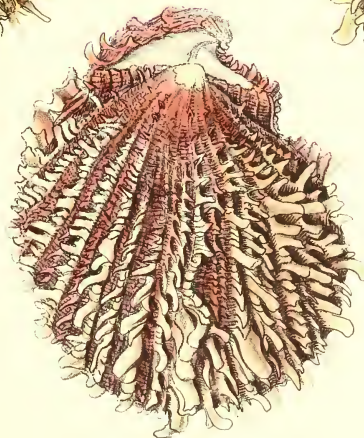
60.



61.



62.



63.

SPONDYLUS.

PLATE XVII.

Species 60. (Mus. Cuming.)

SPONDYLUS RUBICUNDUS. *Spond. testā oblongo-ovata, radiatim tenuisrata, liris subrudibus, acule spinosis, spinis valde irregularibus, breviusculis, curvatis; vixit coccineo-rubra.*

THE ROUGHED SPONDYLUS. Shell oblong-ovate, radiately finely ridged, ridges somewhat rude, sharply spined, spines very irregular, rather short, curved; bright crimson red.

Hab. Philippine Islands.

Characterized by an oblong-ovate form, crowded with rather small rude ridges, sparsely furnished with short irregular curved spines.

Species 61. (Mus. Cuming.)

SPONDYLUS FRAGUM. *Spond. testā ovata, pectiniformi, radiatim lirata et striata, liris spinosis, spinis fortibus, suberectis, striis ezimū muricatis; fuscescente-rosea, versus umbonem albidā, nigro coccineoque punctata, spinis et aculeis albis.*

THE STRAWBERRY SPONDYLUS. Shell ovate, pecten-shaped, radiately ridged and striated, ridges spined, spines strong, rather erect, striae delicately prickled; brownish rose, whitish towards the umbo, dotted with black and scarlet, spines and prickles white.

Hab. Philippine Islands.

Distinguished by a peculiar tone and pattern of colouring, rayed with alternate rows of white spines and prickles.

Species 62. (Mus. Cuming.)

SPONDYLUS AFFINIS. *Spond. testā subtrigono-ovata, rosea diatim costata, costis subdistantibus, squamis longiusculis, prominē contortis, arcatis, interstitiis quinque-seriatim muricatis; fuscescente-purpurea, circa umbonem roseo punctata, squamis albis.*

THE ALLIED SPONDYLUS. Shell somewhat triangularly ovate, radiately ribbed, ribs rather distant, armed with rather long prominently twisted scales, interstices with five rows of prickles; brownish-purple, dotted with rose about the umbo, scales white.

Hab. Philippine Islands.

This species has very much the appearance of *S. albi-barbatus*, the scales being similarly white upon a dark ground, which in the present species has a more purple tone, while the umbo is rose-spotted. The chief difference is in the more rudely angular form of this shell.

Species 63. (Mus. Cuming.)

SPONDYLUS ACULEATUS. *Spond. testā oblongo-ovata, valde irregulari, radiatim tenuistriata, squamis rudibus densè obsita; purpurascēte-rubra, squamis albis.*

THE PRICKLY SPONDYLUS. Shell oblong-ovate, very irregular, radiately finely striated, densely beset with rude scales; purple-red, scales white.

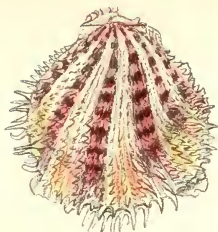
CHEMNITZ, Conch. Cab. vol. vii. p. 74. pl. 44. f. 160

Hab. — ?

Mr. Sowerby refers the shell here represented to the above-cited figure of Chemnitz, but it does not agree with it satisfactorily.



61



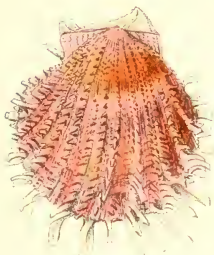
62



63



64



65



66



67

SPONDYLUS.

PLATE XVIII.

Fig. 446. (Mus. Cuming.)

A variety of *S. coccineus*, showing the purple-rayed beading and prickly margin.

Species 64. (Mus. Cuming.)

SPONDYLUS NUX. *Spind. testâ subglobosâ, quinqueliratâ et striatâ, iris squamatis, squamis latè ramosè spathulatis et fornicatis; saturatè corallo-rubrà.*

THE NUT SPONDYLUS. Shell subglobose, five-ridged and striated, ridges scaled, scales broadly ramosely spatulate and vaulted; deep coral-red.

Hab. — ?

A small dark coral-red species, in which the scales, few in number, are broadly ramosely spatulate and elegantly vaulted.

Species 65. (Fig. a, Mus. Cuming; fig. b, Mus. Hanley.)

SPONDYLUS MICROLEPOS. *Spind. testâ ovatâ, irregulari, radiatum liratâ et striatâ, iris strisque gemmatis, versus marginem retusè brevisquamatis; vividè corallo-rubrà.*

THE SMALL-SCALED SPONDYLUS. Shell ovate, irregular, radiately ridged and striated, ridges and striae beaded, bluntly short-scaled towards the margin; bright coral-red.

LAMARCK, *Anim. sans vert.* vol. vii. p. 190.

Hab. China.

The radiating ridges and striae of this species are distinguished by a peculiar short-scaled blunt beaded sculpture, which differs from that of all other species of the genus.

Species 66. (Mus. Cuming.)

SPONDYLUS LAYARDI. *Spind. testâ trigono-ovatâ, irregulari, radiatum densè striatâ, virè liratâ, sparsim mu-*

ricato-squamatâ; intusè purpurè, versus umbonem albidâ.

LAYARD'S SPONDYLUS. Shell triangularly ovate, irregular, radiately densely striated, scarcely ridged, sparsely prickly scaled; dark purple, whitish towards the umbo.

Hab. Ceylon.

A dark purple species, of rather thin substance and irregular growth, densely striated and sparsely prickly scaled.

Species 67. (Mus. Cuming.)

SPONDYLUS TENELLUS. *Spind. testâ ovatâ, radiatum tenuiliratâ, interstitiis minutè striatis, iris crivâ brevisquamatis; coccineo-rufâ, squamis pallidis.*

THE DELICATE SPONDYLUS. Shell ovate, finely radiately ridged, the interstices minutely striated, ridges delicately shortly scaled; scarlet-rose, scales pale.

Hab. — ?

The sculpture of this species is of a characteristic minute pattern, and the colouring of almost transparent delicacy.

Species 68. (Mus. Cuming.)

SPONDYLUS DIGITATUS. *Spind. testâ latè ovatâ, radiatum liratâ, iris aculeis tenuibus et squamis peculiariter trifurcatim ramosis densè obsitis; antratio-rufâ, squamis interdum luteo-lucidis.*

THE FINGERED SPONDYLUS. Shell broadly ovate, radiately ridged, ridges densely beset with fine prickles and peculiarly three-forked branched scales; orange-red, scales sometimes tinged with yellow.

SOWERBY, *Proc. Zool. Soc.* 1847, p. 87.

Hab. Bermudas; Belcher.

Remarkably distinguished from all other species of the genus by the pretty three-forked termination of the scales.

SPONDYLUS.

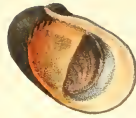
	Plate	Species		Plate	Species
aculeatus, <i>Chemnitz</i>	XVII.	63	limbatus, <i>Sowerby</i>	IX.	34
affinis, <i>Reeve</i>	XVII.	62	lingus-felis, <i>Sowerby</i>	VII.	27
albibarbatas, <i>Reeve</i>	IX.	32	longispina, <i>Lamarck</i>	IV.	17
albidus, <i>Broderip</i>	I.	5	longitudinalis, <i>Lamarck</i>	XIII.	46
Americanus, <i>Lamarck</i>	IV.	17	microlepos, <i>Lamarck</i>	XVIII.	65
arachnoides, <i>Lamarck</i>	IV.	17	minimus, <i>Chemnitz</i>	I.	5
aspririnus, <i>Sowerby</i>	XII.	45	multilamelatus, <i>Chenu</i>	XIII.	46
aurantius, <i>Lamarck</i>	III.	10	multilamelatus, <i>Lamarck</i>	VII.	25
avicularis, <i>Lamarck</i>	IV.	17	multimuricatus, <i>Reeve</i>	IV.	15
barbatus, <i>Reeve</i>	IV.	16	multisetosus, <i>Reeve</i>	III.	11
basilicus, <i>Reeve</i>	XI.	41	muricatus, <i>Chemnitz</i>	II.	8
Butleri, <i>Reeve</i>	IV.	14	mus, <i>Reeve</i>	III.	12
camurus, <i>Reeve</i>	X.	36	Nicobariensis, <i>Chemnitz</i>	XIV.	50
candidus, <i>Lamarck</i>	VI.	22	nudus, <i>Chemnitz</i>	I.	2
castus, <i>Reeve</i>	XIII.	47	nux, <i>Reeve</i>	XVIII.	64
ciliatus, <i>Broderip</i>	I.	4	ocellatus, <i>Reeve</i>	XII.	43
cocticius, <i>Lamarck</i>	XII.	44	Pacificus, <i>Reeve</i>	I.	1
crassisquamatus, <i>Lamarck</i>	VI.	24	<i>Petrovianum</i> , <i>Sowerby</i>	VII.	25
croceus, <i>Chemnitz</i>	V.	19	pictorum, <i>Chemnitz</i>	VI.	24
Cuumingi, <i>Sowerby</i>	X.	35	plurispinosus, <i>Reeve</i>	V.	18
cuneus, <i>Reeve</i>	XV.	56	princeps, <i>Broderip</i>	II.	9
<i>Delessertii</i> , <i>Chenu</i>	I.	3	radula, <i>Reeve</i>	XIV.	52
digitatus, <i>Sowerby</i>	XVIII.	68	ramosus, <i>Reeve</i>	XIV.	51
Jobius, <i>Broderip</i>	VI.	24	regius, <i>Linnaeus</i>	V.	20
duclis, <i>Chemnitz</i>	VII.	26	rubicundus, <i>Reeve</i>	XVII.	60
electrum, <i>Reeve</i>	XV.	54	setiger, <i>Reeve</i>	XV.	53
erinaceus, <i>Reeve</i>	XI.	39	Sinensis, <i>Sowerby</i>	II.	7
fiabelum, <i>Reeve</i>	VI.	21	<i>spalagus</i> , <i>Chemnitz</i>	VII.	26
fohaceus, <i>Chemnitz</i>	VII.	25	<i>spathuliferus</i> , <i>Lamarck</i>	VII.	26
fragilis, <i>Sowerby</i>	XIII.	48	spectrum, <i>Reeve</i>	XIV.	49
fragum, <i>Reeve</i>	XVII.	61	tenebrosus, <i>Reeve</i>	IX.	33
gilvus, <i>Reeve</i>	XI.	38	tenuellus, <i>Reeve</i>	XVIII.	67
Gussouii, <i>Costa</i>	I.	3	tenuispinosus, <i>Sowerby</i>	VI.	23
gedaropus, <i>Linnaeus</i>	III.	13	unicolor, <i>Sowerby</i>	X.	37
heriunaceus, <i>Chenu</i>	VIII.	19	ustulatus, <i>Reeve</i>	XVI.	58
hystrix, <i>Reeve</i>	XII.	42	varians, <i>Sowerby</i>	I.	3
ictivicus, <i>Reeve</i>	XI.	40	variegatus, <i>Chemnitz</i>	II.	8
imbutus, <i>Reeve</i>	XV.	55	vexillum, <i>Reeve</i>	XVI.	59
imperialis, <i>Chenu</i>	VIII.	28	violaceus, <i>Reeve</i>	XVI.	57
Lamarekii, <i>Chenu</i>	VIII.	30	virginicus, <i>Reeve</i>	IX.	31
Layardi, <i>Reeve</i>	XVIII.	66	zonalis, <i>Chenu</i>	VIII.	29
leucacantha, <i>Broderip</i>	II.	6			

MONOGRAPH

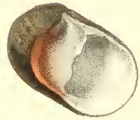
OF THE GENUS

N E R I T I N A .

By JOHN C. SMITH, F. R. S. E.
F. R. S. E. F. R. S. E. F. R. S. E. F. R. S. E.



1a



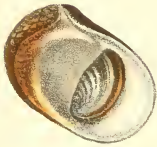
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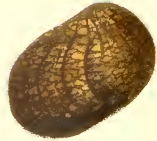
3a



4a



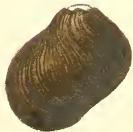
4b



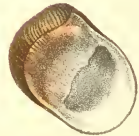
5b



5b



6a



6b



7b

NERITINA.

PLATE I.

Genus NERITINA, Lamarck.

Testa subglobosa, epidermide olivacea plerumque intuta, spirâ parvâ, laterali, rursu erectâ; anfractibus nunc laevibus, nunc spinis coronatis; arâ columellari planâ, saepe peramplâ, margine integrâ; apertura semitruncatâ, labro plus minus diffusâ, lateribus utriusque dilatato. Operculum testaceum, semiovatum, appendice laterali acutâ instructum.

Shell subglobose, generally covered with an olive epidermis, spire small, lateral, seldom exserted; whorls sometimes smooth, sometimes coronated; columellar area flat, often rather large, entire at the margin; aperture semicircular, lip more or less diffused, sometimes dilated on both sides. Operculum testaceous, semiovate, furnished with a sharp lateral piece.

The *Neritinae*, or Freshwater Nerites, are distinguished from the *Nerite* proper, or Marine Nerites, chiefly by their more gloomy aspect, thinner substance, and absence of sculpture and of columellar teeth; there are, nevertheless, some species of extremely brilliant colouring, and some characterized by a conspicuous variously developed crown of spines. Considerable attention has been given to this genus by M. Recluz, and by Mr. G. B. Sowerby, jun., both in his 'Conchological Illustrations' and in his 'The-saurus Couchylierum;' but the additions made to the species from various sources during the last five years by Mr. Cuming, have increased the number one-half, and rendered a further monograph desirable.

The *Neritinae* are chiefly inhabitants of the Old World, ranging from our own continent and islands through the islands of the Pacific and Eastern Seas to Australia and New Zealand. In the New hemisphere the genus is represented mainly in the streams of the West Indies and Central America.

Species 1. (Fig. a, b, Mus. Cuming.)

NERITINA CANALIS. *Ner. testâ oblongo-ovatâ, subtus concavo-depressâ, spirâ parvâ, ferè occultâ, anfractibus con-cavis, angustis, arâ columellari peramplâ, ad latas enaticatalatâ; œceno-nigrâ, arâ columellari sanguineo tinctâ.*

THE CHANNELLED NERITINA. Shell oblong ovate, concavely depressed beneath, spire small, almost hidden, whorls convex, narrow, columellar area very large, channelled at the side; blue-black, columellar area blood-stained.

SOWERBY, Tankerville Catalogue, p. 44, no. 1094.

Hab. Tahiti (on stones in a rivulet); Cuming.

Of a compressly expanded form, with a very large columellar area more or less stained with blood-red.

Species 2. (Fig. a, b, Mus. Cuming.)

NERITINA OLIVACEA. *Ner. testâ oblongo-ovatâ, subglobosâ, solidâ, spirâ concavo-planâ, ferè obsolete, anfractibus rotundatis, promiscuè concentricè striatis, arâ columellari latiusculâ, declivi, subcaulosâ; sordidè olivaceâ, arâ columellari œcrucescente-olivâ.*

THE OLIVE NERITINA. Shell oblong ovate, rather gibbous, solid, spire convexly flattened, almost obsolete, whorls rounded, promiscuously concentrically striated, columellar area rather broad, slanting, somewhat callos; dark olive, columellar area bluish-white.

LE GUILLOU, Revue Zool. Cuvierienne, 1841, p. 344.

Nerita solida, Recluz.

Hab. Island of Luzon, Philippines (on stones in a rapid river); Cuming.

Chiefly distinguished by its gibbous, solid, oblong form, the spire being almost obsolete.

Species 3. (Fig. a, b, Mus. Cuming.)

NERITINA LABIOSA. *Ner. testâ ovato-globosâ, spirâ parvâ, impressâ, anfractibus concavis, rugoso-striatis, prope spiram contractis, versus aperturam rotundato-expansis, arâ columellari amplâ, latè excavatâ; olivaceo-fulvâ, lineis et maculis nigris pictâ, iatus sanguineo tinctâ.*

THE FULL-LIPPED NERITINA. Shell ovately globose, spire small, impressed, whorls convex, roughly striated, contracted near the spire, towards the aperture rotundately expanded, columellar area large, broadly excavated; olive-green, painted with black lines and spots, interior tinged with blood-red.

SOWERBY, Couch. Illustrations, f. 48.

Hab. Island of Luzon, Philippines (on stones in a rapid river); Cuming.

This fine species, first collected in the Philippine Islands by Mr. Cuming, is chiefly distinguished by its bold circularly expanded aperture.

Species 4. (Fig. a, b, Mus. Cuming.)

NERITINA SQUAMIPICTA. *Ner. testā oblongo-ovatā, sub-
tus concavo-expansa, solidā, spirā ferè obsoletā, anfrac-
tibus convexis, concentricè flexuosè striatis, superne
leviter impressis, aereā columellari amplā, ad latus
canaliculatā; olivaceo-latrā, nigro tenuè reticulatā,
obscurè fasciatā.*

THE SCALE-PAINTED NERITINA. Shell oblong-ovate,
concavely expanded beneath, solid, spire almost obso-
lete, whorls convex, concentrically flexuously striated,
faintly impressed round the upper part, columellar
area large, channelled at the side; olive-yellow, finely
reticulated with black, obscurely banded.

RECLUZ, Sowerby, Thesaurus Conch. part 10, p. 513.

Hab. Island of Luzon, Philippines (on stones in a rapid
river); Cuming.

Of a more compressed solid growth than the preceding
species, painted with a fine network.

Species 5. (Fig. c, d, e, Mus. Cuming.)

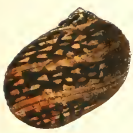
NERITINA BICOLOR. *Ner. testā subconico-oblongā, crassā,
spirā obtusè exsertā, crassā, anfractibus superne con-
cavo-impressis, deinde convexis, subradè plicato-striatis,
aereā columellari subangustā, declivi; virescente-oliva-
ceā, immaculatā, intus carulescente-albā.*

THE TWO-COLOURED NERITINA. Shell somewhat con-
ically oblong, thick, spire obtusely exerted, eroded,
whorls concavely impressed round the upper part,
then convex, somewhat rudely plicately striated, col-
umellar area rather narrow, slanting; greenish-olive,
unspotted, interior bluish-white.

RECLUZ, Pro. Zool. Soc. 1843, p. 200.

Hab. Island of Luzon (on stones in a mountain stream);
Cuming.

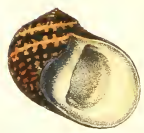
The whorls of this species are faintly concavely impressed
round the upper part, and rather rudely flexuously striated
across.



7a



8a



7b



3a



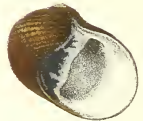
3b



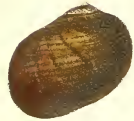
2a



6a



10b



10a



6b

NERITINA.

PLATE II.

Species 6. (Fig. *a, b*, Mus. Cuming.)

NERITINA KNORRI. *Ner. testâ ovatâ, solidissimâ, spirâ plano-impressâ, plus minus erosi, anfractibus subangustis, concentricè striatis, labro superâe subarrio ovato, arâ columellari latâ, amplâ; l. discoculis-sanguineis, nudato-nigro fasciatis variegatâ, labro intus unenatis-rufis, arâ columellari nigricante-ovaleâ.*

KNORR'S NERITINA. Shell ovate, rather solid, spire flatly impressed, more or less eroded, whorls rather narrow, concentrically striated, lip slightly auriculated at the upper part, columellar area broad, flat; yellowish-olive, variegated with bands of black waves, lip orange-red within, columellar area blackish-blue. RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 274.

Hab. Madagascar.

Distinguished as in *N. polligera* by the characteristic smoky blue-black colour of the columellar area and orange-red interior, but less expanded in form.

Species 7. (Fig. *a, b*, Mus. Cuming.)

NERITINA CORNEA. *Ner. testâ ovatâ, spirâ subæsertâ, anfractibus convexis, spiritaliter superficialiter subovatis, arâ columellari subangustâ; nigra, sordidè lateo maculatâ et fasciatis, arâ columellari superâe intusè nigra, nitente.*

THE BORNÉ NERITINA. Shell ovate, spire slightly exerted, whorls convex, spirally superficially grooved, columellar area rather narrow; black, banded and sprinkled with dark yellowish spots, columellar area intensely black at the upper part, shining.

Nerita cornea, Linnæus, *Syst. Nat.* (12th edit.) p. 1258.

Neritina naphtolina, Lesson.

Hab. Philippine Islands.

This characteristic dull orange-blotched species was found by Mr. Cuming in the above-named locality, eighteen feet high upon Palus, a quarter of a mile from any river.

Species 8. (Fig. *a, b*, Mus. Cuming.)

NERITINA PETITII. *Ner. testâ orbiculari-ovatâ, subglobosâ, spirâ obtusè planatâ, anfractibus convexis, cæcis, aperturam latioribus, concentricè irregulariter striatis, spiritaliter obsolete impresso-lineatis, aperturâ expansâ,*

arâ columellari concavo-planâ; intusè brunneo-nigrâ, labro et usq; columellari intusè sanguineis.

PETIT'S NERITINA. Shell orbicularly ovate, subglobose, spire obtusely flattened, whorls convex, broader towards the aperture, concentrically irregularly striated, spirally obsolete impressly lined, aperture expanded, columellar area concavely flattened; dark brown-black, lip and columellar area deep blood-stained.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 373.

Hab. Island of Mindanao, Philippines (on stones in a deep river); Cuming.

Well distinguished by its fine expanded globose form, with ruddy blood-stained lip and columellar area.

Species 9. (Fig. *a, b*, Mus. Cuming.)

NERITINA FULLIGERA. *Ner. testâ orbiculari-ovatâ, subdpressâ, spirâ concavo-impressâ, anfractibus convexis, cæcis, aperturam latioribus, concentricè rugoso-striatis, aperturâ expansâ, labro superâe acutè auriculato, arâ columellari leviter concavâ; aperturâ cærulescente, labro intus aurantio-rufis, arâ columellari nigro-cæcâ.*

THE DUSEY NERITINA. Shell orbicularly ovate, rather depressed, spire concavely impressed, whorls convex, broader towards the aperture, concentrically roughly striated, aperture expanded, lip sharply auriculated at the upper part, columellar area slightly concave; aperture bluish, lip orange-red within, columellar area black-blue.

Nerita fulligera, Linnæus, *Syst. Nat.* (12th edit.) p. 1253.

Nerita rubella, Müller.

Hab. Molucca and Philippine Islands.

This fine species is chiefly distinguished by its broad openly expanded aperture, and the peculiarity of colouring noted in speaking of *N. Knorri*.

Species 10. (Fig. *a, b*, Mus. Cuming.)

NERITINA SUBSULCATA. *Ner. testâ suboblongo-ovatâ, subconstrictâ, spirâ obtusâ, anfractibus superè concavisculis, anticulis, sulcis ferè obsoleteis, arâ columellari*

August, 1855.

subangustā; *sordide olivaceā*, *area columellari caruleo-
albā*, *superne nigro-nebulatā*.

THE FAINTLY GROOVED NERITINA. Shell rather oblong-ovate, somewhat ventricose, spire obtuse, whorls slightly concave round the upper part, faintly grooved, grooves almost obsolete, columellar area rather narrow; dull olive, columellar area bluish-white, clouded with black at the upper part.

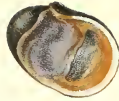
SOWERBY, Conch. Illustrations. *Neritina*, f. 50.

Hab. Philippine Islands.

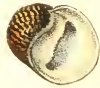
Of a uniform dull olive-colour, correctly distinguished by Mr. Sowerby, Jun., in his 'Conchological Illustrations,' but confounded subsequently in his 'Thesaurus' with *N. cornea*, from which it differs importantly in form.



12 a



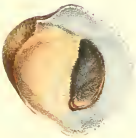
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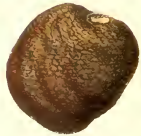
12 b



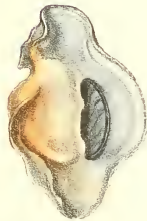
13 a



14 a



14 b



15 b



16 a



16 b



17 b

NERITINA.

PLATE III.

Species 11. (Fig. *a, b*, Mus. Cuming.)

NERITINA BECKII. *Ner. testâ depresso-ovata, sublus concaviusculâ, spirâ plano-impressa, asfracibus concavetricè irregulariter striatis, arâ columellari levigatâ; nigra, labro intus aurantio-rufo, arâ columellari foveo-lividâ.*

BECK'S NERITINA. Shell depressly ovate, rather concave becauth, spire flatly impressed, whorls concentrically irregularly striated, columellar area smooth; black, lip orange-red within, columellar area smoky livid.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 275.

Hab. — ?

Scarcely distinguishable from varieties of *N. pulligera*, and of somewhat doubtful specific value.

Species 12. (Fig. *a, b*, Mus. Cuming.)

NERITINA MARCHIONATA. *Ner. testâ depresso-orbiculari, tenuiculâ, spirâ subexsertâ, asfracibus convexis, junctâ spiram concavo-impressâ, apertura subexpansâ, arâ columellari margine minute denticulatâ; nigra, suspensâ leuco coarsienè undulatâ.*

THE MARQUESAS NERITINA. Shell depressly orbicular, rather thin, spire slightly exserted, whorls convex, concavely impressed next the spire, aperture rather expanded, columellar area rather narrow, minutely toothed at the edge; black, mostly conspicuously waved with yellow.

Hab. Marquesas Islands.

A light elegantly convoluted species, with the whorls impressly concave next the spire, with the columella narrow and minutely toothed at the edge, and the aperture rather expanded. The yellow waved marking is sometimes boldly zigzag, sometimes minutely freckled.

Species 13. (Fig. *a, b*, Mus. Cuming.)

NERITINA LATISSIMA. *Ner. testâ depresso-globosâ, utriusque latissimè alata, spirâ parvâ, distinctâ, asfracibus rotundatis, junctâ spiram impresso-concavis, levigatis, subplicato-corrugatâ, apertura expansâ, labro utriusque peculiariter dilatato, arâ columellari lobi, concaviusculâ; olivaceâ, nuceis minutis latis nigro-nubris densè lentiginosâ, arâ columellari caralescente, carnosotinctâ.*

THE VERY BROAD NERITINA. Shell depressly globose, very broadly winged on each side, spire small, dis-

tinct, whorls rounded, impressly concave next the spire, smooth, somewhat plicately wrinkled, aperture expanded, lip peculiarly dilated on each side, columellar area broad, rather convex; olive, densely speckled with minute dark shaded yellow spots, columellar area bluish, flesh-tinged.

BRODERIP, *Pro. Zool. Soc.* 1832, p. 200.

Hab. Real Lijos (adhering to fluviatile rocks); Cuming.

This very remarkable species is distinguished from all others of the genus by the prolonged wing-like dilatation on each side of the lip.

Species 14. (Fig. *a, b*, Mus. Cuming.)

NERITINA INTERMEDIA. *Ner. testâ subglobosâ, intermedia tumidiusculâ, spirâ subexsertâ, rotè concavulâ, asfracibus convexis, intermedia plicato-corrugatis, apertura latè expansâ, arâ columellari latâ, concaviusculâ, olivaceo-foveâ, labro densè lentiginosâ.*

THE INTERMEDIATE NERITINA. Shell subglobose, sometimes rather swollen, spire a little exserted, rudely convoluted, whorls convex, sometimes plicately wrinkled, aperture broadly expanded, columellar area broad, faintly convex; olive-brown, densely freckled with yellow.

BRODERIP, *Pro. Zool. Soc.* 1832, p. 201.

Eadem var. *N. globosa*, Broderip.

Hab. Central America (found abundantly on stones in a mountain stream in the Isle of Lions, Bay of Montejo); Cuming.

Very like *N. latissima*, despoiled of the winged dilatation of the lip, but specifically distinguished in having the spire more rudely convoluted.

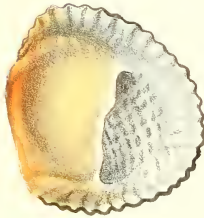
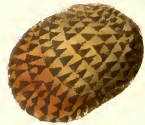
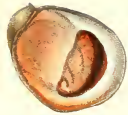
Species 15. (Fig. *a, b*, Mus. Cuming.)

NERITINA DOLIUM. *Ner. testâ subangustè globosâ, rotè lillè, spirâ obtusâ, eix exsertâ, asfracibus supra concavo-helicibus, dense concavis, arâ columellari subangustâ; olivaceo-nigra.*

THE TUN NERITINA. Shell rather narrowly globose, solid, spire obtuse, scarcely exserted, whorls concavely slanting round the upper part, thin convex, columellar area rather narrow; olive-black.

RECLUZ, *MS.*, Mus. Cuming.

Hab. Beneoect, Sumatra (in a muddy stream); Cuming. A solid, obtuse, smooth, olive-black shell, impressly concave beneath the sutures.



NERITINA.

PLATE IV.

Species 16. (Fig. *d, e*, Mus. Cuming.)

NERITINA MACGILLIVRAYI. *Ner. testâ depresso-oviformi, sublus convexâ, spirâ subseriatâ, plerumque plus minus erosa, anfractibus convexis, levigatis, apertura ferè circulari, expansâ, arèâ columellari latissimâ; olivaceo-nigrâ, apertura cereulescente, arèâ columellari sanguineo-tinctâ.*

MACGILLIVRAY'S NERITINA. Shell depressly ear-shaped, concave beneath, spire rather exerted, generally more or less eroded, whorls convex, smooth, aperture nearly circular, expanded, columellar area very broad; olive-black, aperture blue, columellar area blood-tinted.

Hab. Port Carteret, Solomon's Island.

A elegant ear-shaped light depressed species, with a broad expanded bluish aperture and large blood-tinged columellar area.

Species 17. (Fig. *a, b*, Mus. Cuming.)

NERITINA OVALIS. *Ner. testâ depresso-orali, tenuicatâ, spirâ subangustâ productâ, rix exsertâ, anfractibus spirâliber striatis, apertura subrecessu, arèâ columellari latissimâ; nigrâ, apertura cereulescente, arèâ columellari sanguineo-tinctâ.*

THE OVAL NERITINA. Shell depressly oval, rather thin, spire rather narrowly produced, scarcely exerted, whorls spirally striated, aperture rather expanded, columellar area very broad black, aperture bluish, columellar area blood-tinged.

SOWERBY, *Thesaurus Conchyliorum*, p. 507.

Hab. Tahiti.

Very like the preceding species, but narrower in form, with the spire more centrally produced.

Species 18. (Fig. *a, b*, Mus. Cuming.)

NERITINA GRANOSA. *Ner. testâ obliquè trigono-ovata, depressissimâ, utriusque dilatato-alutâ, spirâ ferè ubi-actâ, granulis angulis tubulis dense sculptâ, arèâ columellari latissimâ, convexiusculâ; nigrâ, intus cereuleo sanguineo, arèâ columellari superâ sanguineo-tinctâ.*

THE GRAINED NERITINA. Shell obliquely triangularly ovate, very depressed, dilutely winged on each side, spire almost obsolete, densely sculptured throughout with large swollen granules, columellar area very broad, rather convex; black, interior blue-mottled, columellar area blood-tinged at the upper part.

SOWERBY, *Faunercvitic Catalogus*, App. p. xi

Neritina papillosa, Jay.

Hab. Sandwich Islands.

This fine depressly winged species is distinguished from all others by its characteristic sculpture of swollen granules.

Species 19. (Fig. *c, d*, Mus. Cuming.)

NERITINA PIPERINA. *Ner. testâ globosâ, solidiusculâ, spirâ obtusè planatâ, anfractibus superâ leviter convexis, pressis, deinde rotundatis, levigatis aut concentricè striatis, apertura semicirculari, arèâ columellari subangustâ, marginè minutissimè denticulatâ; olivaceo-luteâ, arenâ nigra trigonâ utriusque tessellatâ, arèâ columellari convexo-aurulatâ.*

THE PEPPER NERITINA. Shell globose, rather solid, spire obtusely flattened, whorls slightly concavely impressed at the upper part, then rounded, smooth, or concentrically striated, aperture semicircular, columellar area rather narrow, very minutely toothed at the ridge; olive-yellow, tessellated throughout with triangular black spots, columellar area flesh-orange.

Nerita piperina, Chemnitz, vol. xi. p. 173. pl. 197. f. 1905, 1906.

Hab. ———?

A solid globose species, peculiarly characterized by a neat tessellated pattern of triangular black spots upon an olive-yellow ground, while the columellar area and interior are of a pale salmon-colour.

Species 20. (Fig. *a, b*, Mus. Cuming.)

NERITINA CALIFORNICA. *Ner. testâ orali, tenuicatâ, infra convexâ, spirâ subangustâ productâ, apice obtusè planatâ, anfractibus levigatis, apertura expansâ, arèâ columellari convexo-planatâ, latiusculâ; nigrâ, intus cereuleâ, arèâ columellari intus sanguineâ.*

THE CALIFORNIAN NERITINA. Shell ovate, rather thin, concave beneath, spire rather narrowly produced, obtusely flattened at the apex, whorls smooth, aperture expanded, columellar area concavely flattened, rather broad; black, blue within, columellar area deep blood-stained.

Hab. Gulf of California.

This appears to be distinct from any of its congeners in form, while the deep-toned colouring is characteristic.



210



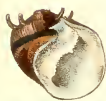
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NERITINA.

PLATE V.

Species 21. (Fig. *a, b, c*, Mus. Cuming.)

NERITINA LONGISPINA. *Ner. testâ subglobosâ, spirâ plus minus exsertâ, aufrechtibus superâ concavis, deinde spirâs longissimas verrucâs verrucâs, aperturâ expansâ, margine fortè spinosa breviter serratâ, areâ columellari subangustâ, columellâ angustâ, areâ columellari interdum pallidè angustissimâ tinctâ.*

THE LONG-SPINED NERITINA. Shell subglobose, spine more or less exserted, whorls concavely slanting at the upper part, then coronated with a row of very long spines, aperture expanded, sinuated or notched at the edge next the spines, columellar area rather narrow; intense black, columellar area sometimes faintly blood-tinged.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 312.

Nerita corana, Chemnitz (not of Linnæus).

Hab. Island of Rodriguez (on stones in small streams); Hinds.

This very remarkable shell, described by Chemnitz and Lamarek as the Linnæan *Nerita corana*, is fully proved by the specimens of the author of the 'Systema Nature,' in the possession of the Linnæan Society, to belong to another species.

Species 22. (Fig. *a, b*, Mus. Cuming.)

NERITINA DIADEMA. *Ner. testâ subglobosâ, tunicatâ, spirâ abbreviatâ-turritâ, aufrechtibus superâ concavis, deinde angulatis, ad angulosa fortiter spinosis, obliquè corrugato-striatis vel loricibus, areâ columellari subangustâ, subverticali, margine denticulatâ; corucubrâncââ vel nigricantè, interdum zonulis angustis lateis circumulatâ.*

THE DIADEM NERITINA. Shell subglobose, rather thin, spine shortly turreted, whorls concave round the upper part, then angled, strongly spined at the angle, obliquely wrinkle-striated, or smooth, columellar area rather narrow, nearly vertical, finely toothed at the edge; horny-brown or blackish, sometimes encircled with narrow yellow zones.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 277.

Hab. Philippine Islands (on stones in small streams); Cuming.

Of a horny-brown or black, sometimes yellow-zoned,

wrinkle-striated or smooth, coronated with strong incurved spires.

Species 23. (Fig. *a, b*, Mus. Cuming.)

NERITINA OBSCURATA. *Ner. testâ globosâ, subtruncatâ, spirâ obtusè depressâ, aufrechtibus superâ decursivis deinde serialiter brevissimis, eademe longitudinaliter corrugatis, aperturâ subobovata, areâ columellari subangustâ, margine arcuatâ; fuscâ-nigra vel olivaceâ, nigro-zonulatâ.*

THE OBSCURE NERITINA. Shell globose, rather solid, spire obtusely depressed, whorls slanting round the upper part, then short-spined, everywhere longitudinally wrinkled, aperture somewhat circular, columellar area rather narrow, arched at the edge brown-black or olive, black-banded.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1842, p. 183.

Hab. Island of Mindanao, Philippines; Cuming.

Of rather solid globose form, with a wrinkled surface, crowned with short irregular spines.

Species 24. (Fig. *a, b*, Mus. Cuming.)

NERITINA SUBGRANOSA. *Ner. testâ globosâ, spirâ brevitate-turritâ, interdum eadè obtusâ, aufrechtibus superâ nigratis, nunc loricibus, nunc angulatis et spinosis, fortiter corrugato-striatis, subgranosis, areâ columellari angustâ, interdum expansâ; cinereo-olivaceâ.*

THE GRANULATED NERITINA. Shell globose, spine shortly turreted, sometimes rudely obtuse, whorls angled round the upper part, now smooth, now angled and spined, strongly wrinkle-striated, granulated, columellar area narrow, sometimes expanded; greenish-olive.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 310.

Hab. Philippine Islands; Cuming.

Of this subgrained wrinkle-striated specimen Mr. Cuming possesses specimens, as illustrated in the accompanying Plate, convoluted into a smooth, obtuse, indelicately constructed spiral, as well as into one concavely turreted and spined. They present little or no variation of colour, all being of a uniform greenish-olive.



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NERITINA.

PLATE VI.

Species 25. (Fig. a, b, c, Mus. Cuning.)

NERITINA DONOVANA. *Ner. testâ subglobosâ, spirâ obtusè exertâ, anfractibus superâe convexo-declivibus, deinde angulatis, ad angulâ spinis curvatis distantibus coronatis, lamellis corrugato-striatis, arcu columellari angustâ, basi verris arcuatis sulcatis, anfractu ultimo plicato-foveâ; olivaceo-luteâ, nigro strigatâ aut subglobosâ reticulatâ.*

DONOVAN'S NERITINA. Shell subglobose, spire obtusely exerted, whorls slanting round the upper part, then angled, coronated at the angle with curved distant spines, finely wrinkle-striated, columellar area narrow, grooved in an arch towards the base, minutely granular at the edge; olive-yellow, streaked or finely reticulated with black.

RECLUZ, Sowerby, Thesaurus Conchyliorum, part 10, p. 126, pl. 110, f. 39, 40.

Hab. Island of Guimaras, Philippines (on stones in a small rivulet); Cuning.

Distinguished by its very neatly reticulated pattern of streaked markings, and by a small arched groove at the basal end of the columellar area.

Species 26. (Fig. a, b, Mus. Cuning.)

NERITINA SUBPUNCTATA. *Ner. testâ globosâ crassâ, solidâ, spirâ obtusè planatâ, anfractibus superâe declivibus, deinde obtusè angulatis et rotundatis, longitudinaliter subrudè plicato-striatis, aperturâ subconvexâ, arcu columellari convexo-declivi olivaceâ, strigâ subchrysois, interstitiis subpunctatis.*

THE FAINTLY-DOTTED NERITINA. Shell globose, thick, solid, spire obtusely flattened, whorls slanting round the upper part, then obtusely angled and rounded, longitudinally rather rudely plicately striated, aperture slightly expanded, columellar area concavely slanting; olive, striae yellowish, interstices faintly dotted.

RECLUZ, Pro. Zool. Soc. 1843, p. 199

Hab. Province of North Ilocos, Island of Luzon, Philippines (in a small mountain stream); Cuning.

A solid shell, of somewhat rude obtuse structure, longi-

tudinally plicately striated, the interstices being prominently faintly dotted with suborange matter.

Species 27. (Fig. a, b, c, d, Mus. Cuning.)

NERITINA CORONA. *Ner. testâ subglobosâ, spirâ rix exertâ, anfractibus superâe convexo-declivibus, superâe corrugato-striatâ, deinde angulatis, ad angulâ spinis subdistansibus coronatis, et supra verris, hexagulis, arcu columellari subangustâ; nigro et olivaceâ, latea verris foveolâ et punctatâ.*

THE CROWN NERITINA. Shell subglobose, spire scarcely exerted, whorls concavely slanting at the upper part, with the surface wrinkle-striated, then angled, crowned with rather distant spines at the angle. Lower convex, smooth, columellar area rather narrow, black or olive, variously banded and speckled with yellow.

NERITA CORONA, Linnæus, Syst. Nat. (12th edit.) p. 1252.

Neritina brevispina, pars, Lamarck.

Neritina coronata, Recluz.

Hab. Island of Burias, Philippines (on stones in rivulets); Cuning.

Mostly of a dark olive or sombre brown, variously painted with yellow, now in bands, now in dots or splashed speckles.

Species 28. (Mus. Cuning.)

NERITINA BREVISPIXA. *Ner. testâ subglobosâ, spirâ rix exertâ, obtusâ, anfractibus superâe plano-declivibus, deinde angulatis, spinis ad angulâ coronatis, nudique convexo corrugato-striatis, arcu columellari subangustâ, convexo-declivi; olivaceâ, foveâ plicatâ in parte.*

THE SHORT-SPINED NERITINA. Shell subglobose, spire scarcely exerted, obtuse, whorls flatly slanting at the upper part, then angled, coronated at the angle, everywhere conspicuously wrinkle-striated, columellar area rather narrow, concavely slanting; olive, more or less brown-tinged.

LAMARCK, Anim. sans vert. vol. viii, p. 572.

Nerita corona anstralis, CLEMENZ.

Cylindrus variabilis, LESSON.

Hab. Philippine Islands; Cuning.

Of smaller size than the preceding species, conspicuously wrinkle-striated throughout.



29a



29b



30a



31a



31b



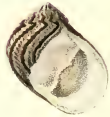
32a



32b



33a



33b



34a

NERITINA.

PLATE VII.

Species 29. (Figs. 29, 30, and 31. Mus. (young).)

NERITINA CUCULIS. *Ner. test. oblongo-ovata, spirae? con-*
gemensibus, angustibus, aperturâ dilatata, striâs con-
centricis, limbo et costâ columellariâ subangustâ, marginibus
subultrâ distinctâ, operculo subangustâ, columella
angustâ, umbilico distincto, testâ et striâ limbo subultrâ
pallidâ.

THE YOUNG NERITINA. Shell oblong-globose, spire rather geminate, whorls sloping to the upper part, then convex, smooth, columellar area rather narrow, minutely beaded at the edge, aperture rather small; olive-black, usually pointed with triangular yellow spots or orange streaks.

LAMARCK, ANIM. MIN. (PL. NÉP.) p. 570.

Hab. Pacific and Philippine Islands; China.

The shells represented by Figs. 29, 30, and 31 of the accompanying Plate illustrate their characteristic structure of this species.

Species 30. (Mus. (young).)

NERITINA FLEMBA. *Ner. test. subglobosa, limbo con-*
spira? acuminato-pedunculâ, angustibus, aperturâ con-
caevâ dilatata, striâs et costâ concentricis, operculo
angustâ, subultrâ distinctâ, umbilico distincto, testâ et
striâ limbo subultrâ pallidâ.

THE SLAND NERITINA. Shell conoid-bosc, rather swollen, spire acuminately produced, whorls concavely slanting round the upper part, concentricly tortuously striated, columellar area rather narrow

minutely rosily (mottled), olive-test, often unspotted.

RECLUZ, SOUVEN. THOUMIN Comb. part. 160 p. 595, pl. 112. f. 119 and 120.

Hab. Island of Bohol, Philippine. Common.

Of a uniform dull lichen-like color, rather impressed, slanting round the upper part of the whorls.

Species 31. (Mus. (young).)

NERITINA TURBIDA. *Ner. test. oblongo-ovata, limbo*
conspira? concaevâ, angustibus, aperturâ dilatata,
striâs distinctâ concentricis, limbo et costâ concentricis, operculo
angustâ, subultrâ distinctâ, umbilico distincto, testâ et
striâ limbo subultrâ pallidâ.

THE TURBID NERITINA. Shell oblong-globose rather swollen, spire acuminated, whorls sloping round the upper part, then convex, smooth, columellar area swollen, minutely rudely denticulated at the edge, aperture rather expanded; black, longitudinally streaked with orange-yellow, columellar area pale carnelion.

Nerita turrita, Chemnitz, Conch. Cab. vol. ix. part. 3, p. 71. pl. 124. f. 1085.

Neritina strigillata, Lamarck.

Neritina longiana, Recluz.

Hab. Madagascar.

Distinguished chiefly from *N. turrita* by the slanting conoid form.



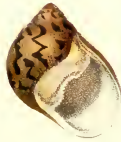
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124



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121

126



122

NERITINA.

PLATE VIII.

Species 34. (Fig. *v, b*, Mus. Cuming.)

NERITINA EUCOLIMA. *Ner. testâ globoso-convolutâ, spirâ solida, spirâ obtusâ, suborbiculatâ, convolutâ, concentricâ, lineâ columellâ, necd subcolumellâ, lineâ circumvolutâ, lineâ circumvolutâ, lineâ circumvolutâ.*

THE EUCOLIMA NERITINA. Shell globosely conoid, solid, spire obtuse, rather produced, whorls concavely flattened round the upper part, rounded at the base, columellar area swollen, very densely painted throughout with olive-black lines.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 257.
Hab. Mexico.

This peculiar conically bulging species is painted longitudinally with fine olive-black lines, so densely as to give the appearance of a uniform tint.

Species 35. (Fig. *a, b*, Mus. Cuming.)

NERITINA CIRCUMVOLUTA. *Ner. testâ suborbiculatâ, spirâ obtusâ, impressâ, anfractibus convexis, plicato-coriaceis, lineâ circumvolutâ, area columellari ovata, dentibus, alveolaribus, fasciâ dentibus nigris distincta circumvolutâ.*

THE ENCIRCLED NERITINA. Shell suborbicular, spire obtusely impressed, whorls convex, plicately wrinkled round the upper part, then smooth, columellar area sharply slanting: olive-yellow, encircled with two distinct black bands.

Recl. Sowerby, Thesaurus Conch. part 10. p. 527. pl. 115. f. 292, 293.

Hab. Island of Negros, Philippines (on stones in a mountain stream); Cuming.

An obtuse orbicular shell, encircled with two characteristic narrow black bands.

Species 36. (Fig. *a, b*, Mus. Cuming.)

NERITINA SEMI-OVATA. *Ner. testâ oblongo-globosâ, spirâ suborbiculatâ, convexâ, anfractibus convexo-impressis, dentibus convexis, bispinosis, area columellari subangulatâ, alveolaribus, nigris, dentibus distinctis, fasciâ circumvolutâ, nigra, fasciâ circumvolutâ, nigra.*

THE SEMI-OVATE NERITINA. Shell oblong-globose, spire rather obtusely conical, whorls concavely im-

pressed round the upper part, then convex, smooth, columellar area rather narrow, callous, minutely denticulated at the edge, yellowish-olive, sparingly beaded with square black fibrous columellar area granulation.

LAMARCK, Anim. sans vert. vol. viii. p. 571.

Hab. Banks of the Ganges, Calcutta.

The spots of this species, usually of an obliquely square form, sometimes flow longitudinally into each other.

Species 37. (Fig. *a, b*, Mus. Cuming.)

NERITINA CAPREA. *Ner. testâ globoso-convolutâ, spirâ obtusâ, productâ, anfractibus superioribus convexo-impressis, dentibus convexis, bispinosis, area columellari bispinosa, alveolaribus, aperturâ subcontractâ, alveolaribus.*

THE CAPREA NERITINA. Shell globosely conoid, solid, spire obtusely produced, whorls concavely impressed round the upper part, then convex, smooth, columellar area rather broad, callous, aperture rather contracted; olive-black.

GRAY, Wood, Index Test. Suppl. pl. S. f. 10.

Hab. Mauritius.

An intensely dark obtusely conoid species, of somewhat rude growth.

Species 38. (Fig. *a, b*, Mus. Cuming.)

NERITINA CREPIDULARIA. *Ner. testâ ovali, Crepidulariformi, spirâ utriculo-ventri, subites convexo-planata, area columellarâ latissimâ, margini integro, subquadrato, utriculo-ventri, alveolaribus, aperturâ et area columellari, coloribus convolutâ.*

THE CREPIDULA-LIKE NERITINA. Shell ovate, Crepidula-shaped, spire twisted inwards anteriorly, concavely flattened beneath, columellar area very broad, with margin entire, expanded throughout, aperture small olive, aperture and columellar area deep carmine.

LAMARCK, Anim. sans vert. vol. viii. p. 572.

Crepidula Crepidularia, Lesson

Neritina Testaceous, Sowerby.

Neritina schwanstianæ, Froschel.

Hab. Ceylon, Bengal.

Distinguished from all other species by its Crepidula-like plan of convolution.



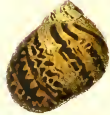
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NERITINA.

PLATE IX.

Figures 39. (Fig. *a, b*, Mus. Cuming.)

NERITINA ZEBRA. *Ner. testâ ovatâ, spirâ parvâ, exsertâ, anfractibus superne declivibus, deinde convexis, arcâ columellari acutè declivè, margine sicutè denticulatâ; nigri, lineis fulvis obliquè undatis longitudinaliter strigatâ.*

THE ZEBRA NERITINA. Shell ovate, spire small, exserted, whorls slanting round the upper part, then convex, columellar area sharply slanting, minutely denticulated at the edge; black, striped with obliquely waved longitudinal yellow lines.

LAMARCK, Anim. sans vert. vol. viii. p. 570.

Hab. Tahiti.

An ovate species, with a small obtruded spire, obliquely longitudinally striped with yellow lines upon a black ground.

Species 40. (Fig. *a, b*, Mus. Cuming.)

NERITINA SOBRIINA. *Ner. testâ compressè globosâ, spirâ obtusâ, sic exsertâ, anfractibus superne declivibus, subangustis, subhis planatis, levibus, arcâ columellari costosâ, subverticali; lateo-olivaceâ, strigis undatis subdistansibus pictâ.*

THE ALLIED NERITINA. Shell compressly globose, spire obtuse, scarcely exserted, whorls slanting round the upper part, rather narrow, flattened beneath, smooth, columellar area callous, rather vertical; yellowish-olive, marked with rather distant zigzag black streaks.

RECLUZ, Sowerby, Thesaurus Conch. part 10. p. 536. pl. 112. f. 100.

Hab. — ?

Of a peculiar obtuse flatly slanting growth about the spire, descending vertically beneath.

Species 41. (Fig. *a, b*, Mus. Cuming.)

NERITINA CUMINGIANA. *Ner. testâ pyramidalè-conicâ, spirâ angustâ, erectâ, anfractibus superne plano-declivibus, basi convexis, arcâ columellari costosâ; rufescente-nigrâ, lineis albis tenuibus longitudinaliter undatis undique notatâ, arcâ columellari carinolatâ.*

CUMING'S NERITINA. Shell pyramidally conical, spire large, erect, whorls flatly slanting round the upper part, convex at the base, columellar area callous;

greenish-black, marked throughout with fine longitudinally waved white lines, columellar area carinate.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1842, p. 77.

Hab. Island of Siquijor, Philippines (on stones in mountain streams); Cuming.

This fine species is well characterized by its solid erect pyramidal form.

Species 42. (Fig. *a, b*, Mus. Cuming.)

NERITINA SMITHII. *Ner. testâ globosâ, solidâ, spirâ subconicâ, anfractibus superne impresso-planatis, deinde costulatis, levibus, arcâ columellari costosâ; rufescente-albâ, fuscis nigris lineisque capillaribus interruptis irregulariter longitudinaliter pictâ, arcâ columellari sanguineo-tinctâ.*

SMITH'S NERITINA. Shell globose, solid, spire subconical, whorls impressly flattened round the upper part, then rounded, smooth, columellar area callous; bluish-white, painted with irregular interrupted longitudinal black bands and hair-lines, columellar area blood-stained.

GRAY, Sowerby, Conch. Illus. *Neritina*, f. 36.

Hab. Banks of the Ganges, Calcutta.

Distinguished by its peculiar mottled grey painting and porcelain-like substance, and characteristic blood-stain on the columellar area.

Species 43. (Fig. *a, b*, Mus. Cuming.)

NERITINA MORIO. *Ner. testâ ovatâ, spirâ parvâ, impressâ, anfractibus superne plano-declivibus, subangustis, arcâ columellari acutè convexâ; intense carbureatâ, arcâ columellari lutescente.*

THE FOOL NERITINA. Shell ovate, spire small, impressed, whorls flatly slanting round the upper part, rather narrow, columellar area sharply concave; deep coal-black, columellar area yellowish.

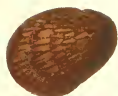
SOWERBY, Pro. Zool. Soc. 1832, p. 201.

Hab. Ducie's and Easter Islands, South Seas (on coral reefs); Cuming.

This species, partaking of the marine character of *Nerita*, is perhaps more strictly referable to that genus.



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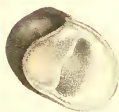
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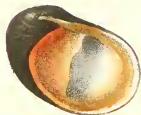
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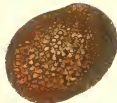
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Species 44. (Fig. *a, b*, Mus. Cuning.)

NERITINA SANGUINEA. *Ner. testâ ovali, spirâ obtusa, rix cœvâ, anfractibus superius convexo-planatis, subangustis, tortuoso-striatis, areâ columellari latâ; olivaceo-oblata, nigra reticulato-sagittarata, areâ columellari intense sanguinea.*

THE BLOOD-STAINED NERITINA. Shell ovate, spire obtuse, scarcely exerted, whorls concavely flattened round the upper part, rather narrow, tortuously striated, columellar area broad - olive-yellow, reticulatedly mottled with black, columellar area deep blood-stained.

SOWERBY, *Thesaurus Conch.* part 10, p. 513.

Hab. New Ireland (on stones in mountain stream); Hinds.

A dark reticulately mottled shell, deep blood-stained round the columellar area.

Species 45. (Fig. *a, b*, Mus. Cuning.)

NERITINA ASPERULATA. *Ner. testâ depresso-ovata, subius convexâ, spirâ parvâ, rix cœvâ, anfractibus subangustis, crispatis, aperturâ expansâ, multilocariâ, areâ columellari latâ, dentatâ, aperturâ angustâ, expansâ; olivaceo-fuscescente, nigra reticulatâ, areâ columellari rufâ tinctâ.*

THE CRISPLY-NERITINA. Shell depressly ovate, convex beneath, spire small, scarcely exerted, whorls rather narrow, expanded towards the aperture, everywhere minutely crisply wrinkled, columellar area broad - slanting, aperture large, expanded; olive-brown, reticulated with black, aperture bluish, columellar area tinged with red.

SOWERBY, *Thesaurus Conch.* part 10, p. 512.

Hab. Island of Luzon, Philippines (on small stones in a rivulet); Cuning.

Curiously sculptured throughout with fine crisply wrinkled striae, and painted with faint openly reticulated network of black lines upon an olive-brown ground.

Species 46. (Fig. *a, b*, Mus. Cuning.)

NERITINA BRUGUIERI. *Ner. testâ oblongo-ovata, depressâ, spirâ parvâ, obtusâ, rix cœvâ, anfractibus subangustis, superius plano-impressis, flexuoso-striatis, areâ columellari latâ, angustâ; intense carbonariâ, areâ columellari viridâ rufâ.*

BRUGUIERE'S NERITINA. Shell oblong-ovate, depressed,

spire small, obtuse, scarcely exerted, whorls rather narrow, flatly impressed round the upper part, flexuously striated, columellar area broad, large; dark coal-black, columellar area deep red.

RECLUZ, Sowerby, *Thesaurus Conch.* part 10, p. 512. pl. 114. f. 159.

Hab. New Ireland (on small stones in a rivulet); Hinds.

Mainly distinguished from *N. conolis*, to which it is the nearest allied species, by the lip, on joining the body-whorl, not being raised into a ridge.

Species 47. (Mus. Cuning.)

NERITA GAGATES. *Ner. testâ subdepresso-globosâ, solidâ, spirâ cœvâ, anfractibus superius convexo-impressis, dentatâ, costulatis, flexuoso-striatis, areâ columellari angustâ, callusâ; olivaceo-nigra, lineis anatis lateis in sign. pallidâ nudâ.*

THE AGATE NERITINA. Shell subdepressly globose, solid, spire scarcely exerted, whorls concavely impressed round the upper part, then rounded, flexuously striated, columellar area large and callous; olive-black, marked throughout with faint yellowish zigzag lines.

LAMARCK, *Anim. sans vert.* vol. viii, p. 570.

Hab. Sumatra (on stones); Cuning.

A solid callous species, of very dark olive-colour, which, on close examination, appears to be marked throughout with close-set zigzag yellow lines.

Species 48. (Fig. *a, b*, Mus. Cuning.)

NERITA PUNCTULATA. *Ner. testâ depresso-ovalâ, subius convexâ, spirâ parvâ, ferè obsoletâ, anfractibus late saucis, lœvibus, areâ columellari angustâ, leviter cœvâ; nigricans-obscuro, punctis lateis nulliquâ expansâ, aperturâ corallo-scuteâ, areâ columellari pallidâ sanguineo-tinctâ.*

THE DOTTED NERITINA. Shell depressly ovate, convex and expanded beneath, spire small, almost obsolete, whorls broadly convex, smooth, columellar area large, slightly convex; blackish-olive, sprinkled throughout with yellow dots, aperture bluish, columellar arc faintly blood-tinged.

LAMARCK, *Anim. sans vert.* vol. viii, p. 584. Enc. Méthodique, pl. 455. f. 2.

Hab. Jamaica, Guadaloupe.

A rather depressly expanded species, characteristically sprinkled throughout with yellow dots upon an olive-black ground.



NERITINA.

PLATE XI.

Species 49. (Fig. a, b, Mus. Cuming.)

NERITINA SPINIFERA. *Ner. testâ subglobosâ, tenuicula, spirâ obtusâ, anfractibus superè concavis, deinde angulatis, ad angulum spiniferis, arcu columellari subangustâ, margine denticulatâ; olivaceo-rufâ, punctis evanescente-ulis leuciginosâ.*

THE SPINED NERITINA. Shell subglobose, rather thin, spire obtuse, whorls concave round the upper part, then angled, spined at the angles, columellar area rather narrow, denticulated at the margin; olive-red, freckled with greenish-white dots.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1842, p. 183.

Hab. Philippine Islands (on stones in small streams); Cuming.

Neatly freckled throughout with greenish-white dots upon a peculiar ruddy olive ground.

Species 50. (Fig. a, b, Mus. Cuming.)

NERITINA BENGALENSIS. *Ner. testâ globosâ, spirâ plano-obtusâ, anfractibus concavo-declivibus, deinde subangulatis, ad angulum obscurè spiniferis, spinis brevibus, arcu columellari subangustâ; fluorescente-brunneâ, olivaceo-nigro pallidè reticulatâ.*

THE BENGAL NERITINA. Shell globose, spire flatly obtuse, whorls concavely slanting round the upper part, then slightly angled, obscurely spined at the angle, spines short, columellar area rather narrow; yellowish-brown, faintly reticulated with olive-black.

Nerita Bengalensis, Chemnitz, *Conch. Cab.* vol. xi. p. 176. pl. 197. f. 1911.

Hab. Bengal.

Of a peculiar dull yellowish-brown, faintly reticulated with olive-black, obtusely keeled at the angle, where the spines are short, blunt, and sometimes partially wanting.

Species 51. (Fig. a, b, Mus. Cuming.)

NERITINA ANGULOSA. *Ner. testâ globosâ, spirâ plano-obtusâ, anfractibus obtusè angulatis, rudè plicato-cornuatis, basin versus lorigatis, arcu columellari excavatâ, margine arcuatâ; fusco-utrâ, intus carulescente.*

THE ANGULOSE NERITINA. Shell globose, spire flatly obtuse, whorls obtusely angled, rudely plicately wrinkled,

smooth towards the base, columellar area excavated, arched at the margin; brown-black, bluish within.

RECLUZ, *MS. Mus. Cuming.*

Neritina corona, *var.*, Sowerby.

Hab. Philippine Islands; Cuming.

There is a spineless variety of *N. corona*, very closely resembling this species, but it nevertheless possesses a character peculiar to itself.

Species 52. (Fig. a, b, Mus. Cuming.)

NERITINA SPINOSA. *Ner. testâ subglobosâ, spirâ obtusâ, anfractibus rotundatis, medio spinosis, spinis numerosis, regularibus, arcu columellari plano-declivi; flavicincte, lineis numerosis nigris cingulatâ, arcu columellari superè sinuato-lucetâ.*

THE SPINY NERITINA. Shell subglobose, spire obtuse, whorls rounded, spined in the middle, spines numerous, regular, columellar area flatly slanting; yellowish, encircled with numerous black lines, columellar area blood-tinged at the upper part.

OWERBY (Badgin *MS.*), *Taukerville Catalogue*, p. 45. no. 1102.

Hab. Tahiti.

The very pretty species is distinguished by the whorls not being angled, and the spines being unusually numerous and regular. The linear painting is characteristic, and also the blood-stain on the upper edge of the columellar area.

Species 53. (Fig. a, b, Mus. Cuming.)

NERITINA RECLUZIANA. *Ner. testâ subglobosâ, spirâ obtusâ, anfractibus superè subangulatis, ad angulum spinosis, spinis brevibus, arcu columellari plano-declivi, subarcuatâ; fusco-nigra, punctis luteis aspersâ.*

RECLUZ'S NERITINA. Shell subglobose, spire obtuse, whorls slightly angled at the upper part, spined at the angle, spines short, columellar area flatly slanting, slightly arched; brownish-black, sprinkled with yellow dots.

LE GUILLOU, *Revue Zool. Soc. Cuvierienne*, 1841, p. 345.

Hab. New Ireland (on stones in rivulets); Hinds.

Of a characteristic brown-black sprinkled throughout with yellow dots.



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NERITINA.

PLATE XII.

Species 54. (Fig. *a, b*, Mus. Cuming.)

NERITINA LINEOLATA. *Ner. testâ convexo-globosâ, solidâ, spirâ obtusâ, anfractibus plano-declivibus, deinde gibbosis, arcâ columellari subangustâ, callusâ, circumscissâ, luvâ nigriâ confertis punctis obliquè scriptâ.*

THE LINEOLATE NERITINA. Shell conically globose, solid, spire obtuse, whorls flatly slanting round the upper part, then gibbous, columellar area rather narrow, callous; olive-yellow, obliquely streaked with close-set waves of black lines.

LAMARCK, Anim. sans vert. vol. viii. p. 574.

Hab. — ?

This shell answers to Lamarck's description of the above-named species, but not to the figures referred to by him in Chemnitz and in the 'Encyclopédie Méthodique,' which, again, differ materially from each other.

Species 55. (Fig. *a, b*, Mus. Cuming.)

NERITINA SERRULATA. *Ner. testâ depresso-globosâ, spirâ parvâ, parvâ exsertâ, anfractibus convexis, levibus, arcâ columellari plano-declivi, margine serrulatâ; olivaceo-nigrâ, lutescente-albo prouersè punctatâ.*

THE FINELY SERRATED NERITINA. Shell depressly globose, spire small, but little exserted, whorls convex, smooth, columellar area flatly slanting, finely serrated at the edge; olive-black, promiscuously dotted with yellowish-white.

RECLUZ, MS. Mus. Cuming, Sowerby, Thesaurus Conch. part 10. p. 518.

Hab. Cape Palmas, Sumatra (on stones in a river); Cuming.

A depressly ovate, somewhat tumid shell, dotted in a very promiscuous manner with yellowish-white upon a dark olive-black ground.

Species 56. (Fig. *a, b*, Mus. Cuming.)

NERITINA SCALMOSA. *Ner. testâ globoso-turbinatâ, crassiusculâ, spirâ obtusè exsertâ, anfractibus convexis, nudè peculiariter verrucoso-squamosis, arcâ columellari plano-declivi; fulco et olivaceo obscurè fasciatâ.*

THE SCALY NERITINA. Shell globose-ly turbinate, rather

thick, spire obtusely exserted, whorls convex, everywhere peculiarly wart-sided. columellar area flatly slanting, obscurely beaded with fulvous-olive.

RECLUZ, MS. Mus. Cuming, Sowerby, Thesaurus Conch. part 10. p. 527.

Hab. Isle of Negros, Philippines (on stones in a mountain stream); Cuming.

Sculptured throughout with a peculiar wart-like shagreen coating.

Species 57. (Fig. *a, b*, Mus. Cuming.)

NERITINA ADUMBRATA. *Ner. testâ depresso-globosâ, spirâ parvâ, acuminatâ, anfractibus convexis, tumidiusculis levibus, arcâ columellari plano-declivi; olivaceâ, punctis minutis albis nigro-nubeculis asperâ, arcâ columellari superâ lutescè sanguinâ.*

THE SHADED NERITINA. Shell depressly globose, spire small, acuminate, whorls convex, rather swollen, smooth, columellar area flatly slanting; olive, sprinkled with minute black-shaded white dots, columellar area deep blood-stained at the upper margin.

Hab. Solomon's Island.

Distinguished by a profuse sprinkling of white dots, shaded on the anterior side with black, and by the upper margin of the columellar area being deeply blood-stained.

Species 58. (Fig. *a, b*, Mus. Cuming.)

NERITINA SANDALINA. *Ner. testâ globosâ, solidâ, spirâ rix exsertâ, rotundâ, anfractibus superâ leviter convexis, fereoso-plicatis, deinde convexis, arcâ columellari subexcavato-declivi, margine arcuatâ; olivaceo-nigrâ.*

THE SANDAL BAY NERITINA. Shell globose, solid, spire scarcely exserted, blunt, whorls slightly concave round the upper part, flexuously pleated, then convex, columellar area slightly excavately slanting, arched at the margin; olive-black.

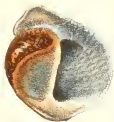
RECLUZ, Revue Zool. Soc. Cuvierienne, 1842, p. 76.

Hab. Sandal Bay.

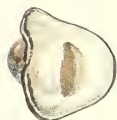
A blunt rudely pleated species, of a uniform olive-black colour.



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NERITINA.

PLATE XIII.

Species 59. (Fig. *a, b*, Mus. Cuming.)

NERITINA OWENIANA. *Ner. testâ convexo-depressâ, laevicula, lobis expansis, spirâ parvâ, vie cœsertâ, anfractibus convexis, leevibus, area columellari peramplâ, labro dilatato, subauriculato: pulvilo fulcâ, olivaceo-nigro reticulatâ, area columellari caraculo-caruleâ.*

OWEN'S NERITINA. Shell convexly depressed, rather thin, broadly expanded, spire small, scarcely exerted, whorls convex, smooth, columellar area very large, lip broadly dilated, subauriculated; pale fulvous, reticulated with olive-black, columellar area carnelion-blue.

GRAY, Wood, Index Testaceologicus, Supp. f. 8.

Hab. Fernando Po (on stones in small streams): Frazer.

A depressly convex species, with a fine expanded slightly auriculated lip.

Species 60. (Fig. *a, b*, Mus. Cuming.)

NERITINA CARIOSA. *Ner. testâ angustâ globosâ, utrinque conspicuè dilatatâ, spirâ subverticali, intortâ, anfractibus convexis, subangosis, area columellari peramplâ, apertura parvâ, labro expanso; caraculo-nigro, punctis albidis aspersis.*

THE WORM-EATEN NERITINA. Shell narrowly globose, conspicuously dilated on each side, spire subvertical, turned in, whorls convex, subangose, columellar area very large, aperture small, lip expanded; blue-black, sprinkled with white dots.

GRAY, Wood, Index Testaceologicus, Supp. f. 9.

Nerita Nuttallii, Recluz.

Hab. Sandwich Islands (on stones in rivulets); Nuttall.

Convolute in an obliquely vertical manner, with the sides prominently dilated.

Species 61. (Fig. *a, b*, Mus. Cuming.)

NERITINA VESPERTINA. *Ner. testâ depressissimâ, utrinque lobè aliatâ, laevi, spirâ obliquè verticali, obtusâ, radiatim striatâ, area columellari peramplâ, apertura parvâ; livido-olivaceâ, subcaruleâ.*

THE SUN-SET NERITINA. Shell very depressed, broadly winged on each side, thin, spire obliquely vertical, obtuse, radiately striated, columellar area very large, aperture small; livid-olive, subcarneous.

NUTTALL, Jay's Catalogue of Shells, p. 66.

Hab. Sandwich Islands (on stones in small streams). Nuttall.

A remarkably wide-winged species, of thin subcarneous substance.

Species 62. (Fig. *a, b*, Mus. Cuming.)

NERITA TAHITENSIS. *Ner. testâ depresso-ovata, subauriculatâ, spirâ obliquè verticali, obtusâ, radiatim minutè striatâ, area columellari peramplâ, leviter convexâ; nigricante-olivaceâ.*

THE TAHITI NERITINA. Shell depressly ovate, subauriculated, spire obliquely vertical, obtuse, radiately minutely striated, columellar area very large, slightly convex; blackish-olive.

LESSON, Sowerby, Thesaurus Conch. part 10. p. 509

Hab. Sandwich Islands (on stones in a small stream). Nuttall.

An oblong-ovate species, squarely auriculated above the spire.

Species 63. (Fig. *a, b*, Mus. Cuming.)

NERITINA CORNUTA. *Ner. testâ ovata, spirâ obliquè intortâ, anfractibus rotundatis, ad suturas pectinatis convexo-carinatis, area columellari lobâ, superne sinuatâ; olivaceo-fulvescente, nigro sparsis reticulatâ, lobis livido-plumbeis, caraculo sanguinatâ.*

THE HORNED NERITINA. Shell ovate, spire obliquely turned in, whorls rounded, peculiarly evenly keeled at the sutures, columellar area broad, sinuated at the upper part; pale olive-fulvous, sparingly reticulated with black, interior livid-lead, edged with carnelion.

Hab. Philippine Islands.

Distinguished by a peculiar concavely keeled appendage next the suture.



66a



67a



68a



69a



70a



71a



72a



73a



74a

NERITINA.

PLATE XIV.

Species 64. (Fig. a, b, Mus. Cuming.)

NERITINA AVELLANA. *Ner. testâ globosâ, solidâ, spirâ cir exsertâ, obtusâ, anfractibus columbato-angulatis, medio subplanatis, arâ columellari acrique dense serrulatâ; pallidâ olivaceo-cinereâ, punctis albâs nigro-maculis profusè aspersâ.*

THE NUT NERITINA. Shell globose, solid, spire exserted, obtuse, whorls rotundately angled, rather flattened round the middle, columella densely serrulated at the edge; pale olive-horny, profusely sprinkled with whitish black-shaded dots.

RECLUZ, Zool. Soc. Cuvierienne, 1842, p. 76.

Hab. Philippine Islands.

Of a peculiarly blunt solid structure, resembling a common nut.

Species 65. (Fig. a, b, Mus. Cuming.)

NERITINA FABÆ. *Ner. testâ globoso-conoidâ, solidâ, spirâ subprotrusâ, plus minus erasâ, anfractibus superne concavis, flexuose plicato-striatis, deinde convexis, lacinibus, arâ columellari abruptè declivi; nigricante-olivaceâ, lutescente-alba promiscuè strigatâ et punctatâ, interstia fasciatâ, fasciâ cicidâ marginaria tenuè reticulatâ.*

THE BEAN NERITINA. Shell globose conoid, solid, spire rather prominent, more or less eroded, whorls convex, flexuously plicately striated, then convex, smooth, columella abruptly slanting; blackish-olive, promiscuously streaked and dotted with yellowish-white, sometimes banded, the band finely reticulated with bright blood-red.

SONDRBY, Conch. Illustrations, f. 10.

Hab. — ?

Extremely variable in painting, but of a uniform solid globose conoid form.

Species 66. (Fig. a, b, Mus. Cuming.)

NERITINA INTERRUPTA. *Ner. testâ globoso-conoidâ, solidâ, spirâ subobtusâ, plerumque erasâ, anfractibus convexo-declivibus, deinde convexis, flexuoso-striatis, arâ columellari declivi; olivaceo-virescente, subtiliter oblique albo-lutescâ, fasciâ luteâ latiusculâ peculiariter oblique cingulatâ.*

THE INTERRUPTED NERITINA. Shell globose conoid, solid, spire rather obtuse, generally eroded, whorls concavely slanting, then convex, flexuously striated, columellar area slanting; olive-green, finely obliquely white-lined, peculiarly obliquely encircled with a rather broad yellow band.

RECLUZ, MS. Sowerby, Thesaurus Conch. part. 10, p. 526.

Hab. Island of Luzon, Philippines (on stones in a rapid river); Cuming.

This species is remarkable for having the apex generally much eroded.

Species 67. (Fig. a, b, Mus. Cuming.)

NERITINA CELATA. *Ner. testâ ovato-globosâ, solidâ, spirâ parvâ, obtusâ, non exsertâ, anfractibus superne planodeclivibus, peculiariter flexuoso-impresso-striatis, deinde columellatis, arâ columellari excavato-declivi; carbonario-altrâ, lineis flexuosis pallidâ ferrugiariâ.*

THE ENGRAVED NERITINA. Shell ovately globose, solid, spire small, obtuse, not exserted, whorls flatly slanting, peculiarly flexuously impressly striated, then rounded, columellar area excavately slanting; coal-black, flexuous lines pale rust.

RECLUZ, MS., Sowerby, Thesaurus Conch. part. 10. f. 528.

Hab. South Sea Islands.

An obtusely conoid species, sculptured with impressed striae running flexuously from the apex.

Species 68. (Fig. a, b, Mus. Cuming.)

NERITINA TRITONENSIS. *Ner. testâ globoso-conoidâ, solidâ, spirâ plus minus erasâ, anfractibus superne convexo-declivibus, deinde rotundatis, arâ columellari subangustâ; lutescente, nigro-olivaceo dense subtiliter reticulatâ.*

THE TRITON NERITINA. Shell globose conoid, solid, spire more or less eroded, whorls concavely slanting round the upper part, then rounded, columellar area rather narrow; yellowish, densely finely reticulated with black-olive.

LE GUILLOT, Revue Zool. Soc. Cuvierienne, 1841, p. 345.

Hab. North Australia.

Very densely reticulated with dark olive on a yellowish ground.



610



611



612



613



614



615



616



617



618



619

NERITINA.

PLATE XV.

Species 69. (Fig. *a, b*, Mus. Cuming.)

NERITINA RUGATA. *Ner. testâ obliquè oratâ, subglobosâ, spirâ cir exsertâ, anfractibus subangulatis, verrucosorugatis, ad angulâ obsoletè spinosis, arâ columellari declivi, juxta apicem subsinuatâ; carbonario-nigrâ, intus carnescente.*

THE WRINKLED NERITINA. Shell obliquely ovate, subglobose, spire scarcely exerted, whorls faintly angled, wart-wrinkled, obsoletely spinous at the angle, columellar area slanting, slightly sinuated next the apex; coal-black, bluish-red within.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1842, p. 75.

Hab. Island of Negros, Philippines (in mountain streams); Cuming.

Well characterized by a fine wart-wrinkled sculpture.

Species 70. (Fig. *a, b*, Mus. Cuming.)

NERITINA INSCULPTA. *Ner. testâ oratâ, spirâ obliquè exsertâ, anfractibus superiè leviter concavis, deinde rotundatis, sulcis linearibus spirâlibus insculptis, arâ columellari subconcaâ; intusè ceruleo-nigrâ.*

THE ENGRAVEN NERITINA. Shell ovate, spire obliquely exerted, whorls slightly concave on the upper part, then rounded, engraved with spiral linear grooves, columellar area rather concave; dark blue-black.

Hab. Sandwich Islands.

A dark blue-black shell, engraved throughout with spiral linear grooves, partaking largely of the characters of *Nerita*.

Species 71. (Fig. *a, b*, Mus. Cuming.)

NERITINA LISTERI. *Ner. testâ obliquè oratâ, spirâ subconoidè, parvè exsertâ, anfractibus concavis, levibus, arâ columellari declivi, cilliosâ, aperturâ parviusculâ, labro contracto; nigricante-olivaceâ, punctis lineisqve minutis lateis aspersâ.*

LISTER'S NERITINA. Shell obliquely ovate, spire subconoid, but little exerted, whorls convex, smooth, columellar area slanting, callous, aperture rather small, lip contracted; blackish-olive, sprinkled with yellow dots and minute lines.

PEIFFER, Sowerby, *Thesaurus Conch.* part 10, p. 534.

Hab. Cuba, Niernagna.

Of a peculiar form, the columellar area being very callous, and the lip unusually attenuately contracted.

Species 72. (Fig. *a, b*, Mus. Cuming.)

NERITINA MACGILLIVRAYI. *Ner. testâ ovato-globosâ, spirâ subexsertâ, anfractibus superiè concavis, deinde rotundatis, densè revicato-striatis, arâ columellari excavato-declivi; sordidè atrâ.*

MACGILLIVRAY'S NERITINA. Shell ovately globose, spire slightly exerted; whorls concave round the upper part, then rounded, closely elevately striated, columellar area excavately slanting; dull black.

Hab. Solomon's Island; Macgillivray.

Well characterized in form, while the surface has a finely-striated satiny lue.

Species 73. (Fig. *a, b*, Mus. Cuming.)

NERITINA AQUATILIS. *Ner. testâ conoidè-globosâ, sulcidâ, spirâ subaltâ, anfractibus superiè leviter concavis, deinde convexis, levibus, arâ columellari callosâ; olivaceo-luteâ, lineis nigris acutè undatis densè pictâ.*

THE RIPPLED NERITINA. Shell conoidly globose, solid, spire rather obtuse, whorls slightly concave round the upper part, then convex, smooth, columellar area callous; olive-yellow, thickly marked with black zigzag lines.

Hab. — ?

Very densely painted throughout with fine black zigzag lines upon an olive-yellow ground.



71a



71b



71c



71d



71e



71f



71g



71h



71i



71j

NERITINA.

PLATE XVI.

Species 74. (Fig. *a, b*, Mus. Cuming.)

NERITINA TURTONI. *Ner. testâ globoso-conoidâ, solidâ, spirâ subprominente, obtusâ, aufractibus superâ leviter concavis, deinde rotundatis, levibus, arâ columellari subangustâ, callosâ, margine vinctâ denticulatâ; brunneo-lutescente, nigro longitudinaliter latistrigatâ, areâ columellari carinata.*

TURTON'S NERITINA. Shell globosely conoid, solid, spire rather prominent, obtuse, whorls slightly concave on the upper part, then rounded, smooth, columellar area rather narrow, callous, minutely toothed at the edge; brownish-yellow, longitudinally broadly striped with black, columellar area carinate.

SOWERBY, *Thesaurus Conch.* part 10, p. 539.

Hab. New Ireland; Hinds.

A dark solid brownish-yellow conoid shell, longitudinally painted with broad waved black stripes.

Species 75. (Fig. *a, b*, Mus. Cuming.)

NERITINA NATALENSIS. *Ner. testâ globoso-conoidâ, spirâ subprominente, obtusâ, aufractibus superâ concavo-denticulatis, deinde concavis, levibus, arâ columellari subangustâ; fulvo-olivaceâ, nigro obliquè strigatâ.*

THE NATAL NERITINA. Shell globosely conoid, spire rather prominent, obtuse, whorls concavely slanting round the upper part, then convex, smooth, columellar area rather narrow; fulvous-olive, obliquely streaked with black.

Hab. Natal.

Of a more slantingly convoluted form than the preceding species, with the black stripes narrower and ranging obliquely in a contrary direction.

Species 76. (Fig. *a, b*, Mus. Cuming.)

NERITINA POWISIANA. *Ner. testâ transversè ovatâ, depressâ, spirâ obliquè intortâ, aufractibus subangustis, concentricè striatis, arâ columellari latâ, juxta apicem in sinu productâ; olivaceo-luteâ, purpurascente fasciatâ, fasciis nigris interruptis varioratâ.*

POWIS'S NERITINA. Shell transversely ovate, depressed,

spire obliquely turned in, whorls rather narrow, concentrically striated, columellar area broad, produced into a sinus next the apex; olive-yellow, faintly banded with purple, and mottled with interrupted black bands.

RECLUZ, *Sowerby, Thesaurus Conch.* part 10, p. 511.

Hab. New Ireland (on stones in a mountain stream); Hinds.

An elevated involuted shell, with the edge of the last whorl next the apex produced into a sinuated horn.

Species 77. (Fig. *a, b*, Mus. Cuming.)

NERITINA SOLIDISSIMA. *Ner. testâ depresso-orbiculari, solidâ, spirâ obliquè intortâ, aufractibus subangustis, cœcis apertura expansis, striis impressis spirâlibus sculptis, arâ columellari subcallosâ; carbonario-atrâ, punctis minutis albis aspersâ.*

THE VERY SOLID NERITINA. Shell depressly orbicular, solid, spire obliquely turned in, whorls rather narrow, expanded towards the aperture, engraved with spiral impressed striae, columellar area rather callous; coal-black, sprinkled with minute white dots.

SOWERBY, *Thesaurus Conch.* part 10, p. 541.

Hab. — ?

A very characteristic species, round and expanded in form, engraved with spiral impressed striae; deep coal-black, sprinkled with minute white specks.

Species 78. (Fig. *a, b*, Mus. Cuming.)

NERITINA ATERRIMA. *Ner. testâ globoso-conoidâ, spirâ subprominente, aufractibus superâ concavis, deinde rotundatis, levibus, arâ columellari angustâ; aterrimâ, intus carnescente-albâ.*

THE VERY BLACK NERITINA. Shell globosely conoid, spire rather prominent, whorls concave round the upper part, then rounded, smooth, columellar area narrow; deep black, bluish-white within.

KOCH, *Philippi, Abbild. und Besch. Conch.* pl. 1, f. 11.

Hab. — ?

Of a simple globosely conoid form, deep black, without indication of any pattern.



370 a



370 b



371 a



371 b



372 a



372 b



373 a



373 b



374 a



374 b

NERITINA.

PLATE XVII.

Species 79. (Fig. *a, b*, Mus. Cuming.)

NERITINA BICANALICULATA. *Ner. testâ ovatâ, subdepressâ, utriusque peculiariter canaliculato-alatâ, spirâ obliquè intortâ, lævigatâ, aræâ columellari peremptâ, aperturâ parâ; pallidè olivaceo-luteâ, nigro tenuè reticulatâ.*

THE DOUBLE-CHANNELLED NERITINA. Shell ovate, rather depressed, peculiarly canaliculately winged on each side, spire obliquely turned in, smooth, columellar area very large, aperture small; pale olive-yellow, finely reticulated with black.

RECLUZ, MS., Sowerby, Thesaurus Conch., part 10, p. 509.

Hab. Island of Luzon, Philippines (on stones in small ponds); Cuming.

Peculiarly distinguished by its channelled auricular wings.

Species 80. (Fig. *a, b*, Mus. Cuming.)

NERITINA SUBAURICULATA. *Ner. testâ ovatâ, solidiusculâ, spirâ obliquè intortâ, concentricè striatâ, aræâ columellari peremptâ, spernè subauriculatâ; pallidè olivaceo-luteâ, nigro tenuè reticulatâ.*

THE SLIGHTLY-EARED NERITINA. Shell ovate, rather solid, spire obliquely turned in, concentrically striated, columellar area very large, slightly auriculated at the upper part; pale olive-yellow, finely reticulated with black.

RECLUZ, MS., Sowerby, Thesaurus Conch., part 10, p. 510.

Hab. Island of Negros, Philippines (on the trunks of palms growing in brackish water); Cuming.

Exactly like the preceding species in detail of painting, and very similar in form, the channelled auricles being simply indicated.

Species 81. (Fig. *a, b*, Mus. Cuming.)

NERITINA DILATATA. *Ner. testâ suborbiculari-ovatâ, utriusque peculiariter dilatatâ, spirâ peculiariter intortâ, concentricè striatâ, aræâ columellari latissimâ, aperturâ parâ; pallidè olivaceo-luteâ, nigro aperte promiscuè reticulatâ, aræâ columellari carneâ.*

THE DILATED NERITINA. Shell suborbiculately ovate,

peculiarly dilated on each side, spire obliquely turned inwards, concentrically striated, columellar area very broad, aperture small; pale olive-yellow, openly promiscuously reticulated at the back, columellar area carnèous.

BRODERIP, Pro. Zool. Soc. 1832.

Hab. Tahiti (on stones in rivers); Cuming.

The reticulated painting of this species is more open and irregular than in the preceding, and the columellar area is dilated outwards on each side.

Species 82. (Fig. *a, b*, Mus. Cuming.)

NERITINA SANDWICHENSIS. *Ner. testâ obliquè ovatâ, spirâ depressè intortâ, lævigatâ, aræâ columellari distinctâ, in auriculâ juxta spiram productâ; pallidè olivaceo-luteâ, lineis undulatis nigris concentricè decussatè pictâ.*

THE SANDWICH ISLANDS NERITINA. Shell obliquely ovate, spire depressly turned inwards, smooth, columellar area rather broad, produced into an auricle next the spire; pale olive-yellow, very densely painted with concentric black waved lines.

DESHAYES, Anim. sans vert. vol. viii. p. 579.

Neritina Mauritiï, Recluz.

Hab. Sandwich Islands, Mauritius.

Curiously obliquely convoluted, with the outer surface very closely painted with concentrically waved black lines.

Species 83. (Fig. *a, b*, Mus. Cuming.)

NERITINA AURICULATA. *Ner. testâ ovatâ, utriusque canaliculato-auriculatâ, spirâ obliquè intortâ, decussatè striatâ, aræâ columellari subemptâ; olivaceo-nigra aræâ columellari confescente.*

THE EARED NERITINA. Shell ovate, conspicuously canaliculately eared on each side, spire obliquely turned inwards, decussately striated, columellar area rather large; olive-black, columellar area tinged with red.

LAMARCK, Anim. sans vert. vol. viii. p. 572.

Hab. New Holland.

The auricles in this species are distinguished from those of its allies by a more horizontal lateral growth.



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86



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89



90



91

NERITINA.

PLATE XVIII.

Species 84. (Fig. *a, b, c*, Mus. Cuning.)

NERITINA ACULEATA. *Ner. testâ compresso-oruth, tenui, spirâ obliquè intortâ, planatâ, sulfractibus curvatis, spiraculis latis, iris serratâ, et columellis, arâ columellari superficialiter excavatâ, auribus, fuscâ, curvâ.*

THE PRICKLY NERITINA. Shell depressly ovate, thin, spine obliquely turned inward, flattened, whorls convex, spirally ridged, ridges serrated or prickly, columellar area superficially excavated; dull brown, horny.

GÜLLIN, Syst. Nat. 13th ed. p. 3686. Chemnitz, C. n. cl. tab. vol. x. pl. 169. f. 1612

Neritina sulcata, Nyst.

Hab. Sumatra.

Of a distinct subgeneric type, thin and horny in substance, partaking of the character of *Paludana*.

Species 85. (Fig. *a, b*, Mus. Cuning.)

NERITINA FLORIDANA. *Ner. testâ compresso-globosâ, globuloseculâ, spirâ obtusâ, anfractibus superâe planiusculis, arâ columellari callusâ; cirsoculis albis, lincis stricis subtilissimis denâ eleganter punctis.*

THE FLORIDA NERITINA. Shell compressly globose, rather solid, spine obtuse, whorls rather flattened at the upper part, columellar area callous; greenish-white, densely elegantly painted with very fine olive lines.

SHUTTLEWORTH, MS. Mus. Cuning.

Neritina relicata, var., Sowerby.

Hab. Florida.

Closely allied to *Neritina relicata*, from which it scarcely differs except in being of a more stunted growth.

Species 86. (Fig. *a, b*, Mus. Cuning.)

NERITINA DEPRESSA. *Ner. testâ compressè ovatâ, vâ dissimulâ, spirâ obliquè intortâ, anfractibus angustis, rotundatis, decussatâ auribus striatis, arâ columellari capillâ, anfractibus continuis olivaceo-fuscâ, plus minus variegatâ, aperturâ carinata.*

THE DEPRESS'D NERITINA. Shell compressly ovate, rather solid, spine obliquely turned inward, whorls narrow, rounded, decussately minutely striated, columellar area large, with the margin continuous. olive-brown, more or less variegated, aperture earthen-tinged.

BENSON, MS. Mus. Cuning.

Hab. Calcutta.

Of a solid *Crepidula*-like form, with an expanded continuous aperture.

Species 87. (Fig. *a, b*, Mus. Cuning.)

NERITINA CUVIERIANA. *Ner. testâ ovato-globosâ, solidiusculâ, spirâ subprominensâ, anfractibus rotundatis, laticulis, arâ columellari subangustâ; olivaceo-nigrâ, lato punctatâ et variegatâ.*

CUVIER'S NERITINA. Shell ovately globose, rather solid, spine slightly prominent, whorls rounded, smooth, columellar area rather narrow: olive-black, dotted and variegated with yellow.

RECLZ, Revue Zool. Soc. Cuvierienne, 1841, p. 338.

Hab. New Ireland.

Of simple form, but varying considerably in painting.



337.



338.



339.



340.



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342.



343.



344.



345.



346.

NERITINA.

PLATE XIX.

Species 88. (Fig. *a* to *k*, Mus. Cuming.)

NERITINA COMMUNIS. *Ner. testā globoso-conoidea, spirā prominulā, anfractibus superne concavo-declivibus, divine convexis, levigatis, nitidis, areā columellari callosā: Intescente-albā, intus roseo variè fasciatā, strigis obliquis nigris interdum pictā.*

THE COMMON NERITINA. Shell globosely conoid, spire prominent, whorls concavely slanting round the upper part, then convex, smooth, shining, columellar area callous; yellowish-white, variously banded with deep rose, sometimes painted with oblique black stripes.

QUOY and GAIMARD, Voy. de l'Astrolabe.

Hab. Island of Siquijor, Philippines; Cuming.

Of this very beautiful and extremely variable species, it has been necessary to give specimens under several different aspects of colouring. The predominant colouring is deep rose, variously interrupted with bands of pale yellow, marked with regular oblique black bands; but these, as it may be seen in Fig. 88 *k*, are sometimes absent, while in other specimens, as at Fig. 88 *i*, the black bands are conspicuous, and the rose colouring is wanting.

November, 1855.



50a



50b



50c



50d



50e



50f



50g



50h



50i



50j

NERITINA.

PLATE XX.

Species 89. (Fig. *a* to *d*, Mus. Cuming.)

NERITA SOVERBII. *Ner. testā globosā, solidiusculā, spirā vix exsertā, obtusā, anfractibus superāe rudē plicatō-rugatis, deinle rotundatis, rugis caavidis, aperturā parvā, arcū columellari perloctivi; sordidē griseā, caruleo-nigrā plus minus variē marmoratā et fusciatā.*

SOVERBY'S NERITINA. Shell globose, rather solid, spire scarcely exerted, obtuse, whorls rudely plicately wrinkled round the upper part, then rounded, with the wrinkles fading, aperture small, columellar area very slanting; dull grey, more or less variably mottled and banded with blue-black.

RECLUZ, Sowerby, Thesaurus Conch. part 10. p. 528.

Hab. Island of Luzon, Philippines (on the stony bed of a small river); Cuming.

Distinguished by a characteristic globose nut-shaped form, variously mottled with blue-black and grey.

Species 90. (Fig. *a* to *f*, Mus. Cuming.)

NERITINA DUBIA. *Ner. testā ovali, spirā leviter exsertā, laterali, anfractibus subangustis, rotundatis, levibus,*

arcū columellari subexsertā, fulvo-aurantiā, fasciis vel strigis undatis nigris vix pictā, interdum omnino fulco-aurantiā, arcū columellari intensē sanguineā.

THE DOUBTFUL NERITINA. Shell ovate, spire slightly exerted, lateral, whorls rather narrow, rounded, smooth, columellar area faintly excavated; fulvous-orange, variously painted with black bands or waved stripes, sometimes altogether fulvous-orange, with columellar area deep blood-red.

CHEMNITZ, Conch. Cab. vol. v. p. 324. pl. 193. f. 2019, 2020.

Neritina fuscata, Lamarek.

Neritina zebraoides, Lesson.

Neritina reticulata, Quoy and Gaimard.

Neritina Philippinara, Sowerby.

Neritina bella, Busch.

Hab. River Pisag, Bay of Manilla (adhering to the piles of wharfs); Cuming.

Though varying considerably in pattern, the ground-colour of this species is invariably a rich fulvous-orange. The columellar area is sometimes tinged, sometimes deeply stained with blood-red, but very rare in the latter state.



81 a



81 b



81 c



82 a



82 b



82 c



82 d



82 e



82 f



82 g

NERITINA.

PLATE XXI.

Species 91. (Fig. *a, b, c*. Mus. Cuming.)

NERITINA PULCHELLA. *Ner. testâ subglobosâ, spirâ obtusè planatâ, anfractibus convexis, nuac levibus, nuac plicato-striatis, arcâ columellari subangustâ, declivè; lutescente-rosâ, œcralio-nigro, punctis interrupto, tinctâ vel fasciatâ.*

THE PRETTY NERITINA. Shell subglobose, spine obtusely flattened, whorls convex, sometimes smooth, sometimes plicately striated, columellar area rather narrow, slanting; yellowish-rose, variously stained or banded with blue-black, interrupted with dots.

Hab. Island of Luzon, Philippines (on stones in a small stream); Cuming.

A small globose shell, variably painted, very much resembling *N. feba*, but wanting the depression which characterizes the upper portion of the whorls of that species.

Species 92. (Fig. *a to d*, Mus. Cuming.)

NERITINA VIRGINEA. *Ner. testâ obliquè conoidè, subglobosâ, spirâ parvâ, subobtusâ, anfractibus superne declivibus, levibus, nitidis, aperturâ parvâ, arcâ columellari perrallosâ; albâ vel pallidè griseâ, nigricante-griseo plus minus reticulatâ, interdum rosacâ.*

THE VIRGIN NERITINA. Shell obliquely conoid, subglobose, spine small, rather obtuse, whorls slanting

round the upper part, smooth, shining, aperture small, columellar area very volubus; whitish or grey, more or less reticulated with blackish-grey, sometimes tinged with rose.

LAMARCK, *Anim. sans vert.* vol. viii. p. 575.

Neritinae Brasiliæ and *Leachii*, Recluz.

Hab. West Indies.

Of a peculiar grey reticulated pattern, the network being sometimes broken up into oblique irregular bands.

Species 93. (Fig. *e, b, c*, Mus. Cuming.)

NERITINA PUPA. *Ner. testâ subobliquè globosâ, spirâ parvâ exsertâ, anfractibus convexis, levibus, arcâ columellari plano-declivè; albâ, œcralio-nigro plus minus confertius strigatâ vel reticulatâ.*

THE PUPA NERITINA. Shell somewhat obliquely globose, spine but little exerted, whorls convex, smooth, columellar area flatly slanting, white, more or less closely striped, or reticulated with blue-black.

Nerita pupa, Linnæus, *Syst. Nat.* 12th edit. p. 1253

Hab. Jamaica.

A globose species, convoluted somewhat obliquely, reticulated or striped with blue-black, varying more or less in the closeness of the pattern.



254



254



254



254



254



254



254



254



254



254

NERITINA.

PLATE XXII.

Species 94. (Fig. *a, b*, Mus. Cuming.)

NERITINA CHLOROSTOMA. *Ner. testâ globosâ, tenui, tumidiusculâ, spirâ subexsertâ, anfractibus superne impressis, deinde rotundatis, substriatis, areâ columellari declivi; intese ferrugineo-griseâ, albipunctatâ, ad suturam vittatâ, aperturâ luteâ.*

THE YELLOW-MOUTHED NERITINA. Shell globose, thin, rather swollen, spire slightly exerted, whorls impressed round the upper part, then rounded, substriated, columellar area slanting; dark rusty-grey, dotted with white, filleted at the sutures, aperture yellow.

BRUDERIP, Pro. Zool. Soc. 1832, p. 201.

Hab. Tahiti (at the mouth of a small stream, at times covered with salt water); Cuming.

Of somewhat light structure, dark grey, thickly studded with minute white dots, with the aperture yellow.

Species 95. (Fig. *a, b*, Mus. Cuming.)

NERITINA TRISERIALIS. *Ner. testâ subglobosâ, spirâ vix exsertâ, anfractibus superne subplanatis vel declivibus, areâ columellari angustâ, callosâ; nigricante-griseâ, maculis albidis aspersâ, in seriebus tribus distinctioribus.*

THE TRISERIAL NERITINA. Shell subglobose, spire scarcely exerted, whorls rather flattened round the upper part, or slanting, columellar area narrow, callous; dark grey, sprinkled with white spots, more distinct in three rows.

SOWERBY, Thesaurus Conch. part 10. f. 521.

Hab. — ?

A dark grey white-spotted shell, in which the spots indicate, more or less distinctly, three interrupted bands.

Fig. 96. (Mus. Cuming.)

The fine specimen here figured proves to be a variety of *N. communis*, represented at Pl. XIX.

Species 97. (Fig. *a, b*, Mus. Cuming.)

NERITINA CUPRINA. *Ner. testâ oblongo-conicâ, spirâ turbinatâ, anfractibus superne impressis, deinde convexis, obliquè striatis, areâ columellari subcallosâ; nigriâ, lineis undatis lateis pallide notatâ, areâ columellari aurantio tinctâ.*

THE COPPER NERITINA. Shell oblong-conical, spire turbinate, whorls impressed round the upper part, then convex, obliquely striated, columellar area rather callous; black, marked with very faintly indicated zigzag lines, columellar area tinged with orange.

RECLUZ, MS., Mus. Cuming.

Hab. — ?

A well-defined conically turbinate black species, marked with faintly indicated wavy yellow lines, which impart a coppery hue to the shell.

Species 98. (Fig. *a, b*, Mus. Cuming.)

NERITINA APIATA. *Ner. testâ globoso-turbinatâ, tenuissimiâ, spirâ parviusculâ, anfractibus superne planulatis, deinde rotundatis, sabangustis, areâ columellari subamplâ; cinereo-griseâ, punctis nicosis transversis aspersâ.*

THE BEE-MARKED NERITINA. Shell globosely turbinate, very thin, spire rather small, whorls flattened round the upper part, then rounded, rather narrow, columellar area rather large; ash-grey, sprinkled with snow-white transverse dots.

RECLUZ, Sowerby, Thesaurus Conch. part 10. p. 518.

Hab. Island of Negros, Philippines (on stones in a mountain stream); Cuming.

An unusually light turbinate species, of distinct typical character, dull grey sprinkled with small transverse whitish flakes.



1096



1097



1098



1099



1100



1101



1102



1103



1104



1105

Species 99. (Fig. a, b, Mus. Cuming.)

NERITINA SPIRALIS. *Ner. testâ transversè ovatâ, tenuicollâ, spirâ parvâ, parvâ exsertâ, laterali, anfractibus decussatim striatis, subangustis, ultimo anticè descendente, aperturâ orbiculari-ovatâ, arâ columellari excavatâ; virescente-olivaceâ, subpellucidâ.*

THE SPIRAL NERITINA. Shell transversely ovate, rather thin, spire small, but little exerted, lateral, whorls decussately striated, rather narrow, the last descending in front, aperture orbicularly ovate, columellar area excavated; greenish-olive, subtransparent.

Hab. —?

Of a characteristic spiral growth, and of a peculiar light substance.

Species 100. (Fig. a, b, Mus. Cuming.)

NERITINA STRIOLATA. *Ner. testâ subglobosâ, spirâ parvâ, obtusâ, anfractibus convexis, concentricè tenui-striatis, arâ columellari callusâ, aperturâ parvisculâ; pallidè cinereo-olivaceâ, punctis sparsis nigricantibus aspersâ.*

THE FINELY-STRIATED NERITINA. Shell subglobose, spire small, obtuse, whorls convex, concentrically finely striated, columellar area callous, aperture rather small; pale ash-olive, sprinkled with scattered black dots.

RECLUZ, Sowerby Thesaurus Conch. part 10. p. 537.

Hab. —?

Of a dull *Aspularia*-like tone of colour, sparsely dotted with black.

Species 101. (Fig. a, b, Mus. Cuming.)

NERITINA PICTA. *Ner. testâ subglobosâ, spirâ obtusâ, anfractibus convexis, levibus, pallivâ, arâ columellari callusâ; pallidè grisèâ, concentricè-nigro rariè tenuè articulatâ, arâ columellari eicèntè castaneo-rubrà.*

THE PAINTED NERITINA. Shell somewhat globose, spire obtuse, whorls convex, smooth, polished, columellar area callous; light grey, variously finely reticulated with blue-black, columellar area bright chestnut-red.

SOWERBY, Pro. Zool. Soc. 1822, p. 201.

Hab. Panama (on a mud-bank partially overflowed with fresh water); Cuming.

A beautifully reticulated grey porcellanous species, with a bright chestnut-red columellar area.

Species 102. (Fig. a, b, Mus. Cuming.)

NERITINA NAVIGATORIA. *Ner. testâ conico-turbulatâ, spirâ prominulâ, anfractibus superè declivibus, deinde piano-convexis, levibus, arâ columellari subcallusâ,*

marginè tenuè denticulatâ; olivaceo-nigrâ, lineis pallidis lutescentibus, longitudinaliter undatis ornatâ, arâ columellari lutescente.

THE NAVIGATORS' ISLAND NERITINA. Shell conically turbinate, spire rather prominent, whorls slanting round the upper part, then flatly convex, smooth, columellar area rather callous, finely toothed at the edge; olive-black, painted with faint longitudinally waved yellow lines, columellar area yellowish.

Hab. Navigators' Island, Pacific Ocean.

Of rather light structure for this conoidal form of species, faintly closely waved with yellowish lines upon an olive-black ground.

Species 103. (Fig. a, Mus. Cuming.)

NERITINA FULGETRUM. *Ner. testâ subglobosâ, spirâ rix conoidè, obtusâ, anfractibus superè convexis, deinde concavis, levibus, nitentibus, arâ columellari callusâ; vitreo-olivaceâ, lineis nigris transversè acutè undatis pulcherrimè notatâ, arâ columellari carinulâ.*

THE LIGHTNING-MARKED NERITINA. Shell subglobose, spire scarcely conoid, obtuse, whorls concave round the upper part, then convex, smooth, shining, columellar area callous; glassy-olive, beautifully marked with sharp transversely zigzag black lines, columellar area carnelion.

Hab. —?

A smooth yellowish-olive shell with a striking glassy polish, marked with acute transversely zigzag black lines, and having a carnelion callous columellar area.

Species 104. (Fig. 103 b, Mus. Cuming.)

NERITINA GUAYAQUILENSIS. *Ner. testâ orato-globosâ, subdepressâ, spirâ obtusè exsertâ, anfractibus convexis, densè concentricè striatis, arâ columellari callusâ, marginè tenuè denticulatâ; luteo-olivaceâ, punctis reticulatis sarauarâ, arâ columellari carinulâ.*

THE GUAYAQUIL NERITINA. Shell ovately globose, rather depressed, spire obtusely exerted, whorls convex, closely concentrically striated, columellar area callous, finely toothed at the margin; yellowish-olive, mottled with reticulated dots, columellar area carnelion.

D'ORBIGNY, Sowerby Thesaurus Conch. part 10. p. 520.

Hab. Realjos, Guayaquil.

A somewhat obtuse depressly globose species, mottled throughout with light black-edged dots upon a bronze-like olive ground.



112 a



113 a



113 b



114 a



115 a



116 b



117 b



118 a



119 b



120 a

NERITINA.

PLATE XXIV.

Species 105. (Fig. 104, 105, Mus. Cuming.)

NERITINA LAYARDI. *Nat. testâ ovata, callâ depressâ, tenui, pellucidâ, spirâ obliquè intortâ, decussatâ striatâ, arcâ columellari perimplâ, superâ quadrato-alatâ; alioveo-brunâ, nigro tenuè reticulatâ.*

LAYARD'S NERITINA. Shell ovate, very depressed, thin, transparent, spire obliquely turned in, decussately striated, columellar area very large, quadrately winged at the upper part; olive-horny, finely reticulated with black.

Hab. Ceylon; F. Layard, Thwaites.

Of a subtransparent horny texture, conspicuously square-winged at the upper part.

Species 106. (Fig. a, b, Mus. Cuming.)

NERITINA SOLOMONENSIS. *Nat. testâ obliquè ovatâ, subdepressâ, spirâ parvâ, fere obsolete, anfractibus concentricè laticostatis, apertura subrepansâ, arcâ columellari amplâ, callosâ, juxta apicem sinuatâ; alioveo-brunâ, nigro tenuè reticulatâ, arcâ columellari sanguineo-aurantâ.*

THE SOLOMON ISLAND NERITINA. Shell obliquely ovate, rather depressed, spire small, almost obsolete, whorls convex, concentrically ridge-striated, aperture rather expanded, columellar area large, callous, sinuated next the apex; olive-brown, obscurely reticulated with black, columellar area blood-stained carnelian.

Hab. Solomon's Island.

A very characteristic species in form, and also in sculpture and colouring.

Species 107. (Fig. a, b, Mus. Cuming.)

NERITINA NOVO-CALEDONICA. *Nat. testâ depressâ, tenui, tenuicatâ, radiatâ elevatè striatâ, spirâ obliquè intortâ, arcâ columellari amplâ, subulatâ, sordide nigri, intus carulescente, arcâ columellari pallide carneliâ.*

THE NEW CALEDONIA NERITINA. Shell depressly ovate, rather thin, radiately elevately striated, spire obliquely turned in, columellar area large, slightly dilated; dull black, interior blue, columellar area pale carnelian.

Hab. New Caledonia.

This species also presents a distinct typical character, thinly ovately expanded within, radiately striated without.

Species 108. (Fig. a, b, Mus. Cuming.)

NERITINA ACICULATA. *Nat. testâ depressè ovatâ, tenuicatâ, spirâ parvâ, obliquè laterali, anfractibus subangustis, dense radiatâ striatis, apertura dilatato-repansâ, arcâ columellari declivi, margine denticulatâ; sordide nigri.*

THE SHARP-EDGED NERITINA. Shell depressly ovate, rather thin, spire small, obliquely lateral, whorls rather narrow, closely radiately striated, aperture dilatedly expanded, columellar area slanting, denticulated at the margin; dull black.

MORCH, MS. Mus. Cuming.

Hab. Island of Nicobar.

Of light substance, chiefly characterized by an oblique convolution of the spire, and dilatedly expanded aperture.



107A



108A



109A



110A



111A



112A



113A



114A



115A



116A

NERITINA.

PLATE XXV.

Species 109. (Fig. a, b, Mus. Cuming.)

NERITINA MICHAUDI. *Ner. testâ subglobosâ, spirâ plana-obtusâ, suturis impressis, anfractibus superioribus plano-concavis, deinde convexis, lacinibus, pollicis, areâ columellari callosâ; tubo-olivaceâ, lineis nigris acutis, transversè nublatis ornâtâ.*

MICHAUD'S NERITINA. Shell subglobose, spire flatly obtuse, sutures impressed, whorls flatly concave round the upper part, then convex, smooth, polished, columellar area callous; yellowish-olive, ornamented with sharp transversely zigzag black lines.

RECLUZ, Pro. Zool. Soc. 1841, p. 315.

Hab. Panama.

Of a polished glassy substance, neatly painted with sharp transversely zigzag black lines.

Species 110. (Fig. a, b, Mus. Cuming.)

NERITINA LENTIGINOSA. *Ner. testâ conoido-globosâ, subtiliusculâ, spirâ obtusâ, anfractibus superioribus declivibus et subulatè plicato-striatis, areâ columellari subcallosâ; olivaceâ, punctis minutis albis, nigro umbratis, promiscuè lentiginosâ.*

THE FRECKLED NERITINA. Shell conoidly globose, rather solid, spire obtuse, whorls slanting round the upper part, and rather rudely plicately striated, columellar area rather callous; olive, promiscuously freckled with minute black-shaded white dots.

Hab. Pacific Islands.

A dark olive *Paludina*-like species, freckled with promiscuous black-shaded white dots.

Species 111. (Fig. a, b, Mus. Cuming.)

NERITINA PULCHRA. *Ner. testâ ovato-conoidè, solidâ, spirâ subexsertâ, anfractibus superioribus concavo-declivibus, deinde convexis, lacinibus, nilentibus, areâ columellari callosâ; intus fultâ, maculis granulis nigris tessellatâ aut fuscis, interdum raris partim tinetâ.*

THE PRETTY NERITINA. Shell ovately conoidly, solid, spire rather exerted, whorls concavely slanting round the upper part, then convex, smooth, shining, columellar area callous; dark fulvous, tessellated or banded with large black spots, sometimes partially tinged with red.

SOWERBY, Conch. Illustrations, f. 59.

Hab. Panama.

A dark shining fulvous species, prettily tessellated with black blotches, sometimes ranging in bands.

Species 112. (Fig. a, b, Mus. Cuming.)

NERITINA MELEAGRIS. *Ner. testâ conoido-globosâ, spirâ brevi, obtusâ, anfractibus convexis, lacinibus, areâ columellari callosa-declivi; albâ, griseo varicè reticulatâ et nigro-punctatâ.*

THE GUINEA-FOWL NERITINA. Shell conoidly globose, spire short, obtuse, whorls convex, smooth, columellar area callously slanting; whitish, variously reticulated with grey and snow-flaked.

LAMARCK, Anim. sans vert. vol. viii. p. 575.

Hab. Honduras Bay; Dyson.

Distinguished by a characteristic pattern of grey network interspersed with small white flakes.

Species 113. (Fig. a, b, Mus. Cuming.)

NERITINA FRASERI. *Ner. testâ depresso-subglobosâ, spirâ parva exsertâ, anfractibus superioribus concavis, deinde convexis, concentricè plicato-liratis, areâ columellari latiusculâ, declivi; nigricante-olivaceâ.*

FRASER'S NERITINA. Shell depressly subglobose, spire but little exerted, whorls concave round the upper part, concentrically plicately ridged, columellar area rather broad, slanting; blackish-olive.

Hab. West Africa; Fraser.

A dark olive species, with a characteristic sculpture of wrinkle-ridges.



101



102



103



104



105



106



107



108



109



110

NERITINA.

PLATE XXVI.

Species 114. (Fig. *a, b*, Mus. Cuming.)

NERITINA ASPERSA. *Ner. testâ subglobosâ, levicullâ, spirâ obtusè planatâ, anfractibus corrugato-liratis, superè angulatis, ad angulum longi-spinosis, arcâ columellari declivi, superè subinnatâ; carbonario-âllâ, punctis luteis minutis obscurè aspersâ.*

THE SPRINKLED NERITINA. Shell subglobose, rather thin, spire obtusely flattened, whorls wrinkle-ridged, angled round the upper part, long-spined at the angle, columellar area slanting, a little sinuated at the upper part; coal-black, obscurely sprinkled with minute yellowish dots.

RECLUZ, MS., Mus. Cuming; Sowerby Thesaurus Conch. part 10. p. 524.

Hab. Sandwich Islands.

Generally of small size, wrinkle-ridged throughout, and crowned with long spines.

Species 115. (Fig. *a, b*, Mus. Cuming.)

NERITINA SOULEYETANA. *Ner. testâ subglobosâ, spirâ plano-obtusâ, anfractibus liris, superè angulatis, ad angulum rudè tuberculatis vel spinosis, spinis per-juncis distantibus, arcâ columellari declivi, margine subarcuatâ; virescente-olivaceâ, liris luteis longitudinalibus subflexuosis utridè pictâ.*

SOULEYET'S NERITINA. Shell subglobose, spire flatly obtuse, whorls smooth, angled round the upper part, rudely tubercled or spined at the angle, spines few and distant, columellar area slanting, slightly arched at the margin; greenish-olive, neatly painted with slightly flexuous longitudinal yellow lines.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1842, p. 182.

Hab. Marquesas Islands.

The waved linear yellow painting of this species is perhaps the most striking characteristic.

Species 116. (Fig. *a, b*, Mus. Cuming.)

NERITINA OBTUSA. *Ner. testâ subquadrato-oculi, spirâ obtusâ, anfractibus superè subconvexo-declivibus, deinde plano-convexis, undique obliquè rudè plicato-striatis, arcâ columellari callosâ, superè sinuatâ, margine arcuatâ et denticulatâ; sordidè olivaceâ, punctis minutis albidis transversis lentiginosâ.*

THE OBTUSE NERITINA. Shell somewhat squarely oval, spire obtuse, whorls rather concavely slanting round the upper part, then flatly convex, everywhere obliquely, rudely, plicately striated, columellar area callous, sinuated at the upper part, arched and denticulated at the margin; dull olive, freckled with small transverse white dots.

BENSON, Sowerby, Thesaurus Conch. part. 10. p. 517.

Hab. Banks of the Ganges, Calcutta.

A solid obtuse species, of a dark olive-colour, freckled throughout with small white dots, splashed transversely.

Species 117. (Fig. *a, b*, Mus. Cuming.)

NERITINA JOVIS. *Ner. testâ conoideo-globosâ, spirâ breviusculâ, anfractibus superè declivibus, deinde rotundatis, levibus, arcâ columellari declivi, margine arcuatâ et minutè denticulatâ; nitente-âtrâ, punctis livisque fulguratis albidis pallidè notatâ.*

JUPITER'S NERITINA. Shell conoidly globose, spire rather short, whorls slanting round the upper part, then rounded, smooth, columellar area slanting, arched and minutely toothed at the margin; shining black, faintly marked with whitish dots and lightning marks.

RECLUZ, MS., Mus. Cuming.

Hab. — ?

A smooth, shining, black, conoidly globose shell, marked with faint white dots and zigzag lines.

Species 118. (Fig. *a, b*, Mus. Cuming.)

NERITINA CASSICULUM. *Ner. testâ obtusè conoideâ, sub-globosâ, solidâ, spirâ vix exsertâ, anfractibus subplano-convexis, arcâ columellari callosâ, margine corrugato-striatâ; luteo-olivaceâ, nigro tenuè reticulatâ, arcâ columellari pallidè carinata.*

THE LITTLE HELMET NERITINA. Shell obtusely conoid, rather globose, solid, spire scarcely exerted, whorls rather flatly convex, columellar area callous, wrinkle-striated at the margin; yellowish-olive, finely reticulated with black, columellar area pale flesh-tinged.

SOWERBY, Conch. Illustrations, f. 55.

Hab. — ?

A solid bluntly conoid species, of a dark olive-colour, covered with a fine lacing of black.



119 a



119 b



120 b



121 a



122 a



122 b



123 a



124 a



125 a



126 b

NERITINA.

PLATE XXVII.

Species 119. (Fig. *a, b*, Mus. Cuming.)

NERITINA SIQUIJORENSIS. *Ner. testā oblongo-ovatā, spirā lobatā, anfractibus subangustis, compressis, levibus, areā columellari latā, marginē continuo; sordidē castro, nigro obscure reticulatō, interstima raso-radiatā.*

THE SIQUIJOR NERITINA. Shell oblong-ovate, spire twisted inwards, whorls rather narrow, compressed, smooth, columellar area broad, with the margin continuous; dull horny, obscurely reticulated with black, sometimes pink-ryed.

RECLUZ, Pro. Zool. Soc. 1843, p. 198.

Hab. Island of Siquijor, Philippines (in a small stream); Cuming.

A narrow compressed species, with a broad columellar area, having a raised edge continuous with the margin of the aperture.

Species 120. (Fig. *a, b*, Mus. Cuming.)

NERITINA GUADIANENSIS. *Ner. testā oblongo-conoidē, solutā, spirā subprominulatā, obtusā, anfractibus superne declivibus, inferne gibbosis, anfractū ultimo antice descendente, areā columellari callosā; sordidē albā, griseo-nigro dense reticulatā.*

THE GUADIANA NERITINA. Shell oblong-conoid, solid, spire rather prominent, obtuse, whorls slanting round the upper part, gibbous round the lower part, last whorl descending in front, columellar area callous; dull white, densely reticulated with greyish-black.

MORELET, Moll. du Portugal, p. 97, pl. 9. f. 3.

Hab. Guadiana, Portugal.

A solid *Natica*-like species, with the last whorl unusually descending in front, closely reticulated with grey-black.

Species 121. (Fig. *a, b*, Mus. Cuming.)

NERITINA RETICULATA. *Ner. testā ovatā, spirā subexsertā, anfractibus subangustis, radiatim sulco-striatis, areā columellari declivi, subexcavatā; lacteo-albā, intense nigro laevē reticulatā.*

THE RETICULATED NERITINA. Shell ovate, spire slightly exserted, whorls rather narrow, radiately groove-striated, columellar area slanting, slightly excavated; cream-coloured, openly reticulated with jet-black.

SOWEBY, Pro. Zool. Soc. 1832, Conch. Illus. f. 2.

Hab. Lord Hood's Island (on sand in brackish water) Cuming.

Distinguished by a loosely reticulated pattern of jet-black upon a cream-coloured ground.

Species 122. (Fig. *a, b*, Mus. Cuming.)

NERITINA DANUBIALIS. *Ner. testā ovatā, spirā cix exsertā, anfractibus subangustis, levibus, areā columellari excavato-declivi; albā, strigis nigricantibus flexuosis audique transversim pictā.*

THE DANUBIAN NERITINA. Shell ovate, spire scarcely exserted, whorls rather narrow, smooth, columellar area excavately slanting; whitish, painted throughout with transverse flexuous black streaks.

ZIEGLER, Deshayes Anim. sans vert. vol. viii. p. 592.

Neritium serratilineata, Ziegler.

Hab. The Danube.

Painted transversely with flexuous black lines, ranged throughout with great regularity.

Species 123. (Fig. *a, b*, Mus. Cuming.)

NERITINA VIOLACEA. *Ner. testā ovatā, spirā rix exsertā, anfractibus subangustis, levibus, areā columellari plano-declivibus; violacē, lucis griseis acatē nudatis dense nebulatis.*

THE VIOLET-TINGED NERITINA. Shell ovate, spire scarcely exserted, whorls rather narrow, smooth, columellar area flatly slanting; violet-tinged, thickly clouded with zigzag grey lines.

MORELET, Moll. du Portugal, p. 92, pl. 9. f. 1.

Hab. Coimbra, Portugal.

A rather narrow violet-tinged species, densely clouded throughout with sharply zigzag grey-black lines.



1251



1252



1253



1254



1255



1256



1257



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1259



1260

NERITINA.

PLATE XXVIII.

Species 124. (Fig. *d*, Mus. Cuming.)

NERITINA PERROTETTIANA. *Ner. testâ ovatâ, subdepressâ, spirâ vir exsertâ, obtusâ, anfractibus superis concentricis impressis, deinde rotariis, lœvibus, arâ columellari latiusculâ; carbonario-nigrâ.*

PERROTETT'S NERITINA. Shell ovate, somewhat depressed, spire scarcely exerted, obtuse, whorls concavely impressed on the upper part, then convex, smooth, columellar area rather broad; coal-black.

RECLUZ, Pro. Zool. Soc. 1841, p. 337.

Hab. Ceylon; Dr. Gardner.

A smooth, coal-black, rather depressed species, but little smaller in size than the accompanying figure. The inscription, "considerably enlarged," in the opposite Plate, should be "slightly enlarged."

Species 125. (Fig. *a, b*, Mus. Cuming.)

NERITINA FLUVIATILIS. *Ner. testâ oblongo-ovatâ, spirâ parvâ, perspicuè concolatâ, anfractibus subangustis, lœvibus, nitentibus, arâ columellari latiusculâ; nigricante-violaceâ, maculis albis reticulatè aspersâ.*

THE FLUVIATILE NERITINA. Shell oblong-ovate, spire small, perspicuously convoluted, whorls rather narrow, smooth, shining, columellar area rather broad; blackish-violet, sprinkled with a network of white spots.

Nerita fluviatilis, Linnæus, Syst. Nat. 12th edit. p. 1253.

Neritina Fluvaticæ, Parth.

Hab. Rivers of France and England.

A rather narrow oblong species, painted with pale blackish-violet, splashed with white subelongated spots.

Species 126. (Fig. *a, b*, Mus. Cuming.)

NERITINA LISTERI. *Ner. testâ subglobosâ, spirâ obtusè planatâ, anfractibus convexis, lœvibus, arâ columellari callosâ, tumidâ; lutescente-olivaceâ, lineis nigris flexuosis confertis pictâ.*

LISTER'S NERITINA. Shell subglobose, spire obtusely

flattened, whorls convex, smooth, columellar area callous, swollen; yellowish-olive, painted with close-set flexuous black lines.

PFEIFFER, Sowerby, Thesaurus Conch. part 10. p. 534
Hab. St. John's River, Nicaragua.

A subglobose, rather callous species, very neatly painted with close-set flexuous black lines.

Species 127. (Fig. *a, b*, Mus. Cuming.)

NERITINA BACONI. *Ner. testâ suboblongo-ovatâ, spirâ subexsertâ, obtusâ, anfractibus convexis, concentricè striatis, nitentibus, arâ columellari subcallosâ; sordidè cinereâ, nigro aut reticulatâ aut flexuoso-lineatâ.*

BACON'S NERITINA. Shell suboblong-ovate, spire slightly exerted, obtuse, whorls convex, concentrically striated, shining, columellar area rather callous; dull ash-colour, reticulated or flexuously lined with black.

Hab. Swan River; Dr. Bacon.

Somewhat resembling the preceding species in respect of its linear variety of painting, but of a more spirally conoid form, and narrower.

Species 128. (Fig. *a, b*, Mus. Cuming.)

NERITINA GUINERII. *Ner. testâ depresso-orbiculari, spirâ obtusè planatâ, anfractibus angustis, æquis aperturam latioribus, spiralicè linearisulcatis, aperturâ rotundato-capasâ, arâ columellari declivi; carbonario-nigrâ.*

GUINER'S NERITINA. Shell depressly orbicular, spire obtusely flattened, whorls narrow, broader towards the aperture, spirally linearly grooved, aperture roundly expanded, columellar area slanting; coal-black.

RECLUZ, Sowerby, Thesaurus Conch. part 10. p. 541.

Hab. — ?

Distinguished by its pinched compressed spire and round expanded aperture.



179a



179b



179c



180a



180b



180c



181a



181b



181c



182a

NERITINA.

PLATE XXIX.

Species 129. (Fig. *a, b*, Mus. Cuming.)

NERITINA JORDANI. *Ner. testâ obtusè conoidâ, obusâ, spirâ rix exsertâ, aufractibus plano-declivibus, levibus, nitentibus, arâ columellari callosâ; olivaceo-flavescente, strigis fuscis flexuosis densè pictâ.*

THE JORDAN NERITINA. Shell obtusely conoid, stout, spire scarcely exerted, whorls flatly slanting, smooth, shining, columellar area callous; olive-yellow, densely painted with flexuous brown streaks.

SOWERBY, *Conch. Illus.* f. 49. *Thesaurus Conch.* part 10. p. 531. pl. 115. f. 213-215.

N. Ellepparasis, Recluz.

Hab. River Jordan.

A stout solid species, painted throughout with close-set red-brown flexuous streaks.

Fig. 130. (Mus. Cuming.)

The specimen here figured proves to be a characteristic variety of *N. violacea*, represented at Plate XXVII, Fig. 123.

Species 131. (Fig. *a, b*, Mus. Cuming.)

NERITINA TENEBRICOSSA. *Ner. testâ depressè globosâ, leviculâ, spirâ parvâ, parva exsertâ, aufractibus subplano-convexis, arâ columellari angustâ, declivi, aperturâ subamplâ; fuscio-olivaceâ, lineis nigris acutè undulatis transversis pictâ.*

THE DARK-SHADED NERITINA. Shell depressly globose, rather thin, spire small, but little exerted, whorls rather flatly convex, columellar area narrow, slanting, aperture rather large; smoky-olive, painted with sharply zigzag transverse black lines.

C. B. ADAMS, *Contributions to Conchology*, p. 175.

Hab. Jamaica.

A light subglobose species, painted with close-set sharply zigzag black lines upon a dull smoky-olive ground.

Species 132. (Fig. *a, b*, Mus. Cuming.)

NERITINA DRINGII. *Ner. testâ depressè oblongâ, subcontortâ, spirâ rix exsertâ, plus minus erosi, aufractibus supernè impresso-convexis, plicato-striatis, deinde convexis, arâ columellari angustâ, declivi; nigrâ, laterâ rixâ fasciatâ, lineis nigris satutis undatis interdum pictâ.*

DRING'S NERITINA. Shell depressly oblong, somewhat contorted, spire scarcely exerted, more or less eroded, whorls impressly concave round the upper part, plicately striated, then convex, columellar area narrow, slanting; black, variously banded with yellow, sometimes painted with minute waved black lines.

RECLUZ, *MS*, Mus. Cuming.

Hab. North Australia.

Very distinct in character, both with respect to form and painting.

Species 133. (Fig. *a, b*, Mus. Cuming.)

NERITINA TURBIDA. *Ner. testâ orbiculari, parvè depressâ, tenui, spirâ parvâ, rix exsertâ, aufractibus convexis, concentricè striatis, arâ columellari subamplâ, callosâ, aperturâ expansâ; fuscio-olivaceâ, nigro obscure reticulatâ.*

THE DISTURBED NERITINA. Shell orbicular, very depressed, thin, spire small, scarcely exerted, whorls convex, concentrically striated, columellar area rather large, callous, aperture expanded; smoky-olive, obscurely reticulated with black.

MORELET, *Test. Nov. Americæ Centralis*, p. 27.

Hab. River Machaquilan, Guatemala.

A light, orbicularly depressed shell, peculiarly thinly rotundately expanded.



154 a



155 a



156 a



157 a



158 a



159 a



160 a



161 a



162 a



163 a

(Moderately enlarged.)

NERITINA.

PLATE XXX.

Species 134. (Fig. 134 and 135, Mus. Cuming.)

NERITINA GLABRATA. *Ner. testâ obliquè ovalâ, solidâ, spirâ obtusâ, anfractibus convexis, levibus, nitentibus, arâ columellari densè callosâ, aperturâ minutâ; lutescente-albâ, nigro fuscâ vel curiè lineatâ.*

THE SMOOTH NERITINA. Shell obliquely ovate, solid, spire obtuse, whorls convex, smooth, shining, columellar area thickly callous, aperture very small; yellowish-white, banded or variously lined with black.

SOWERBY, *Thesaurus Conch.* part 10. p. 535. pl. 116. f. 256-263.

Hab. — ?

A beautifully polished, callous, pea-like shell, variously encircled with black bands or lines.

Species 136. (Fig. a, b, Mus. Cuming.)

NERITINA DESMOULINSII. *Ner. testâ depressè orbiculari, spirâ obtusè planâ, plus minus erasâ, anfractibus convexis, levibus, arâ columellari subangustâ, declivi, aperturâ amplâ, rotundato-expansâ; carbonario-nigrâ.*

DESMOULINS' NERITINA. Shell depressly orbicular, spire obtusely flattened, more or less eroded, whorls convex, smooth, columellar area rather narrow, slanting, aperture large, rotundately expanded; coal-black.

RECLUZ, MS., Mus. Cuming.

Hab. Tahiti.

Distinguished chiefly by its depressed rotundately expanded aperture.

Species 137. (Fig. a, b, Mus. Cuming.)

NERITINA LUTESTA. *Ner. testâ ovalâ, truncatâ, spirâ subexsertâ, anfractibus convexis, concentricè striatis, arâ columellari declivi, aperturâ subexpansâ; sordidè fulcâ, rufo-fuscescente obscurè tessellatâ.*

THE SOILED NERITINA. Shell ovate, rather thin, spire moderately exerted, whorls convex, concentrically striated, columellar area slanting, aperture slightly expanded; dull fulvous, obscurely tessellated with red-brown.

MORELET, MS., Mus. Cuming.

Hab. Portugal.

A thin, dull-looking species, almost of the texture of a *Lymnaea*, but nevertheless prettily variegated with ruddy brown.

Species 138. (Fig. a, b, Mus. Cuming.)

NERITINA AFRICANA. *Ner. testâ suborbiculari, spirâ parvâ, vie exsertâ, anfractibus plano-convexis, arâ rotundatè subangustâ, declivi; sordidè albâ, lineis nigricantibus eximie flexuosis interruptis notatâ.*

THE AFRICAN NERITINA. Shell suborbicular, spire small, scarcely exerted, whorls flatly convex, columellar area rather narrow, slanting; dull white, marked with delicate interrupted black flexuous lines.

Hab. Africa.

A small, rather compressly convoluted species, marked with characteristic faintly pencilled blackish flexuous lines, more or less interrupted.



1100



1101



1102



1103



1104



1105



1106



1107



1108



1109

NERITINA.

PLATE XXXI.

Species 139. (Fig. *a, b*, Mus. Cuming.)

NERITINA MACRI. *Ner. testâ ovatâ, spirâ subexsertâ, plus minus erosâ, anfractibus superne leviter impressis, deinde convexis, levibus, arâ columellari declivi; nitente-atrâ.*

THE MACRI NERITINA. Shell ovate, spire slightly exerted, more or less eroded, whorls faintly impressed round the upper part, then convex, smooth, columellar area slanting; shining black.

RECLUZ, Sowerby, Thesaurus Conch. part 10. p. 531. pl. 116. f. 222.

Hab. Asia Minor; Lieutenant Spratt, R.N.

A small shining jet-black species, with the spire generally more or less eroded

Species 140. (Fig. *a, b*, Mus. Cuming.)

NERITINA CARINATA. *Ner. testâ subglobosâ, spirâ planatâ, plus minus erosâ, anfractibus superne concavo-angulatis, deinde rotundato-carinatis, infra convexis, arâ columellari declivi; pallide virescente, lineis olivaceo-nigris flexuosis confertim pictâ.*

THE KEELED NERITINA. Shell subglobose, spire flattened, more or less eroded, whorls concavely angled round the upper part, then rotundately keeled, convex beneath, columellar area slanting; pale green, painted with close-set flexuous, olive-black lines.

Koch, Sowerby, Thesaurus Conch. part 10. p. 516. pl. 114. f. 157, 158.

Hab. — ?

Strongly characterized by a prominent rounded keel, which gives a concavely angled structure to the upper part of the whorls.

Species 141. (Fig. *a, b, c, d*, Mus. Cuming.)

NERITINA MERTONIANA. *Ner. testâ ovatâ, subglobosâ, solidâ, spirâ parvâ exsertâ, obtusâ, anfractibus convexis, levibus, attenuatis, arâ columellari plus minus callosâ; griseo-albâ, nigricante variè reticulatâ et fuscilatâ.*

MERTON'S NERITINA. Shell ovate, subglobose, solid, spire but little exerted, obtuse, whorls convex, smooth, shining, columellar area more or less callous; greyish-white, variously reticulated and banded with black.

RECLUZ, Pro. Zool. Soc. 1843, p. 71.

Neritina nebulata, Recluz.

Hab. Island of Negros, Philippines (on stones in a small stream); Cuming.

A subglobose callous shining species, variously reticulated banded and enlaced with black upon a greyish-white ground.

Species 142. (Fig. *a, b*, Mus. Cuming.)

NERITINA RANGIANA. *Ner. testâ oblongo-ovatâ, depressâ. Heliotilifurcâ, spirâ parvâ, obtusâ exsertâ, anfractibus superne rudiè angulatis, deinde planatis, arâ columellari sinuâplâ, callosâ; pallide virescente, lineis flexuosis nigris, opaco-albo marginatis.*

RANG'S NERITINA. Shell oblong-ovate, depressed, heliotis-shaped, spire small, obtusely exerted, whorls rudely angled round the upper part, then flattened, columellar area rather large, callous; pale green, marked with flexuous black lines, edged with opaque white.

RECLUZ, Revue Zool. Soc. Curicienne, 1841, p. 339.

Hab. Dumaguete, Island of Negros, Philippines (on stones in a small stream); Cuming.

This species, it will be observed, is of a very peculiar form, and singularly marked.



197a



198a



199a



200a



201a



202a



203a



204a



205a



206a

(Habit. moderate-sized)

NERITINA.

PLATE XXXII.

Fig. 140 and 146. (Mus. Cuming.)

The shells here figured represent respectively the *N. boissacensis*, Ziegler, and *N. rarispina*, Recluz, and are varieties of the European *N. fluviatilis*.

Species 144. (Fig. *a, b*, Mus. Cuming.)

NERITINA TRISTIS. *Ner. testâ subglobosâ, spirâ parvâ, sinuâseriatâ, lævigatâ, arâ columellari declivi; veruculisangrâ, punctis albis densè aspersâ.*

THE SAIL NERITINA. Shell subglobose, spine small, rather exserted, smooth, columellar area slanting; blue-black, densely sprinkled with white dots.

D'ORBIGNY, Hist. Moll. Cuba.

Hab. Cuba.

A small pea-shaped species of a dark blue-black colour, densely sprinkled with minute white dots.

Species 145. (Fig. *a, b*, Mus. Cuming.)

NERITINA ADANSONIANA. *Ner. testâ obliquè conicâ, crassiusculâ, spirâ obtusâ, anfractibus declivibus, basi tumidiusculis, arâ columellari callosâ; fultâ, lineis nigris reticulatis vel strigatis.*

ADANSON'S NERITINA. Shell obliquely conical, rather thick, spine obtuse, whorls slanting, rather swollen at the base, columellar area callous; fulvous, reticulated or streaked with black lines.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 313.

Hab. Scuegal.

Of a solid conical form, with an obtusely exserted spine

Species 147. (Fig. *a, b*, Mus. Cuming.)

NERITINA TRIFASCIATA. *Ner. testâ subcompressè ovata, tenui, semipellucidâ, spirâ parvâ, obtusè planulatâ, anfractibus subangustis, lævibus, arâ columellari ampla, plano-concavâ; pallidè cinerâ, nigricante pallidè trifasciatâ.*

THE THREE-BANDED NERITINA. Shell somewhat compressly ovate, thin, semipellucid, spine small, obtusely flattened, whorls rather narrow, smooth, columellar area large, flatly concave; pale ash-colour encircled with three faint blackish bands.

MENKE, MS. Mus. Cuming.

Hab. —?

Closely allied to the European *N. fluviatilis*, but having the spine flattened.



150a



149a



151a



152a



148a



153a



154a



155a



156a



157a

(Figures moderately enlarged.)

NERITINA.

PLATE XXXIII.

Species 148. (Fig. *a, b*, Mus. Cuming.)

NERITINA ANATOLICA. *Ner. testâ subglobosâ, spirâ parvâ, subexsertâ, anfractibus concavis, lœvibus, arcâ columellari declivi; dilatè nigro lineatâ et lineatâ.*

THE ANATOLIA NERITINA. Shell subglobose, spire small, slightly exerted, whorls convex, smooth, columellar area slanting; lined and stained with dilute black.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 342.

Hab. Syrna, Aleppo, Sidou, and Scio (in fountains); Recluz.

A solid smooth subglobular species, stained with dilute black.

Species 149. (Fig. *a, b*, Mus. Cuming.)

NERITINA BOURGIGNARTI. *Ner. testâ subattenuato-oblongâ, spirâ conspicuè convolutâ, anfractibus subcompressis, lœvibus, arcâ columellari amplâ, subexsertâ; carbonario-âtrâ, sæpè erodâ.*

BOURGIGNART'S NERITINA. Shell subattenuately oblong, spire conspicuously convoluted, whorls rather compressed, smooth, columellar area large, slightly excavated; coal-black, often eroded.

RECLUZ, *MS.*, Mus. Cuming.

Hab. ———?

Of rather narrow elegant spiral growth, with a rather large slightly excavated columellar area.

Species 150. (Fig. *a, b*, Mus. Cuming.)

NERITINA CHRISTOVALENSIS. *Ner. testâ subquadrato-orbiculari, depressâ, spirâ obliquè intortâ, anfractibus concavis, utriusque auriculatâ, aperturâ ampliter dilatâ, arcâ columellari declivi, margine minute denticulatâ; lutescente-âtrâ, purpureo-roseo pulcherrimè varioratâ.*

THE CHRISTOVALE NERITINA. Shell somewhat squarely orbicular, depressed, spire obliquely twisted in, whorls convex, auriculated on both sides, aperture largely

dilated, columellar area slanting, minutely denticulated at the edge; yellowish-white, prettily mottled with purple-rose.

Hab. St. Christoval, Solomon's Islands: Macgillivray.

A solid compressly raised shell, auriculated on each side with a largely dilated aperture, prettily mottled with purple rose.

Species 151. (Fig. *a, b*, Mus. Cuming.)

NERITINA ROSTRATA. *Ner. testâ oblongo-quadratâ, spirâ intortâ, subcentrali, valdè productâ, quasi rostratâ, anfractibus elevatis, perangustis, aperturâ dilatâ, arcâ columellari amplâ, superne quadrato-auriculatâ, intense fusco-olivaceâ, intus rufescente-fuscâ.*

THE BEAKED NERITINA. Shell oblong square, spire twisted inwards, almost central, much produced, as if beaked, whorls raised, very narrow, aperture dilated, columellar area large, squarely auriculated at the upper part; dark brownish-olive, interior red-brown.

Hab. Ceylon; F. Layard.

A narrow rather compressed species, with a squarely dilated aperture curiously distinguished by the produced beak-like structure of the spire.

Species 152. (Fig. *a, b*, Mus. Cuming.)

NERITINA PISIFORMIS. *Ner. testâ globosâ, spirâ parvâ, vix exsertâ, anfractibus rotundatis, subrugoso-striatis, arcâ columellari subamplâ, declivi; carbonario-âtrâ.*

THE PEA-SHAPED NERITINA. Shell globose, spire small, scarcely exerted, whorls rounded, somewhat roughly striated, columellar area rather large, slanting: coal-black.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1842, p. 181.

Hab. Tahiti?

A solid globular species, deep black, rather roughly striated and more or less eroded.



1200



1201



1202



1203



1204



1205



1206



1207



1208



1209

NERITINA.

PLATE XXXIV.

Species 153. (Fig. *a, b*, Mus. Cuming.)

NERITINA VIRIDIS. *Ner. testâ obliquè ovali, spirâ parvâ, parvâ exsertâ, anfractibus convexis, subangustis, levibus, nitentibus, arâ columellari callosâ; pellucido-virescente, punctis albis lineisque nigris capillaribus variegatâ.*

THE GREEN NERITINA. Shell obliquely oval, spire small, but little exerted, whorls convex, rather narrow, smooth, shining, columellar area callous; transparent green, variegated with black hair lines and white dots.

LINNÆUS, Syst. Nat. (12th edit.), p. 1254.

Hab. West Indies.

Chiefly distinguished by its narrow obliquely ovate form, and semitransparent substance.

Figs. 154 and 156. (Mus. Cuming.)

The specimens here figured represent the *N. Michaudi* and *Mittrana* of Recluz, and are varieties of *N. flaviventris*.

Species 155 (Mus. Cuming.)

NERITINA PREVOSTIANA. *Ner. testâ subobliquè ovali,*

spirâ nitidè turbulatâ, anfractibus convexis, subangustis, arâ columellari excavato-planatâ; intense carneo-nigrâ.

PREVOST'S NERITINA. Shell somewhat obliquely oval, spire neatly turbulated, whorls convex, rather narrow, columellar area excavately flattened; deep blue-black.

SOWERBY, Conch. Illus. p. 16

Hab. — ?

Of a rather narrow obliquely oval form, very dark shining blue-black.

Species 157. (Fig. *a, b*, Mus. Cuming.)

NERITINA NILOTICA. *Ner. testâ subgloboso-ovatâ, spirâ subexsertâ, anfractibus rotundatis, arâ columellari subcallosâ; lutescente, olivaceo dense lineatâ.*

THE NILE NERITINA. Shell somewhat globosely ovate, spire a little exerted, whorls rounded, columellar area rather callous; yellowish, densely lined with olive.

Hab. Banks of the Nile.

Of a peculiar subglobose form, painted with close-set wavy olive lines upon a yellowish ground.



158 a



159 a



155 b



160 a



161 a



162 a



163 b



164 a



165 b



153 b

(Moderately enlarged)

NERITINA.

PLATE XXXV.

Species 158. (Fig. *a, b*, Mus. Cuming.)

NERITINA SUCCINEA. *Ner. testā oblongo-ovatā, tenui, pellucidā, spirā parvā, anfractibus levibus, superne concavo-planatā, arēā columellari subamplā; colore succineo.*

THE SUCCINEA NERITINA. Shell oblong-ovate, thin, transparent, spire small, whorls smooth, concavely flattened at the upper part, columellar area rather large; amber colour.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 343.

Hab. Guadeloupe.

A small, transparent, Succinea-like species, resembling *N. fluviatilis* in form.

Species 159. (Fig. *a, b*, Mus. Cuming.)

NERITINA PELOPONNESIA. *Ner. testā angustē ovalā, spirā subamplā, plus minus erosa, anfractibus convexis, concentricē striatis, arēā columellari subamplā; nitente atrā.*

THE PELOPONNESIAN NERITINA. Shell narrowly ovate, spire rather large, more or less eroded, whorls convex, concentrically striated, columellar area rather large; shining black.

RECLUZ, MS., Mus. Cuming.

Hab. The Morea.

Distinguished from *N. fluviatilis* by its spiral plan of convolution and concentric striae.

Species 160. (Fig. *a, b*, Mus. Cuming.)

NERITINA LUGUBRIS. *Ner. testā ovalā, spirā parvā, oppressā, anfractibus angustis, versus aperturam expansis, arēā columellari latā; nitente cœruleo-nigrā.*

THE MOURNING NERITINA. Shell ovate, spire small,

appressed, whorls narrow, expanded towards the aperture, columellar area broad; shining blue-black.

PHILIPPI, Abbild. und Besch. Conch. pl. 1. f. 9.

Hab. Sandwich Islands.

A shining black species, with a rather expanding aperture.

Species 161. (Fig. *a, b*, Mus. Cuming.)

NERITINA SIDEEA. *Ner. testā ovato-turbinatā, spirā subexsertā, anfractibus convexis, superne leviter impressis, levibus, arēā columellari declivi; nitente atrā.*

THE SHINING NERITINA. Shell ovately turbinated, spire rather exserted, whorls convex, slightly impressed round the upper part, smooth, columellar area slanting; shining black.

GOULD, MS., Mus. Cuming.

Hab. Sandwich Islands.

A small, shining black species, with a rather turbinated spire.

Species 162. (Fig. *a, b*, Mus. Cuming.)

NERITINA LUCTUOSA. *Ner. testā ovato-conicā, spirā turbinatā, anfractibus convexis, superne leviter concavis, obscure concentricē striatis, arēā columellari declivi, subexcavatā; nitente atrā.*

THE SAD NERITINA. Shell ovately conical, spire turbinated, whorls convex, slightly concave round the upper part, obscurely concentrically striated, columellar area slanting, subexcavated; shining black.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 317.

Hab. —?

A shining black shell, distinguished from the preceding species by its more turbinated conoidal form.



162 a



162 b



162 b



163 a



164 a



164 b



165 a



167 a



167 b



168

NERITINA.

PLATE XXXVI.

Species 163. (Mus. Cuming.)

NERITINA ZEBRINA. *Ner. testâ obliquè ovatâ, subangustâ, spirâ contractâ, anfractibus convexis, versus aperturam expansâ, arâ columellari latiusculâ; lutescente, lineis acutè undatis dense strigatâ.*

THE LITTLE ZEBRA NERITINA. Shell obliquely ovate, rather narrow, spire contracted, whorls convex, expanded towards the aperture, columellar area rather broad; yellowish, densely striped with zigzag lines.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 341.

Hab. Montpellier.

This may probably be a variety of *N. fluviatilis*, but we have been led to figure it because more varieties of *Neritina* have been indiscriminately referred to that species than are admissible.

Species 164. (Fig. a, b, Mus. Cuming.)

NERITINA MICHOUÏ. *Ner. testâ ovatâ, spirâ parâ, plus minus erodâ, anfractibus convexis, levibus, arâ columellari declivi; nitente atrâ.*

MICHOÛ'S NERITINA. Shell ovate, spire small, more or less eroded, whorls convex, smooth, columellar area slanting; shining black.

BOURGUINATI, MS., Mus. Cuming.

Hab. ———?

A small shining black species, with an eroded apex.

Species 165. (Fig. a, b, Mus. Cuming.)

NERITINA MERIDIONALIS. *Ner. testâ angustè ovatâ, spirâ parâ, distinctè convolutâ, anfractibus convexis, subcompressis, levibus, arâ columellari latâ, plano-excavatâ; lutescente-albâ, olivaceo-nigro dense reticulatâ.*

THE MERIDIAN NERITINA. Shell narrowly ovate, spire small, distinctly convoluted, whorls convex, rather compressed, smooth, columellar area broad, flatly excavated; yellowish-white, densely reticulated with olive-black.

PHILIPPI, Enum. Moll. Sicil. p. 159. pl. 9. f. 13.

Neritina Moreleti, Recluz.

Neritina elongatula, Morelet.

Hab. Sicily, Portugal.

Rather elongately convoluted, and painted with a close network of olive.

Species 166. (Fig. a, b, Mus. Cuming.)

NERITINA ANATENSIS. *Ner. testâ oblongâ, compressè rotundatâ, solidâ, spirâ parâ, subobscurâ, anfractibus convexis, nitentibus, arâ columellari perimplâ, callosâ; pellucido-cærulescente, strigis griseis obliquè notatâ.*

THE ANATO NERITINA. Shell oblong, compressly rounded, solid, spire small, rather obscure, whorls convex, shining, columellar area very large, callous; transparent-bluish, marked with oblique raised streaks.

RECLUZ, Sowerby, Theasarus Conch. part 10. p. 535. pl. 116. f. 247, 248.

Hab. Portugal.

A polished pea-like shell, of a compressed oblong form, with the spire indistinctly exerted.

Fig. 167. (Mus. Cuming.)

The shell here figured, *Neritina thormalis*, Boubé, must be regarded as a variety of *N. fluviatilis*.

Species 168. (Mus. Cuming.)

NERITINA OUALANENSIS. *Ner. testâ rotundato-ovatâ, spirâ parâ, obscurâ, anfractibus rotundatis, levibus, politis, arâ columellari subangustâ, callosâ; lutescente-albâ, griseo variè lineatâ aut reticulato-fuscicatâ.*

THE OUALAY NERITINA. Shell rotundately ovate, spire small, obscure, whorls rounded, smooth, polished, columellar area rather narrow, callous; yellowish-white, variously lineated or reticately banded with grey.

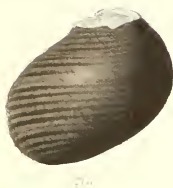
RECLUZ, MS., Mus. Cuming.

Neritina Mertoniana, cor., Sowerby.

Hab. Oualay, Sandwich Islands.

Distinguished chiefly from *N. Mertoniana*, which inhabits the Philippine Islands, by its thinner substance and rounded pea-like form.

March, 1856.



NERITINA.

PLATE XXXVII.

Species 169. (Fig. *a, b*, Mus. Cuming.)

NERITINA NUMIDICA. *Ner. testâ ovatâ, spirâ parvâ, distinctâ, anfractibus convexis, tumidiusculis, lœvibus, arcâ columellari subamplâ, excavato-planatâ; nigra.*

THE NUMIDIAN NERITINA. Shell ovate, spire small, distinct, whorls convex, slightly tumid, smooth, columellar area rather large, excavately flattened; black. RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 346. f. 179.

Hab. Numidia.

A black ovate form of *N. fluviatilis*.

Species 170. (Fig. *a, b*, Mus. Cuming.)

NERITINA ARCTILINEATA. *Ner. testâ subobliquè ovatâ, spirâ parvâ, anfractibus convexis, lœvibus, arcâ columellari subangustâ; lutescente, lineis nigris flexuosis densè pictâ.*

THE CLOSE-LINED NERITINA. Shell rather obliquely ovate, spire small, whorls convex, smooth, columellar area rather narrow; yellowish, densely painted with flexuous black lines.

RECLUZ, *Sowerby, Thesaurus Conch.* part 10. p. 531.

Hab. — ?

An obliquely ovate species, of rather light substance, painted with close-set flexuous lines upon a yellowish ground.

Species 171. (Mus. Chimmo.)

NERITINA CHIMMOI. *Ner. testâ ovatâ, spirâ quasi exsertâ, erosâ, anfractibus superè convexo-impressis, spiraliter sulcatis, sulcis superficialibus, subflexuosis, irregularibus, juxta suturam confertioribus, arcâ columellari subangustâ, declivi, lœvi; carbonario-atrâ, arcâ columellari ustulato-sanguineo intusè tinctâ.*

CHIMMO'S NERITINA. Shell ovate, spire as though exserted, altogether eroded, whorls concavely impressed round the upper part, spirally grooved, grooves superficial, rather flexuous, irregular, closer next the suture, columellar area rather narrow, slanting,

smooth; coal-black, columellar area deeply stained with scorched blood-colour.

Hab. — ?

This fine species, in which the columellar area is characterized by a peculiar burnt blood-stain, was collected by Lieutenant Chimmo, we believe, in Australia or New Zealand. Owing to the absence of the collector abroad I am unable to verify the locality.

Species 172. (Fig. *a, b*, Mus. Cuming.)

NERITINA PANAYANA. *Ner. testâ obliquè ovatâ, tenui, tumidiusculâ, spirâ attenuatâ, compressâ, arcâ columellari subamplâ, excavato-planatâ; lutescente, lineis nigris tenuibus flexuosis densè pictâ.*

THE PANAY NERITINA. Shell obliquely ovate, thin, rather swollen, spire attenuated, compressed, columellar area rather large, excavately flattened; yellowish, densely painted with fine flexuous black lines.

SOVERBY, *Thesaurus Conch.* part 10. p. 517. pl. 115. f. 191.

Hab. River Dingle, Island of Panay (on small stones): Cuming.

A delicate shell, of light semitransparent substance, compressly attenuated towards the spire.

Species 173. (Fig. *a, b*, Mus. Cuming.)

NERITINA INQUINATA. *Ner. testâ subquadrato-ovatâ, spirâ parvâ, anfractibus convexis, tumidiusculis, arcâ columellari subexcavatâ, olivaceâ, lineis tenuibus nigris marioratâ et reticulatâ.*

THE DYED NERITINA. Shell somewhat squarely ovate, spire small, whorls convex, rather swollen, columellar area slightly excavated; olive, mottled and reticulated with fine black lines.

MORELET, *Mus. Cuming.*

Hab. — ?

Of a rather square ovate form, closely mottled and reticulated with black lines upon an olive ground.

NERITINA.

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Anatolica, Recluz	XXXIII.	148	Dringii, Recluz	XXIX.	132
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apiata, Recluz	XXII.	98	Elleppenensis, Recluz	XXIX.	129
aquatilis, Reece	XV.	73	elongatula, Morelet	XXXVI.	165
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Caifra, Gray	VIII.	37	Jovis, Recluz	XXVI.	117
Californica, Reece	IV.	20	Knorri, Recluz	II.	6
canalis, Sowerby	I.	1	labiosa, Sowerby	I.	3
carinata, Koch	XXXI.	140	latissima, Broderip	III.	13
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MONOGRAPH

OF THE GENUS

N A T I C A .

-
- It sees the ocean to its bosom clasp
The rocks and sea-sand with the kiss of peace,
It sees the wild winds lift it in their grasp,
And hold it up, and shake it like a fleece.
- The startled waves lemp over it: the storm
Smites it with all the scourges of the rain,
And steadily against its solid form
Press the great shouiders of the hurricane."—*Longfellow.*
-



1a



2



3



1b

NATICA.

PLATE I.

Genus NATICA, *Adanson*

Testis globosus vel ovatoideus, introitus apertus cylindricus, spiræ horisæ, sepiosissimæ, cretæ, inflexionis purescens, multilobus, implexus furciculatus, ante callositatē sibi in apertis, ante callositatē columnari spiritaliter adhaerente, squamula plicataque plus minus lunari. Operculum interius testaceum, sepiosissimè corneum, spirale.

Shell globose or nitoid, sometimes openly inflated, spiræ short, very often scarcely exerted, whorls few, forming a large umbilicus, which is sometimes filled with a dense callosity, sometimes with a columnar callosity entering spirally, aperture generally more or less lunar. Operculum sometimes testaceous, generally horny, spiral.

The comparatively recent discovery that the soft parts of *Natica* are similar to those of *Sigaretus*, required that these genera, which in Lamarck's time were arranged at some distance from each other in the system, should be brought into more immediate relationship. By malacologists, indifferent to the characters of the shell, the *Naticæ* have been removed to the *Sigareti*; but conchologists, unwilling to lose sight of their obvious and long-acknowledged affinity in this respect with the *Nerites*, have caused the *Sigareti* to be removed to the *Neritacea*. It was by the French navigators, MM. Quoy and Gaimard, during the voyage of the 'Astrolabe,' that the animal portion of *Natica* was first fully observed, though figured a century before by Adanson. Differing essentially from that of *Nerita*, it proved to be of very much larger dimensions in proportion to the size of the shell, distinguished by a broad mantle-like expansion of the foot, and characterized by a more or less thickened circular ridge, holding the shell, and sometimes almost concealing it from view. The *Natica* has, moreover, a retractile proboscis, which the *Nerite* has not, and it is of more predaceous habits. The lobe which carries the operculum is also largely developed and reflected over the shell. The animal of *Sigaretus* is of similar structure: and looking alone to its distinctive features of organization, there is little family relationship between it and the typical soft parts of *Neritacea*.

The shells of *Natica* are not particularly variable in form. They are nearly all of the same peculiar semi-globose, lunar-apertured plan of convolution, which is characteristic of the *Nerites*, mostly largely umbilicated, but having the umbilicus sometimes filled up with callosus

enamel, and sometimes partially filled with a peculiar spiral columnar callosity. Little, however, as this variation is, the *Naticæ* have been divided into seven genera:—*Natica* proper (*N. caerulea*), *Lunaticæ*, Lamarck (*N. nitidifera*), *Neritica*, Risso (*N. albivaca*), *Aspallia*, Lamarck (*N. fluctuata*), *Rissa*, Chemnitz (*N. Maera*), *Mamma*, Klein (*N. mammilla*), and *Naticina*, Gray (*N. papilla*). The chief conchological distinction between the genera *Nerita* and *Natica* is, that whilst the *Nerites* are mostly strongly grooved and otherwise sculptured, and richly painted, the *Naticæ* are smooth and polished, as is almost invariably the case with shells more or less enveloped by the soft parts of the animal, and painted, generally with light colours.

The *Naticæ* live mostly in sandy and muddy beaches, at about low-water mark, and are strictly carnivorous. Speaking of a large species, *N. heros*, inhabiting the shores of Massachusetts, Dr. Gould says, in his history of the Invertebrata of that State:—"This, in common with other species of *Natica*, is very voracious, and plays a conspicuous part in devouring the dead fish and other animals which are thrown up by the tide. Many of the shells thrown upon the shore are found to be perforated with a small round hole: this is done principally by the different species of *Natica*. They have the power of perforating shells, it is generally supposed, by discharging an acid which decomposes the shell, and through the aperture they extract the juices, and destroy the lives of the otherwise secure inhabitants. Their foot is very large, so as to completely envelope the objects on which they prey. In moving, they burrow in the sand, so as to be almost entirely concealed by it, and their place is generally indicated by a small heap of sand. The singular mucus in which the animal of *Natica* deposits its eggs has been an object of much curiosity and speculation. It is a mass of sand glued together into the shape of a broad bowl, open at the bottom, and broken at one side. Its thickness is about that of an orange-peel, easily bent without breaking when damp, and when held up to the light will be found to be filled with little cells, arranged in quincunx order. Each of these cells contains a gelatinous egg, having a yellow nucleus, which is the embryo shell."

Species 1. (Mus. Cuming.)

NATICA CAMPEACHIENSIS. *Nat. testâ umbilicatâ, de-*

pyriformis-ovata, convexa, sutura concava, spirâ parvâ, convexo-depressâ, anfractibus obliquè striatis, superne convexo-declivibus, deinde rotundatis, aperturâ pyriformi-ovata, horizontali, columella tenuiculâ, callositate ampliâ latâ spirali umbilicem ferè implente; pallidè grisèâ, callositate et apertura faveæ castaneo-spadicis.

THE CAMPEACHY NATICA. Shell umbilicated, depressly globose, thick, concave beneath, spire small, convexly depressed, whorls obliquely striated, concavely slanting at the upper part, then rounded, aperture pyriformly ovate, horizontal, columella rather thin, with a large broad spiral callosity nearly filling the umbilicus; light grey, callosity and interior of the aperture chestnut-fawn.

RECLUZ, MS., Mus. Cuming.

Hab. Campeachy Bay, Gulf of Mexico.

This fine species is distinguished from its congeners of the same gigantic dimensions, by its more depressly globose form and flattened spire.

Species 2. (Mus. Cuming.)

NATICA HEROS. *Nat. testâ profundè umbilicatâ, globoso-turbinatâ, tenuiculâ, inflatâ, spirâ subexsertâ, anfractibus rotundatis, lævigatis, superne subdepressis, juxta suturam obsolete plicato-marginatis, aperturâ suboblongâ; sordidè cinerâ, epidermide tenui fulvulâ nudatâ, intus fusciscente.*

THE HERO NATICA. Shell deeply umbilicated, globose-turbinated, rather thin, inflated, spire rather exerted, whorls rounded, smooth, slightly depressed at the upper part, absolutely plicately margined next

the suture, aperture suboblong, dirty ash, covered with a thin fulvous epidermis, interior brownish.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 248.

Hab. Bay of Massachusetts, United States (on sandy and muddy beaches); Gould.

This fine species, distinguished by a rather light, globose form, is very closely allied to *N. duplicata*, so near, indeed, that we have great doubt of its being actually distinct.

Species 3. (Mus. Cuming.)

NATICA RECLUZIANA. *Nat. testâ obtusè umbilicatâ, conico-turbinatâ, crassissimâ, sutura excavato-depressâ, spirâ subexsertâ, obtusâ, anfractibus lævibus, superne declivibus, infra convexis, aperturâ obliquè contractâ, columellâ callositate densissimè super umbilicem crassè reflectâ; sordidè cinerâ, juxta suturam obscurè fusco-fasciatâ, callositate carneo-fusciscente.*

RECLUZ'S NATICA. Shell with a covered umbilicus, conically turbinated, very thick, excavately depressed beneath, spire rather exerted, obtuse, whorls smooth, slanting at the upper part, convex below, aperture obliquely contracted, columella with a very dense callosity thickly reflected back over the umbilicus: dirty ash, obscurely brown-banded next the suture, callosity flesh-brown.

DESHAYES, Mag. de Zool. 1841. Moll. pl. 37.

Hab. California; Hinds.

This fine species is remarkably characterized by its heavy growth and monstrous callosity. The shell figured by Dr. Gould at No. 164 of his work on the Invertebrata of Massachusetts as a variety of *N. duplicata* appears to be an immature *N. Recluziana*.



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NATICA.

PLATE II.

Species 4. (Mus. Cuming.)

NATICA DUPLICATA. *Nat. testâ suboblate, umbilicâ, subobliqua-globosâ, spirâ exsertâ, aperturâ linearis, operculâ, saepe subdepressâ, ad suturam obsolete angustâ, aperturâ sublongâ, labra columbellæ conoïdâ; sanctorum cuorum, epidermide tenui fulvâ inornatâ.*

THE DUPLICATE NATICA. Shell with a slightly covered umbilicus, suboblong-globose, spire exerted, whorls smooth, rounded, a little depressed at the upper part, obsolete margined at the suture, aperture rather oblong, columellar lip rather callous; dirty-ash, covered with a thin fulvous epidermis.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 247.
Hab. Bay of Massachusetts, United States; Newfoundland.

This species scarcely differs from *N. heros*, inhabiting the same locality, except in being of a more oblong form, which is of doubtful importance. The shell figured by Dr. Gould for this species, in his work on the Invertebrata of Massachusetts, at No. 164, appears to be *N. Reetziana*.

Species 5. (Mus. Cuming.)

NATICA GLAUCA. *Nat. testâ superficialiter umbilicatâ, depresso-orbiculari, subtus excavatâ, tenuicatâ, spirâ brevissimâ, plano-concavâ, aperturâ dense arcuato-striatâ, dentato-recurvâ, ad peripheriam obsolete rotundato-circumâ, aperturâ depresso-obliquâ, labia saepe leviter sinuatâ, columellâ callositudo insigni spiratâ, costis planatâ; plus minus glaucâ, intus nitente-sensuatâ, callositudo intus castneâ.*

THE GREY NATICA. Shell superficially umbilicated, depresso-orbicular, excavated beneath, rather thin, spire very short, flatly concave, whorls densely arcuately striated, slantingly convex, obsolete rotundately keeled at the periphery, aperture depresso-oblique, lip slightly sinuated at the upper part, columella with a peculiar spiral callosity, outwardly flattened: more or less grey, interior shining chestnut, callosity dark chestnut.

HUMBOLDT, Deshayes, Anim. sans vert. vol. viii. p. 651.
Natica patula, Sowerby in Zool. Journ. vol. i. p. 60, pl. 5.

Hab. West Columbia (in sandy mud, deep water); Cuming.

A light, concavely depressed species, with an extremely characteristic, flatly-abraded, spiral callosity. Humboldt's name for this species not having been fairly published by

the illustrious traveller, would seem to give Mr. Sowerby's some authority, but that there is a fossil *Natica patula*.

Species 6. (Mus. Cuming.)

NATICA LAMARCKIANA. *Nat. testâ apertè umbilicatâ, depresso-globosâ, spirâ convexâ, cic. elevatâ, aperturâ brevius latius, angustè decussatâ striatâ, aperturâ oblongo-oratâ, subangulâ, columellâ tenuicatâ, callositudo latâ, sinuatâ, recurvâ, umbilico ampliter angulato-excavato; spudico-grisâ, obscurè fuscâ, callositate castneâ.*

LAMARCK'S NATICA. Shell openly umbilicated, depresso-globose, spire convex, scarcely raised, whorls smooth, minutely decussately striated, aperture oblong-ovate, rather large, columella rather thin, with a broad, grooved, recurved callosity, umbilicus largely angularly excavated; fawn-grey, obscurely banded, callosity chestnut.

RECLUZ, MS., Mus. Cuming.

Hab. — ?

Resembling *N. problematica* in form and colour, but of larger size, and differing slightly at the suture and umbilical excavation.

Species 7. (Mus. Cuming.)

NATICA CHEMNITZII. *Nat. testâ angustè suboblate umbilicatâ, globosâ, spirâ convexâ, parva elevatâ, aperturâ obliquè striatâ, saepe depresso-concavâ, dentic. rotundatis, aperturâ pyriformi-oratâ, columellâ tenuicatâ, callositate latissimâ, recurvâ, sinuatâ; plus minus grisâ, costis albidâ, callositate et aperturâ fuscâ castneâ.*

CHEMNITZ'S NATICA. Shell with a narrow partially covered umbilicus, globose, spire convex, but little raised, whorls obliquely striated, depresso-concave round the upper part, then rounded, aperture pyriformly ovate, columella rather thin, with a very broad, recurved, grooved callosity; lead-grey, whitish beneath, callosity and interior of the aperture chestnut.

RECLUZ, MS., Mus. Cuming.

Hab. — ?

This species presents exactly the same typical characteristics as the preceding, more globose in form, with the umbilicus only slightly angularly excavated, and the callosity broader and cutrely pressed back.



NATICA.

PLATE III.

Species 8. (Mus. Cuming.)

NATICA GLAUCINA. *Nat. testâ depresso-globosâ, subconcentricâ, ampliter umbilicatâ, callositate crassi, spirali, spirâ obtusâ, anfractibus rotundatis, partibus levibus, attentibus, partibus obliquè striatis, apertura porcinis-collâ, scutiformi; caraco-cinereâ, spulicâ infra saturatam, colla et aperture fauce purpurescente tinctis.*

THE GLAUCINE NATICA. Shell depressly globose, excavated beneath, largely umbilicated, with a thick, spiral callosity, spire obtuse, whorls rounded, partly smooth and shining, partly obliquely striated, aperture rather small, scutellar; flesh-tinged ash, buff beneath the suture, callosity and interior of the aperture tinged with purple.

LAMARCK, Anim. sans vert. vol. viii. p. 625.

Necita glaucina, Linnaeus.

Hab. Méditerranée.

This shell, inhabiting the Mediterranean, is, M. Deshayes thinks, the recent analogue of the fossil *N. alta* of M. Marcel de Serres.

Species 9. (Mus. Cuming.)

NATICA SPADICEA. *Nat. testâ profundè umbilicatâ, globosâ, spirâ brevi, anfractibus rotundatis, juxta suturam concavo-depressis et plicato-striatis, apertura lunari-oratâ, amplâ, subfissâ, columellâ callositate spirali unducri; albidiâ, fasciis castaneo-fuscis dilatis cingulatâ, epidermide tenui indatâ.*

THE FAWN NATICA. Shell deeply umbilicated, globose, spire short, whorls rounded, concavely depressed and plicately striated next the suture, aperture lunar-ovate, large, somewhat effused, columella with a moderate spiral callosity; whitish, encircled with chestnut-fawn diluted bands, covered with a thin epidermis.

GMELIN, Syst. Nat. 13th ed.

Hab. Singapore (in sandy mud at a depth of six fathoms); Cuming.

A fine, elegantly spiral species, encircled with broad, undefined, diluted chestnut-fawn bands.

Species 10. (Mus. Cuming.)

NATICA FLUCTUATA. *Nat. testâ superficierâ, singularem, spirâ brevissimâ, apice acutâ, anfractibus tenuissimè striatis, altiano perimpho, ad què effuso, apertura amplâ, patulâ, columellâ densè encaustâ; pallidè spadiceâ, strigis albidis fluctuatis notatâ, columellâ eburnâ, intus castaneo marginatâ.*

THE WAVED NATICA. Shell imperforated, subglobose, spire very short, sharp at the apex, whorls very finely striated, the last very large, obliquely effused, aperture large, open, columella densely enamelled; light fawn, marked with waved white streaks, columella ivory-white, edged with deep chestnut.

SOWERBY, Tankerville Catalogue, Appendix, p. 12.

Hab. Island of Mindoro, Philippines; Cuming.

This fine *Natica* is distinguished from all other species of the genus by its obliquely effused form, waved and chestnut-stained colouring, and absence of umbilicus.

Species 11. (Mus. Cuming.)

NATICA PANAMAENSIS. *Nat. testâ subnagustè umbilicatâ, ovato-globosâ, subcentricâ, subpanderosâ, spirâ brevi, apice acutâ, anfractibus superè concavis, medio declivi-depressis, ad basin subexpansis, minutissimè decussatis striatis, apertura oblongo-semilunari, columellâ callosâ; eburnâ, epidermide tenuissimâ indatâ.*

THE PANAMA NATICA. Shell rather narrowly umbilicated, ovately-globose, slightly ventricose, rather heavy, spire short, sharp at the apex, whorls convex at the upper part, slantingly depressed in the middle, rather expanded round the base, very minutely decussately striated, aperture oblong-semilunar, columella callous; ivory-white, covered with a very thin epidermis.

RECLUZ, Pro. Zool. Soc. 1843, p. 208.

Hab. Bay of Panama (in fine sand at ten fathoms); Cuming.

A rounded species, of very pure white substance, peculiarly slantingly depressed round the middle, and densely encircled with very minute striae.



13a



13



13b



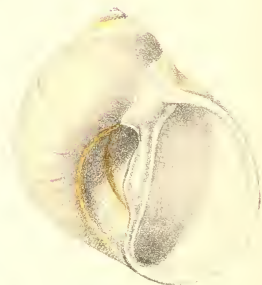
14a



15a



16



17

NATICA.

PLATE IV.

Species 12. (Mus. Cuming.)

NATICA PERSPICUA. *Nat. testâ compressâ perspectivè umbilicatâ, oblongo-ovata, spirâ subtorbiatâ, obtusâ, anfractibus superâ declivi-convexis, deinde rotundatis, levigatis, vel minutissimè decussatis striatis, ultimo conspicuè descendente, aperturâ lunari, columellâ callosâ, precipuè ad partem superiorem; rosaceo-albâ, umbilico castaneo.*

THE PERSPICUOUS NATICA. Shell compressly perspectivevly umbilicated, oblong-ovate, spire slightly turbinated, obtuse, whorls slantingly convex, then rounded, smooth, or minutely decussately striated, last whorl conspicuously descending, aperture lunar, columella callous, especially at the upper part; pink-white, umbilicus chestnut.

RECLUZ, Petit, Journ. Conch. vol. i. p. 379. pl. 14. f. 1, 2.
Hab. Mouth of the Oregon River, Upper California; Lieut. Baskerville.

The chief characteristic of this species consists in its open, compressly perspective purple-chestnut umbilicus, arising from the last whorl being loosely convoluted, and more than usually descending below the other.

Species 13. (Mus. Cuming.)

NATICA CUMINGIANA. *Nat. testâ profundissimè perspectivè umbilicatâ, ovato-ventricosâ, solidiusculâ, spirâ obtuso-conoidâ, apice acutâ, anfractibus levibus, nitentibus, vel minutissimè striatis, ad suturas callosis, deinde declivi-convexis, aperturâ semilunari, columellâ leviter callosa-reflexâ; aurantâ vel avrautio-spadicâ, fasciis duabus albis dilutis spiratibus juxta suturas.*

CUMING'S NATICA. Shell very deeply perspectivevly umbilicated, ovately ventricose, rather solid, spire obtusely conoid, sharp at the apex, whorls smooth, shining, or very minutely striated, callous at the sutures, then slantingly convex, aperture semilunar, columella slightly callously reflected; orange, or orange-fawn, with two spiral infused white bands next the suture.

RECLUZ, Pro. Zool. Soc. 1843, p. 210.

Eadem, *Natica pallium*, Recluz.

Hab. Island of Cuyo, Philippines (in sandy mud, deep water); Cuming.

This fine species is chiefly characterized by its infused

white double sutural band, and deep perspective umbilicus, on the columellar side of which there is only a moderate callosity.

Species 14. (Mus. Cuming.)

NATICA CANEENA. *Nat. testâ subangustè profundè umbilicatâ, subglobosâ, ventricosâ, spirâ brevi, subprominutâ, anfractibus levibus, spirâliter rotundatis, ultimo anticè subdescendente, aperturâ semilunari, columellâ callositate mediocri; rufescente-castneâ, zonis pallidis circumdatâ, zonis strigis nigricante-fuscis nudatis longitudinaliter pictis, basi albâ.*

THE FLAMED NATICA. Shell rather narrowly deeply umbilicated, subglobose, ventricose, spire short, rather prominent, whorls smooth, spirally rounded, the last somewhat descending in front, aperture semilunar, columella with moderate callosity; reddish-chestnut, encircled with pale zones longitudinally painted with zigzag blackish-brown streaks, base white.

LINNEUS, Mus. Ulr. p. 674.

Hab. West Indies.

The zigzag-marked bands of this well-known species are sometimes neatly articulated. The operculum is curious in being of a solid testaceous substance circularly grooved.

Species 15. (Mus. Cuming.)

NATICA EFFUSA. *Nat. testâ profundè umbilicatâ, ovato-ventricosâ, spirâ brevissimâ, mamillari, anfractibus convexis, nitentibus, minutissimè decussatis striatis, ad suturas opaco-callosis, ultimo decussatè striatâ, aperturâ semilunari, columellâ callositate mediocri; subpellucido-albâ.*

THE EFFUSED NATICA. Shell deeply umbilicated, ovately ventricose, spire very short, mamillary, whorls convex, shining, very minutely decussately striated, opakely callous at the sutures, last whorl rather effused, aperture semilunar, columella with a moderate callosity; subtransparent-white.

SWAINSON, Zoological Illustrations, pl. 104.

Hab. Moluccas.

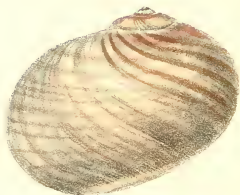
A rather light subpellucid-white effused mamillary species, a little opaque in the sutures.



17a



16



17b



15a



13a



18a



10b

NATICA.

PLATE V.

Species 16. (Mus. Cuming.)

NATICA PYRIFORMIS. *Nat. testâ obtectè umbilicatâ, oblongo-pyriformi, spirâ parvâ, mamillari, anfractibus superâe convexo-convexis, deinde convexis, ultimo subeffuso, aperturâ semilunari, columellâ callosâ, callositate lato, umbilicâ implete; nitente-eburneâ.*

THE PEAR-SHAPED NATICA. Shell with a covered umbilicus, oblong pear-shaped, spire small, mamillary, whorls concavely slanting round the upper part, then convex, the last somewhat effused, aperture semilunar, columella callous, callosity broad, filling up the umbilicus; shining ivory-white.

RECLUZ, *Pro. Zool. Soc.* 1843, p. 211.

Hab. Ilo Ilo, Island of Panay, Philippines (on the sand at low water); Cuming. Mouth of the Huan River, Australia (in sandy mud, ten fathoms); Lieut. Collie.

A polished ivory species, chiefly distinguished by its oblong-pyriform effused growth.

Species 17. (Mus. Cuming.)

NATICA PETIVERJANA. *Nat. testâ apertè umbilicatâ, depresso-orbiculari, subtus concavâ, spirâ brevi, parvâ, evertâ, anfractibus convexis, levibus, vel minutè decussatis striatis, aperturâ lunari-ovata, horizontali, columellâ tenniculâ, callositate prominente spirali sulcatâ, umbilico subangulato-excavato; cinereo-griseâ, pallidè ceruleo-eburneâ strigatâ, subtus albâ, callositate et aperturâ fauce castaneis.*

PETIVER'S NATICA. Shell openly umbilicated, depressly orbicular, concave beneath, spire short, but little exerted, whorls convex, smooth, or minutely decussately striated, aperture lunar-ovate, horizontal, columella rather thin, with a prominent grooved spiral callosity, umbilicus slightly angularly excavated; ash-grey, faintly blue-streaked, whitish beneath, callosity and interior of the aperture chestnut.

RECLUZ, *MS.*, Mus. Cuming.

Hab. Catbalonga, Island of Samar, Philippines (on sand banks at low water); Cuming.

Distinguished from several allied species of the same type, by its compressly orbicular form.

Species 18. (Mus. Cuming.)

NATICA MACULATA. *Nat. testâ umbilicatâ, globosâ, turgidâ, spirâ paululâ evertâ, anfractibus levibus, vel obsolete striatis, rotundatis, aperturâ semilunari, leviter effusâ, columellâ callositate spirali umbilicâ intrante; luteo-albidâ, fulco-sanguineo maculatâ, maculis obscurè trizonatis, fulco rubescente-cinereâ.*

THE SPOTTED NATICA. Shell umbilicated, globose, turgid, spire a little exerted, whorls smooth, or obsoletely striated, rounded, aperture semilunar, slightly effused, columella with a spiral callosity entering the umbilicus; livid white, spotted with fulvous-red spots obscurely three-zoned, interior reddish-violet.

DESHAYES, *Anim. sans vert.* vol. viii. p. 645.

Natica dense maculata, Chemnitz.

Natica adspersa, Menke.

Natica millepunctata, var., Philippi.

Hab. Mediterranean.

The spots of this well-known species are more or less promiscuously blotched, and gather obscurely into three bands.

Species 19. (Mus. Cuming.)

NATICA COLUMNARIS. *Nat. testâ apertè perspectivè umbilicatâ, ovato-globosâ, ventricosâ, spirâ minutâ, cir- elevatâ, anfractibus convexis, lævigatis, ad suturem corrugato-striatis, aperturâ lunari-ovata, subangulâ, effusâ, columellâ callositate conspicuâ spirali, umbilico latè angulato-excavato; eburneâ.*

THE COLUMNAR NATICA. Shell openly perspectively umbilicated, ovately globose, ventricose, spire very small, scarcely raised, whorls convex, smooth, wrinkle-striated at the suture, aperture lunar-ovate, rather large, effused, columella with a conspicuous spiral callosity, umbilicus broadly angularly excavated; ivory-white.

RECLUZ, *Petit, Journ. Conch.* vol. i. p. 394.

Hab. Pasacao, Province of South Camarines, Island of Luzon, Philippines (in sandy mud at six fathoms); Cuming.

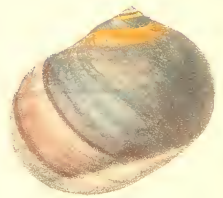
A shining white acritoid species, ventricose and effused, with a peculiarly open spirally excavated umbilicus.



21a



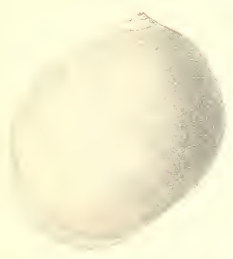
22



23b



25a



26



27a



27b

NATICA.

PLATE VI.

Species 20. (Mus. Cuming.)

NATICA AURANTIA. *Nat. testâ obtusè umbilicatâ, oblongo-ovata, crassissimâ, ponderosâ, spirâ parvâ, subcallosâ, apice distincto, anfractibus minutissime decussatim striatis, superne convexo-declivibus, deinde subplanatulo-convexis, aperturâ parvâ, semilunari, columellâ callosâ, callositate latâ, umbilicâ impunte; visidè folio-aurantiâ, callositate eburneâ.*

THE ORANGE NATICA. Shell with a covered umbilicus, oblong-ovate, very thick, ponderous, spire small, rather callous, apex distinct, whorls very minutely decussately striated, concavely slanting at the upper part, then somewhat flatly convex, aperture small, semilunar, columella callous, callosity broad, filling up the umbilicus; bright fulvous orange, callosity ivory-white.

LAMARCK, *Anim. sans vert.* (Deshayes' edit.), vol. viii. p. 632.

Hab. Island of Ticao, Philippines (on the reefs); Cuming.

A shell of very solid ponderous growth, of a brilliant fulvous-orange colour, distinguished by the delicate contrast of the bright ivory-white enamelled callosity, which fills up the umbilicus.

Species 21. (Mus. Cuming.)

NATICA PROBLEMATICA. *Nat. testâ latè apertè umbilicatâ, depresso-orbiculari, subtus planatâ, spirâ vix elevatâ, anfractibus convexis, superne convexo-depressis et subfiliis plicato-striatis, aperturâ lunari-ovata, horizontali, columellâ callositate parvâ, umbilicâ latissime excavato; glaucocinereis, versus apicem carnelescente, callositate et fune aperturæ castaneis.*

THE PROBLEMATIC NATICA. Shell broadly openly umbilicated, depressly orbicular, flattened beneath, spire scarcely raised, whorls convex, concavely depressed, and finely plicately striated at the upper part, aperture lunar-ovate, horizontal, columella with a small callosity, umbilicus very broadly excavated; glaucous-ash, bluish towards the apex, callosity and interior of the aperture chestnut.

Natica intermedia, Recluz (not of Philippi).

Hab. China.

A depressed glaucous species, bluish towards the apex, but tinged with bright yelk-yellow beneath the suture.

Species 22. (Mus. Cuming.)

NATICA POWISIANA. *Nat. testâ apertè obliquè umbilicatâ, ovato-ventricosâ, spirâ brevi, subcallosâ, apice acutâ, anfractibus levibus, nitentibus, superne subcallosis, convexis, aperturâ semilunari, columellâ callositate mediocri; visidè rubeco-spadicivâ, fasciâ vitellinâ distinctâ juxta suturam, callositate et columellâ eburneis.*

POWIS'S NATICA. Shell openly obliquely umbilicated, ovately ventricose, spire short, rather callous, sharp at the apex, whorls smooth, shining, rather callous at the upper part, convex, aperture semilunar, columella with a moderate callosity; bright reddish-fawn, with a distinct yelk-yellow band next the suture, callosity and columella ivory-white.

RECLUZ, *Pro. Zool. Soc.* 1843, p. 210.

Hab. Moluccas; Cuming.

This fine species is well characterized by the light band which encircles the whorls next the suture, it being peculiarly distinctly defined.

Species 23. (Mus. Cuming.)

NATICA ALBULA. *Nat. testâ obtusè umbilicatâ, depresso-globosâ, subventricosâ, subtus planatâ, spirâ minutâ, apice acutâ, anfractibus subquadrato-convexis, politis, obsolete sulcato-striatis, aperturâ lunari-ovata, subeffusâ, columellâ dense callosâ, callositate umbilicâ impunte; nitente-eburneâ.*

THE WHITISH NATICA. Shell with a covered umbilicus, depressly globose, subventricose, flattened beneath, spire very small, sharp at the apex, whorls somewhat squarely convex, polished, obsolete groove-striated, aperture lunar-ovate, somewhat effused, columella densely callous, callosity filling up the umbilicus; shining ivory-white.

RECLUZ, *Petit, Journ. Conch.* vol. ii. p. 194.

Hab. Pasacao, Province of South Camarines, Island of Luzon, Philippines (in sandy mud at a depth of ten fathoms); Cuming.

A shining ivory-white species, of rather square, effused, inflated growth, with a very small spire, and the umbilicus filled up with callous enamel.



154



155



156



157



158



159



160

NATICA.

PLATE VII.

Species 24. (Mus. Cuming.)

NATICA LINEATA. *Nat. testâ umbilicatâ, globoso-ventricosâ, luniculâ, spirâ subersertâ, anfractibus lævigatis, rotundatis, aperturâ semilunari, columellâ tenui, callositate spirali umbilicem semiclaudente; livido-albidâ, lineis rufis longitudinalibus, leviter undulatis nudique pictâ.*

THE LINEATED NATICA. Shell umbilicated, globosely ventricose, rather thin, spire somewhat exserted, whorls smooth, rounded, aperture semilunar, columella thin, with a spiral callosity, half-closing the umbilicus; livid white, painted throughout with longitudinal, slightly waved red lines.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 610.

Hab. Singapore (in sandy mud at six fathoms); Cuming.

This elegantly formed species, which is painted throughout with close-set slightly waved red lines, has a particularly columnar spiral callosity. It has also a shelly operculum.

Species 25. (Mus. Cuming.)

NATICA MAURA. *Nat. testâ angustè subobtectè umbilicatâ, ovato-ventricosâ, spirâ parvâ, anfractibus decussatim striatis, subquadrato-convexis, aperturâ oblongo-semilunari, subnuplâ, basi subeffusâ, columellâ lamina eucantâ super umbilicem revolutâ; nudique intense castaneâ.*

THE MOOR NATICA. Shell with a narrow nearly covered umbilicus, ovately ventricose, spire small, whorls decussately striated, somewhat squarely convex, aperture oblong-semilunar, rather large, a little effused towards the base, columella with enamelled lamina rolled back over the umbilicus; everywhere deep chestnut.

BRUGUIÈRE, Encyclop. Méthodique, pl. 453. f. 4 a, b.

Natica melanostoma, var. *b*, Lamarck.

Hab. San Nicolas, Island of Zebu, Philippines (on the reefs); Cuming.

It may still be doubted whether this species is not a variety of *N. melanostoma*; it is, however, generally of shorter and more square growth, and they are from different localities.

Species 26. (Mus. Cuming.)

NATICA MILLEPUNCTATA. *Nat. testâ latè apertè umbilicatâ, globoso-ventricosâ, spirâ subersertâ, anfractibus lævigatis, rotundatis, ultimo gradatim descendente, aperturâ semilunari, columellâ medioeri, callositate parviscutâ spirali; latescente-albâ, punctis rufis confertis nudique pictâ.*

THE THOUSAND-SPOTTED NATICA. Shell broadly openly umbilicated, globosely ventricose, spire rather exserted, whorls smooth, rounded, the last gradually descending, aperture semilunar, columella middling, with a rather small spiral callosity; yellowish-white, everywhere painted with thick-set red dots.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 636.

Le Mille Points, Favanne.

Natica stercus-muscarum, Enc. Méthodique.

Hab. Mediterranean.

Distinguished by its characteristic painting of red dots, which in *N. maculata*, of the same typical form, from the same locality, are represented by confused blotches.

Species 27. (Mus. Cuming.)

NATICA MAMILLA. *Nat. testâ obtectè umbilicatâ, subpyriformi-ovatâ, ventricosâ, spirâ parvâ, anfractibus lævigatis, nitentibus, superâ declivibus, deinde convexis, anfracta ultimo anticè descendente, obliquè effuso, aperturâ semilunari, columellâ densè callosâ, callositate latâ, umbilicem implete; nudique eburneâ.*

THE NIPPLE NATICA. Shell with a covered umbilicus, somewhat pyriformly ovate, ventricose, spire small, whorls smooth, shining, slanting at the upper part, then convex, last whorl descending in front, obliquely effused, aperture semilunar, columella densely callous, callosity broad, filling the umbilicus; everywhere ivory-white.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 630.

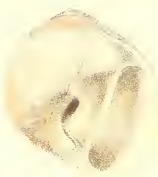
Nerita mamilla, Linnæus.

Hab. Island of Luzon, Philippines (in sandy mud, seven fathoms); Cuming.

This we take to be the original type of the old Linnæan *Nerita unguilla*.



27a



28



29b



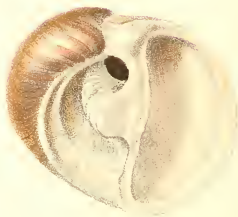
30a



31a



32b



33b

NATICA.

PLATE VIII.

Species 28. (Mus. Cuming.)

NATICA CANDIDISSIMA. *Nat. testâ subobtectè umbilicatâ, globosâ, ponderosâ, spirâ minutâ, vicè elevatâ, apicè distinctâ, anfractibus declivi-concavis, deinde rotundatis, minutissimè decussatim striatis, aperturâ parvâ, obliquâ, semilunari, columellâ densè callosâ; nitentè albâ.*

THE VERY WHITE NATICA. Shell with a nearly covered umbilicus, globose, ponderous, spire very small, scarcely raised, distinct at the apex, whorls slantingly convex, then rounded, very minutely decussately striated, aperture small, oblique, semilunar; columella densely callous, shell white.

LE GUILLOU, *Revue Zool. Soc. Cuvierienne*, 1842, p. 105. *Hab.* Moluccas.

Of a peculiarly short globose form, the spire being only faintly indicated, although distinctly developed at the apex.

Species 29. (Mus. Cuming.)

NATICA MAMILLARIS. *Nat. testâ subangustè profundè umbilicatâ, conoidè-ovatâ, crassâ, spirâ subelevatâ, anfractibus superiè depresso-declivibus, deinde convexis, minutissimè decussatim striatis, aperturâ semilunari, parvisculâ, columellâ callositate mediocri; fulco-rubescente, basi albâ.*

THE MAMILLARY NATICA. Shell rather narrowly deeply umbilicated, conoidly ovate, thick, spire somewhat raised, whorls depressly slanting at the upper part, then convex, very minutely decussately striated, aperture semilunar, rather small, columella with a moderate callosity; fulvous-red, white at the base.

LAMARCK, *Anim. sans vert.* (Deshayes' edit.), vol. viii. p. 628.

Hab. West Indies.

M. Deshayes has shown, in an elaborate note on this species, that the Linnaean *Natica mamillaris* must refer to a freshwater shell, probably a *Lymnaea*. The shell represented in the accompanying Plate, which Lamarck took for his type, is well figured by Chemnitz.

Species 30. (Mus. Cuming.)

NATICA MELANOSTOMA. *Nat. testâ angustè subobtectè*

umbilicatâ, oblongo-ovatâ, subpyriformi, tumidâ, spirâ parvâ, anfractibus obliquè rudè striatis, striis minutissimis spiralibus impressis, anfractu ultimo subeffuso, aperturâ oblongo-semilunari, subamplâ, columellâ lamina ecausatâ super umbilicem revolutâ; albidâ, carneo-fuscescente pallidè latifusciatâ, columellâ et circa umbilicem intensè castaneâ.

THE BLACK MOUTH NATICA. Shell with a narrow nearly covered umbilicus, oblong-ovate, somewhat pear-shaped, swollen, spire small, whorls obliquely rudely striated, impressed with very minute spiral striae, last whorl somewhat effused, aperture oblong-semilunar, rather large, columella with enamelled lamina, rolled back over the umbilicus; whitish, faintly broadly banded with light flesh-brown, columella and round the umbilicus dark chestnut.

LAMARCK, *Anim. sans vert.* (Deshayes edit.), vol. viii. p. 631.

Nerita melanostoma, Gmelin.

Natica opaca, Recluz.

Hab. Sechelle Islands.

Of a swollen, effused, somewhat pear-shaped, ovate form, very faintly dusky flesh-banded, rich dark chestnut on the columellar lamina and region of the umbilicus.

Species 31. (Mus. Cuming.)

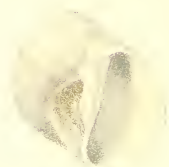
NATICA ALBUMEN. *Nat. testâ perampliter umbilicatâ, convexo-depressâ, subtilis ecaucato-planatâ, spirâ minutâ, anfractibus convexis, levigatis, vel minutissimè decussatim striatis, aperturâ subangustè semilunari, umbilico latè canaliculatâ, callositate conspicuâ centrali; aurantio-rubescente, subtilis albâ.*

THE ALBUMEN NATICA. Shell very largely umbilicated, convexly depressed, excavately flattened beneath, spire very small, whorls convex, smooth, or very minutely decussately striated, aperture rather narrowly semilunar, umbilicus broadly channelled, with a conspicuous central callosity; orange-red, white beneath.

LAMARCK, *Anim. sans vert.* (Deshayes' edit.), vol. viii. p. 628.

Hab. Catbalonga, Island of Samar, Philippines (in sandy mud at six fathoms); Cuming.

This well-known species is remarkably characterized by its very depressed convex form.



NATICA.

PLATE IX.

Fig 32. (Mus. Cuming.)

This very delicately coloured shell is the var. β , *lutea seu straminea*, of *N. aurantia*, noted by Recluz in Pro. Zool. Soc. 1847, p. 211. It is from Port Essington, north coast of New Holland.

Species 33. (Mus. Cuming.)

NATICA ALABASTER. *Nat. testâ profundè umbilicatâ, abbreviato-globosâ, ventricosâ, spirâ parvâ, subcallosâ, anfractibus levibus, rotundatis, columellâ calloso-revolutâ; eburneâ.*

THE ALABASTER NATICA. Shell deeply umbilicated, shortly globose, ventricose, spire small, rather callous, whorls smooth, rounded, columella callously rolled back; ivory-white.

Hab. Mazatlan.

A pure white species, distinguished by an inflated shortly globose form, with a very small spire.

Species 34. (Mus. Cuming.)

NATICA PLUMBEA. *Nat. testâ angustè profundè umbilicatâ, oblongo-turbinatâ, spirâ conoidèâ, apice acutâ, anfractibus rudè diagonaliter striatis, ad suturam obsolete plicatis, deinde rotundatis, aperturâ ovatâ, columellâ superâ calloso-encastâ; plumbeo-griseâ, plicis ad suturam rufescentibus, margine umbilici et encasti columellari vividè sanguineo.*

THE LEADEN NATICA. Shell narrowly deeply umbilicated, oblong-turbinated, spire conoid, sharp at the apex, whorls rudely diagonally striated, obsolete pucker at the suture, then rounded, aperture ovate, columella callously enamelled at the upper part; leaden-grey, plics at the suture reddish, edge of the umbilicus and columellar enamel bright red.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 632.

Natica sordida, Swainson.

Hab. Brisbane Water, east coast of Australia; Strauge.

This fine species may be readily distinguished by its oblong-turbinated form and leaden-grey colour, the columellar enamel and umbilicus being edged with deep blood-red.

Species 35. (Mus. Cuming.)

NATICA DEIODOSA. *Nat. testâ obtectè umbilicatâ, depresso-ovatâ, neritoidèâ, spirâ minutâ, laterali, anfractibus tenuistriatis, nitentibus, convexis, ultimo obliquè prolongato, subtus planato, aperturâ semilunari, parviusculâ, columellâ deusissimè callosâ, callositate umbilicem implente; pallidè stramineâ, callositate eburneâ.*

THE SULPHUR NATICA. Shell with a covered umbilicus, depressly ovate, neritoid, spire minute, lateral, whorls finely striated, shining, convex, the last obliquely prolonged, flattened beneath, aperture semilunar, rather small, columella very thickly callous, callosity filling the umbilicus; pale straw-colour, callosity ivory-white.

Hab. Australia.

This fine species agrees in its delicate tone of colouring with the straw-coloured variety of *N. aurantia* represented at Fig. 32, but is of quite a distinct form, being distinguished by a particularly contracted Nerite-like growth.

Species 36. (Mus. Cuming.)

NATICA PRIAMUS. *Nat. testâ compressè angustè umbilicatâ, abbreviato-globosâ, tenuiculâ, inflatâ, spirâ minutâ, laterali, anfractibus convexis, tenuistriatis, nitentibus, aperturâ ovatâ, amplâ, effusâ, columellâ laminâ callosâ super umbilicem revolutâ; pallidè livido-castaneâ, spirâ riter zonatâ, maculis brunneis paucis promiscuè cingulatâ.*

THE PRIAMUS NATICA. Shell compressly narrowly umbilicated, shortly globose, rather thin, inflated, spire very small, lateral, whorls convex, finely striated, shining, aperture ovate, large, effused, columella with a callous lamina rolled back over the umbilicus; pale livid chestnut, spirally zoned, encircled with a few promiscuous brown spots.

RECLUZ, Pro. Zool. Soc. 1843, p. 213.

Hab. Moluccas.

A very distinct species, allied to *N. Maura*, distinguished by a pattern of marking somewhat similar to that which is characteristic of the genus *Priamus*.



37a



38a



39a



40a



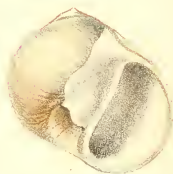
41a



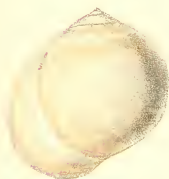
42a



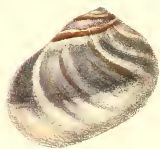
43a



44a



45a



46a

Species 37. (Mus. Cuming.)

NATICA BACONI. *Nat. testâ obtectâ umbilicatâ, abbreviato-trochiformi, crassâ, spirâ brevi, obtusâ, anfractibus obliquè densè minutissimè striatis, superne declivibus, ad suturam rûdibus et callosis, ad basin rotundatis, aperturâ semilunari, horizontali, columellâ subrotundâ, callositate densâ rudî umbilicem impleute; carnescente-griseâ, irregulariter pallidè strigatâ, basi albidâ.*

BACON'S NATICA. Shell with a covered umbilicus, abbreviated trochus-shaped, thick, spire short, obtuse, whorls obliquely, densely, very minutely striated, slanting at the upper part, rude and callous at the suture, rounded at the base, aperture semilunar, horizontal, columella rather sharp, with a rude dense callosity filling the umbilicus; bluish-grey, irregularly pale streaked, white at the base.

Hab. Mouth of the Swau River, New Holland; Dr. Bacon.

A solid trochoid species, of rude structure, of a bluish-grey colour, irregularly interrupted with pale streaks running into the base, which is white.

Species 38. (Mus. Cuming.)

NATICA INTERMEDIA. *Nat. testâ obtectâ umbilicatâ, oblongo-globosâ, crassâ, ponderosâ, spirâ parvâ, uncinatâ, anfractibus lævigatis, nitentibus, superne declivibus, deinde plano-concavis, aperturâ semilunari, columellâ callositate densissimâ, umbilicem impleute; albidâ, rufo-ferrugineo tinctâ.*

THE INTERMEDIATE NATICA. Shell with a covered umbilicus, oblong-globose, thick, ponderous, spire small, pointed, whorls smooth, shining, slanting round the upper part, then flatly convex, aperture semilunar, columella with a very thick callosity, filling the umbilicus; whitish, stained with red rust.

PHILIPPI, Kuster Conch. pl. 18. f. 10.

Hab. — ?

This species, of a rather flattened oblong-globose form, with a small pointed spire, is peculiarly stained with red rust.

Species 39. (Mus. Cuming.)

NATICA VITELLUS. *Nat. profunde subangustè umbilicatâ, globosâ, solidiusculâ, spirâ brevi, apice acutâ, anfractibus rotundatis, lævigatis, aperturâ semilunari, columellâ callosâ, eucansto super umbilicem partim reculuto; ustulato-auratâ, natis albis perparvis promiscuis interruptâ, columellâ et aperturâ fance albis.*

THE EGG-YOLK NATICA. Shell deeply, rather narrowly umbilicated, globose, rather solid, spire short, sharp

at the apex, whorls rounded, smooth, aperture semilunar, columella callous, the enamel partially rolled back over the umbilicus; burnt orange, interrupted with a few prominent white blotches, columella and interior of aperture white.

LAMARCK, Anim. sans vert. vol. viii. p. 637.

Nervis vitellus, LINNÆUS.

Hab. Island of Ticao, Philippines (on the reefs); Cuming.

This well-known species is always distinctly characterized by its peculiar burnt-orange colouring, interrupted with a few gaps wanting colour.

Species 40. (Mus. Cuming.)

NATICA BIFASCIATA. *Nat. testâ angustè subobtectâ umbilicatâ, oblongo-globosâ, spirâ subæsertâ, anfractibus densè minutè striatis, rotundatis, spandiceo-fuscescente, ad suturam albis, fasciis angustis albis subdistansibus medio cingulatis, aperturâ oblongo-ovata, columellâ callosâ, eucansto super umbilicem partim reculuto; eucansto rotundari intus violaceo-castanea.*

THE TWO-BANDED NATICA. Shell with a narrow nearly covered umbilicus, oblong-globose, spire rather exserted, whorls densely minutely striated, rounded, light fawn brown, white next the suture, encircled round the middle with two narrow, rather distant, white bands, aperture oblong-ovate, columella callous, enamel partially rolled back over the umbilicus: columellar enamel deep violet-chestnut.

GRAY, Griffith's Cuvier's Animal Kingdom, pl. 1. f. 2.

Hab. Guaymas, Gulf of California (on the sands at low water); Mr. Babb, R.N.

An elegant species, of a characteristic oblong-globose form, distinguished by two linear white bands upon a light fawn-brown ground, the columellar enamel being a deep chestnut.

Species 41. (Mus. Cuming.)

NATICA DUBIA. *Nat. testâ obtectâ umbilicatâ, globosâ, crassâ, ponderosâ, spirâ parvâ, suturâ callosâ, indistinctâ, anfractibus rotundatis, politis, aperturâ semilunari, parvâ, columellâ dense callosâ, callositate umbilicem impleute; stramineo-eburneâ.*

THE DOUBTFUL NATICA. Shell with a covered umbilicus, globose, thick, ponderous, spire small, suture callous, indistinct, whorls rounded, polished, aperture semilunar, small, columella densely callous, callosity filling the umbilicus; straw-tinted ivory.

RECLUZ, Pro. Zool. Soc. 1843, p. 209.

Hab. Chili ?

A very solid globular shell, of polished surface, like straw-tinted ivory.



23a



24a



25b



26a



27a



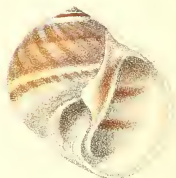
28b



29a



30b



31b



32a

Species 42. (Mus. Cuming.)

NATICA PHYTELEPHAS. *Nat. testâ perangustè profundè umbilicatâ, globosâ, solidiusculâ, spirâ parvâ, apicè distincto, anfractibus lævibus, et minutè decussatâ striatis, superiè leviter concavis, deinde plano-rotundatis, aperturâ semilunari, columellâ callosâ, callositate umbilicam partim implente; fulvescente-albâ, subopacâ.*

THE IVORY-NUT NATICA. Shell very narrowly deeply umbilicated, globose, rather solid, spire small, apex distinct, whorls smooth, or minutely decussately striated, slightly concave at the upper part, then flatly rounded, aperture semilunar, columella callous, callosity partially filling the umbilicus; yellowish-white, rather opaque.

Hab. Austrâlia.

A solid, globose, dead-white shell, rather concavely flattened round the upper part of the whorls.

Species 43. (Mus. Cuming.)

NATICA SEPTENTRIONALIS. *Nat. testâ obtectè umbilicatâ, globosâ, tenui, inflatâ, spirâ subsertâ, anfractibus rotundatis, minutè decussatâ striatis, epidermidè tenui fulvâ indutâ, aperturâ subpyriformi-ovatâ, columellâ tenuiculâ, callositate albâ parvâ umbilicam implente.*

THE NORTHERN NATICA. Shell with a small covered umbilicus, globose, thin, inflated, spire subserted, whorls rounded, minutely decussately striated, covered with a thin fulvous epidermis, aperture subpyriformly ovate, columella rather thin, with a rather small white callosity filling up the umbilicus.

BECK, Cat. Moll.

Hab. Greenland.

A light inflated species of *Ampullaria*-like form, covered with a very characteristic close, thin, horny-yellowish epidermis.

Species 44. (Mus. Cuming.)

NATICA DRAPARNAUDI. *Nat. testâ spirâliter umbilicatâ, depresso-globosâ, neritoidè, crassâ, ponderosâ, spirâ parvâ, callosâ, laterali, anfractibus lævigatis, nitentibus, superiè leviter concavo-impresis, aperturâ semilunari, columellâ densè callosâ, umbilicâ spirâliter angulato, callositate intrante; eicidè vitellino-aurantiâ, umbilico et callositate albis.*

DRAPARNAUD'S NATICA. Shell spirally umbilicated, depressly globose, neritoid, thick, heavy, spire small, callous, lateral, whorls smooth, shining, slightly con-

cavely impressed round the upper part, aperture semilunar, columella thickly callous, umbilicus spirally angled, with callosity entering; bright yellowish-orange, nublilicus and callosity white.

RECLUZ, Petit, Journ. Conch. vol. ii. p. 198. pl. 5. f. 11. Hab. Isle of Baelcou, Philippines.

A brilliant yellowish-orange neritoid shell, with a peculiar white-angled umbilicus.

Species 45. (Mus. Cuming.)

NATICA PHILIPPANA. *Nat. testâ obtectè umbilicatâ, depresso-globosâ, spirâ plano-concavâ, eicè elevatâ, anfractibus concavo-declivibus, deinde rotundatis, lævigatis, politis, aperturâ pyriformi-ovatâ, horizontali, columellâ callositate densè rotundatâ; fulvo-cinereâ, spirâ aurantio-rufâ, callositate et aperturâ fance castaneo-rufo.*

PHILIPP'S NATICA. Shell with a covered umbilicus, depressly globose, spire flatly convex, scarcely raised, whorls convexly slanting, then rounded, smooth, polished, aperture pyriformly ovate, horizontal, columella with a thick rounded callosity; fulvous-ash, spire orange-red, callosity and interior of the aperture chestnut-brown.

RECLUZ, MS., Mus. Cuming.

Hab. Alexandria, Mediterranean.

A highly polished reddish-ash shell, distinguished from *N. glaucina* by its more solid umbilical callosity.

Species 46. (Mus. Cuming.)

NATICA GLOBOSA. *Nat. testâ profundè umbilicatâ, globosâ, spirâ parvâ, anfractibus lævibus, aut minutissime decussatâ striatis, superiè declivibus, deinde concavis, aperturâ semilunari, columellâ parvâ callosâ; albâ, apicè livido-nigricante, fasciis latis dilutè helveticè circumulatâ.*

THE GLOBOSE NATICA. Shell deeply umbilicated, globose, spire small, whorls smooth, or very minutely decussately striated, slanting at the upper part, then convex, aperture semilunar, columella but little callous; white, apex livid black, encircled with broad diluted blood-red bands.

CHEMNITZ, Conch. Cab. vol. v. p. 267. pl. 158. pl. 1890. 1897.

Natica helvetica, Lamarek.

Natica syndica, var., Dillwyn.

Hab. Singapore (in sandy mud at six fathoms), Cuming.

A globose shell, encircled with broad diluted fawn-red bands, leaving the white ground most distinct next the suture.



96a



97a



98a



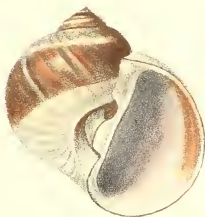
99b



99a



99c



99b



99a



99b



99c

Species 47. (Mus. Cuming.)

NATICA RAPULUM. *Nat. testâ angustè profunde umbilicatâ, globosâ, tenuiculâ, ventricosâ, spirâ parâ, sub-exsertâ, apicè acutâ, aufractibus rotundatis, minutissimè deussatis striatis, aperturâ lunari-oratâ, columellâ tenuiculâ, callosâ; opaco-albâ, epidermide stramineâ partim indutâ.*

THE LITTLE TURNIP NATICA. Shell narrowly deeply umbilicated, globose, rather thin, ventricose, spine small, slightly exerted, sharp at the apex, whorls rounded, very minutely deussately striated, aperture linear-ovate, columella rather thin, callous; opake-white, partially covered with a straw-coloured epidermis.

Hab. Payta, Peru (on mud-banks); Cuming.

A light, opake-white species, partially covered with a light straw-coloured epidermis, with somewhat the form of an *Ampullaria*.

Species 48. (Mus. Cuming.)

NATICA CONICA. *Nat. testâ angustè partim obtusè umbilicatâ, oblongo-conicâ, solidâ, spirâ angustâ, exsertâ, aufractibus obliquè tenuistriatis, concavis, infra suturam depresso-concavis, aperturâ lunari-oratâ, columellâ callosâ, encausto solidissimo, super umbilicam revalatâ; fulvo-cinereâ, columellâ fuscocastanea tinctâ.*

THE CONICAL NATICA. Shell with a narrow partially covered umbilicus, oblong-conical, solid, spine large, exerted, whorls obliquely finely striated, convex, depressly concave beneath the suture, aperture lunar-ovate, columella callous, enamel rather solid, rolled back over the umbilicus; fulvous-ash, columella stained with smoky-chestnut.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 632.

Hab. Australia.

Characterized chiefly by its conically turbinate form, and by the smoky-chestnut tinge of the columellar canal.

Species 49. (Mus. Cuming.)

NATICA UNIFACIATA. *Nat. testâ umbilicatâ, ventricoso-globosâ, spirâ sub-exsertâ, apicè acutâ, aufractibus minutè deussatis striatis, rotundatis, superne leviter depressis, aperturâ lunari-oratâ, effusâ, columellâ tenuiculâ, callositate spirali umbilicam fere implente; violascente-cinereâ, fasciâ albââ lineari supra medianam cingulatâ.*

THE ONE-BANDED NATICA. Shell umbilicated, ventricosely globose, spine rather exerted, sharp at the apex, whorls minutely deussately striated, rounded, slightly depressed at the upper part, aperture lunar-ovate, effused, columella rather thin, with a spiral callosity nearly filling the umbilicus; violet-ash, encircled with a whitish linear band above the middle.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 640.

Hab. Bay of Panama (on mud-banks at low water). Cuming.

This species has, particularly, the form and general aspect of an *Ampullaria*. It has a shelly operculum.

Species 50. (Mus. Cuming.)

NATICA MONILIFERA. *Nat. testâ angustè profunde umbilicatâ, globosâ, subventricosâ, spirâ exsertâ, apicè acutâ, suturâ lineari-impressâ, aufractibus rotundatis, levigatis, aperturâ lunari-oratâ, columellâ tenuè callosâ; fulvo-glaucoscente, superne maculis spadiceis serie unicâ cingulatâ.*

THE NECKLACE-MARKED NATICA. Shell narrowly deeply umbilicated, globose, subventricose, spine exerted, sharp at the apex, with the suture linearly impressed, whorls rounded, smooth, aperture lunar-ovate, columella thinly callous; pale yellowish-glaucous, encircled at the upper part with a single row of pale fawn spots.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 638.

Nerita glaucina, Pennant (not of Linnaeus).

Nerita cateua, Da Costa.

Natica castanea, Lamarck.

Natica spyalida, Macgillivray.

Hab. European seas.

Well characterized by the necklace of fawn-red spots which encircles the whorls next the suture.

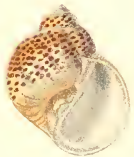
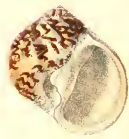
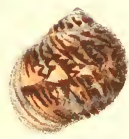
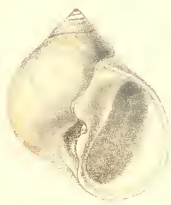
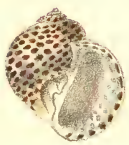
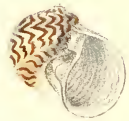
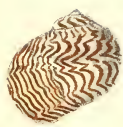
Species 51. (Mus. Cuming.)

NATICA LEUCOPLEA. *Nat. testâ subangustè profunde umbilicatâ, globoso-ventricosâ, spirâ breviusculâ, obtusâ, aufractibus rotundatis, ad suturam obsolete plicatis, aperturâ pyriformi-oratâ, columellâ callosâ, encausto super umbilicam revalatâ; plumbeo-griseâ, infra suturam rufa tinctâ, labro et encausto columellari sanguineo-rufis.*

THE GREY NATICA. Shell rather narrowly deeply umbilicated, globosely ventricose, spine rather short, obtuse, whorls rounded, faintly plicated at the suture, aperture pyriformly ovate, columella callous, enamel rolling back over the umbilicus; leaden-grey, stained with red beneath the suture, lip and columellar enamel red.

Hab. Australia.

A very characteristic leaden-grey shell, of light *Ampullaria*-like form, stained with blood-red along the edge of the lip and columellar enamel, and round the upper edge of the whorls next the suture.



NATICA.

PLATE XIII.

Species 52. (Mus. Cuming.)

NATICA MAROCHENSIS. *Nat. testâ umbilicatâ, globoso-ventricosâ, spirâ exertâsculâ, anfractibus laevigatis, rotundatis, apertura lunari-ovata, subfissa, columellâ tenuiculâ, callositate columnari spirali umbilicosa fere implete; griseo-carulescente et squamide rufâ, maculis tripartitis apertico-fasciis plus minus indistinctè quatuor-seriatis cingulatâ.*

THE MOROCCO NATICA. Shell umbilicated, globosely ventricose, spire rather exerted, whorls smooth, rounded, aperture lunar-ovate, subeffused, columella rather thin, with a columnar spiral callosity nearly filling the umbilicus; greyish-blue or dirty red, encircled more or less indistinctly with five rows of arrow-headed fawn-brown spots.

LAMARCK, Anim. sans vert. vol. viii. f. 642.

Nerito Marocensis, Guérin.

Natica Chemnitzii, Menke (not of Recluz).

Hab. North Africa and West Indies.

This species is always characterized by being encircled with bands of arrow-headed spots, but they are often much obscured.

Species 53. (Mus. Cuming.)

NATICA ZEBRA. *Nat. testâ umbilicatâ, globoso-ventricosâ, subinflatâ, spirâ obtusè exertâ, anfractibus laevigatis, nitentibus, superne declivibus, deorsu rotundatis, apertura lunato-orbiculari, columellâ tenui, callositate columnari spirali, umbilicosa fere implete; albâ, strigis angustis rufis arcuè natis dense longitudinaliter pictâ.*

THE ZEBRA NATICA. Shell umbilicated, globosely neritoid, rather inflated, spire obtusely exerted, whorls smooth, shining, slanting at the upper part, then rounded, aperture lunar-orbicular, columella thin, with a spiral columnar callosity nearly filling the umbilicus; white, densely longitudinally painted with narrow, sharply zigzag red streaks.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 643.

Hab. Cagayan, Province of Misamis, Island of Mindanao, Philippines (in sandy mud at twenty-five fathoms); Cuming.

The longitudinal zigzag red streaks which distinguish

this species ~~was~~ now narrow and close-set, now broader and more distant.

Species 54. (Mus. Cuming.)

NATICA UBER. *Nat. testâ subangustè umbilicatâ, oblongo-turbinatâ, solitâsculâ, spirâ exertâ, anfractibus minutissimè decussatè striatis, superne declivibus, deinde convexis, apertura lunari-oblongâ, columellâ dense enervatâ, callositate parvâ; albâ, epidermide tenuissimâ indatâ.*

THE TEAT NATICA. Shell rather narrowly umbilicated, oblong-turbinated, rather solid, spire exerted, whorls very minutely decussately striated, slanting round the upper part, then convex, aperture lunar-oblong, columella densely enamelled, with a small callosity, white, covered with a very thin epidermis.

VALENCIENNES, in Obs. Geol. Humboldt, 1833, vol. ii. p. 266.

Hab. Casma, Peru (in muddy sand at four fathoms), Cuming.

This, I believe, is the true *N. uber* of Valenciennes collected by Humboldt, and the same species as that collected by D'Orbigny in the same locality, although the specimen figured by the latter is of rather different proportions.

Species 55. (Mus. Cuming.)

NATICA PELLIS-TIGRINA. *Nat. testâ subangustè perspective umbilicatâ, globosâ, spirâ exertâ, apice ovatâ, anfractibus superne subdepressis, deinde convexis, laevigatis, apertura lunari-ovata, subfissa, columellâ superne callosâ, callositate parvâ columnari spirali umbilicosa intrate; albâ, maculis rufo-purpureis interdum confluentibus dense pictâ.*

THE TIGER'S SKIN NATICA. Shell rather largely perspective umbilicated, globose, spire exerted, sharp at the apex, whorls somewhat depressed at the upper part, then convex, smooth, aperture lunar-ovate, rather effused, columella callous at the upper part, with a small columnar spiral callosity entering the umbilicus; whitish, densely painted with red-purple spots, sometimes flowing together.

CHEMNITZ, Conch. Cab. vol. v. p. 265. pl. 187. f. 1892 and 1893.

April, 1855.

Natica variolaria, Recluz.

Hab. Swan River (in sandy mud at ten fathoms); Dr. Collic, R.N.

This pretty species is distinguished by a pattern of dark purple-red spots, quite distinct in character from that of *N. maculosa*.

Species 56. (Mus. Cuming.)

NATICA RAYNAUDIANA. *Nat. testâ sabobtectè umbilicatâ, globosâ, crassiusculâ, spirâ parva exsertâ, anfractibus lævigatis, superne declivibus, deinde rotundatis, apertura lunari-ovata, columellâ dense rugosâ, eucansto umbilicem partim obtegente; dilute aurantio-fulvâ, strijs rufo-castaneis irregulariter reticulatis promiscuè fasciatim pictâ.*

RAYNAUD'S NATICA. Shell with a nearly covered umbilicus, globose, rather thick, spire but little exerted, whorls smooth, slanting at the upper part, then rounded, aperture lunar-ovate, columella thickly enamelled, enamel partially covering the umbilicus; pale orange-fulvous, promiscuously painted with irregularly netted streaks of reddish-chestnut bands.

RECLUZ, Pro. Zool. Soc. 1843, p. 212.

Hab. Zanzibar; T. Thorn, Esq.

A solid orange-tinted shell, banded with very characteristic chestnut net-streaked markings, first collected at Trincomalee, Bay of Ceylon, by M. Raynaud.

Species 57. (Mus. Cuming.)

NATICA MACULOSA. *Nat. testâ angustè umbilicatâ, globoso-turbinatâ, spirâ conico-exsertâ, anfractibus rotundatis, apertura lunari-ovata, columellâ tenuè rugosâ, callositate parvâ columari spirali; albâ, punctis purpureo-fuscis dense pictâ, anfractibus superne et inferne immaculatis.*

THE FULL-SPOTTED NATICA. Shell narrowly umbilicated, globose turbinate, spire conically exerted, whorls rounded, aperture lunar-ovate, columella thinly enamelled with a small spiral callosity: white, densely crowded with purple-brown dots, whorls at the upper and lower edge unspotted.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 641.

Hab. Singapore (in sandy mud at six fathoms); Cuming.

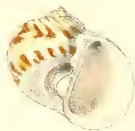
M. Deshayes is wrong in assigning this species to the *N. pellis-tigrina* of Chemnitz, which is that represented in the accompanying Plate at Fig. 55.



581



582



583



584



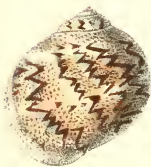
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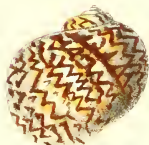
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588



589



Species 58. (Fig. a, b, c, Mus. Cuming.)

NATICA MAHENSE. *Nat. testâ umbilicatâ, globosâ, spirâ subexsertâ, suturâ impressâ, anfractibus rotundatis, lævigatis, juxta suturam peculiariter obliquè plicato-corrugatâ, aperturâ lunari-ovata, columellâ superâe callosâ, callositate columnari spirali umbilicis semiclaudente; albâ, fasciis duabus maculis ferrugineo-spadicis interruptis cingulatâ.*

THE MAHE NATICA. Shell umbilicated, globose, spire a little exerted, suture impressed, whorls rounded, smooth, peculiarly obliquely plicately wrinkled next the suture, aperture lunar-ovate, columella callous at the upper part, with a columnar spiral callosity half filling the umbilicus; white, encircled with two interrupted bands of rust-fawn blotches.

RECLUZ, MS., Mus. Cuming.

Hab. Island of Mahe, Seychelles.

A very characteristic species, encircled beneath the suture with obliquely plicately wrinkles.

Species 59. (Mus. Cuming.)

NATICA FORSKALII. *Nat. testâ subapertè perspectivè umbilicatâ, globosâ, subcentricosâ, spirâ breviter exsertâ, anfractibus rotundatis, lævibus, juxta suturam plicato-striatis, aperturâ lunari-ovata, columellâ superâe callosa-recurvâ; albâ, striis ferrugineo-spadicis medio fasciâ albâ interruptis nudique pictâ.*

FORSKAL'S NATICA. Shell rather openly perspective-ly umbilicated, globose, subcentricose, spire shortly exerted, whorls rounded, smooth, plicately striated next the suture, aperture lunar-ovate, columella callously recurved at the upper part; white, marked throughout with longitudinal rust-fawn streaks, leaving a white band in the centre.

Nerita Forskalii, Chemn. Couch. Cab. vol. xi. pl. 197. f. 1901 and 1902.

Hab. — ?

Resembling the preceding species, but distinct in all its detail of character. The suture of the spire is not similarly impressed, the plicated striae are very different from the wrinkles, and the umbilicus is not obscured by any winding columnar callosity.

Species 60. (Mus. Cuming.)

NATICA ALA-PAPILIONIS. *Nat. testâ ampliter umbilicatâ, subglobosâ, spirâ exsertâ, suturâ impressâ, anfractibus lævigatis, rotundatis, superâe depressis et plicato-corrugatis, callositate columnari spirali umbilicis semiclaudente; albâ, fasciis duabus maculis ferrugineo-spadicis interruptis cingulatâ.*

rugatis, altimo medio effuso, columellâ superâe callosâ, callositate columnari spirali umbilicis intrantè; spadicæ-curve, zonis quatuor albis maculis quadratis purpureis distantibus cinctis cingulatâ, callositate albâ.

THE BUTTERFLY-WING NATICA. Shell largely umbilicated, subglobose, spire exerted, suture impressed, whorls smooth, rounded, depressed and plicately wrinkled at the upper part, last whorl much effused, columella callous at the upper part, with a columnar spiral callosity entering the umbilicus; fawn-flesh tinged, encircled with four white zones, filleted with distant square purple spots, callosity white.

Nerita ala-papilionis, Chemnitz, Couch. Cab. vol. v. p. 257. f. 1868 to 1871.

Natica zozaria, Lamarck, De Blainville.

Eadem, *Natica creata*, Recluz.

Hab. San Nicolas, Island of Zebu, Philippines (in sandy mud at ten fathoms); Cuming.

Well distinguished by its dark purple filleted zones and effused aperture.

Species 62. (Fig. 61 and 62, Mus. Cuming.)

NATICA FULMINEA. *Nat. testâ perspectivè umbilicatâ, globosâ, solidâ, spirâ brevi, subimpressâ, anfractibus rotundatis, juxta suturam subrè plicato-striatis, aperturâ lunari-ovata, columellâ superâe latè callosâ. albâ, striis acutè nudatis rufa-fasciis irregularibus densè longitudinaliter pictâ.*

THE LIGHTNING-MARKED NATICA. Shell perspective-ly umbilicated, globose, solid, spire short, somewhat impressed, whorls rounded, rudely plicately striated next the suture, aperture lunar-ovate, columella broadly callous at the upper part; white, densely longitudinally painted with irregular zigzag red-brown streaks.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. 3. p. 611.

Nerita fulminea, Gmelin.

Nerita arachnoidea, Gmelin.

Natica arachnoidea, Lamarck.

Natica crenata, Lamarck.

Natica punctata, Swainson.

Natica bifasciata, Recluz.

Natica Senegaleensis, Recluz.

Natica Bourguignati, Recluz.

Hab. Senegal.

Of this species, from Senegal, varying more or less in its markings of dots, blotches, and zigzag flames, too many spurious species have been made.



62



63a



64b



65a



66a



66b



67b



67a



67b



67c

Pl. VI. Natica.

Pl. VI. Natica.

Species 53. (Mus. Cuming.)

NATICA TINCTURATA. *Nat. testâ perspectivè umbilicatâ, globosâ, verrucosâ, spirâ breviusculâ, anfractibus levibus, politis, superâ depressâ, deinâ angustâ, rotundatâ, aperturâ lunari-ovatâ, columellâ superâ callosâ; lineâculo-albâ, punctis pallidâ, maculis nigris peransis obliquis et fasciis angustis albâbus pictâ.*

THE STAINED NATICA. Shell perspectively umbilicated, globose, verritoid, spire rather short, whorls smooth, polished, rather depressed at the upper part, then somewhat squarely rounded, aperture lunar-ovate, columella callous at the upper part; livid-white, painted with pale orange dots, large oblique blotches, and narrow filleted bands.

Hab. — ?

A beautifully-painted porcelain shell, with a coloured umbilicus.

Species 64. (Mus. Cuming.)

NATICA FLORIDA. *Nat. testâ umbilicatâ, globosâ, spirâ breviusculâ, anfractibus levibus, superâ declivibus, deinâ rotundatâ, aperturâ lunari-ovatâ, effusâ, columellâ superâ leviter callosâ, callositate parâ columnari spirali umbilicâ intrantâ; albâ, punctis pallidâ spadicis confertis undato-aggregatis undique pictâ, umbilico spadiceo.*

THE FLORID NATICA. Shell umbilicated, globose, spire rather short, whorls smooth, slanting at the upper part, then rounded, aperture lunar-ovate, effused, columella slightly callous at the upper part, with a small spiral columnar callosity entering the umbilicus; whitish, painted throughout with close-set wave-aggregated light fawn dots, umbilicus fawn.

Hab. — ?

Allied to the preceding, but less globose, and furnished with a very characteristic columnar callosity.

Species 65. (Mus. Cuming.)

NATICA VIOLACEA. *Nat. testâ subtectè umbilicatâ, conoidè-globosâ, crassâ, spirâ breviusculâ, obtusâ, anfractibus levibus, politis, superâ declivibus, deinâ rotundatâ, aperturâ lunari-ovatâ, subobliquâ, columellâ superâ lobè ecanstâ, ecansto umbilicâ fere oblongâ; albâ, maculis aurantio-fasciis quadratis seriatis tessellatâ, maculis interdum prominensè interruptis, ecansto columellari intensè violaceo-roseo.*

THE VIOLET NATICA. Shell with a nearly-covered umbilicus, conoid-globose, thick, spire rather short, obtuse, whorls smooth, polished, slanting at the upper part, then rounded, aperture lunar-ovate, rather oblique, columella broadly enamelled at the upper part, enamel nearly covering the umbilicus; white, tessellated with rows of square orange-brown spots, spots

sometimes prominently interrupted, columnar enamel deep violet-rose.

SOBERY, Tankerville Catalogue, App. p. xi.

Natica rhodostoma, Philippî.

Hab. Island of Masbate, Philippines (in sandy mud at six fathoms); Cuming.

This very beautiful species is distinguished from all others of the genus by the delicate violet-rose colouring of the columnar enamel.

Species 66. (Mus. Cuming.)

NATICA BRODERIPIANA. *Nat. testâ latè umbilicatâ, globosâ, solidiusculâ, spirâ evertâ, anfractibus convexis, longitudinaliter plicato-sulcatis, aperturâ lunari-ovatâ, effusâ, columellâ truncatâ, callositate depressâ columnari spirali umbilicâ intrantâ; pallidè aurantio-spadicâ, fasciis tribus distantibus castaneis interruptis.*

BRODERIP'S NATICA. Shell broadly umbilicated, globose, rather solid, spire exerted, whorls convex, longitudinally plicately grooved, aperture lunar-ovate, effused, columella rather thin, with a depressed columnar spiral callosity entering the umbilicus; light orange-fawn, encircled with three interrupted distant chestnut bands.

RECLUZ, Pro. Zool. Soc. 1847, p. 205.

Eadem Natica Testâ, Recluz.

Hab. Xipixapi, West Colombia (in sandy mud at sixteen fathoms); Cuming.

The surface of this species is impressed longitudinally with grooves, which at the suture and base pucker it into fine ribs.

Species 67. (Mus. Cuming.)

NATICA PICTA. *Nat. testâ umbilicatâ, subglobosâ, verrucosâ, spirâ breviusculâ, anfractibus levibus, rotundatâ, aperturâ lunari-ovatâ, subproductâ, columellâ superâ callosâ, callositate solidâ columnari umbilicâ fere intrantâ; albâ, lineis aurantio-spadicis transversè undatis in fasciis quatuor plus minus apertè angulatis undique densè pictâ.*

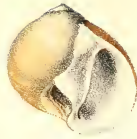
THE PAINTED NATICA. Shell umbilicated, subglobose, verritoid, spire rather short, whorls smooth, rounded, aperture lunar-ovate, rather produced, columella callous at the upper part, with a solid columnar callosity nearly filling the umbilicus; whitish, everywhere densely painted with very finely-waved orange-fawn lines, more or less openly arrow-headed in four bands.

RECLUZ, Pro. Zool. Soc. 1843, p. 204.

Eadem Natica ecansto et Natica elegans, Recluz.

Hab. Bassey, Isle of Samar, Philippines (on the reefs). Cuming.

The linear painting of this species varies in being more or less opened out in pattern.



69 c



69 a



69 b



69 d



70 a



70 b



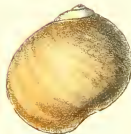
69 e



71 a



71 b



69 f

NATICA.

PLATE XVI.

Fig. 68. (Mus. Cuming.)

NATICA RAVIDA. *Nat. testâ profundè perspectiveè umbilicatâ, globosâ, solidissimâ, spirâ parvâ, obtusâ, anfractibus lævigatis, superâ declivibus, deinde convexis, columellâ superâ et infraè densissimè callusâ, apertura lunari-oratâ, parvissimâ; albâ, epidermide tenui luteâ subrugosâ carinâ iulatâ.*

THE TAWNY NATICA. Shell deeply perspectiveè umbilicated, globose, very solid, spire small, obtuse, whorls smooth, slanting at the upper part, then convex, columella very densely callous, above and below, aperture lunar-ovate, rather small; white, covered with a thin, rough, horny, yellowish epidermis.

SOLEYER, Voyage de la Bonite.

Hab. St. Elena, West Columbia (in sandy mud at six fathoms); Cuming.

A shell of peculiar solid globose growth, marble-white, covered with a thin, rough, yellowish epidermis.

Species 69. (Fig. a to d, Mus. Cuming.)

NATICA ORIENTALIS. *Nat. testâ latè umbilicatâ, subglobosâ, peculiariter læcè convolutâ, spirâ parvâ, subulorâ, suturâ impressâ, anfractibus convolutis, lævigatis, juxta suturam radiatim carregatis, respicè longitudinaliter dilatatis, apertura oblongo-oratâ, ampliter dilatato-effusâ, columellâ supra et infra callusâ, callositate columnari spirali umbilicis intrante, fulvo-chestnâ vel chernâ.*

THE ORIENTAL NATICA. Shell broadly umbilicated, sub-globose, peculiarly loosely convoluted, spire small, somewhat immersed, suture impressed, whorls rounded, smooth, radiately wrinkled next the suture, rapidly longitudinally dilated, aperture oblong-ovate, largely dilately effused, columella callous above and below, with a columnar spiral callosity entering the umbilicus; fulvous-chestnut, or white.

Nerita orientalis, Gmelin, Syst. Nat. p. 3673.

Natica charvæ, Deshayes.

Hab. Singapore (in sandy mud, at four to six fathoms); Cuming.

The two varieties of this very characteristic, loosely convoluted, dilately effused species, are respectively described by Chemnitz as *subulca* and *charvæ*, but not named.

Species 70. (Mus. Cuming.)

NATICA RUFA. *Nat. testâ crassissimâ, subgloboso-neritoidè, solidissimâ, spirâ brevî, circumplexâ rotundatâ, superâ declivibus et tenui, globoso-convolutâ, apertura lunari-oratâ, columellâ superâ callusâ, callositate columnari parvâ spirali umbilicis intrante, fulvo-chestnâ, foveâ parvâ angustâ, infra et juxta suturam albâ.*

THE RED NATICA. Shell extremely umbilicated, globosely neritoid, rather solid, spire short, weakly rounded, slanting at the upper part, and finely plicately wrinkled, aperture lunar-ovate, columella callous at the upper part, with a small spiral columnar callosity entering the umbilicus; fulvous-chestnut, encircled with a pale band, white beneath and next the suture.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. viii. p. 639.

Nerita rufa, Born.

Hab. Singapore (in sandy mud, at six fathoms); Cuming.

This and *N. spadicea* are probably varieties, yet the former is of larger ventricose growth, and is conceavely impressed next the suture.

Species 71. (Mus. Cuming.)

NATICA SOLIDA. *Nat. testâ subultrè umbilicatâ, globoso-neritoidè, crassâ, solidâ, spirâ abbreviato-cumulatâ, anfractibus superâ convexo-declivibus, dividi-cumulatis, lævigatis, apertura lunari-oratâ, columellâ superâ densè evanescâ, evanescâ super umbilicis recolatâ; violaceo-chestnâ, evanescâ columellari intusè purpureo-chestnâ, nitente.*

THE SOLID NATICA. Shell with a nearly covered umbilicus, globosely neritoid, thick, solid, spire shortly conoid, whorls conceavely slanting at the upper part, then rounded, smooth, aperture lunar-ovate, columella thickly enamelled at the upper part, enamel rolled back over the umbilicus; violet-chestnut, columellar enamel dark purple-chestnut, shining.

BLAINVILLE, Malacologie, pl. 36. f. 8.

Hab. San Nicolas, Island of Zebu, Philippines (in sandy mud, at ten fathoms); Cuming.

Characterized by a peculiarly dark violet-chestnut enamel.



700



701



702



703



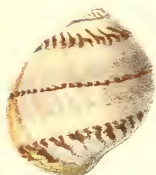
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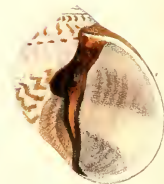
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708



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NATICA.

PLATE XVII.

Species 74. (Mus. Cuming.)

NATICA FILOSA. *Nat. testâ subanguste umbilicatâ, compresso-oratâ, Sigareticâ, spirâ brevi, acuminatâ, asfractibus declivi-concavis, arcuatim longitudinaliter striatâ, striis minutis impressis oculatis spirâlibus decussatâ, asfractu ultimo inflato, aperturaâ ampla, columellâ sublatè reflectâ; albâ, fasciis duabus latis dilutè ferrugineo-fuscis ringulatâ, columellâ purpureo-nigricante.*

THE THREAD-MARKED NATICA. Shell rather narrowly umbilicated, compressly ovate, inflated, Sigaretus-shaped, spire short, acuminated, whorls slantingly convex, arcuately longitudinally striated, decussated with minute, waved, spiral, impressed striae, last whorl large, inflated, aperture large, columella rather broadly reflected; whitish, encircled with two broad, dilute, rust-brown bands, columella purple-black.

SOEWERY, MSS., Mus. Cuming.

Hab. — ?

This species, belonging to the group of *Notice*, partaking mostly of the character of *Sigaretus*, is distinguished by its decussated thread-like sculpture.

Species 73. (Mus. Cuming.)

NATICA SUCCINEOIDES. *Nat. testâ angustè obvelè umbilicatâ, compressè ventâ, spirâ brevi, acuminatâ, asfractibus obliquè plicato-striatis, superè concavo-declivibus, declivè plano-concavis, asfractu ultimo inflato, aperturaâ ampla, basi subaffusâ, columellâ plano-reflexâ, umbilicam tegente; albâ, epidermide tenui indatâ, columellâ et orâ umbilicali purpureo-nigris.*

THE SUCCINEA-LIKE NATICA. Shell with a narrow covered umbilicus, compressly ovate, spire short, acuminated, whorls obliquely plicately striated, concavely slanting at the upper part, then flatly convex, last whorl inflated, aperture large, rather effused at the base, columella flatly reflected at the back, covering the umbilicus; white, covered with a thin epidermis, columella and umbilical area purple-black.

Hab. Pasaca, Island of Luzon, Philippines (in sandy mud at ten fathoms); Cuming.

A delicate white species, having the characteristic form

of *Succinea*, with the rich purple-black stained columella broadly reflected and pressed down upon the umbilicus.

Species 74. (Fig. a, Mus. Cuming; Fig. b, Mus. Taylor.)

NATICA SEEBE. *Nat. testâ angustè umbilicatâ, oblongo-oratâ, tenuientâ, spirâ parvâ, acuminatâ, asfractibus leviter convexis, levè plicato-striatis, striis minutissimis spirâlibus impressis decussatis, asfractu ultimo inflato, aperturaâ ampla, subquadrato-oratâ, columellâ breviusculâ, superè latè appressâ; pellucido-albâ, fusco interduâ obscurè fasciatâ, epidermide fatè indatâ, columellâ rubro-fuscâ.*

SEEBE'S NATICA. Shell narrowly umbilicated, oblong-ovate, rather thin, spire small, acuminated, whorls slightly convex, finely plicately striated, striae decussated with spiral, very minute, impressed striae, last whorl much inflated, aperture large, somewhat squarely ovate, columella rather short, broadly appressed at the upper part; transparent white, sometimes obscurely banded with brown, covered with a fulvous epidermis, columella violet-brown.

SOUTEYET, Voyage de la Bonite, pl. 35, f. 6, 7.

Hab. San Nicolas, Island of Zebu, Philippines (under stones); Cuming.

A fine bold species, the largest and most inflated of the *Sigaretus*-like group.

Species 75. (Mus. Cuming.)

NATICA ZANZIBARICA. *Nat. testâ subobtectè umbilicatâ, compressè quadrato-ventâ, spirâ minutâ, asfractibus longitudinaliter plicato-striatis, striis minutissimis impressis spirâlibus decussatis, asfractu ultimo perispiro, inflato, aperturaâ quadrato-oratâ, palmâ, columellâ latè reflectâ, umbilicam ferè tegente; albâ, fasciâ fuscâ interruptè obscurè ringulatâ, epidermide fatè indatâ, columellâ et orâ umbilicali nigricante-castaneis.*

THE ZANZIBAR NATICA. Shell with a nearly covered umbilicus, compressly quadrately ovate, spire very small, whorls longitudinally plicately striated, striae decussated with very minute spiral impressed striae, last whorl very large, inflated, aperture squarely ovate, open, columella broadly reflected back, nearly covering the umbilicus; white, obscurely encircled

with a brown interrupted band, covered with a fulvous epidermis, columella and umbilical area blackish-chestnut.

RECLUZ, Pro. Zool. Soc. 1843, p. 213.

Hab. Zanzibar; Thori.

Distinguished chiefly from the other species of the group by its square and more open form and minute spire.

Species 76. (Mus. Cuming.)

NATICA SIMILE. *Nat. testâ oblectè umbilicatâ, ovatâ, spirâ brevî, anfractibus declivi-convexis, minutè plicato-striatis, subnitentibus, apertura ovali-ovata, columellâ latè reflexâ, umbilicem ferè tegente; cærulescente-albâ, maculis undatis rufescente-castaneis, bizonatiâ, in-*

terdum trizonatiâ, cingulatâ, columellâ nigricante-castaneâ.

THE MONKEY NATICA. Shell with a nearly covered umbilicus, ovate, spire short, whorls slantingly convex, minutely plicately striated, rather shining, aperture oblong-ovate, columella broadly reflected, nearly covering the umbilicus; bluish-white, encircled with two, sometimes three, zones of waved reddish chestnut spots, columella blackish-chestnut.

DESHAYES, Anim. sans vert. vol. viii. p. 552.

Runa Simia, Chemnitz.

Eadem, *Natica Simioides*, Recluz.

Hab. Philippine Islands.

Distinguished by its bands of waved reddish chestnut-streaked spots and shining surface.



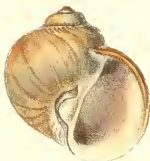
27a



26a



28a



29a



30a



31a



29b



31a



32a



27b

NATICA.

PLATE XVIII.

Species 77. (Mus. Cuming.)

NATICA IMPERFORATA. *Nat. testâ obtectâ umbilicatâ, globosâ, solidâ, spirâ subæsertâ, obtusâ, infractibus superne subconcaeco-impressis, deinde convexis, aperturâ semilunari, columellâ densè callosâ, callositate latè expansâ, umbilicam implete; livido-albâ, flammis brevibus rufis infra suturam cingulatâ, deinde punctis rufis nudique aspersâ.*

THE IMPERFORATED NATICA. Shell with a covered umbilicus, globose, solid, spire somewhat exerted, obtuse, whorls somewhat concavely impressed round the upper part, then convex, aperture semilunar, columella densely callous, callosity broadly spread, filling up the umbilicus; livid-white, encircled beneath the upper part with short red flames, then everywhere sprinkled with red dots.

SOEWERY, Zool. Beechey's Voyage, p. 135. pl. 37. f. 1.
Hab. Buffalo, Cape of Good Hope.

A very distinct solid species, encircled beneath the suture with a characteristic fringe of irregular red flames, the remainder of the shell being freckled with dots of the same colour. The callosity thickly overspreads the umbilicus.

Species 78. (Mus. Cuming.)

NATICA MELASTOMA. *Nat. testâ obtectâ umbilicatâ, ovalâ, subtus planiusculâ, spirâ obtusâ, infractibus superne superficialiter concaeco-reccatis, obliquè striatis, stris fere obsolete, aperturâ ovali, columellâ latè callosâ, callositate umbilicam claudente; livido-cinereâ, callositate sanguinâ.*

THE BLACK-MOUTH NATICA. Shell with a covered umbilicus, ovate, rather flattened beneath, spire obtuse, whorls faintly concavely excavated round the upper part, obliquely striated, striae almost obsolete, aperture ovate, columella broadly callous, callosity overspreading the umbilicus; livid-ash, callosity blood-red.

SWAINSON, Zool. Illus. 1st Series, pl. 79.

Natica sanguinolenta, Deshayes.

Hab. Mouth of the Brisbane River, Australia.

The umbilicus of this species is entirely overspread by a delicate blood-stained callosity.

Species 79. (Mus. Cuming.)

NATICA INTIHOSTOMA. *Nat. testâ subobtectâ umbilicatâ, globosâ, subinflatâ, spirâ subæsertâ, apice ovali, infractibus rotundatis, obsolete plicato-striatâ, aperturâ ovali-auriformi, columellâ levit, umbilico parvo, callositate ferè impleto; fulco-fuscescente, aperturâ circumscissâ lineatâ.*

THE VIOLET-MOUTHED NATICA. Shell with a nearly covered umbilicus, globose, somewhat inflated, spire

rather exerted, sharp at the apex, whorls rounded, obsolete plicately striated, aperture ovately car-shaped, columella thin, umbilicus small, nearly filled with the callosity; fulvous-brown, aperture stained with violet.

DESHAYES, Guérin's Mag. de Zool. pl. 45.

Hab. Kautschatka.

There is but a faint tinge of violet in the specimen of this species here figured, but the colour is well shown in the original figure of M. Deshayes.

Species 80. (Mus. Cuming.)

NATICA FLEMINGIANA. *Nat. testâ umbilico parviscoto, pyriformi-ovalâ, crassissimâ, solidâ, spirâ subæsertâ, obtusè callosâ, infractibus superne callosis, lævibus, aperturâ semilunari, parvisculâ, columellâ superne densè callosâ; unguis vitæte-obtusâ.*

FLEMING'S NATICA. Shell with a rather small umbilicus, pyriformly ovate, very thick, solid, spire rather exerted, obtusely callous, whorls slanting at the upper part, smooth, aperture semilunar, rather small, columella densely callous at the upper part: everywhere shining ivory-white.

RECLUZ, Pro. Zool. Soc. 1843, p. 209.

Hab. Sorsogon, Isle of Luzon, Philippines (among sand and small stones); Cuming.

A very solid, shining, ivory-white shell of peculiar form and character.

Species 81. (Mus. Cuming.)

NATICA STRANGEL. *Nat. testâ subangustè perspective umbilicatâ, globosâ-ovalâ, spirâ subæsertâ, infractibus superne superficialiter concaeco-reccatis, et obliquè plicato-striatis, deinde rotundatis, lævibus, aperturâ pyriformi-lunari, columellâ superne latè callosâ; livido-cinereâ, fasciâ angustâ sanguinâ infra suturam, apice orbibus-nigro, arâ umbilicali lobis et unguis callositatis circuli sanguinis.*

STRANGE'S NATICA. Shell rather narrowly perspective-ly umbilicated, globose-ovate, spire somewhat exerted, whorls faintly concavely excavated round the upper part, and obliquely plicately striated, then rounded and smooth, aperture pyriformly lunar, columella broadly callous at the upper part; livid-ash, with a narrow blood-red band beneath the suture, apex blue-black, umbilical area, lip, and edge of the callosity bright blood-red.

Hab. Port Jackson, South Australia (on mud banks): Strange.

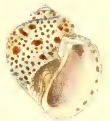
A solid species, allied to *N. plicata*, of a delicate blue or livid-ash colour, stained with deep blood-red round the aperture and within the umbilical area, with a lighter band of the same colour beneath the suture.



55a



57a



56a



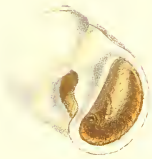
58a



59a



60a



61a



62a



63a



64a

Species 82. (Mus. Cuming.)

NATICA CHINENSIS. *Nat. testâ suboliteâ umbilicatâ, semiglobosâ, spirâ brevi, suturâ impressâ, angustè canalatâ, apice acuto, anfractibus superiùs plicato-striatis, deinde laevibus, convexis, apertura semilunari, subinflata, umbilico amplo, callositate latâ seminipletâ; albidâ, maculis castaneis subquadralis distinctibus renatè triangulatâ, epib. rufis levi indutâ.*

THE CHINESE NATICA. Shell with a nearly covered umbilicus, semiglobose, spire short, suture impressed, narrowly channelled, apex sharp, whorls plicately striated round the upper part, then smooth, convex, aperture semilunar, somewhat effused, umbilicus large, half-filled with a broad callosity; white, remotely encircled with distant, somewhat square chestnut spots, covered with a thin epidermis.

LAMARCK, *Anim. sans vert.* vol. viii. p. 644.

Hab. China and Philippine Islands.

This species is chiefly distinguished by the distinct square-like character and distant arrangement of the spots.

Species 83. (Mus. Cuming.)

NATICA ADAMSONI. *Nat. testâ ovipiter perspective umbilicatâ, subglobosâ, spirâ mediocri, apice acutâ, anfractibus superiùs planis et oblique striatis, deinde reticulatis, laevigatis, basi convexa sublaevitatis, apertura subangustè semilunari, umbilico callositate parva elevatâ; caraco-albidâ, punctis rufis multique aspersâ, maculis subovatis bifasciatâ, callositate rufâ.*

ADAMSON'S NATICA. Shell largely perspective umbilicated, subglobose, spire moderate, sharp at the apex, whorls flattened and obliquely striated at the upper part, then rounded, smooth, slightly attenuated towards the base, aperture rather narrowly semilunar, umbilicus with a slightly raised callosity; flesh-white, everywhere sprinkled with red dots, and encircled with two obscure bands of blotches, callosity red.

Le Étuel, Adamson.

Natica Étuel, Recluz.

Hab. East and west coasts of Africa.

The name given to this species by the old French conchologist of Senegal cannot be strictly used in a Latin form of nomenclature. It is always distinct both in form and colouring from the allied species of Senegal, and inhabits also Zanzibar.

Species 84. (Mus. Cuming.)

NATICA JUKESII. *Nat. testâ umbilicatâ, globoso-neritoides, solidissima, crassâ, spirâ minutâ, viz elevatâ, anfractibus convexis, politis, apertura semilunari, parvasentiâ, columellâ latè callosâ, umbilico perspective; omnino nitente-oburneâ.*

JUKES' NATICA. Shell umbilicated, globosely neritoid, very solid, thick, spire minute, scarcely elevated, whorls convex, polished, aperture semilunar, rather small, columella broadly callous, umbilicus perspective; everywhere shining ivory-white.

Natica caudifissima, Recluz (not of Le Guillou).

Hab. North Australia; Jukes.

A very solid neritoid shell, of shining ivory-white substance, distinguished by a particularly small superficial spire, and arched perspective umbilicus.

Species 85. (Mus. Cuming.)

NATICA UNIMACULATA. *Nat. testâ compressè umbilicatâ, subpyriformi-ovata, crassâ, solidâ, spirâ brevi, acuminatâ, anfractibus superiùs declivibus, deinde convexis, laevigatis, apertura lunari-ovata, columellâ superiùs latè callosâ, callositate umbilicali unilunari; albidâ, epidermide corvâ fulcâ indutâ, callositate purpureo-uniculatâ.*

THE ONE-SPOTTED NATICA. Shell compressly umbilicated, somewhat pyriformly ovate, thick, solid, spire short, acuminate, whorls slanting at the upper part, then convex, smooth, aperture lunar-ovate, columella broadly callous at the upper part, umbilical callosity moderate; white, covered with a fulvous horny epidermis, callosity stained with a purple spot.

Hab. Mazatlan; Lieut. Shipley.

A solid shell, of a pyriformly ovate shape, whitish, covered with a conspicuous fulvous epidermis. Its chief peculiarity consists in there being a characteristic purple stain on the umbilical callosity.

Species 86. (Mus. Cuming.)

NATICA GALLAPAGOSA. *Nat. testâ angustè arcuata umbilicatâ, ovato-globosâ, crassissima, spirâ brevissima, obtusâ, anfractibus superiùs declivibus, deinde plano-convexis, laevigatis, ant. tenuissimè oblique striatis, apertura ovata, columellâ superiùs latè callosâ; circumplexibus, fasciâ latè politè areolatâ juxta suturam, aperturae fance foveovente.*

THE GALLAPAGOS NATICA. Shell narrowly arcuately umbilicated, ovately globose, rather thick, spire rather short, obtuse, whorls slanting at the upper part, then flatly convex, smooth, or very finely obliquely striated, aperture ovate, columella very callous at the upper part; ash-lead, with a broad light orange band next the suture, interior of the aperture brownish.

Recluz, *Pro. Zool. Soc.* 1843, p. 213.

Hab. Albemarle Island, Gallapagos group (in coral sand); Cuming.

An obtusely ovate species, of a lead-ash colour, encircled round the spire with a broad pale orange band.



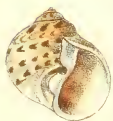
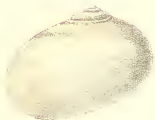
38a



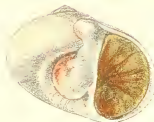
39a



38b



36a



39b



36b



37a

NATICA.

PLATE XX.

Species 87. (Mns. Cuming.)

NATICA COLLARIA. *Nat. testâ multilocatâ, globosâ, spirâ subproductâ, saturâ planatâ, leviter campanulatâ, unfractibus convexis, aperturâ semilunari, columellâ tenuiculâ, callositate parvâ columnari umbilicis intratâ: albâ, strigis pallidè rufescente-fuscis nudatis piatâ, strigis amplis paucioribus in fasciâ patente infra saturam.*

THE COLLAR NATICA. Shell umbilicated, globose, spine rather produced, suture flattened, slightly channelled, whorls convex, aperture semilunar, columella rather thin, with a small columnar callosity entering the umbilicus: whitish, painted with light waved reddish-brown streaks, streaks beneath the suture large and fewer, in an open band.

LAMARCK, *Anim. sans vert.* vol. viii. p. 638.

Hab. Seuegal.

The open zigzag waves which form a collar, so to speak, round the upper part of each whorl, are always characteristic of this species.

Species 88. (Mus. Cuming.)

NATICA CLAUSA. *Nat. testâ imperforatâ, globulari, tenuiculâ, spirâ brevi, subexsertâ, unfractibus superâ subdepressis, deinde rotundatis, levigatis, aperturâ lunari-ovatâ, columellâ tenui, callosâ, callositate umbilicis emittente; albâ aut fusciscente.*

THE CLOSED NATICA. Shell imperforated, globular, rather thin, spine short, rather exserted, whorls a little depressed round the upper part, then rounded, smooth, aperture lunar-ovate, columella thin, callous, callosity closing the umbilicus; white or brownish.

BORDERIP and SOWERBY, *Zool. Journal*, vol. iv. p. 360.

Hab. North Sea.

Of a delicate white or brownish colour, generally thin, but varying in substance according to circumstances of locality.

Species 89. (Mus. Cuming.)

NATICA INCIL. *Nat. testâ oblectè multilocatâ, orbiculari-depressâ, solidiusculâ, spirâ plano-obtusâ, unfractibus*

angustis, superâ leviter-convexis, inferâ rotundatis, minutissimè lunari-ovatis, aperturâ lunari-ovatâ, horizontali, columellâ subnuda, callosâ, callositate latâ, rotundatâ, in zona umbilicis: albente-albâ.

INCE'S NATICA. Shell with a covered umbilicus, orbicularly depressed, rather solid, spine flatly obtuse, whorls narrow, slantingly convex at the upper part, rounded at the lower, very minutely decussately striated, aperture lunar-ovate, horizontal, columella rather sharply callous, callosity broad, round, in the umbilical area; shining white.

PHILIPPI, *MS. Mus. Cuming.*

Hab. Torres Straits, Australia; Capt. Ince.

A species of solid texture, and of peculiarly depressed growth, with a large solid button-like callosity filling up the umbilical area.

Species 90. (Mus. Cuming.)

NATICA ZELANDICA. *Nat. testâ vix multilocatâ, globoso-turbinatâ, spirâ subexsertâ, unfractibus superâ declivi-convexis, deinde rotundatis, globosis, aperturâ lunari-ovatâ, columellâ tenui, callositate rotundatâ in areâ umbilicali: luteo-spudicâ, maculis fuscis arcuatis quinquefasciatâ.*

THE NEW ZEALAND NATICA. Shell scarcely umbilicated, globosely turbinated, spine rather exserted, whorls slantingly convex on the upper part, then rounded, smooth, aperture lunar-ovate, columella thin, with a round callosity in the umbilical area; yellowish-fawn, encircled with five zones of arched brown spots.

QUOY and GAIMARD, *Voy. de l'Astrolabe*, vol. ii. p. 237. pl. 66. f. 11 and 12.

Natica affinis, Philippi.

Hab. New Zealand.

Of a smooth porcelain-like substance, painted with five rows of arched spots.

Fig. 91. (Mus. Cuming.)

For description of this species, *N. sulcata*, see next Plate, Sp. 95.



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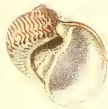
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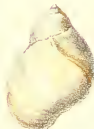
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162



163

NATICA.

PLATE XXI.

Species 92. (Fig. a, Mus. Taylor; Fig. b, c, Mus. Cuming.)

NATICA CATENATA. *Nat. testâ ampliter excavatè umbilicatâ, obliquè depressâ, subinflatâ, infra concavâ, spirâ parvâ, anfractibus superne declivibus, dense plicato-striatis, interstitiis acutè impressis, anfractu non medio et parte inferiori lævibus vel minutè decussatim striatis, aperturâ lunari-ovata, subamplâ, effusâ, columellâ tenui, callositate latâ obtusâ columinari umbilicem intrante; livido-cinereâ, flammis fulvo-fuscescentibus fasciatim pictâ.*

THE CHAINED NATICA. Shell largely excavately umbilicated, obliquely depressed, somewhat inflated, concave beneath, spire small, whorls slanting in the upper part, densely plicately striated, the interstices being sharply impressed, middle and lower portion of the whorls smooth or minutely decussately striated, aperture lunar-ovate, rather large, effused, columella thin, with a broad obtuse columnar callosity entering the umbilicus; livid ash-colour, painted with bands of fulvous-brown flames.

PHILIPPI, Pro. Zool. Soc. 1851.
Hab. Sicily.

This very interesting species is of an obliquely depressed form, characterized beneath the suture with a dense row of deeply grooved plicated ridges, which terminate suddenly at about one-third of the shell.

Species 93. (Mus. Cuming.)

NATICA PYRAMIS. *Nat. testâ subobtectè umbilicatâ, conoidèâ, crassâ, solidâ, spirâ valdè exsertâ, anfractibus declivi-convexis, minutè decussatim striatis, aperturâ parvisculâ, lunari-ovata, columellâ superne crassè callosâ; fuscescente-albâ, nitidè.*

THE PYRAMID NATICA. Shell with a nearly covered umbilicus, conoid, thick, solid, spire much exserted, whorls slantingly convex, minutely decussately striated, aperture rather small, lunar-ovate, columella thickly callous at the upper part; brownish-white, shining.

Hab. Mouth of the Swan River, New Holland (in sandy mud, at the depth of ten fathoms); Lieut. Collie, R.N.

A very solid conical species, of a shining white, faintly tinged with brown.

Species 94. (Mus. Cuming.)

NATICA ELENAE. *Nat. testâ ampliter excavatè umbilicatâ, obliquè depressâ, inflatâ, spirâ parvâ, anfractibus convexis, supra et infra dense plicato-liratis, aperturâ subamplâ, lunari-ovata, effusâ, columellâ superne callosâ, callositate latâ columinari umbilicem intrante; lutescente-albâ, lineis fulvo-rufis interruptè undatis dense longitudinaliter pictâ.*

THE ELENA NATICA. Shell largely excavately umbilicated, obliquely depressed, inflated, spire small, whorls convex, closely plicately ridged above and below, aperture rather large, lunar-ovate, effused, columella callous at the upper part, with a broad columnar callosity entering the umbilicus; yellowish-white, densely longitudinally painted with interruptedly waved fulvous-red lines.

RECLUZ, Pro. Zool. Soc. 1843, p. 203.
Eadem Natica Haneti, Récluz.

Hab. St. Elena, West Columbia (in sandy mud, at six fathoms); Cuming.

Peculiarly characterized by the fulvous-red lines with which it is densely longitudinally painted, being here and there suddenly shaken or dislocated, so to speak, in their plan of waving.

Species 95. (Mus. Cuming.)

NATICA SULCATA. *Nat. testâ ampliter excavatè umbilicatâ, obliquè depressâ, crassiusculâ, spirâ brevè, anfractibus rotundatis, juncta suturas impressis, undique fortiter sulcatis et cancellatis, aperturâ lunari-ovata, effusâ, columellâ superne callosâ, callositate latâ columinari umbilicem intrante; albâ, fulco-aurantio interdum fasciatâ et maculatâ.*

THE GROOVED NATICA. Shell largely excavately umbilicated, obliquely depressed, rather thick, spire short, whorls round, impressed next the sutures, strongly grooved and cancellated throughout, aperture lunar-ovate, effused, columella callous at the upper part, with a broad columnar callosity entering the umbilicus; white, sometimes banded and mottled with fulvous-orange.

Nerita sulcata, Born, Test. Mus. Cæs. Vindobonensis,
pl. 17. f. 5, 6.

Nerita cancellata, Gmelin.

Natica cancellata, Lamarck.

Natica sulcata, Deshayes.

Hab. West Indies.

The only species of *Natica* which is absolutely sculptured throughout.

Species 96. (Mus. Cuming.)

NATICA GRÆNLANDICA. *Nat. testâ viz umbilicatâ, globosâ, spirâ subamplicâ, exsertâ, anfractibus rotundatis,*

lævibus, aperturâ lunari-ovata, columellâ infernè callosa-reflexâ; opaco-albâ, epidermidè virescenti-cinereâ indutâ, versus apicem plus minus erodâ.

THE GREENLAND NATICA. Shell scarcely umbilicated, globose, spire rather large, exserted, whorls rounded, smooth, aperture inner-ovate, columella callously reflected at the lower part; opaque-white, covered with a greenish-ash epidermis, more or less eroded towards the apex.

BECK, Möller, Ind. Moll. Grænlandiæ, p. 7.

Hab. Greenland and Norway.

A light chalk-white species, covered with a peculiar livid-ash smooth horny epidermis.



97a



97b



97c



97d



97e



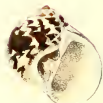
97f



97g



97h



97i



97j

NATICA.

PLATE XXII.

Species 97. (Fig. a, b, c, Mus. Cuming.)

NATICA INTRICATA. *Nat. testâ subcapitler excavatè umbilicatâ, subobliquè globosâ, solidâ, spirâ mediocri, anfractibus supernè concavo-depressis, deinde rotundatis, lævibus, aperturâ lunari-ovatâ, columellâ supernè callosa-reflexâ; fulvescente-albâ, flammis tenuibus rufescente-fuscis, fuscisque vittatis angustis.*

THE ENTANGLED NATICA. Shell rather largely excavately umbilicated, rather obliquely globose, solid, spire moderate, whorls concavely depressed round the upper part, then rounded, smooth, aperture lunar-ovate, columella callously reflected at the upper part; fulvous-white, painted with fine reddish-brown flames and narrow filleted bands.

Natica intricata, Donovan, British Shells, vol. v. pl. 167.

Natica Valenciennesii, Payrandaun.

Hab. Mediterranean.

Though originally described as a British shell, this species is not indigenous to our coast. It is an inhabitant of the Mediterranean, belonging to the same type as *N. Marochiensis*.

Fig. 98. (Mus. Cuming.)

The shell here figured proves to be the young of *N. Sinaitæ*, represented at Plate XVII. Fig. 76.

Species 99. (Mus. Cuming.)

NATICA VAVAOI. *Nat. profundè perspective umbilicatâ, obliquè ovatâ, solidissimâ, spirâ obtusâ, subproductâ, anfractibus supernè concavo-declivibus, deinde convexis, aperturâ parvâ, lunari-ovatâ, columellâ callositate latissimâ reflexâ ad partem superiorem, umbilicicum partim tegente; nitente eburneâ.*

THE VAVAO NATICA. Shell deeply perspective umbilicated, obliquely ovate, very solid, spire obtuse, rather produced, whorls concavely slanting at the upper part, then convex, aperture small, lunar-ovate, columella with a very broad reflected callosity at the upper part, partially covering the umbilicus; shining ivory-white.

LE GUILLOT, MS. in Mus. Cuming.

Hab. Island of Vavao, South Pacific.

Distinguished from *N. candidissima* of the same author, from the same locality, by its more obliquely oblong form,

and more produced apex, and very broad recurved shelf of enamel bridged across the umbilicus.

Species 100. (Mus. Taylor.)

NATICA FULGURANS. *Nat. testâ umbilicatâ, obliquè globosâ, subtus concavâ, solidiusculâ, spirâ mediocri, anfractibus rotundatis, lævibus vel tenuè striatis, aperturâ lunari-ovatâ, columellâ tenuiculâ, callositate parvâ columellari umbilicicum intrante; albâ, flammis fulgurantibus spadiceo-nigris irregulariter confluentibus pictâ.*

THE LIGHTNING-MARKED NATICA. Shell umbilicated, obliquely globose, concave beneath, rather solid, spire moderate, whorls smooth or finely striated, aperture lunar-ovate, columella rather thin, with a small callosity callosity entering the umbilicus; white, marked with fawn-black lightning flames, irregularly flowing together.

RECLUZ, Pro. Zool. Soc. 1843, p. 206.

Hab. Senegal.

A solid species, very characteristic in its bold irregular style of painting.

Species 101. (Mus. Cuming.)

NATICA MELANOSTOMOIDES. *Nat. testâ imperforatâ, tenui, auriformi, inflatâ, spirâ parvâ, obtusâ, anfractibus concavo-declivibus, striatis, ultimo pernullo maximo, compresso, aperturâ peramplâ, basi effusâ, columellâ tenuè reflexâ; pellucido-albâ, maculis fuscocastaneis interruptis triseriatim zonatâ, epidermide stramineâ partim indutâ, eburneâ columellari castaneâ.*

THE MELANOSTOMOID NATICA. Shell imperforated, thin, ear-shaped, inflated, spire small, obtuse, whorls convexly slanting, striated, the last very much the largest, compressed, aperture very large, effused at the base, columella thinly reflected; transparent white, encircled with three rows of interrupted fulvous-chestnut spots, partially covered with a straw-coloured epidermis, columellar enamel chestnut.

QUOY and *GAIMARD*, Voy. de l'Astrolabe, vol. ii. p. 229. pl. 66. f. 4 to 8.

Hab. New Guinea and New Ireland; *Quoy*.

This species is the extremest auriform type of the Sigaretoid group of *Natica*, having nearly the form of a *Succinea*.



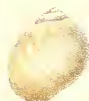
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1971



1972



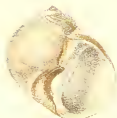
1973



1974



1975



1976



1977



1978



1979

NATICA.

PLATE XXIII.

Species 102. (Mus. Cuming.)

NATICA PORCELLANEA. *Nat. testâ angustè profundè umbilicatâ, obliquè globosâ, solidâ, spirâ brevi, obtusâ, anfractibus superne concavo-indentatis, deinde convexis, apertura lunari-oratâ, columellâ superne latè callusâ, callusitate parvâ calvariori umbilicem intrante; cœrulescente-lactea, epidermide corvâ flavicante partim induta.*

THE PORCELAIN NATICA. Shell narrowly deeply umbilicated, obliquely globose, solid, spire short, obtuse, whorls concavely indented round the upper part, then convex, aperture lunar-ovate, columella broadly callous at the upper part, with a small columellar callosity entering the umbilicus; bluish milk-white, partially covered with a yellowish-horny epidermis.

D'ORBIGNY, MS. in Mus. Cuming.

Hab. Bahía.

A solid milk-white shell, partially covered with a yellowish epidermis, distinguished chiefly by a gently indented opaque concavity round the upper portion of the whorls.

Species 103. (Mus. Cuming.)

NATICA RUFILABRIS. *Nat. testâ obtusè umbilicatâ, subglobosâ, lenniculâ, spirâ mediocri, subconvertâ, anfractibus rotundatis, levibus, apertura oratâ, columellâ superne callusâ, callusitate latè reflexâ umbilicem ingente; lido-plumbeâ, obsolete fasciatâ, nitentè, cancrâ columellari et callusitate eicidè cancris.*

THE RED-LIPPED NATICA. Shell with a covered umbilicus, subglobose, rather thin, spire moderate, a little exerted, whorls rounded, smooth, aperture ovate, columella callous at the upper part, with a broad reflected callosity covering the umbilicus; livid lead-colour, obsolete banded, shining, columellar enamel and callosity bright chestnut.

Hab. Bahía.

A rather light shining livid lead-coloured species, with the columellar enamel and callosity deep bright chestnut.

Species 104. (Mus. Cuming.)

NATICA VARIABILIS. *Nat. testâ vix umbilicatâ, subobliquè globosâ, solidiusculâ, spirâ mediocri, apice acutâ,*

anfractibus rotundatis, levibus, nitentibus, apertura lunari-oratâ, columellâ calloso-reflexâ; albidâ, lido-cærulescente plus minus fasciatâ, fulvo-erugo nudiq; aequalè reticulatâ et ad basin fasciatâ, cancrâ columellari fulvo-castoreâ.

THE VARIABLE NATICA. Shell scarcely umbilicated, rather obliquely globose, rather solid, spire moderate, rather sharp at the apex, whorls rounded, smooth, shining, aperture lunar-ovate, columella callously reflected: whitish, more or less stained with livid-blue, covered with a fine network of fulvous-red and banded at the base, columellar enamel fulvous-chestnut.

RECLUZ, MS. in Mus. Cuming.

Hab. —?

This species belongs to the same type as *N. intricata*, and is probably from the Mediterranean.

Species 105. (Mus. Cuming.)

NATICA GAMBIE. *Nat. testâ angustè umbilicatâ, obliquè globosâ, crassiusculâ, spirâ conico-depressâ, apice acutâ, anfractibus superne obliquè plicato-sulcatis, deinde levibus, rotundatis, apertura lunari-oratâ, columellâ callusitate latè reflexâ, precipuè ad partem superiorem; albâ, interdum dilatè carava-fasciatâ.*

THE GAMBIA NATICA. Shell narrowly umbilicated, obliquely globose, rather thick, spire conically depressed, sharp at the apex, whorls obliquely plicately grooved round the upper part, then smooth, rounded, aperture lunar-ovate, columella with a broad reflected callosity, particularly at the upper part; white, sometimes faintly flesh-tinged.

RECLUZ, Pro. Zool. Soc. 1843, p. 207.

Hab. Mouth of the River Gambia, West Africa (found on the sands); Mr. Beale, of Jersey.

A solid shining flesh-white shell, well characterized by an oblique row of plicated grooves below the sutures.

Species 106. (Mus. Cuming.)

NATICA NITIDA. *Nat. testâ angustè umbilicatâ, conicoglobosâ, subcentricosâ, spirâ acutè conoideâ, anfractibus superne declivi-convexis, deinde rotundatis, apertura lunari-oblongâ, columellâ tenitè reflexâ, ad basin arcuatâ; cærulescente-albâ, maculis fulvo-rufescentibus*

obscurè quinquefasciatâ, encaustâ columellari fulvo-castaneâ.

THE SHINING NATICA. Shell narrowly umbilicated, conically globose, subventricose, spire sharply conoid, whorls slantingly convex round the upper part, then rounded, aperture lunar-oblong, columella thinly reflected, arched at the base; bluish-white, obscurely five-banded with fulvous-red blotches, columellar enamel fulvous-chestnut.

Nerita nitida, Donovan, Brit. Shells, vol. iv. pl. 144.

Natica nitida, Fleming.

Natica Alderi, Forbes.

Natica Guillemini, Payrandaub.

Hab. Seas of Europe.

An elegantly formed species, mostly of a livid bluish colour, obscurely painted with bands of fulvous-red blotches, of which the uppermost is the most distinct.

Species 107. (Mus. Cuming.)

NATICA PLICATULA. *Nat. testâ angustè umbilicatâ, globosâ, tenuiculâ, spirâ subobtusâ, anfractibus rotundatis, subrugosis, rudè tenuiplicatis, aperturâ lunari-oblongâ, columellâ tenuiter reflectâ; sordidè fulvâ, ferrugineo-rufa tinctâ.*

THE FINELY Plicated NATICA. Shell narrowly umbilicated, globose, rather thin, spire rather obtuse, whorls rounded, rather rough, rudely finely plicated, aperture lunar-oblong, columella thinly reflected; dirty fulvous, tinged with rust-red.

NUTTALL, Jay's Catalogue of Shells, p. 68.

Hab. — ?

A light rough fulvous-red shell, irregularly finely plicated.



105a



109a



110b



111a



113a



114b



116b



117a



118b



119a

NATICA.

PLATE XXIV.

Species 108. (Fig. a, b, Mus. Cuming.)

NATICA UMBILICATA. *Nat. testâ ampliter obliquè excavatè umbilicatâ, convexo-depressâ, Haliotiformi, tenui, semipellucidâ, spirâ brevissimâ, laterali, anfractibus convexis, tenuiter decussatim striatis, ultimo maximo, inflato, apertura ovali, marginibus approximatis; subpellucido-albâ, ferrugineo-rufa promiscuè strigatâ et maculatâ.*

THE UMBILICATED NATICA. Shell largely obliquely excavately umbilicated, convexly depressed, Haliotis-shaped, thin, semitransparent, spire very short, lateral, whorls convex, finely decussately striated, last whorl much the largest, inflated, aperture ovate, with the margins approximated; subtransparent white, promiscuously streaked and spotted with rust-red.

QUOY, Voy. de l'Astrolabe, vol. ii. p. 234. pl. 66. f. 22 and 23.

Hab. Van Diemen's Land; Ronald C. Gunn.

A light semitransparent Haliotis-shaped shell, with a very peculiar obliquely excavated umbilicus.

Species 109. (Mus. Cuming.)

NATICA TRISERIATA. *Nat. testâ subangustè umbilicatâ, globosâ, spirâ brevissimâ, suturâ leviter impressâ, anfractibus rotundatis, obsolete plicato-striatis, apertura ovali, columellâ superne callosa-reflexâ; livido-grisei, obscure triseriatâ, hic illic ferrugineo-tinctâ, callositate opaco-albâ, aperturae fovee castaneæ.*

THE THREE-BANDED NATICA. Shell rather narrowly umbilicated, globose, spire rather short, suture slightly impressed, whorls rounded, faintly plicately striated, aperture ovate, columella callously reflected at the upper part; livid grey, obscurely three-banded, here and there rust-tinged, callously opake-white, interior of aperture chestnut.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. v. p. 209.

Hab. Bay of Massachusetts, United States.

The opake-white callosity and chestnut interior of this shell, contrast in a characteristic manner with its rust-tinged livid blue exterior.

Species 110. (Mus. Cuming.)

NATICA FLAVA. *Nat. testâ im perforatâ, globosâ, tenui, lamidiusculâ, spirâ brevissimâ, depressâ, anfractibus convexis, ultimo multo maximo, apertura ovali, subangustâ, columellâ tenuè reflexâ, subconcolori; pellucido-albâ, epidermide cornuè deciduâ glaciâ indurâ.*

THE YELLOW NATICA. Shell imperforated, globose, thin, rather swollen, spire very short, depressed, whorls convex, the last much the largest, aperture ovate,

rather large, columella thinly reflected, slightly twisted; transparent white, covered with a yellow deciduous horny epidermis.

GOULD, Silliman's Journ. vol. xxxviii. p. 196. Invert. of Massachusetts, p. 239. f. 162.

Hab. Massachusetts Bay, United States.

A light inflated globose transparent white shell, covered with a yellow horny deciduous epidermis, the spire being almost on a level with the upper margin of the aperture.

Species 111. (Mus. Cuming.)

NATICA SAGRANA. *Nat. testâ suboblectè umbilicatâ, obliquè globosâ, spirâ brevi, subobtusâ, anfractibus superne declivibus, deinde convexis, levibus, politis, apertura lunari-ovalâ, columellâ callositate latâ amplâ umbilicam fere tegente; albida, lineis griseo-purpureiscentibus dense obliquè undatâ, callositate fusciscenti.*

THE SAGRA NATICA. Shell with a nearly covered umbilicus, obliquely globose, spire short, rather obtuse, whorls slanting round the upper part, then convex, smooth, polished, aperture lunar-ovate, columella with a large broad callosity nearly covering the umbilicus; whitish, densely obliquely waved with greyish-purple lines, callosity brownish.

D'ORBIGNY, Moll. Cuba, pl. 18. f. 20 and 22.

Hab. Malaga.

A smooth porcelain-like species, closely painted throughout with obliquely waved greyish-purple lines; the umbilicus being nearly covered by a broad button-like callosity.

Species 112. (Mus. Cuming.)

NATICA COLLIEI. *Nat. testâ subampliter umbilicatâ, globosâ, spirâ brevi, subovata, anfractibus rotundatis, superne obsolete plicato-liratis, apertura lunari-ovalâ, columellâ callositate solidâ columnari umbilicam intrante; albida, maculis subquadratis, anfractibus quadratis, interdum confluentibus, seriatim picti.*

COLLIE'S NATICA. Shell rather largely umbilicated, globose, spire short, rather exerted, whorls rounded, obsolete plicately ridged round the upper part, aperture lunar-ovate, columella with a solid columnar callosity entering the umbilicus; whitish, painted with rows of somewhat square orange-fawn spots sometimes flowing together.

RECLUZ, Pro. Zool. Soc. 1843, p. 207.

Hab. Swan River, Australia (on stones at low water); Lieut. Collie.

Distinguished mainly by its large obliquely square orange-fawn spots, sometimes flowing longitudinally together.



110



114a



114b



115



116a



116b



117a



117b



118a



119

NATICA.

PLATE XXV.

Species 113. (Mus. Cuming.)

NATICA CLAUSA. *Nat. testâ obtectâ umbilicatâ, subglobosâ, spirâ brevi, anfractibus rotundatis, levigatis vel leviter erosis, aperturâ semilunari, labro simplici, columellâ tenniculâ, callositate parâ latâ umbilicium implente; pallidè sordidè fuscoseente.*

THE CLOSED NATICA. Shell with a closed umbilicus, subglobose, spire short, whorls rounded, smooth or slightly eroded, aperture semilunar, lip simple, columella rather thin, with a small broad callosity filling the umbilicus; light dull brown.

PRODERIP and SOWERBY, Zool. Journ. vol. iv. p. 360.

Natica consolidata, Couthouy.

Natica borealis, Beck.

Natica impercia, Philippi.

Hab. Bay of Massachusetts, United States (taken alive in stomachs of fishes, plentifully); Gould.

A dull pale brownish solid globose species, having the umbilicus closed by a small broad callosity, and the aperture by a shelly operculum.

Species 114. (Mus. Cuming.)

NATICA GUALTERIANA. *Nat. testâ subampliciter umbilicatâ, subglobosâ, tenniculâ, spirâ brevi, subacutâ, anfractibus rotundatis, levigatis, juxta suturam obsolete plicato-striatis, ultimo subeffuso, aperturâ lunari-oratâ, columellâ tenniculâ, callositate spirali columnari umbilicium intrante; semipellucido-albâ, strigis pallidè aurantio-rufis quadrifasciatâ.*

GUALTER'S NATICA. Shell rather largely umbilicated, subglobose, rather thin, spire short, rather sharp, whorls rounded, smooth, obsoletely plicately striated next the suture, last whorl rather effused, aperture lunar-ovate, columella rather thin, with a spiral columnar callosity entering the umbilicus; semitransparent white, encircled with four bands of light orange-red streaks.

PETIT, Journ. Conch. vol. i. p. 396.

Hab. Island of Bohol, Philippines; Cuming.

A light subinflated species, encircled with four bands of faint orange-red close-set streaks.

Species 115. (Mus. Cuming.)

NATICA TEXTILIS. *Nat. testâ angustè profundè umbili-*

catâ, globoso-turbinatâ, spirâ subexsertâ, anfractibus rotundatis, levibus, aperturâ lunari-oratâ, labro tenui. columellâ parvâ callosâ, arèâ umbilicali spirâliter excavatâ; fuscoseente, textile irregulari rufo-fusco pictâ.

THE TEXTILE NATICA. Shell narrowly and deeply umbilicated, globosely turbinated, spire slightly exerted, whorls rounded, smooth, aperture lunar-ovate, lip thin, columella but little callous, umbilical area spirally excavated; brownish, painted with an irregular red-brown brocade.

Hab. — ?

A very characteristic species, painted with a red-brown brocade, interrupted promiscuously with large open spots, and having a smooth shelly operculum.

Species 116. (Mus. Cuming.)

NATICA SEMISULCATA. *Nat. testâ profundè ampliciter umbilicatâ, oratâ, spirâ brevissimâ, suturâ canaliculatâ et minutè linearis-sulcatâ, anfractibus superne declivicoarctatis, glabris, politis, sulcis quinque ad sex linearibus equidistantibus infra suturam cingulatis, aperturâ lunari-oratâ, columellâ parvâ callosâ, superne effusâ; eburneâ.*

THE HALF-GROOVED NATICA. Shell deeply largely umbilicated, ovate, spire rather short, suture channelled and minutely linearly grooved, whorls slantingly contracted at the upper part, smooth, polished, encircled beneath the suture with five to six equidistant linear grooves, aperture lunar-ovate, columella but little callous, effused at the upper part; ivory-white.

GRAY, Zool. Beechey's Voyage, p. 137.

Hab. Porto Rico.

A subpake ivory-white species, readily distinguished by its channelled suture, and by the presence of five to six equidistant linear grooves round the upper contracted portion of the whorls.

Species 117. (Mus. Cuming.)

NATICA PUSILLA. *Nat. testâ vix umbilicatâ, subglobosâ, spirâ subexsertâ, anfractibus rotundatis, aperturâ lunari-oratâ, columellâ inferne callosâ-reflexâ, callositate umbilicium fere tegente; sordidè albâ vel pallidè citraceâ, plus minus erodâ.*

June, 1855.

THE SMALL NATICA. Shell scarcely umbilicated, subglobose, spire rather exerted, whorls rounded, aperture lunar-ovate, columella callously reflected at the lower part, callosity nearly spread over the umbilicus; dull white or pale olive, more or less eroded.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 257.

Hab. Bay of Massachusetts, United States (taken from fishes); Gould.

This little species, though so closely allied in character and habit to *N. clausa*, differs in having a horny operculum. The whorls are more slanting round the upper part, and the umbilicus is only partially covered, the columellar lip being more callously reflected towards the base.

Species 118. (Mus. Cuming.)

NATICA CARIBBEA. *Nat. testâ angustâ profundè umbilicatâ, ovatâ, crassiusculâ, solidâ, spirâ brevi, subob-*

tusâ, anfractibus lævibus, declivi-convexis, aperturâ lunari-ovatâ, columellâ callositate latâ densâ superne nudâ, callositate umbilicua fere tegente; sordidè livido-albicante, fasciâ opaco-albâ juxta suturam circumulatâ.

THE CARIBBEAN NATICA. Shell narrowly deeply umbilicated, ovate, rather thick, solid, spire short, rather obtuse, whorls smooth, slantingly convex, aperture lunar-ovate, columella with a broad dense callosity at the upper part, callosity almost covering the umbilicus; dull livid white, circled with an opaque-white band next the suture.

PHILIPPI, MS. in Mus. Cuming.

Hab. Caribbean Sea.

A small solid white shell, of a peculiar livid aspect, opaque next the suture; the columella being densely callous at the upper part.



179a



176a



176b



179 b



177a



177 b



178a



175a



175 b



175c

NATICA.

PLATE XXVI.

Species 119. (Mus. Cuming.)

NATICA BULBOSA. *Nat. testâ angustè umbilicatâ, globosâ, tenui, subinflatâ, spirâ parvâ, suturâ minutè impressâ, anfractibus rotundatis, lævibus, epidermide cærescente-corneâ corneâ indutâ, aperturâ ovatâ, columellâ tenuè callosa-reflexâ, versus apicem plus minus erosâ.*

THE BULBOUS NATICA. Shell narrowly umbilicated, globose, thin, slightly inflated, spire small, suture minutely impressed, whorls rounded, smooth, covered with greenish-ash horny epidermis, aperture ovate, columella thinly callously reflected, more or less eroded towards the apex.

Hab. — ?

This has all the appearance of an Arctic species, thinner in substance and rounder than *N. Grantlandica*, with a shorter spire.

Species 120. (Mus. Cuming.)

NATICA BOREALIS. *Nat. testâ angustè umbilicatâ, globosâ, spirâ brevi, suturâ minutè impressâ, anfractibus rotundatis, lævibus, aperturâ ovatâ, columellâ nudique subcallosa-reflexâ; calcareo-albâ, epidermide corneâ flavicante indutâ, versus apicem leviter erosâ.*

THE NORTHERN NATICA. Shell narrowly umbilicated, globose, spire short, suture minutely impressed, whorls rounded, smooth, aperture ovate, columella somewhat callously reflected throughout; chalk-white, covered with a yellowish-horny epidermis, a little eroded towards the apex.

SOWERBY, Zool. Beechey's Voyage, pl. 37. f. 2.

Hab. North Seas.

Allied to *N. Grantlandica*, but distinguished from that species by the spire being less exerted.

Species 121. (Mus. Cuming.)

NATICA GENUANUS. *Nat. testâ imperforatâ, subglobosâ, spirâ brevisculâ, anfractibus convexis, lævibus, aperturâ seminulari, columellâ callositate maximâ reflexâ; lateocæte-albâ, fasciis tribus angustis distantibus rufofusco vitatis cingulatâ, interstitiis punctis rufo-fuscis aspersis, serie flavimuræum juxta suturam.*

THE GARTERED NATICA. Shell imperforated, subglobose, spire rather short, whorls convex, smooth, aperture seminular, columella with a very large reflected callosity; yellowish-white, encircled with three distant,

narrow, red-brown filleted bands, the interstices filled with red-brown dots, with a row of flames next the suture.

Hab. South Africa.

A very characteristic solid species, in which the seat of the umbilicus is entirely covered with callous matter, and the painting is peculiar. Round the upper part of the whorls is a row of red-brown flames as in *N. collaris*, the remainder of the shell being painted with close-set dots of the same colour, interrupted at rather distant intervals with three filleted bands.

Species 122. (Mus. Cuming.)

NATICA CORA. *Nat. testâ angustè profundè umbilicatâ, oblongo-ovatâ, crassâ, solidâ, spirâ breviusculâ, conoidè, anfractibus plano-declivibus, lævibus, aperturâ seminulari, parvisculâ, columellâ superè callositate densâ latè minutè; eburneâ, epidermide tenui corneâ indutâ, ferrugineo-rufa interdum portum tinctâ.*

THE GIRL NATICA. Shell narrowly deeply umbilicated, oblong-ovate, thick, solid, spire rather short, conoid, whorls flatly slanting, smooth, aperture seminular, rather small, columella with a thick broad callosity at the upper part; ivory-white, covered with a thin horny epidermis, sometimes partially tinged with rust-red.

D'ORBIGNY, Voyage dans l'Amér. mérid. pl. 78. f. 10 and 11.

Hab. — ?

A solid ivory-white shell, of a peculiarly oblong-conoidal form, slightly concavely flattened round the middle, covered with a thin horny epidermis.

Species 123. (Mus. Cuming.)

NATICA FORTUNEI. *Nat. testâ angustè umbilicatâ, conoideo-globosâ, tenuiculâ, spirâ exertâ, anfractibus convexis, decussatim minutissimè striatâ, aperturâ ovatâ, columellâ tenui, subreflexâ; livido-cæruleâ, carneofuscescente tinctâ.*

FORTUNE'S NATICA. Shell narrowly umbilicated, conoidly globose, rather thin, spire exerted, whorls convex, decussately very minutely striated, aperture ovate, columella thin, slightly reflected; livid-tinged with flesh-brown.

Hab. Shanghai, China; Fortune.

Of a light texture and livid blue colour, tinged with flesh-brown, collected at Shanghai by Mr. Fortune.





1747



1748



1749



1750



1751



1752



1753



1754



1755



1756

NATICA.

PLATE XXVII.

Species 124. (Mus. Cuming.)

NATICA GLABELLA. *Nat. testâ augustè profunde umbilicatâ, subfusiformi-oblongâ, solidiusculâ, spirâ breviusculâ, exsertâ, anfractibus declivi-concavis, lævigatâ, politâ, aperturâ semilunari, parâ, columellâ superâ callositate latâ, reflexâ; pellucida-albâ, carneo tinctâ, callositate carneâ.*

THE SMOOTH NATICA. Shell narrowly deeply umbilicated, subfusiformly oblong, rather solid, spire rather short, exserted, whorls slantingly convex, smooth, polished, aperture semilunar, small, columella with a broad reflected callosity at the upper part; transparent white, flesh-tinged, callosity flesh-coloured.

Hab. — ?

An elegantly convoluted transparent white polished shell, of rather solid structure, tinged with a violet flesh-colour, which is bright on the callosity.

Species 125. (Mus. Cuming.)

NATICA MONTAGUI. *Nat. testâ profunde umbilicatâ, globosâ, spirâ medioeri, anfractibus rotundatis, lævigatis, aperturâ lunari-oratâ, columellâ superâ levis callosâ, callositate columnari ferè obsoletâ umbilicem intrante; rufescente-albâ.*

MONTAGU'S NATICA. Shell deeply umbilicated, globose, spire middling, whorls rounded, smooth, aperture lunar-ovate, columella a little thickened at the upper part, with a nearly obsolete columnar callosity entering the umbilicus; rufous-white.

FORBES, *Malacologia Monensis*, p. 32.
Nerita rufa, Montagu (not of Born).

Natica rutila, Macgillivray.

Hab. Britain.

A rufous-white species, inhabiting the British seas throughout, but chiefly in the north.

Species 126. (Fig. a, b, c, Mus. Cuming.)

NATICA PROXIMA. *Nat. testâ umbilicatâ, globosâ, spirâ brevi, anfractibus rotundatis, lævibus, nitulis, aperturâ lunari-oratâ, columellâ subincroscatâ, callositate co-*

lumnari umbilicem intrante; albâ, punctis minutis rufescente-fuscis indutâ, fuscis tribus rittatis interruptâ.

THE ALLIED NATICA. Shell umbilicated, globose, spire short, whorls rounded, smooth, shining, aperture lunar-ovate, columella rather thickened, with a columnar callosity entering the umbilicus; whitish, covered with minute red-brown dots, interrupted with three filleted bands.

C. B. ADAMS, *Contributions to Conchology*, p. 111.

Hab. Jamaica.

This belongs to the same type of form and colouring as *N. caerulea*, the filleted bands varying in width and distinctness in different species.

Fig. 127. (Mus. Cuming.)

This specimen, named in Mr. Cuming's collection by M. Récluz *N. Francisca*, appears to be a variety of the British *N. nitida*.

Species 128. (Mus. Cuming.)

NATICA BURIASENSIS. *Nat. testâ profunde umbilicatâ, subglobosâ, solidiusculâ, spirâ parâ, subsertâ, anfractibus superâ declivibus, inferâ concavis, lævibus, politis, aperturâ lunari-oratâ, parvisculâ, columellâ superâ callositate latâ reflexâ; carulescente-oblâ. lineis rufis undatis longitudinaliter pictâ, callositate intusè rufâ.*

THE BURIAS NATICA. Shell deeply umbilicated, sub-globose, rather solid, spire small, a little exserted, whorls slanting round the upper part, convex at the lower, smooth, polished, aperture lunar-ovate, rather small, columella with a broadly reflected callosity at the upper part; bluish-white, painted longitudinally with fine waved red lines, callosity deep red.

RECLUZ, *Pro. Zool. Soc.* 1843, p. 212.

Hab. Island of Burias, Philippines; Cuming.

A solid porcelain-like species, neatly painted throughout with longitudinally waved red lines, the callosity being of a deep red colour.



120a



121a



122b



123a



124a



125b



126a



127a



128a



129a

(Enlarged one half diam)

NATICA.

PLATE XXVIII.

Species 129. (Mus. Cuming.)

NATICA FORATA. *Nat. testâ excavatâ perspectivè umbilicatâ, depresso-globosâ, spirâ subobtusâ, anfractibus juxta suturas subdepressis, deinde rotundatis, ultimo anticè descendente, aperturâ semilunari, columellâ tenui, superne callosâ: albâ, punctis et maculis aurantiis eximie pictâ.*

THE BORED NATICA. Shell excavately perspectively umbilicated, depressly globose, spire rather obtuse, whorls a little depressed next the suture, then rounded, last whorl descending in front, aperture semilunar, columella thin, callous at the upper part; whitish, prettily painted with orange dots and blotches.

Hab. Buffalo, Cape of Good Hope.

A prettily painted species, distinguished by a large peculiarly excavated perspective umbilicus.

Species 130. (Mus. Cuming.)

NATICA FIBULA. *Nat. testâ obtectè umbilicatâ, orbiculari-depressâ, sublus excavatâ, spirâ minutâ, anfractibus ad suturas marginatis, plano-convexis, aperturâ obliquè lunari, columellâ brevissimâ, callositate perimplâ solidâ rotundâ umbilicium implente; fulvescente-albâ.*

THE BUTTON NATICA. Shell with a covered umbilicus, orbicularly depressed, excavated beneath, spire very small, whorls margined at the suture, flatly convex, aperture obliquely lunar, columella very short, with a large round solid callosity filling the umbilicus; fulvous-white.

Hab. ———?

A small obliquely depressed fulvous-white shell, with a large round button-like callosity in the place of the umbilicus.

Species 131. (Mus. Cuming.)

NATICA JAMAICENSIS. *Nat. testâ obtectè umbilicatâ, obliquè globosâ, subdepressâ, spirâ parvâ, anfractibus juxta suturas plicato-striatis, convexis, aperturâ lunari-ovata, subfissâ, columellâ tenui, reflexâ, callositate latâ rotundâ umbilicium implente; liliido-griseâ, nitentè, juxta suturas albâ, inferne fuscâ fulcâ latâ interruptâ cingulatâ, callositate intensè purpureo-caesuleâ.*

THE JAMAICA NATICA. Shell with a covered umbilicus, obliquely globose, slightly depressed, spire small, whorls plicately striated next the suture, convex, aperture lunar-ovate, a little clefted, columella thinly reflected, with a broad round callosity filling the umbilicus; livid grey, shining, white next the suture, encircled at the lower part with a broad interrupted fulvous band, callosity deep purple-chestnut.

C. B. ADAMS, Contributions to Conchology, p. 111.

Hab. Jamaica.

Of a delicate livid grey, encircled with a broad interrupted pale flamed band round the lower part, and with white next the suture; the callosity and columellar enamel being bright purple-chestnut.

Species 132. (Mus. Cuming.)

NATICA PAVIMENTUM. *Nat. testâ obtectè umbilicatâ, globosâ, solidiusculâ, spirâ parvâ, obtusâ, suturâ lunari-impressâ, anfractibus obtusè rotundatis, aperturâ semilunari, parvisculâ, columellâ callosâ, callositate rotundâ, umbilicium implente; albâ, nitentè, maculis aurantiis-fuscis distantibus tessellatâ.*

THE PAVEMENT NATICA. Shell with a covered umbilicus, globose, rather solid, spire small, obtuse, suture linearly impressed, whorls obtusely rounded, aperture semilunar, rather small, columella callous, with a rounded callosity filling the umbilicus; white, shining, tessellated with distant orange-brown square spots.

RECLUZ, Pro. Zool. Soc. 1843, p. 208.

Eadem var. *Natica Caillandi*, Recluz.

Hab. Island of Ticao, Philippines; Cuming.

A rounded largely irregularly tessellated shell, shining like porcelain.

Species 133. (Mus. Cuming.)

NATICA MACILENTA. *Nat. testâ excavatè profundè umbilicatâ, globoso-ovata, spirâ parvâ, obtusè exsertâ, anfractibus superne declivibus, deinde convexis, levibus, aperturâ lunari-ovata, columellâ calloso-reflexâ; fulvescente-albâ, nitentè, corvo-fuscescente obscurè linctâ et vittatâ, ecanstâ columellari castaneâ.*

THE LEAN NATICA. Shell excavately deeply umbilicated,

globose ovate, spire small, obtusely exerted, whorls slanting in the upper part, then convex, smooth, aperture lunar-ovate, columella callously reflected; fulvous-white, shining, obscurely stained and filleted flesh-brown, columellar enamel chestnut.

PHILIPPI, Abbild. und Besch. Conch. vol. ii. pl. 24. f. 14.
Hab. — ?

The painting of this little species, which is of rather light structure, is very obscurely distributed.

Species 134. (Mus. Cuming.)

NATICA LOCELLUS. *Nat. testâ minutè umbilicatâ, sub-*

globosâ, spirâ exertâ, apice acutâ, anfractibus rotundatis, lævibus, aperturâ lunari-ovatâ, columellâ tenuè callosâ; livido-carnæ, fulvo-aurantio obscure tinctâ et vittatâ.

THE LITTLE PURSE NATICA. Shell minutely umbilicated, subglobose, spire exerted, sharp at the apex, whorls rounded, smooth, aperture lunar-ovate, columella thinly callous; livid flesh-tinged, fulvous-brown, obscurely filleted and stained.

Hab. — ?

More globose than the preceding species, with the spire more turbinate raised. The filleted colouring is very indistinct, and the ground-colour of a particular livid hue.



NATICA.

PLATE XXIX.

[Figures considerably magnified.]

Species 135. (Mus. Cuming.)

NATICA PISIFORMIS. *Nat. testâ augustè profunde umbilicatâ, globosâ, solidiusculâ, spirâ minutâ, anfractibus superne obtusè productis, deinde plano-convexis, aperturâ oblongo-ovatâ, columellâ superne subcallosâ; sordide albâ.*

THE PEA-SHAPED NATICA. Shell narrowly deeply umbilicated, globose, rather solid, spire very small, whorls obtusely produced round the upper part, then slightly convex, aperture oblong-ovate, columella slightly callosous at the upper part; dull white.

RECLUZ, Pro. Zool. Soc. 1843, p. 213.

Hab. Valparaiso; Cuming.

A small pea-like shell, obtusely gibbous round the upper part, with the umbilicus rather deeply excavated.

Species 136. (Mus. Cuming.)

NATICA ASELLUS. *Nat. testâ obtectè umbilicatâ, obliquè globosâ, subtus depressâ, spirâ brevissimâ, anfractibus convexis, levigatis, nitentibus, prope suturam obscurè plicato-striatis, aperturâ semilunari-ovatâ, columellâ callositate latâ umbilicem tegente; albâ, fasciis duabus latiusculis ceruleo-nigricantibus cingulatâ, punctorum serie minutâ in interstitio.*

THE LITTLE ASS NATICA. Shell with a covered umbilicus, obliquely globose, depressed beneath, spire very short, whorls convex, smooth, shining, faintly plicately striated next the suture, aperture semilunar-ovate, columella with a broad callosity covering the umbilicus; white, encircled with two rather broad blue-black bands, with a minute series of dots in the interstices.

Hab. Australia.

An interesting small species, in which the painting is not much unlike that of the *Cypræa asellus*.

Species 137. (Mus. Cuming.)

NATICA TRAILLI. *Nat. testâ subampliter umbilicatâ, conoideo-globosâ, solidiusculâ, spirâ parvâ, anfractibus superne declivibus, subtus peculiariter plano-convexis, aperturâ ovatâ, columellâ callositate latâ umbilicem*

ferè tegente; albâ, lineis rufo-fuscis nudatis irregularibus undique longitudinaliter pictâ, callositate rufo-fuscâ.

TRAILL'S NATICA. Shell largely umbilicated, conoidly globose, rather solid, spire small, whorls slanting round the upper part, peculiarly flatly excavated beneath, aperture ovate, columella with a broad callosity nearly covering the umbilicus; whitish, painted longitudinally throughout with waved irregular red-brown lines, callosity red-brown.

Hab. Malacca.

A characteristic solid species, curiously excavated and obtusely angled at the base, painted throughout with irregularly waved red-brown lines.

Species 138. (Mus. Cuming.)

NATICA VENUSTULA. *Nat. testâ obtectè umbilicatâ, semi-globosâ, spirâ obtusè conoideâ, anfractibus convexis, levibus, nitentibus, aperturâ lunari-ovatâ, columellâ latè callosâ, umbilicem implete; albâ, juxta suturam opacâ, deinde lineis rufo-fuscis acutè nudatis pictâ.*

THE PRETTILY-MARKED NATICA. Shell with a covered umbilicus, semiglobose, spire obtusely conoid, whorls convex, smooth, shining, aperture lunar-ovate, columella broadly callosous, filling the umbilicus; white, opaque next the suture, then marked with zigzag red-brown lines.

PHILIPPI, Zeitschrift für Malac. 1851.

Hab. — ?

The chief peculiarity of this little species consists in its opake-white zone round the upper portion of the whorls, from which the light red-brown zigzag lines suddenly depend.

Species 139. (Mus. Cuming.)

NATICA SUFFUSA. *Nat. testâ oblongo-ovatâ, solidâ, spirâ obtusè conoideâ, anfractibus declivi-convexis, levibus, aperturâ semilunari-ovatâ, basi productâ, columellâ callositate latâ umbilicem tegente; pelliculo-albâ, hic illic opacâ, versus apicem violaceo-tinctâ, callositate violacâ.*

THE SCFFUSED NATICA. Shell oblong-ovate, solid, spire obtusely conoid, whorls slantingly convex, smooth, aperture semilunar-ovate, produced at the base, columella with a broad callosity covering the umbilicus; transparent white, here and there opaque, tinged with violet towards the apex, callosity violet.

Hab. New Ireland.

An obtusely conoid species, of solid growth, though subtransparent in character, delicately tinged with violet, the colour being most conspicuous on the callosity.

Species 140. (Mus. Cuming.)

NATICA NUCULA. *Nat. testā obtectē umbilicatā, subquadrate-globosā, solidā, spirā minutā, anfractibus superne obtusē rotundatis, deinde subplanatis, aperturā semilunari-ovata, columellā callositate latā rotundatā umbilicem tegente; sordidē lutescente-albā, apice lividā.*

THE LITTLE NUT NATICA. Shell with a covered umbilicus, somewhat squarely globose, solid, spire very small, whorls obtusely rounded at the upper part, then rather flattened, aperture semilunar-ovate, columella with a broad button-like callosity covering the umbilicus; dull yellowish-white, livid at the apex.

Hab. New Ireland.

This little solid species, from the same locality as the preceding, is peculiarly squarely compressed round the periphery, and has a characteristic small livid spire.

Species 141. (Mus. Cuming.)

NATICA IMMACULATA. *Nat. testā angustissimē profundē umbilicatā, ovato-globosā, solidiusculā, spirā minutā, subversatā, anfractibus plano-convexis, aperturā oblongo-ovata, columellā superne subcallosā; sordidē albā.*

THE SPOTLESS NATICA. Shell very narrowly deeply umbilicated, ovately globose, rather solid, spire minute, a little exerted, whorls flatly convex, aperture oblong-ovate, columella rather callous at the upper part; dull white.

TOTTEN, Silliman's Journal, vol. xxviii. p. 351. f. 6.

Hab. Bay of Massachusetts, United States (found plentifully in the stomachs of fishes); Gould.

Very closely allied to the little *N. pisiformis* from Valparaiso, but the spire is rather more exerted, and the umbilicus more contracted.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

NATICA.

PLATE XXX.

Species 142. (Fig. 142, 144, 145, and 146,
Mus. Cuming.)

NATICA HELICOIDES. *Nat. testâ vix rimato-umbilicatâ, ovatâ, Ampullariiformi, spirâ exsertâ, suturâ conspicuè canaliculatâ, anfractibus convexis, basin versus subattenuatim productis, aperturâ ovatâ, limi effusâ, columellâ tenuiter marginatâ; calcareo-albâ, epidermide tenui corneâ deciduâ indutâ.*

THE HELIX-LIKE NATICA. Shell slightly edge-umbilicated, ovate, Ampullaria-like, spire exerted, suture conspicuously channelled, whorls convex, somewhat attenuately produced towards the base, aperture ovate, effused at the base, columella thinly edged; chalk-white, covered with a thin yellowish horny deciduous epidermis.

JOHNSTON, Trans. Nat. Hist. Soc. of Berwick-on-Tweed, for 1835.

Natica canaliculata, Gould.

Natica Islandica? Gmelin.

Hab. North Seas.

The accompanying figures, 142, 144, 145, and 146, selected to represent *N. Helicoides*, *canaliculata*, and *Islandica*, as so many distinct species, are without doubt

one and the same. It has much the appearance of an *Ampullaria* or *Paludina*, but may be readily distinguished by its more calcareous marine aspect and deciduous epidermis.

Species 143. (Mus. Cuming.)

NATICA CORNEA. *Nat. testâ minutè rimato-umbilicatâ, ovatâ, tenui, subinflatâ, spirâ exsertâ, suturâ canaliculatâ, anfractibus convexis, ad basin rotundato-productis, aperturâ ovatâ, columellâ tenuiter marginatâ; calcareo-albâ, epidermide corneâ fuscâ deciduâ indutâ.*

THE HORNY NATICA. Shell minutely edge-umbilicated, ovate, thin, rather inflated, spire exerted, suture channelled, whorls convex, rotundately produced at the base, aperture ovate, columella thinly edged; chalk-white, covered with a brown horny deciduous epidermis.

MOLLER, Ind. Moll. Grœnlandiæ, p. 7.

Hab. Greenland.

Lovén quotes this as a synonyme of the preceding species, but it is of a more broadly inflated form, and characterized by a darker epidermis.

NATICA.

Plac.	Natica.	Plac.	Natica.		
Adausoni, <i>Reeve</i>	XIX.	83	<i>eburnea</i> , Deshayes	XXI.	69
<i>Adausoni</i> , Philippi	XIV.	61	<i>effusa</i> , <i>Serriusson</i>	IV.	15
<i>adspersa</i> , McIcke	V.	18	<i>elegans</i> , Recluz	XV.	67
<i>affinis</i> , Busch	XX.	99	<i>Elenae</i> , Recluz	XXI.	94
<i>albula</i> , Recluz	VI.	23	<i>enazona</i> , Recluz	XV.	67
<i>albumen</i> , <i>Lamarck</i>	VIII.	31	<i>Ennel</i> , Recluz	XIX.	83
<i>ala-papilionis</i> (<i>Verita</i>), Chemn.	XIV.	60	<i>fibula</i> , <i>Reeve</i>	XXVIII.	130
<i>Alberi</i> , Forbes	XXIII.	106	<i>filosa</i> , <i>Sowerby</i>	XXVII.	72
<i>arachnoidea</i> , <i>Lamarck</i>	XIV.	61	<i>flava</i> , <i>Gould</i>	XXIV.	110
<i>asellus</i> , <i>Reeve</i>	XXIX.	136	<i>Flemingiana</i> , Recluz	XXIII.	80
<i>articulata</i> , Philippi	XIV.	60	<i>florida</i> , <i>Reeve</i>	XV.	64
<i>aurantia</i> , <i>Lamarck</i>	VI.	20	<i>fluctuata</i> , <i>Sowerby</i>	III.	10
<i>Baconi</i> , <i>Reeve</i>	X.	37	<i>forata</i> , <i>Reeve</i>	XXVIII.	129
<i>bifasciata</i> , <i>Gray</i>	X.	40	<i>Forskahii</i> (<i>Verita</i>), Chemnitz	XIV.	59
<i>bifasciata</i> , Recluz	XIV.	61	<i>Fortunei</i> , <i>Reeve</i>	XXVI.	123
<i>borealis</i> , Beck	XXV.	113	<i>Francisca</i> , Recluz	XXVII.	127
<i>borealis</i> , <i>Sowerby</i>	XXVI.	120	<i>fulgurans</i> , Recluz	XXII.	100
<i>Bourguignati</i> , Recluz	XIV.	61	<i>fulminea</i> (<i>Verita</i>), Gmelin	XIV.	61
<i>Broderipiana</i> , Recluz	XV.	66	<i>Gallapagosa</i> , Recluz	XIX.	86
<i>bulbosa</i> , <i>Reeve</i>	XXVI.	119	<i>Gambiae</i> , Recluz	XXIII.	105
<i>Buriasensis</i> , Recluz	XXVII.	128	<i>genuanus</i> , <i>Reeve</i>	XXVI.	121
<i>Caillandi</i> , Recluz	XXVIII.	132	<i>glabella</i> , <i>Reeve</i>	XXVII.	124
<i>Campechiensis</i> , Recluz	I.	1	<i>glauca</i> , <i>Humboldt</i>	II.	5
<i>canaliculata</i> , <i>Gould</i>	XXX.	142	<i>glauca</i> , <i>Lamarck</i>	III.	8
<i>cancellata</i> , <i>Lamarck</i>	XXI.	95	<i>globosa</i> , <i>Chevinitz</i>	XI.	46
<i>candidissima</i> , Recluz	XIX.	84	<i>Groenlandica</i> , Beck	XXI.	96
<i>candidissima</i> , <i>Le Guillou</i>	VIII.	28	<i>Gualteriana</i> , <i>Peris</i>	XXV.	114
<i>canrena</i> , <i>Lionens</i>	IV.	14	<i>Guilleminii</i> , <i>Payraudeau</i>	XXIII.	106
<i>Caribbaea</i> , Philippi	XXV.	118	<i>Haneli</i> , Recluz	XXI.	94
<i>castanea</i> , <i>Lamarck</i>	XII.	50	<i>Helicoides</i> , <i>Johanson</i>	XXX.	142
<i>catenata</i> , Philippi	XXI.	92	<i>helvacea</i> , <i>Lamarck</i>	XI.	46
<i>Chemnitzii</i> , Recluz	II.	7	<i>heros</i> , <i>Say</i>	I.	2
<i>Chemnitzii</i> , Menke	XIII.	52	<i>iausthostoma</i> , Deshayes	XVIII.	79
<i>Chiuensis</i> , <i>Lamarck</i>	XIX.	82	<i>Istacidia</i> ? <i>Gmelin</i>	XXX.	142
<i>clausa</i> , <i>Brod. and Sor.</i>	XXV.	113	<i>immaculata</i> , <i>Tottu</i>	XXIX.	141
<i>collaria</i> , <i>Lamarck</i>	XX.	87	<i>imperfata</i> , <i>Sowerby</i>	XVIII.	77
<i>Collii</i> , Recluz	XXIV.	112	<i>Impercia</i> , Philippi	XXV.	113
<i>columnaris</i> , Recluz	V.	19	<i>Inci</i> , Philippi	XX.	89
<i>conica</i> , <i>Lamarck</i>	XII.	48	<i>intemerata</i> , Philippi	IX.	33
<i>consolidata</i> , <i>Courthouy</i>	XXV.	113	<i>intermedia</i> , Recluz	VI.	21
<i>cornica</i> , <i>Moller</i>	XXX.	143	<i>intricata</i> (<i>Verita</i>), <i>Donovan</i>	XXII.	97
<i>corn</i> , <i>D'Orbigny</i>	XXVI.	122	<i>Jamaicensis</i> , <i>C. B. Adams</i>	XXVIII.	131
<i>crenata</i> , Recluz	XIV.	60	<i>Jukesii</i> , <i>Reeve</i>	XIX.	84
<i>crenata</i> , <i>Lamarck</i>	XIV.	61	<i>Lamarckiana</i> , Recluz	II.	6
<i>Cumingiana</i> , Recluz	IV.	13	<i>leucophaea</i> , <i>Reeve</i>	XII.	51
<i>deiodosa</i> , <i>Reeve</i>	IX.	35	<i>lineata</i> , <i>Lamarck</i>	VII.	24
<i>dense maculata</i> , Chemnitz	V.	18	<i>loellus</i> , <i>Reeve</i>	XXVIII.	134
<i>Draparnaudi</i> , Recluz	XI.	44	<i>macilenta</i> , Philippi	XXVIII.	133
<i>dubia</i> , Recluz	X.	41	<i>maculata</i> , <i>Deshayes</i>	V.	18
<i>duplicata</i> , <i>Say</i>	II.	4	<i>maculosa</i> , <i>Lamarck</i>	XIII.	57

NATICA.—INDEX.

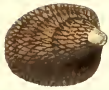
	Plate.	Species.		Plate.	Species.
Maheense, Recluz	XIV.	58	rufa (Verita), Born	XVI.	70
mamilla, Lamarck	VII.	27	rufilabris, Reece	XXIII.	103
mamillarlis, Lamarck	VIII.	29	rutila, Macgillivray	XXVII.	125
Marochiensis, Lamarck	XIII.	52	Sagraina, D'Orbigny	XXIV.	111
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millipunctata, Lamarck	VII.	26	Simiae (Rawa), Chemnitz	XVII.	76
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Montagui, Forbes	XXVII.	125	septentrionalis, Beck	XI.	43
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opaca, Recluz	VIII.	30	spadicea, Gmelin	III.	9
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Panamaensis, Recluz	III.	11	Strangei, Reece	XVII.	81
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perspicua, Recluz	IV.	12	sulcata (Verita), Born	XXI.	95
Petiveriana, Recluz	V.	17	teniata, Menke	XIV.	60
Philippiana, Recluz	XI.	45	Taslei, Recluz	XV.	66
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porcellanea, D'Orbigny	XXIII.	102	unifasciata, Lamarck	XII.	49
Powisiana, Recluz	VI.	22	unimaculata, Reece	XIX.	85
Priamus, Recluz	IX.	36	Valenciennesii, Payraudeau	XXII.	97
problematica, Reece	VI.	21	variabilis, Recluz	XXIII.	104
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pyriformis, Recluz	V.	16	vitellus, Lamarck	X.	39
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Recluziana, Deshayes	I.	3	zonaria, Lamarck	XIV.	60
rhodostoma, Philippi	XV.	65			

ERRATA.

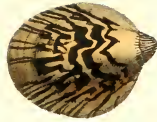
- Sp. 33. For *N. slabaster*, Reece, read *N. istenerata*, Philippi, Pro. Zool. Soc. 1851.
 Sp. 38. For *N. intermedia*, Philippi, read *N. vestalis*, Philippi, Pro. Zool. Soc. 1851.
 Sp. 60. Add as synonymes *N. arborata*, Philippi, and *N. teniata*, Menke.
 Sp. 61. Add as synonyme *N. Adamsi*, Philippi.
 Sp. 63. For *N. inaequalata*, Reece, read *N. pulicaris*, Philippi, Kuster, Conch. Cab. Natice, p. 90, pl. 13, f. 9.
 Sp. 118. *N. Coribaei*, Philippi: add reference Pro. Zool. Soc. 1851.

MONOGRAPH
OF THE GENUS
N A V I C E L L A.

"The man
Whom Nature's works can charm, with God himself
Holds converse."—*Thornton*.



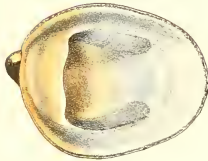
25a.



1a.



26.



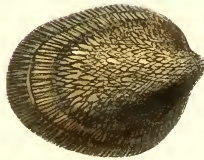
1b.



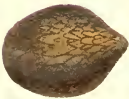
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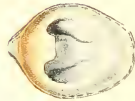
28.



1c.



29.



28.



30.

NAVICELLA.

PLATE I.

Genus NAVICELLA, Lamarck.

Testa oblongo-ovata, depressa, Patellaformis, interdum concentricè striata, sæpius lævigata, olivaceo-lutea vel virescens, nigro plerumque reticulata, spirâ nullâ, vertice ad marginem subobliquè reflexo, interdum rostrato, labro simplici, aræ columellari tenui, planâ, septiformi, apertura peramplâ, impressionibus muscularibus duabus distinctis. Operculum testaceum, subquadratum, planum, dente laterali acuto.

Shell oblong-ovate, depressed, Patella-shaped, sometimes concentrically striated, more frequently smooth, olive-yellow or greenish, generally reticulated with black, no spire, vertex rather obliquely inflected, sometimes beaked, lip simple, columellar area thin, flat, septum-like, aperture very large, muscular impressions two, distinct. Operculum testaceous, nearly square, flat, with a sharp tooth at the side.

The *Navicellæ* are a group of the very characteristic family of fresh-water Nerites, in which the shell assumes a more open Limpet-like form. The spire, which in *Nerita* and *Neritina* is convoluted in a very simple manner, and is, in some species, so concealed as scarcely to show any convolution, is here transformed into the simple nucleus of a spire with the vertex inflected, as in some of the Limpets, into a beak. The callous expansion of the columella, typical of this family, which is often so broadly and thinly developed in *Neritina*, is in *Navicella* modified into a positive septum or shelf, forming, so to speak, the poop of the little boat.

There is not much variation either of form or painting in the *Navicellæ*. They are mostly of an olive-yellow or greenish colour, reticulated or blotched with black, but a few are semitransparent and tinged with rose. Only five species were known to Lamarck. The exploration of the rivers, during the last few years, in the islands of the Eastern and South-Eastern Seas have brought many more species to light, and the number is increased to upwards of thirty. The *Navicellæ* are not found in Europe nor in any part of the Western Hemisphere. Their chief habitats are the Philippine and Australian Islands, the New Hebrides, New Ireland, and New Caledonia.

Species 1. (Fig. a, b, Mus. Cuming.)

NAVICELLA JANELLI. *Nav. testâ oblongo-ovata, convexo-depressâ, olivaceo-luteâ, lineis obliquis nigricante-viridibus*

reticulatâ, interdum nigro concentricè maculatâ intus cærulescente, aræ columellari aurantio-tinctâ.

JANELLE'S NAVICELLA. Shell oblong-ovate, convexly depressed, olive-yellow, reticulated with oblique blackish-green lines, sometimes concentrically blotched with black; interior bluish, columellar area tinged with orange.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 376.

Hab. Guam (in the river Umata); Janelle. Philippine Islands (in mountain streams); Cuming.

A fine large oval species, reticulated or blotched with blackish-green upon an olive-yellow ground.

Species 2. (Fig. a, b, Mus. Cuming.)

NAVICELLA BIMACULATA. *Nav. testâ subquadrato-ovata, convexo-depressâ, lutescente, lineis nigris oblique maculato-reticulatâ; intus cærulescente, aræ columellari angustâ, aurantio-rufa marginatâ, maculis duabus nigris notatâ.*

THE TWO-SPOTTED NAVICELLA. Shell somewhat squarely ovate, convexly depressed, yellowish, obliquely blotched with black lines; interior bluish, columellar area narrow, edged with orange-red, marked with two black blotches.

Hab. Mauritius.

Characterized by two black blotches on the columellar area, which is rather narrow and tipped with orange-red, and, externally, by a rather blotchy kind of network.

Species 3. (Fig. a, b, Mus. Cuming.)

NAVICELLA DEPRESSA. *Nav. testâ obovata, depressâ, subtus subexpansâ, olivaceo-luteâ, nigro maculato-reticulatâ; intus cærulescente, aræ columellari parvisculatâ, aurantio-rufa tinctâ.*

THE DEPRESSED NAVICELLA. Shell oblong-ovate, depressed, rather expanded beneath, olive-yellow, blotched with black; interior bluish, columellar area rather small, tinged with orange-red.

LESSON, Voy. de la Coquille, Zool. p. 365.

Eadem var. *Navicella zebra*, Lesson.

Hab. Tahiti.

Distinguished by a depressly expanded form, which induces the columellar area to a crescent shape.

Species 4. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA FREYCINETI. *Nav. testâ ovatâ, gibbosâ, apicem versus subrostratâ, concentricè nitidè striatâ, sordidè olivaceâ, lineis fuscis concentricè densè undulatâ; intus carlescente, areâ columellari latiusculâ, medio peculiariter lingulatâ, versus marginem aurantio-rufo tinctâ.*

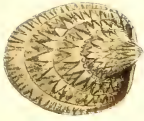
FREYCINET'S NAVICELLA. Shell ovate, gibbous, somewhat beaked towards the apex, concentrically neatly

striated, dull olive, densely concentrically waved with brown lines; interior bluish, columellar area rather broad, peculiarly tongued in the middle, tinged towards the margin with orange-red.

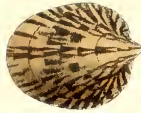
RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 375.

Hab. New Hebrides.

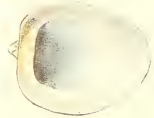
Well distinguished by its gibbous slightly beaked form, and peculiar tongue-like process of the columellar area.



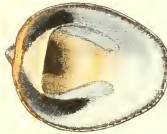
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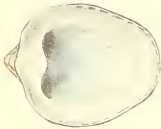
26.



27.



28.



29.



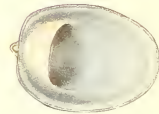
30.



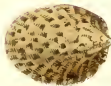
31.



32.



33.



34.

NAVICELLA.

PLATE II.

Species 5. (Fig. *a, b, c*, Mus. Cuming.)

NAVICELLA ORBICULARIS. *Nav. testâ suborbiculari, ventricosâ, fulvescente, olivaceo-nigro promiscuè reticulatâ vel maculatâ, intus cærulescente, aréâ columellari subangustâ, concavâ.*

THE SLIGHTLY ORBICULAR NAVICELLA. Shell suborbicular, ventricose, fulvous, promiscuously reticulated or blotched with olive-black, interior bluish, columellar area rather narrow, concave.

SOWERBY, Tankerville Catalogue, App. p. 10. n. 1092.

Hab. Philippine Islands; Cuming.

Chiefly distinguished by its light gibbous form and loosely reticulated painting.

Species 6. (Mus. Cuming.)

NAVICELLA PORCELLANA. *Nav. testâ subtrigono-ovatâ, solidiusculâ, olivaceo-nigro densè reticulatâ, intus cærulescente, marginè superpasso, aréâ columellari distincti, ad latera nigro maculatâ.*

THE PORCELAIN NAVICELLA. Shell somewhat triangularly ovate, rather solid, closely reticulated with olive-black, interior blue, margin rather expanded, columellar area slanting, blotched with black at the sides.

Patella porcellana, Linnæus, Mus. Lud. Ulric. p. 659. n. 411.

Nerita porcellana, Chemnitz.

Navicella porcellana, Deshayes.

Patella Bourbonica, Bory St. Vincent.

Crepidula Bourbonica, De Roissy.

Septaria Bourbonica, De Férussac.

Navicella elliptica, Lamarek

Scandalinna pictura, Schumacher.

Hab. Islands of Bourbon, Rodriguez, Mauritius, and Madagascar; Recluz.

The articulated painting of this old Linnæan species is

extremely thick-set, leaving only minute triangular spaces of yellowish ground at irregular intervals.

Species 7. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA CUMINGIANA. *Nav. testâ subtrigono-ovatâ, versus apicem subrostratâ, ad latera expansâ, olivaceo-luteâ, nigricante-fusco concentricè undulatâ, intus cærulescente, aréâ columellari angustâ, margine mediè subproducto.*

CUMING'S NAVICELLA. Shell somewhat triangularly ovate, slightly beaked towards the apex, expanded at the sides, olive-yellow, concentrically waved with blackish-brown, interior bluish, columellar area narrow, margin slightly produced in the middle.

RECLUZ, MS. Mus. Cuming.

Hab. Philippine Islands.

The painting of this fine species consists throughout of concentric rings of irregularly waved blackish-brown lines.

Species 8. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA VARIABILIS. *Nav. testâ oblongo-ovali, convexo-gibbosâ, versus apicem subrostratâ, concentricè striatâ, sordidè olivaceâ, nigro obscurè reticulato-nubratâ, intus livido-carnéâ, aréâ columellari arenatâ.*

THE VARIABLE NAVICELLA. Shell oblong-ovate, convexly gibbous, somewhat beaked towards the apex, concentrically striated, dull olive, obscurely reticulately shaded with black, interior livid blue, columellar area arched.

RECLUZ, MS. Mus. Cuming.

Hab. Philippine Islands.

Of a very regular oblong-oval form, sculptured with a well-marked concentric striae, the network painting being obscured by patches of shading.



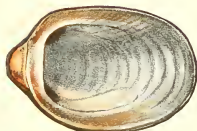
5a



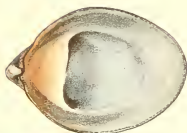
6a



10b



12a



11a



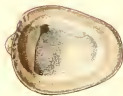
14a



12b



13a



17b



19b

NAVICELLA.

PLATE III.

Species 9. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA LENTIGINOSA. *Nav. testá subtrigono-ovatá, subtus concavo-expansá, olivaceo-luteá, nigricante-fusco unilique nitidè lineatá et lentiginosá, intus carulescente, areá columellari porvâ, concavo-declivi.*

THE FRECKLED NAVICELLA. Shell somewhat triangularly ovate, concavely expanded beneath, olive-yellow, neatly lineated and freckled throughout with blackish-brown, interior bluish, columellar area small, concavely slanting.

Hab. — ?

Distinguished by its triangularly expanded form and neatly freckled painting.

Fig. 10. (Mus. Cuming.)

The shell here figured represents the *Navicella elliptica* of Lamarck, which is a variety of the Linnean *N. porcellana*.

Species 11. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA LUZONICA. *Nav. testá angustè ovatá, gibbosâ, ad apicem conspicuè rostratâ, concentricè rudè striatâ, fulvo-castaneâ, immaculatâ; intus carulescente, areá columellari aurantio-rufo lineatâ.*

THE LUZON NAVICELLA. Shell narrowly ovate, gibbous, conspicuously beaked at the apex, concentrically rudely striated; fulvous chestnut, unspotted, interior bluish, columellar area tinged with orange-red.

SOULEYET, Recluz, Revue Zool. Soc. Cuvierienne, 1841, p. 375.

Hab. Island of Luzon, Philippines (in mountain streams on stones); Cuming.

Of a characteristic narrow, gibbous, boat-like form, fulvous-chestnut in colour, destitute of any marking.

Species 12. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA SCARABÆUS. *Nav. testá oblongo-ovatâ, concavo-depressâ, subtus planatâ, apice retusè eroso, concentricè rudè striatâ, nigricante-castaneâ, nitente, cornâ, intus carulescente, areá columellari angustissimâ, crassâ, declivi, carneo-roseâ.*

THE BEETLE NAVICELLA. Shell oblong-ovate, convexly depressed, flattened beneath, apex bluntly eroded, concentrically rudely striated, blackish chestnut, shining, horny, interior bluish, columellar area very narrow, thick, slanting, flesh-rose.

Hab. Hamond's Island, Australian Seas.

A very peculiar oblong-oval species, depressly flattened beneath, with a narrow, thickly callous, columellar area. The outer surface of the shell is covered with a hard, horny epidermis.

Species 13. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA LIVIDA. *Nav. testá subtrigono-ovatâ, versus apicem gibbosâ, sordidè livido-olivaceâ, obscurè reticulatâ, intus livido-carulescente, area columellari concavo-planâ.*

THE LIVID NAVICELLA. Shell somewhat triangularly ovate, gibbous towards the apex, dark livid olive, obscurely reticulated, interior livid blue, columellar area concavely flattened.

Hab. — ?

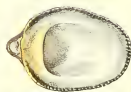
Allied to *N. suborbicularis*, but of a different form and general livid hue.



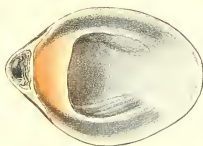
15a



16a



17a



18a



19a



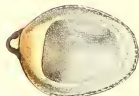
20a



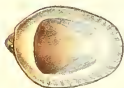
21a



22a



23a



24a

NAVICELLA.

PLATE IV.

Species 14. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA COOKII. *Nav. testā suboblongo-ovatā, tenuicollā, gibbosā, fulvescente, olivaceo-nigro obscure latè reticulatā, intus carulescente, medio rufescente tinctā, areā columellari parvā, pallidissimè rufescente.*

COOK'S NAVICELLA. Shell suboblong-ovate, rather thin, gibbous, light fulvous, obscurely broadly reticulated with olive-black, interior bluish, tinged with red in the middle, columellar area small, very faintly tinged with red.

RECLUZ, MS. Mus. Cuming.

Hab. Philippine Islands; Cuming.

A light gibbous species, allied to *N. suborbicularis*, somewhat peculiarly contracted.

Species 15. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA AFFINIS. *Nav. testā ovatā, subtus subexpansā, olivaceo-luteā, nigro densè reticulatā, intus carulescente, areā columellari lutescente, concavo-declivi.*

THE ALLIED NAVICELLA. Shell ovate, rather expanded beneath, olive-yellow, densely reticulated with black; interior bluish, columellar area yellowish, concavely slanting.

Hab. — ?

There is little to distinguish this species from *N. depressa* in point of colouring, but it may be recognized by a difference of form.

Species 16. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA MAGNIFICA. *Nav. testā oblongo-ovatā, utrinque attenuatā, concentricè densè elevato-striatā, nigricante-fuscā, epidermide corneā, apice multo crosso, intus carulescente, areā columellari plano-declivi, aurantio-rufa tinctā.*

THE MAGNIFICENT NAVICELLA. Shell oblong-ovate, attenuated at each end, concentrically densely elevated striated, dark brown. epidermis horny, apex much

eroded, interior bluish, columellar area flatly slanting, tinged with orange-red.

Hab. Hanond's Island, Australian Seas.

This fine species is of a bold expanded oblong-ovate form, rather attenuated at each end, covered with a dark bright brown epidermis, sculptured throughout with concentric rings of raised striae.

Species 17. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA SANGUISUGA. *Nav. testā elongato-ovatā, subobliquè curvatā, gibbosā, apice obsolete, concentricè rudè annulato-striatā, nigricante-fuscā, epidermide corneā, intus carulescente, areā columellari terminali, crassā, callosā, plus minus erodā.*

THE LEECH NAVICELLA. Shell elongately ovate, somewhat obliquely curved, gibbous, apex obsolete, concentrically rudely ring-striated, blackish-brown, epidermis horny, interior bluish, columellar area terminal, thick, callous, more or less eroded.

Hab. New Caledonia.

Of a peculiar elongately ovate form, obliquely curved, with an eroded sinus on the inner side, which seems to indicate that this shell may prove to be typical of a new genus. The columellar area forms a thickly flatly eroded shelf across the end. Externally the epidermis is horny.

Species 18. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA HAUSTRUM. *Nav. testā ovatā, subtus excavatā, gibbosā, apice rostrato, olivaceo-luteā, nigro densè reticulatā, intus carulescente, areā columellari parviusculā, albicante.*

THE SCOOP NAVICELLA. Shell ovate, excavated beneath, gibbous, apex beaked, olive-yellow, densely reticulated with black, interior bluish, columellar area rather small, whitish.

Hab. New Caledonia.

Of a more than usual excavated gibbous growth, with painting similar in character to that of *N. depressa*.



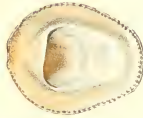
18a.



19a.



20a.



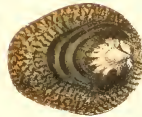
21a.



22a.



23a.



24a.



25a.



26a.



27a.

NAVICELLA.

PLATE V.

Species 19. (Fig. a, b, Mus. Cuming.)

NAVICELLA CREPIDULOIDES. *Nav. testâ subangustâ ovalâ, depressâ, versus apicem attenuatè rostratâ, subtus excavatâ, œruleo-nigrâ, olivaceo-luteo minutè lineatâ et punctatâ, arêâ columellari latâ, plano-declivi, tenui, semipellucidâ.*

THE CREPIDULA NAVICELLA. Shell rather narrowly ovate, depressed, attenuately beaked towards the apex, excavated beneath, blue-black, minutely lineated and dotted with olive-yellow, columellar area broad, flatly slanting, thin, semitransparent.

Hab. — ?

Of depressly excavated growth, peculiarly attenuated and beaked towards the apex, the columellar area having the appearance of a thin septum as in some species of *Crepidula*.

Species 20. (Fig. a, b, Mus. Cuming.)

NAVICELLA RETICULATA. *Nav. testâ depressè ovalâ, tenui, semipellucidâ, lutescente, apicem versus rosco-tinatâ, olivaceo-nigro apertè reticulatâ, arêâ columellari parvâ.*

THE RETICULATED NAVICELLA. Shell depressly ovate, thin, semitransparent, yellowish, tinged with rose towards the apex, openly reticulated with olive-black, columellar area small.

Hab. Ceylon.

A thin semitransparent oblong-square ovate shell, reticulated with a rather large open pattern.

Species 21. (Fig. a, b, Mus. Cuming.)

NAVICELLA INSIGNIS. *Nav. testâ subtrigono-ovalâ, peculiariter depressissimè expansâ, concentricè rudè corrugatâ, apicè non marginali, olivaceo-nigrâ, versus marginem lutescente punctatâ, intus œrulescente, arêâ columellari parvâ, contractâ.*

THE REMARKABLE NAVICELLA. Shell somewhat triangularly ovate, peculiarly very depressly expanded,

concentrically rudely wrinkled, apex not marginal, olive-black, dotted with yellow towards the margin, interior bluish, columellar area small, contracted.

Hab. Sumatra; Captain Martin.

Remarkably distinguished by its depressly expanded *Patella*-like form, the margin being produced much beyond the apex.

Species 22. (Fig. a, b, Mus. Cuming.)

NAVICELLA APIATA. *Nav. testâ ovato-trigona, utrinque alatâ, depressissimâ, olivaceo-nigro undique pulcherrimè minutissimè reticulatâ, intus œrulescente, maculis sub-amplic duabus nigris, arêâ columellari angustâ.*

THE FINELY-NETTED NAVICELLA. Shell ovately triangular, winged on each side, very depressed, beautifully finely netted throughout with olive-black, interior bluish, with two rather large black spots, columellar area narrow.

LE GUILLOU, Recluz, Revue Zool. Soc. Cuvierienne, 1841, p. 376.

Hab. Nukuhiva, Feejee Islands.

Conspicuously characterized by its depressed winged expansion, and peculiarly neat minute reticulated marking.

Species 23. (Fig. a, b, Mus. Cuming.)

NAVICELLA PSITTACEA. *Nav. testâ angustè ovalâ, versus apicem attenuatè rostratâ, vix gibbosâ, atrâ, obscure reticulatâ, intus œrulescente, arêâ columellari declivi, margine medio conspicuè producto, superè rufo-tinctâ.*

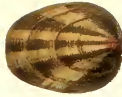
THE PARROT-BEAK NAVICELLA. Shell narrowly ovate, attenuately beaked towards the apex, very gibbous, black, obscurely reticulated, interior bluish, columellar area slanting, margin conspicuously produced in the middle, tinged with red at the upper part.

Hab. Australian Islands.

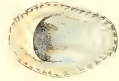
A narrow gibbous shell, of light substance, attenuately beaked towards the apex, with the columellar area produced in the middle into a tongue-like process.



22a



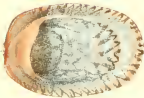
23a



23b



24a



24b



25a



26a



26b



27a



27b

NAVICELLA.

PLATE VI.

Species 24. (Fig. a, b, c, Mus. Cuming.)

NAVICELLA CLYPEOLUM. *Nav. testâ subquadrato-ovata, tenuiculâ, expansâ, concentricè dense striatâ, lutescente fusco reticulatim variegatâ, saturatè fusco interdum radiatâ, apice rosco, arâ columellari curvatâ.*

THE LITTLE - SHIELD NAVICELLA. Shell somewhat squarely ovate, rather thin, expanded, concentrically densely striated, yellowish, reticulately variegated with brown, sometimes rayed with dark brown, apex rose, columellar area curved.

RECLUZ, MS. Mus. Cuming.

Eadem varietates. *Navicellæ atra* and *radiata*, Reeve, in Conch. Syst.

Hab. Philippine Islands (in mountain-streams on stones); Cuming.

A light squarely ovate variegated species, with a characteristic rose apex.

Species 25. (Fig. a, b, Mus. Cuming.)

NAVICELLA PULCHELLA. *Nav. testâ compressè ovatâ, dense concentricè striatâ, nigrâ, versus marginem nigro et luteo pulchrè tessellatâ, arâ columellari parvisculâ.*

THE PRETTY NAVICELLA. Shell compressly ovate, densely concentrically striated, black, towards the margin prettily tessellated with black and yellow, columellar area rather small.

Hab. — ?

A black compressly ovate shell, neatly tessellated towards the margin with yellow.

Species 26. (Fig. a, b, Mus. Cuming.)

NAVICELLA EXIMIA. *Nav. testâ suboblongo-quadrata versus apicem contractâ, concentricè dense striatâ, apice rostrato, lutescente, olivaceo-nigro tessellatâ et interdum unbeculatâ, intus pelucido-cærulescente, arâ columellari latiusculâ, aurantio-rufo tinctâ.*

THE DELICATE NAVICELLA. Shell somewhat oblong-square, contracted towards the apex, concentrically densely striated, apex beaked, yellowish, tessellated and sometimes clouded with olive-black, interior transparent blue, columellar area rather broad, tinged with orange-red.

Hab. Ceylon; F. Layard.

A semitransparent tessellated species, marked with a characteristic pattern and colour.

Species 27. (a, b, c, Mus. Cuming.)

NAVICELLA TESSELLATA. *Nav. testâ angustè ovatâ, tenuiculâ, dense concentricè striatâ, apice subrostrato, lutescente, olivaceo-nigro promiscuè tessellatâ et variegatâ, apice rosaceo, arâ columellari curvatâ.*

THE TESSELLATED NAVICELLA. Shell narrowly ovate, rather thin, densely concentrically striated, apex rather beaked, yellowish, promiscuously tessellated and variegated with olive-black, apex tinged with rose, columellar area arched.

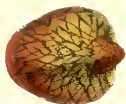
LAMARCK, Anim. sans vert. vol. viii. p. 564.

Hab. Philippine Islands (in mountain-streams on stones); Cuming.

Of a narrower oblong form than either of the preceding species of the same type, and more promiscuously tessellated.



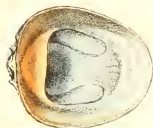
29a



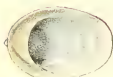
29b



29c



29d



29e



29f



29g



29h



29i



29j

NAVICELLA.

PLATE VII.

Species 28. (Fig. a, b, c, Mus. Cuming.)

NAVICELLA MACROCEPHALA. *Nav. testâ latè ovalâ, convexo-lunatâ, apice subampto, castaneo-fuscâ vel olivaceâ, lineis nigris apertè undatâ, areâ columellari convulsio-rufa finitâ.*

THE LARGE-HEADED NAVICELLA. Shell broadly-ovate, convexly swollen, apex rather large; chestnut-brown or olive, laced with zigzag black lines, columellar area tinged with orange-red.

GUILLOU, Revue Zool. Soc. Cuvierienne, 1841, p. 374.

Fejee Islands.

Very characteristic broadly-ovate species, convexly swollen towards the apex.

Species 29. (Fig. a, b, c, d, Mus. Cuming.)

NAVICELLA CERULESCENS. *Nav. testâ ovalâ, apice sub-rostratâ, concentricè tenuistriatâ, tenui, cœrulescente, olivaceo-nigro varîè subtilissimè tessellatâ et variegatâ, interdum fasciatâ, areâ columellari subangustâ.*

THE BLuish NAVICELLA. Shell ovate, rather beaked at the apex, eoucentrically finely striated, thin, bluish,

variously finely tessellated and clouded with olive-black, sometimes banded, columellar area rather narrow.

Hab. Calcutta (in the streets of the city and in the Botanic Gardens).

A light grey tessellated species, small and obscure in pattern, and extremely variable.

Species 30. (Fig. a, b, c, Mus. Cuming.)

NAVICELLA BOUGAINVILLE. *Nav. testâ ovalâ, apicem versus convexo-lunatâ, olivaceâ, lineis nigris undatis pictâ, intus carinatâ, areâ columellari angustâ, maculis duabus nigris notatâ.*

BOUGAINVILLE'S NAVICELLA. Shell ovate, convexly swollen towards the apex, olive, painted with wavy black lines, interior blue, columellar area narrow, marked with two black spots.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 374.

Hab. New Ireland.

Distinguished by its peculiar wavy-line painting and internal black blotches.



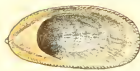
36a



35a



35b



37a



32a



32b



31b



33a



33b



34b

NAVICELLA.

PLATE VIII.

Species 31. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA LINEATA. *Nav. testâ elongato-ovata, ad latera compressâ, tenui, diaphanâ, apice rostrato, pellucidolutescente, punctis nigris sagittiferis aspersâ, areâ columellari latiusculâ.*

THE LINEATED NAVICELLA. Shell elongately ovate, compressed at the sides, thin, diaphanous, apex beaked, transparent yellow, sprinkled with black arrow-headed dots, columellar area rather broad.

LAMARCK, Encyclopédie Méthodique, pl. 456. f. 2 *a, b*.

Septaria navicula, De Férussac.

Hab. Philippine Islands.

The most elongated and transparent of the genus, marked with rays of arrow-headed black dots upon a transparent yellowish ground.

Species 32. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA ENTRECASTAUXII. *Nav. testâ subelongato-ovata, ad latera compressâ, apice rostrato, tenui, subdiaphanâ, luteo-rosâ vel pellucido-olivaceâ, lineis subcylindricis reticulatis radiatâ, areâ columellari parvisculâ, arcuatâ.*

ENTRECASTAUX'S NAVICELLA. Shell sub-elongately ovate,

compressed at the sides, apex beaked, thin, subdiaphanous, livid rose or transparent olive, rayed with clouded reticulating lines, columellar area rather small, arched.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 380.

Hab. Point Entrecastaux, King George's Harbour, Australia.

Of a similar transparent substance to the preceding species, less elongated in form, of a delicate rose-yellow tinge, reticulate rayed with black lines.

Species 33. (Fig. *a, b*, Mus. Cuming.)

NAVICELLA ORIENTALIS. *Nav. testâ ovata, ad latera subcompressâ, tenui, subdiaphanâ, lutescente-griseâ, punctis nigricantibus reticulatis aspersâ, areâ columellari subangustâ, arcuatâ.*

THE EAST INDIAN NAVICELLA. Shell ovate, slightly compressed at the sides, thin, subdiaphanous, yellowish-grey, reticulate sprinkled with blackish dots, columellar area rather narrow, arched.

Hab. Calcutta (in the Botanic Garden).

A somewhat rudely compressed semitransparent shell, faintly reticulate sprinkled with black dots.

LATIA.

Genus LATIA, Gray.

Testa tenuis, subcornea, ovata, depressè pileiformis, vertice obliquè intorto, subrostrato; intus septo arcuato, margine subreflexo, ad extremitatem unam acutè producto.

Shell thin, rather horny, ovate, depressly cap-shaped, vertex obliquely twisted in and slightly beaked; interior marked with an arched shelf, a little turned up at the edge, which is sharply produced at one end.

The two little shells here figured with the *Navicella* present a distinct general character, partaking almost equally in the general features of convolution and texture with *Aucylus*. Dr. Gray, while distinguishing them in our national collection by the generic title of *Latia*, places them near the latter genus; but in the absence of any knowledge of the animal, their position in the system can only be a matter of conjecture. They are of thin, olive or greenish, horny substance, with the spire obliquely twisted in, having an opaque white septum in the interior, similar in a measure to that of *Navicella* or *Calyptraea*, but presenting a peculiar modification, the edge being slightly bent upwards and prolonged at one end into a sort of spine.

Both species are from New Zealand.

Species 1. (Fig. 34 *a, b*, Mus. Cuming.)

LATIA NERITOIDES. *Lat. testâ ovata, levigatâ, vertice tumidiusculo, producto; olivaceo-cornè.*

THE NERITE-LIKE LATIA. Shell ovate, smooth, vertex rather swollen, produced; olive-horny.

GRAY, MS. Mus. Brit.

Hab. New Zealand; Earl.

This species, the smaller of the two which at present constitute this genus, has the vertex the more swollen and produced in proportion to the size of the shell.

Species 2. (Fig. 35 *a, b*, Mus. Cuming.)

LATIA LATERALIS. *Lat. testâ subquadrato-ovata, subdepressâ, obscure lateraliter sulcatâ; virescente-cornè.*

THE LATERAL LATIA. Shell somewhat squarely ovate, rather depressed, obscurely grooved at the side; greenish-horny.

GOULD, MS. Mus. Cuming.

Hab. New Zealand; Hart, R.N.

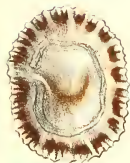
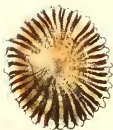
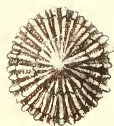
Rather larger than the preceding species, and more squarely depressed in general contour. The vertex is less prominent, and the side of the shell is faintly grooved.

NAVICELLA.

<i>affinis, Reeve</i>	IV	15	<i>Janelli, Recluz</i>	I	1
<i>apiata, Le Guillou</i>	V	22	<i>lentiginosa, Reeve</i>	III.	9
<i>bimaculata, Reeve</i>	I.	2	<i>lineata, Lamarck</i>	VIII.	31
<i>Bougainvillii, Recluz</i>	VII.	30	<i>livida, Reeve</i>	III.	13
<i>cerulescens, Reeve</i>	VII.	29	<i>Luzonica, Souleyet</i>	III.	11
<i>clypeolum, Recluz</i>	IV.	24	<i>macrocephala, Le Guillou</i>	VII.	28
<i>Cookii, Recluz</i>	IV.	14	<i>magnifica, Reeve</i>	IV.	16
<i>Crepiduloides, Reeve</i>	V.	19	<i>orbicularis, Sowerby</i>	II.	5
<i>Cumingiana, Recluz</i>	II.	7	<i>orientalis, Reeve</i>	VIII.	33
<i>depressa, Lessou</i>	I.	3	<i>porcellana (Patella), Linn.</i>	II.	6
<i>elliptica, Lamarck</i>	II.	6	<i>psittacea, Reeve</i>	V.	23
<i>Entrecaustauxii, Recluz</i>	VIII.	32	<i>pulehella, Reeve</i>	VI.	25
<i>eximia, Reeve</i>	VI.	26	<i>reticulata, Reeve</i>	V.	20
<i>Freycineti, Recluz</i>	I.	4	<i>sanguisuga, Reeve</i>	IV.	17
<i>haustum, Reeve</i>	IV.	18	<i>scarabaeus, Reeve</i>	III.	12
<i>inistiguis, Reeve</i>	V	21	<i>tes-sellata, Lamarck</i>	VI.	27

MONOGRAPH
OF THE GENUS
SIPHONARIA.

"Part single, or with mate.
Graze the seaweed, their pasture,
And through groves of coral stray."—*Milton*



39

38



SIPHONARIA.

PLATE I.

Genus SIPHONARIA, *Sowerby*.

Testa ovata, nunc elevato-conica, vertice uncinato, nunc depressa, radiatio costata vel lirata, margine denticulata. Impressio muscularis antice interrupta, latero-canali plus minus distincte imbuta.

Shell ovate, sometimes elevately conical, uncinatè at the top, sometimes depressed, radiately ribbed or striated, denticulated at the margin. Muscular impression interrupted in front, more or less distinctly marked, with a canal leading to the side.

The attention of Mr. Sowerby was first attracted to this group of Limpets, as distinguished from the ordinary *Patelle*, by the impressed mark, on one side of the interior, of an outlying siphon. The animal was successively anatomized by De Blainville and M. Quoy, and a structure corresponding with this mark was found to exist in the form of a canal, used for the conveyance of water to the branchial cavity, which proved to be situated in the back of the neck. The first recognized species were described and figured by Mr. Sowerby, in his 'Genera of Shells.' The soft parts were figured by M. Quoy in the 'Voyage de l'Astrolabe,' but several of the shells named in that work as distinct species, and reproduced as such by M. Deshayes in his edition of Lamarck's 'Animaux sans vertèbres,' appear to be varieties of one and the same species in different states. With the aid of a numerous series of specimens of *Siphonaria*, collected together by Mr. Cuming, I have been enabled to define many new species, and remove previous errors, the whole forming an exceedingly natural group, all readily distinguished by their variations of form, sculpture, and internal colouring.

The *Siphonaria*, as will be seen on reference to the habitats, are widely distributed in both hemispheres.

Species 1. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA DIEMENSIS. *Siph. testâ ovalâ, convexâ, vertice acuto, radiatio costatâ, costis numerosis, rubris, irregularibus; costis albidis, interstitiis versus marginem cinereo-rufescentibus, margine intus conspicuè castaneo alboque lineolato.*

THE VAN DIEMEN'S LAND SIPHONARIA. Shell ovate, convex, sharp at the top, radiately ribbed, ribs numerous, rude, irregular; ribs white, interstices ash-red towards the margin, margin conspicuously lined within with chestnut and white.

QUOY and GAIMARD. Voy. de l'Astrolabe, vol. ii. p. 327. pl. 25. f. 1-12.

Hab. Van Diemen's Land.

An acutely convex species, irregularly closely ribbed, with the interstices excavately grooved, and further distinguished by the inner margin being conspicuously tessellated.

Species 2. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA SCABRA. *Siph. testâ orbiculari, subdepressâ, convexâ, vertice obtusè annulatâ, radiatio costatâ, costis rubris, scabris; costis sordidè albidis, interstitiis purpureo-fuscescentibus, intus purpureo-lineatâ.*

THE ROUGH SIPHONARIA. Shell orbicular, rather depressly convex, obtusely pointed at the top, radiately ribbed, ribs rude and scabrous; ribs dirty-white, interstices purple-brown, interior purple-lined.

Hab. Port Jackson, Australia.

Of a more orbicular form than the preceding species, with the ribs more rough and irregular, and the shell being of thinner substance, the purple linear painting is seen running up further in the interior.

Species 3. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA GIGAS. *Siph. testâ elevato-convexâ, radiatio fortiter costatis, costis rufè angulatis, acutis, interstitiis striatis; fuscâ, versus marginem nigricante lineatâ.*

THE GIANT SIPHONARIA. Shell elevately convex, radiately strongly ribbed, ribs rudely angled, sharp, interstices striated; brown, stained with black towards the margin.

SOWERBY, Tankerville Catalogue, App., p. vii. n. 808.

Hab. Galapagos Islands and Panama.

This fine species is well distinguished by its strong, rude, angularly raised ribs, radiating from the top like buttresses.

Species 4. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA DENTICULATA. *Siph. testâ ovalâ, crassius-*

vulā, subirregulari, depressè convexā, radiatim costatā, costis rudibus, alternatim majoribus; intus livido-castaneā, margine albo maculatā.

THE TOOTHED SIPHONARIA. Shell ovate, rather thick, somewhat irregular, depressly convex, radiately ribbed, ribs rude, alternately larger: interior livid chestnut, white-spotted at the edge.

QUOY and GAIMARD, Voy. de l'Astrolabe, vol. ii. p. 340. pl. 25. f. 19 and 20.

Hab. Australia.

Chiefly distinguished by the livid brown colouring of the interior and short white tessellated spots of the inner margin.

Species 5. (Fig. *a, b*, Mus. Cuming.)

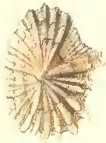
SIPHONARIA LEVIUSCULA. *Siph. testa suborbiculari, elevato-convexā, vertice anticè subinclinato, radiatim livatā et sulcatā, liris laevibus; sordidè cinerā, intus purpureo-refescente, margine viz denticulatā.*

THE SMOOTH SIPHONARIA. Shell suborbicular, elevately convex, top a little inclined anteriorly, radiately ridged and grooved, ridges smooth; dirty-ash, interior purple-red, scarcely denticulated at the edge.

DE BLAINVILLE, MS. Mus. Cuming.

Hab. Valparaiso.

An orbicular raised shell, with the top a little inclined towards the front. The outer surface is only superficially ridged, while the interior is of a peculiar purple-red colour.



SIPHONARIA.

PLATE II.

Species 6. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA FUSCULATA. *Siph. testā ovatā, elevatā, prominē dēnē costatā et liratā; costis lirisque opaco-albis, interstitiis fusciscentibus.*

THE CORDED SIPHONARIA. Shell ovate, raised, prominently densely ribbed and ridged; ribs and ridges opaque white, interstices light brown.

Hab. Van Diemen's Land.

A raised ovate species, closely rayed throughout with opaque white ribs and ridges upon a light brown ground, with the siphon very distinctly indicated in the interior.

Species 7. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA CANCER. *Siph. testā suboblongo-ovatā, convexo-depressā, valdē irregulari, radiatim costatā, costis fortibus, rudibus, subcorrugatis, tribus prope siphonem distantibus; sordidē purpurascēte-fuscā.*

THE CRAB SIPHONARIA. Shell somewhat oblong-ovate, convexly depressed, very irregular, radiately ribbed, ribs strong, rude, subcorrugate, three next the siphon distant; dull purple-brown.

Hab. New Zealand.

A rather depressly convex species, rayed with subcorrugate rude ribs, three of which on the side of the siphon are widely separated.

Species 8. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA CHARACTERISTICA. *Siph. testā rotundatā, elevato-conicā, radiatim obscurē liratā et striatā; cinereo-nigricante, prope verticem ferrugineā, liris albidis.*

THE CHARACTERISTIC SIPHONARIA. Shell rounded, elevately conical, radiately obscurely ridged and striated; cinder-black, rusty-brown near the top, ridges whitish.

REEVE, *Conch. Systematica*, vol. ii. pl. 138. f. 3.

Hab. Galapagos Islands and Panama.

Of a very elevated conical form, merely sculptured with rather obscure ridges and striae.

Species 9. (Fig. *a, b, c, d*, Mus. Cuming.)

SIPHONARIA SIPHO. *Siph. testā subacutē conicā, Balanusiformi, variē radiatim costatā et liratā; costis lirisque opaco-albis, interstitiis purpurascēte-fuscis.*

THE SIPHON SIPHONARIA. Shell somewhat acutely conical, Balanus-shaped, variously radiately ribbed and ridged; ribs and ridges opaque white, interstices purple-brown.

SOWERBY, *Genera of Shells, Siphonaria*, f. 1 and 4.

Siphonaria exigua, Sowerby.

Siphonaria crebricostata, Nuttall.

Siphonariae albicans, Zelandica, acuta, punctata, and plicata; Quoy and Gaimard.

Hab. Philippine Islands.

This species, of which fine specimens, such as those figured, were collected in abundant variety by Mr. Cuming at the Philippine Islands, differs materially in the character of its sculpture, the ribs being sometimes numerous and close-set, as in Mr. Sowerby's typical specimen, sometimes distant, with small intervening ridges, as in *S. exigua* of the same author.



11a



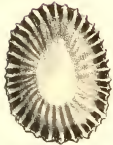
10a



11b



12a



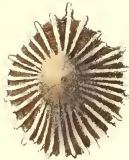
10b



12b



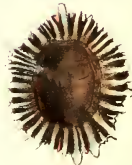
13a



11c



10c



11d

SIPHONARIA.

PLATE III.

Species 10. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA VENOSA. *Siph. testā ovatā, elevato-conicā, crassiusculā, radiatim densē striatā, striis nigris, elevatiusculis.*

THE VEINED SIPHONARIA. Shell ovate, elevately conical, rather thick, radiately densely striated, striae black, somewhat raised.

Hab. Cape Coast.

A raised oblong conical species, of rather solid growth, characterized within and without with pencil-black raised lines.

Species 11. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA LINEOLATA. *Siph. testā depressē ovatā, tenui, radiatim obtusē costatā, costis latis, versus verticem obsolete; pellucido-fuscā, nigro linctā, costis pellucido-albis.*

THE LINEOLATE SIPHONARIA. Shell depressly ovate, thin, radiately obtusely ribbed, ribs broad, obsolete towards the top; transparent brown, black-stained, ribs transparent white.

SOWERBY, *Pro. Zool. Soc.* 1835, p. 6.

Siphonaria plana, Quoy and Gaimard.

Hab. Chili and Central America (on rocks in exposed situations); Cuming.

Chiefly distinguished by its broad sinuated transparent white superficial ribs.

Species 12. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA OBLIQUATA. *Siph. testā ovato-oblongā, subdepressā, radiatim obliquatē liratā, vertice uncinatā; cinereo-fuscā.*

THE CROOKED SIPHONARIA. Shell ovately oblong, rather depressed, radiately crookedly ridged, vertex uncinately; ash-brown.

SOWERBY, Tankerville Catalogue, App. p. 7. n. 809.

Siphonaria scutellum, Deshayes.

Hab. New Zealand.

This oblong species, quite unique in form and dimensions, has a sharp uncinately apex, and is crookedly distorted throughout.

Species 13. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA CONCINNA. *Siph. testā subdepressē ovatā, acutē rudē costatā, costis numerosis; costis albidis, interstitiis ferrugineo-nigris.*

THE NEAT SIPHONARIA. Shell subdepressly ovate-sharply rudely ribbed; ribs white, interstices rusty-black.

SOWERBY, *Genera of Shells*, f. 1 and 2.

Hab. Gambia and Mauritius.

Of a characteristic oval dish-shape, neatly coloured with shining purple-black between the white ribs.

Species 14. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA ATRA. *Siph. testā depressē ovatā, tenui, radiatim costatā, costis subacutis, irregularibus, interstitiis striatis; pellucido-nigrā aut rufo-fuscā, costis albidis.*

THE BLACK SIPHONARIA. Shell depressly ovate, thin, radiately ribbed, ribs rather sharp, irregular, with the interstices striated; transparent black or red-brown, ribs whitish.

QUOY and GAIMARD, *Voy. de l'Astrolabe*, vol. ii. p. 337. pl. 25. f. 41, 42.

Siphonaria Coreensis, Adams and Reeve.

Hab. Singapore, Corea, Island of Vanikoro.

Closely allied to *S. lineolata*, though sufficiently distinguished by the ribs being more pronounced, with intervening striae.



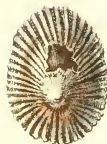
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SIPHONARIA.

PLATE IV.

Species 15. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA EQUILORATA. *Siph. testā oblongo-ovata, irregulari, convexo-depressa, vertice uncinata, dense rufè striata, margine tenuè denticulato; sordidè fusca, intus purpureo-castaneè.*

THE FRINGED SIPHONARIA. Shell oblong-ovate, irregular, convexly depressed, uncinata at the top, densely rudely ridged, margin finely denticulated; dirty brown, purple-chestnut within.

GRAY, MS., Mus. Cuming.

Hab. Mazatlan.

Closely allied to *S. denticulata*, but uncinata at the top and more finely sculptured.

Species 16. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA FICA. *Siph. testā ovata, convexa, vertice subacuminata, radiatim costata, costis fortibus, distantibus, intersitiis striatis; intus castaneè atrè, costis albis.*

THE PIED SIPHONARIA. Shell ovate, convex, rather acuminated at the top, radiately ribbed, ribs strong, distant, striated in the interstices; black, ribs white, black within and without.

SOWERBY, Pro. Zool. Soc. 1835, p. 6.

Hab. Acapulco.

Well characterized by its distant white ribs upon a black ground.

Species 17. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA BRASILIANA. *Siph. testā ovata, depressiusculata, dense corrugato-costata, vertice obtuso; sordidè albicante, intus fusco-nigro eleganter striata.*

THE BRAZILIAN SIPHONARIA. Shell ovate, rather depressed, closely corrugately ribbed, top obtuse; dirty white, within elegantly lined with brown-black.

Hab. Rio Janeiro.

A rather depressly close-ribbed shell, elegantly pencilled with brown-black in the interior.

Species 18. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA PALPEBRUM. *Siph. testā ovata, subregulari, convexa, radiatim dense striata, stris nigris, elevatisculis.*

THE EYE-LID SIPHONARIA. Shell ovate, somewhat irregular, convex, radiately densely striated, striae black, slightly raised.

Hab. Lisbon.

Sculptured round the margin with closely-set pencilled black striae.

Species 19. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA COSTATA. *Siph. testā ovata, acuminato-convexa, tenui, vertice uncinato, radiatim corrugato-costata, costis interdum partim obsolete; sordidè cineris, intus purpureo-rufa.*

THE RIBBED SIPHONARIA. Shell ovate, acuminately convex, thin, top uncinated, radiately wrinkle-ribbed, rib-sometimes partially obsolete; dull ash, interior purple-red.

SOWERBY, Pro. Zool. Soc. 1835, p. 6.

Hab. Guacama, Central America.

Of rather thin, rude growth, deep purple-red in interior.

March, 1856.



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SIPHONARIA.

PLATE V.

Species 20. (Mus. Cuming.)

SIPHONARIA KURRACHEENSIS. *Siph. testā depresso-conicā, subacutē costatā, lirā centrali strisque in interstitiis, siphone subsensuoso; albā, croceo plus minus tinctā, prope verticem nigro pallidē radiatā.*

THE KURRACHEE SIPHONARIA. Shell depressly conical, rather sharply ribbed, with a central ridge and striae in the interstices, siphon rather conspicuous; white, more or less tinged with yellow, faintly rayed with black near the top.

Hab. Kurrachee, Scinde.

Distinctly rayed with small equidistant ribs, faintly impressed towards the top with black hair-lines upon a white ground tinged with yellow.

Species 21. (Mus. Cuming.)

SIPHONARIA ZEBRA. *Siph. testā depresso-conicā, radiatā costatā et liratā, costis irregularibus, hic illic conspicuis, siphone distincto; albā, maculis nigris nūā vel duabus.*

THE ZEBRA SIPHONARIA. Shell depressly conical, radiately ribbed and ridged, ribs irregular, here and there conspicuous, siphon distinct; white, with one or two black blotches.

Hab. Philippine Islands.

Of more irregular uncouth growth than the preceding species, ribbed more on one side and blotched quite promiscuously with black.

Species 22. (Mus. Cuming.)

SIPHONARIA BIFURCATA. *Siph. testā perlepressē conicā, tenuiculā, radiatā costatā, latis, obtusis, subsuperficialibus; lutescente-albā, costarum interstitiis nigro radiatis.*

THE BIFURCATE SIPHONARIA. Shell very depressly conical, rather thin, radiately ribbed, ribs broad, obtuse, rather superficial; yellowish-white, interstices between the ribs rayed with black.

Hab. Port Jackson, Australia; Strange.

A rather flat thin species, rayed with obtuse superficial

ribs, the interstices between which are stained with rusty-black.

Species 23. (Fig. a, b, Mus. Cuming.)

SIPHONARIA TRISTENSIS. *Siph. testā ovato-conicā, tenuiculā, vertice subobliquē acuminatō et intorto; sordidē virescente, lineis fuscis irregulariter radiatis filisā, intus nitente castaneā.*

THE TRISTAN SIPHONARIA. Shell ovately conical, rather thin, vertex somewhat obliquely acuminated and twisted in; dull greenish, irregularly radiately threaded with bifurcate brown lines, interior shining chestnut.

SOWERBY, Genera of Shells, f. 3.

Patella Tristensis, Leach.

Siphonaria Lessouii, Blainville.

Hab. Tristan D'Acunha, West Indies.

Of the same obliquely intorted *Capulus* type as the preceding species, but more erect.

Species 24. (Fig. a, b, Mus. Cuming.)

SIPHONARIA REDIMICULUM. *Siph. testā tumidē conicā, Capuliformi, vertice conspicuē obliquē intortā, subobsolete radiatis liratā, tenuiculā; sordidē nigrā.*

THE BONNET SIPHONARIA. Shell tumidly conical, *Capulus*-shaped, with a vertex conspicuously obliquely twisted in, rather obsoletely radiately ridged, rather thin; dirty black.

Hab. ———?

Curiously distinguished by its light *Capulus*-like form, with the vertex being prominently obliquely twisted inwards.

Species 25. (Fig. a, b, Mus. Cuming.)

SIPHONARIA MACGILLIVRAYI. *Siph. testā ovatā, conicā, Capuliformi, vertice obliquē intorto, obsolete costatā, costis distinctibus, sordidē fuscā, intus nitidē castaneā.*

MACGILLIVRAY'S SIPHONARIA. Shell ovate, conical, *Capulus*-shaped, with vertex obliquely twisted in-

SIPHONARIA.—PLATE V.

wards, obsolete ribbed, ribs distant; dirty brown, interior shining chestnut.

Hab. Island of St. Paul's.

Of the same *Copulus* type as the two previous species, small and faintly distantly ribbed.

Species 26. (Ms. Cumiug.)

SIPHONARIA FERRUGINEA. *Siph. testā subdepressā, radiatum costatis, costis acutis, rudibus, irregularibus,*

siphone conspicuo; sordide nigrescente, intus nigro-castaneo varicinctā.

THE RUSTY SIPHONARIA. Shell rather depressed, radiately ribbed, ribs sharp, rude, irregular, siphon conspicuous; dirty blackish, variously stained within with blackish-chestnut.

Hab. — ?

A depressed rudely ribbed species, promiscuously stained within with blackish-chestnut, the margin being prettily denticulated and edged with the same colour.



27 a



28 a



28 b



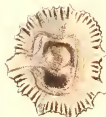
29 a



30 a



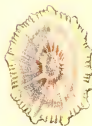
31 a



32 a



33 a



33 b



27 b

SIPHONARIA.

PLATE VI.

Species 27. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA SQUIJORENSIS. *Siph. testā depressè ovatā, radiatim fortiter costatā et striatā, costis anticis latè divergentibus; pellucida-albā, intus ferrugineo-nigro partim tinctā.*

THE SQUIJOR SIPHONARIA. Shell depressly ovate, radiately strongly ribbed and striated, anterior ribs broadly diverging; transparent white, partially stained within with rusty black.

Hab. Island of Squijor, Philippines.

A flat transparent white species, with the side ribs broadly diverging, and the interior partially stained with rust-black.

Species 28. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA COCHLEARIFORMIS. *Siph. testā ovatā, plano-convexā, subirregulari, profusè radiatim corrugato-riatā, sinu laterali latè cochleariformi; albā, intus aurantiis-fusco tinctā.*

THE SPOON-SHAPED SIPHONARIA. Shell ovate, flatly convex, rather irregular, profusely radiately wrinkle-ridged, lateral sinus broad, spoon-shaped; whitish, stained within with orange-brown.

Hab. Isle of Hainan, coast of China.

Of an irregular convexly flattened growth, closely wrinkle-ridged, with a broad spoon-shaped sinus.

Species 29. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA LUZONICA. *Siph. testā suborbiculari, depressè convexā, radiatim costatā, costis distantibus, angustis, prominantibus, interstitiis nitidè elevato-striatis; pellucida-albā, ferrugineo-nigro partim tinctā.*

THE LUZON SIPHONARIA. Shell suborbicular, depressly convex, radiately ribbed, ribs distant, narrow, prominent, interstices neatly elevately striated; transparent white, partially stained with rust-black.

Hab. Putcao, Island of Luzon, Philippines.

Characterized by strong distant ribs, the interstices being neatly sculptured with close-set, raised striae.

Species 30. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA BACONI. *Siph. testā convexo-planā, nitidè radiatim ficutā, interstitiis tenuistriatis; albā, ferrugineo-nigro pallidè maculatā, intus aurantio tinctā.*

BACON'S SIPHONARIA. Shell convexly flattened, neatly radiately ridged, interstices finely striated; white faintly spotted with rust-black, tinged with orange within.

Hab. Swan River, New Holland; Bacon.

Distinguished by a particularly neat and delicate pattern of rayed sculpture.

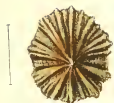
Species 31. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA CORRUGATA. *Siph. testā suboblongo-ovata, depressā, radiatim costatā, interstitiis nitidè striatis, costis anticis lateralibus latè divergentibus; albā, pallidè fuscescente tinctā.*

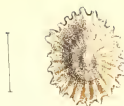
THE PUCKERED SIPHONARIA. Shell somewhat oblong-ovate, depressed, radiately ribbed, interstices neatly striated, the anterior lateral ribs broadly diverging white, tinged with pale brown.

Hab. Putcao, Island of Luzon, Philippines; Cuming.

Distinguished chiefly by its more oblong form and prominently developed ribs.



22a



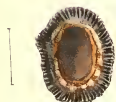
27a



23b



26a



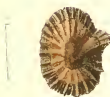
25a



24b



27b



24a



24c



27c

SIPHONARIA.

PLATE VII.

Species 32. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA SPINOSA. *Siph. testā oratā, subdepressā, apice lateraliter uncinato, radiatim costatā, costis submarginatis, profuse spinulato-spinosis; intesevato-albā.*

THE SPINED SIPHONARIA. Shell ovate, rather depressed, apex laterally unciniate, radiately ribbed, ribs rather narrow, profusely squamately spined; yellowish-white.

Hab. New Zealand.

Distinguished in a characteristic manner from all other species by its squamate spines.

Species 33. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA AMARA. *Siph. testā ovatā, depresso-conoides, apice anticē uncinato, radiatim dense costatā et liratā; nigra, albo fasciatim radiatā.*

THE BLACKISH SIPHONARIA. Shell ovate, depressly conoid, apex anteriorly unciniate, radiately closely ribbed and ridged; black, rayed with white bands.

NUTTALL, MS., Mus. Cuming.

Hab. California.

Chiefly to be recognized by its white rays upon a under-black ground.

Species 34. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA FULIGINATA. *Siph. testā orbiculari, oratā, subdepressā, obscure radiatim fimbriato-costatā, costis creviss apicea obsolete; sordidē albā, ferrugineo-nigro sparsim unculatā.*

THE SPOTTED SIPHONARIA. Shell orbicularly ovate, rather depressed, obscurely radiately fimbriately ribbed, ribs

obsolete toward the apex, dull white, sparingly blotched with rusty-black.

Hab. —?

The ribs of this species have a furbelowed appearance near the margin, and are obsolete towards the apex.

Species 35. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA FUNICULATA. *Siph. testā oratā, depresso-conoides, apice anticē uncinato, radiatim dense elevato-striatā; carulescente-nigra, striis lividis.*

THE CORDED SIPHONARIA. Shell ovate, depressly conoid, apex anteriorly unciniate, radiately densely elevately striated; blue-black, striae livid.

Hab. —?

A somewhat conoid species, densely rayed with raised livid striae upon a black ground, the apex being slightly hooked anteriorly.

Species 36. (Fig. *a, b*, Mus. Cuming.)

SIPHONARIA MAURA. *Siph. testā ovatā, subdepressā, apice lateraliter uncinato, radiatim liratā, liris subdistinctibus, intersitiis striatis; sordidē fusciscente, fusco nigra juxta marginem, latus alente atrā.*

THE MOOR SIPHONARIA. Shell ovate, rather depressed, apex laterally unciniate, radiately ridged, ridges rather distant, with the interstices striated; dull brown, with a black band next the margin, interior shining black.

SOWERBY, Pro. Zool. Soc. 1835, p. 7.

Hab. Panama.

A little shining black species, rusty-brown exteriorly except next the margin.

SIPHONARIA.

	Plate.	Species.		Plate.	Species.
<i>acuta</i> , Quoy	II.	9	<i>Kurraheensis</i> , Reece	V.	20
<i>aquilorata</i> , Reece	IV.	15	<i>Lessoni</i> , Blainville	V.	23
<i>albicans</i> , Quoy	II.	9	<i>leviscula</i> , Blainville	I.	5
<i>anara</i> , Nuttall	VII.	33	<i>lineolata</i> , Sowerby	III.	11
<i>atra</i> , Quoy	III.	14	<i>Luzonica</i> , Reece	VI.	29
<i>Baconi</i> , Reece	VI.	30	<i>Macgillivrayi</i> , Reece	V.	25
<i>bifurcata</i> , Reece	V.	22	<i>naara</i> , Sowerby	VII.	36
<i>Brasiliana</i> , Reece	IV.	17	<i>obliquata</i> , Sowerby	III.	12
<i>cancer</i> , Reece	II.	7	<i>palpebrum</i> , Reece	IV.	18
<i>characteristica</i> , Reece	II.	8	<i>pica</i> , Sowerby	IV.	16
<i>cochlicariformis</i> , Reece	VI.	28	<i>plana</i> , Quoy	III.	11
<i>coccinna</i> , Sowerby	III.	13	<i>plicata</i> , Quoy	II.	9
<i>Coreensis</i> , Adams and Reece	III.	14	<i>punctata</i> , Quoy	II.	9
<i>corrugata</i> , Reece	VI.	31	<i>redimiculum</i> , Reece	V.	24
<i>costata</i> , Sowerby	IV.	19	<i>scabra</i> , Reece	I.	2
<i>crebricostata</i> , Nuttall	II.	9	<i>scutellum</i> , Deshayes	III.	12
<i>denticulata</i> , Quoy	I.	4	<i>sipho</i> , Sowerby	II.	9
<i>Diemenensis</i> , Quoy	I.	1	<i>Siquijorensis</i> , Reece	VI.	27
<i>exigua</i> , Sowerby	II.	9	<i>spinosa</i> , Reece	VII.	32
<i>ferruginca</i> , Reece	V.	16	<i>Tristensis</i> , Sowerby	V.	23
<i>fuliginata</i> , Reece	VII.	34	<i>venosa</i> , Reece	III.	19
<i>fumilulata</i> , Reece	II.	6	<i>zebra</i> , Reece	V.	21
<i>lirata</i> , Reece	VII.	35	<i>Zelandica</i> , Quoy	II.	9
<i>gigas</i> , Sowerby	I.	3			

ERRATUM.

Sp. 35. For *S. fraterlata* read *S. frata*.

MONOGRAPH

OF THE GENUS

N E R I T A .

A thing of beauty is a joy for ever.—*Keats*.



NERITA.

PLATE I.

Genus NERITA. *Linnaeus.*

*Testa globoso-orata, spirâ rariâ exsertâ, aperturâ subcon-
pressâ convolutâ, interdum levigatâ, plerumque spiro-
liter costatâ et liratis, apertura sua subbimber, latera
intus crevato-lirata, interdum ad latera glaberrima;
area columellari subauctâ, sæpè granulatâ aut verru-
gatâ, ad marginem plerumque dentatâ; columæ variae,
sæpius in vicinâ pictâ; operculo testaceo.*

Shell globosely ovate, spire rarely exserted, whorls rather compressly convoluted, sometimes smooth, generally spirally ribbed or ridged, aperture semiobovate, lip crenately ridged within, sometimes toothed at the sides, columellar area rather large, often granulated or wrinkled, generally toothed at the margin; colour various, mostly brightly painted; operculum testaceous.

The Sea Nerites have always been a favourite tribe of shells among collectors, on account of their pretty varieties of painting. The animal of the Freshwater Nerites, which I propose, contrary to the opinion of some conchologists, to associate still under the head of *Neritina*, is the same, but the shell is of lighter structure and of more sombre hue. From *Natica* the shell of *Nerita* differs in being more sculptured and more brilliantly coloured, and the columellar area is, with few exceptions, toothed, and either grained or wrinkled. The genus has been well examined by M. Recluz, but several of his species I have been unable to identify for want of figures. Fortunately the types of most of this French conchologist's species are in the collection of Mr. Cuming, who confided his specimens to him about fifteen years since for description. The species which are named for the first time in the following Monograph have accumulated since that period.

The *Nerites* are most abundant in the Molucca and Philippine Islands, and New Zealand and Australia contribute some fine species. A few species inhabit the shores of Central America and the West Indies, but the genus is not represented generally in the New World. The species are less numerous than those of *Neritina*, and there are few of small size.

Species 1. (Fig. a, b, Mus. Cuming.)

NERITA EXVIA. *Ner. testâ ovatâ, crassâ, subtus plano-
excavatâ, spirâ minutâ, laterali, superficialiâ, apice*

*ovato, multoties subauctâ rotundatâ, spirâ rariâ
costatâ, costis angustis, striatis, apice subcon-
pressâ convolutâ, interdum levigatâ, plerumque spiro-
liter costatâ et liratis, apertura sua subbimber, latera
intus crevato-lirata, interdum ad latera glaberrima;
area columellari subauctâ, sæpè granulatâ aut verru-
gatâ, ad marginem plerumque dentatâ; columæ variae,
sæpius in vicinâ pictâ; operculo testaceo.*

THE SEMI-OVATE NERITE. Shell ovate, thick, flatly excavated beneath, spire minute, lateral, superficial, short at the apex, whorls rather narrowly rounded, spirally ribbed, ribs narrow, raised, intermediate grooves broad, conspicuously excavated, with a small central ridge running through them, interior of the aperture ridged, columella very broadly concave, granulated, and minutely toothed in the middle at the edge; ribs blue-black, sparingly marked with white lines, groove whitish, spotted with blue-black, columellar area fulvous-lined.

LINNEUS (not of Lamouré), Mus. reg. Ulricæ, p. 682.

Nerita Malaccensis, Lamouré.

Hab. Philippine Islands; Cuming.

Much confusion has arisen through confounding the well-known *N. pleura* of Chemnitz with the Linnaean *N. exviva*; but the description "nigricans lineis transversis albidis" in the careful diagnose above referred to, does not apply to that species.

Species 2. (Fig. a to d, Mus. Cuming.)

NERITA POLITA. *Ner. testâ obliquè ovatâ, subtus plano-
convexâ, crassâ, spirâ minutâ, obtusè planatâ, infran-
tibus angustè rotundatâ, spirâ versus lateraliâ compressâ,
levigatâ, et corrugato-striatâ, apertura foveâ
vir obsolete liratâ, arâ columellari ad marginem rudè
tenè dentatâ; caricè vicinè coloratâ, subtus albâ, poli-
tâ.*

THE POLISHED NERITE. Shell obliquely ovate, flatly convex beneath, thick, spire minute, obtusely flattened, whorls narrowly rounded, laterally compressed towards the spire, smooth or wrinkle-striated, interior of the aperture scarcely obsolete ridged, columellar area rudely finely toothed at the edge; variously brightly coloured, white and polished beneath.

LINNEUS, Syst. Nat. (10th edit.) p. 778.

Nerita nigra, flavescens, and hieroglyphica, Chemnitz.

Nerita batesi and *diffusa*, Gmelin.

Hab. Philippine Islands, Mauritius, etc.

Extremely variable in colouring and marking, but always characterized by its peculiar pinched form next the spire.

Species 3. (Fig. *a, b*, Mus. Cuming.)

NERITA ORNATA. *Ner. testā globoso-turbinatā, solidissimā, spirā exsertā, prominētā, anfractibus superiōrē declivibus, deorsū reticulatis, omnique densè spirāliter costatis, costis regularibus, subplanis, apertura intus inossatā et serratā, arēā columellari corrugatā et eadē dentatā; albida, costis plus minus interruptè maculato-nigris.*

THE ADORNED NERITE. Shell globosely turbinated, very solid, spire exerted, rather prominent, whorls slanting at the upper part, then rounded, everywhere closely spirally ribbed, ribs regular, rather flat, aperture inwardly thickened and serrated, columellar area wrinkled and rudely toothed; whitish, ribs more or less interruptedly blue-black.

HOWEBY, Genera of Shells, No. 10.

Hab. Panama and Gallapagos Islands (on the rocks at low water); Cuming.

The largest and most solid species of the genus, spirally flatly ribbed throughout; the ribs being of moderate

width, regular, and close-set, and coloured with blue-black promiscuously interrupted with white.

Species 4. (Mus. Cuming.)

NERITA QUADRICOLOR. *Ner. testā subglobosā, solidissimā, spirā subexsertā, anfractibus superiōrē declivibus, deorsū convexis, spicūliter costatis, costis parvisentis, numerosis, subirregularibus, apertura fauce tenuiter serratā, arēā columellari sparsim granulatā et corrugatā, ad marginē conspiciēte dentatā; pallidè roseo-rubra, costis irregulariter nigro maculatis, apice lutescente.*

THE FOUR-COLOURED NERITE. Shell subglobose, rather solid, spire somewhat exerted, whorls slanting round the upper part, then convex, spirally ribbed, ribs rather small, numerous, somewhat irregular, interior of the aperture finely serrated, columellar area sparingly granulated and wrinkled, conspicuously toothed at the edge; pale pinkish-violet, ribs irregularly spotted with black, apex yellowish.

Gmelin, Syt. Nat. (13th edit.) p. 3684.

Nerita exilis rubri, Chemnitz.

Hab. Red Sea.

Colour, which in the preceding species is too variable to be of any specific value, is in this species very characteristic, the specimens being always of the same pinkish-violet hue with yellow apex.



NERITA.

PLATE II.

Species 5. (Mus. Cuming.)

NERITA ANTIQUATA. *Ner. testā globosā, solidā, compactā, spirā plano-depressā, anfractibus rotundatis, concentricè dense lirato-striatis, aperturā intus incrassatā, obsolete serratā, arēā columellari leviter corrugatā, bifidatā; griseo-albā, pallidē nigricante variè nebulosā et lentiginosā, columellā vitellinā.*

THE ANTIQUATED NERITE. Shell globose, solid, compact, spire flatly depressed, whorls rounded, concentrically closely ridge-striated, aperture thickened inwardly, obsolete serrated, columellar area faintly wrinkled, two-toothed; greyish-white, variously clouded and freckled with pale black, columella yell.-yellow.

RECLUZ, *Bevue Zool. Soc. Cuvierienne*, 1841, p. 106.

Hab. Philippine Islands; Cuming.

A particularly rounded solid shell, compressed towards the spire, sculptured throughout with close-set concentric ridge-like striae, with a characteristic yell.-yellow stain across the toothed edge of the columella.

Species 6. (Mus. Cuming.)

NERITA COSTATA. *Ner. testā globosā, solidā, spirā obtusè planatā, spiritaliter costatā, costis rotundatis, regularibus, interstitiis nitidè excavatis, aperturā incrassatā, fortiter serratā et dentatā, arēā columellari coarctā, corrugatā, fortiter dentatā; costis conspicuè carbonario-nigris, interstitiis fulcis, arēā columellari superne luteo tinctā.*

THE RIBBED NERITE. Shell globose, solid, spire obtusely flattened, spirally ribbed, ribs rounded, regular, the interstices neatly excavated, aperture thickened, strongly serrated and toothed, columellar area convex, wrinkled, strongly toothed; ribs conspicuously coal-black, interstices yellowish, columellar area stained with yellow at the upper part.

CHEMNITZ, *Conch. Cab.* vol. v. p. 299. pl. 191. f. 1966, 1967.

Hab. Island of Nicobar.

A compressly rounded solid shell, conspicuously distinguished by its bold symmetrical coal-black ribs, yellowish in the interstices.

Species 7. (Mus. Cuming.)

NERITA DESHAYESI. *Ner. testā globoso-turbinatā, crassā, spirā subexsertā, anfractibus superne subdeclivibus, deinde rotundatis, spiritaliter costatis, costis tenuibus, numerosis, valde irregularibus, subserratis, aperturā incrassatā, obscure serratā, dentatā, arēā columellari prominè corrugatā, rudissimè fortiter dentatā; lutescente-albā, carneo-nigro sparsim undatā, columellā inter dentes vitellinā.*

DESHAYES' NERITE. Shell globosely turbinated, thick, spire rather exerted, whorls rather slanting at the upper part, then rounded, spirally ribbed, ribs thin, numerous, very irregular, subserrated, aperture thickened, faintly serrated, toothed, columellar area promiscuously wrinkled, very rudely strongly toothed; yellowish-white, sparingly waved with blue-black, columella yell.-yellow between the teeth.

RECLUZ, *Bevue Zool. Soc. Cuvierienne*, 1841, p. 104.

Hab. Panama.

Closely allied to *N. ornata*, from the same locality, but distinguished slightly and characteristically from that species in all particulars. It is turbinated, with the spire less exerted; the ribs are narrower and more irregular, and serrated; the colouring is waved, and the teeth are much more rudely developed.

Species 8. (Mus. Cuming.)

NERITA PELORONTA. *Ner. testā oblongo-globosā, spirā subexsertā, anfractibus superne concavo-declivibus, deinde rotundis, spiritaliter costatis, costis mediocribus, confertis, aperturā intus incrassatā, vix serratā, arēā columellari concavo-excavatā, subirregulariter dentatā; lutescente-albā, nigro et roseo variè flexuosè uncinatā, arēā columellari et inter dentes sanguineo tinctā.*

THE BLEEDING-TOOTH NERITE. Shell oblong-globose, spire somewhat exerted, whorls concavely slanting at the upper part, then rounded, spirally ribbed, ribs middling, close-set, aperture thickened inwardly, scarcely serrated, columellar area concavely excavated, somewhat irregularly toothed; yellowish-white, variously flexuously spotted with black and crimson, columellar area and between the teeth blood-stained.

LINNEUS, *Syst. Nat.* (10th edit.), p. 778.

Hab. West Indies.

This well-known species is distinguished from all others by the remarkable blood-stain on the columellar area.

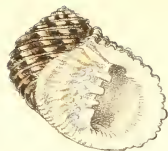
Species 9. (Mus. Cuming.)

NERITA FUNICULATA. *Ner. testā ovatā, solidā, spirā sub-
coarctā, anfractibus rotundatis, liris tenuibus confertis
spiraliter funiculatis, aperturā subincrassatā, vix ser-
ratā, subampliter expansā, areā columellari prominēte
corrugatā, dentatā; purpurascente-nigrā, inter liras
pallidā.*

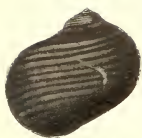
THE CORDED NERITE. Shell ovate, solid, spire slightly exerted, whorls rounded, spirally corded with fine close-set ridges, aperture rather thickened, scarcely serrated, rather largely expanded, columellar area promiscuously wrinkled; purple-black, pale between the ridges.

Hab. ——— ?

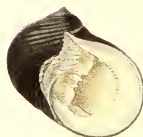
The sculpture of this species resembles that of *N. li-
neata*, except that the ridges are closer set. In the broad
expanded aperture and wrinkled columellar area, it differs
from that species materially.



10a



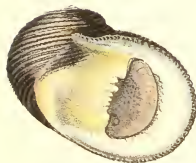
10b



11a



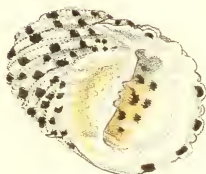
11b



12a



12b



13a



13b



14a



14b

NERITA.

PLATE III.

Species 10. (Mus. Cuming.)

NERITA GROSSA. *Ner. testâ obliquè ovatâ, solidâ, spirâ parâ, vis exsertâ, spirâliter costatâ, costis rotundatis, elevatis, interstitiis subprofundè excavatis, lirâ intermediâ prope aperturam, aperturâ intus incrassatâ et serratâ, arâ columellari corrigatâ et rudè dentatâ; cinereo-griseâ, nigricante-olivaceâ irregulariter articulatâ, apice lutescente.*

THE STOUT NERITE. Shell obliquely ovate, solid, spire small, scarcely exerted, spirally ribbed, ribs round, elevated, interstices rather deeply excavated, with an intermediate ridge next the aperture, aperture thickened and serrated inwardly, columellar area wrinkled and rudely toothed; ash-grey, irregularly articulated with blackish-olive, apex yellowish.

LINNEUS, Syst. Nat. (10th edit.), p. 778. Deshayes, Anim. sans vert. vol. viii. p. 614.

Hab. Island of Burias, Philippines (on the reefs at low water); Cuming.

Distinguished by its raised rounded ribs and excavated interstices, articulated with a characteristic olive-brown tone of colouring.

Species 11. (Mus. Cuming.)

NERITA NIGERRIMA. *Ner. testâ ovato-globosâ, crassâ, spirâ parâ, subsersâ, anfractibus supernè concavo-planatis, dèinde convexis, levibus, spirâliter sulcato-striatis, striis versus aperturam gradatim obsolete, aperturâ intus incrassatâ, tenè serratâ, peculiariter expansâ, arâ columellari subobscurè corrigatâ, leviter denticulatâ; intus cinereo-nigrâ, interdum albipunctatâ, ad aperturam lutescente.*

THE VERY BLACK NERITE. Shell ovately globose, thick, spire small, rather exerted, whorls concavely flattened at the upper part, then convex, smooth, spirally groove-striated, striae gradually obsolete towards the aperture, aperture thickened inwardly, finely serrated, peculiarly expanded, columellar area obscurely wrinkled, slightly toothed; deep blue-black, sometimes white-dotted, yellowish at the aperture.

CHEMNITZ, Conch. Cab. vol. v. p. 309, pl. 192. f. 1985. 1886.

Nerita aterrima, Gmelin.

Hab. — ?

A solid blue-black species, spirally groove-striated, the striae becoming gradually fainter as they approach the aperture, which is peculiarly roundly expanded.

Species 12. (Mus. Cuming.)

NERITA PLEXA. *Ner. testâ ovato-globosâ, spirâ plano-compressâ, anfractibus spirâliter costatâ, costis alternâlim latis et angustis, subirregularibus, undique rugoso-serratis, aperturâ intus subincrassatâ, lirâ, arâ columellari plano-excavatâ, granulatâ, vir dentatâ; albâ, maculis cinereo-nigris subrenatè tessellatâ, apice et arâ columellari luteo tinctis, fauce luteâ.*

THE PLATTED NERITE. Shell ovately globose, flatly compressed at the spire, whorls spirally ribbed, ribs alternately broad and narrow, rather irregular, rugosely serrated throughout, aperture slightly thickened within, ridged, columellar area flatly excavated, granulated, scarcely toothed; white, rather distantly tessellated with blue-black spots, apex and columellar area tinged with yellow, interior yellow.

CHEMNITZ, Conch. Cab. vol. v. p. 190. f. 1944, 1945.

Nerita testilis, Gmelin.

Nerita exuvia, Lamarek (not of Linnæus).

Hab. Philippine Islands; Cuming.

In this well-known species the dark spots are blue-shaded and rather distant, on white ribs, which are alternately broader and narrower, while the apex is impressly flattened and yellowish.

Species 13. (Mus. Cuming.)

NERITA LINEATA. *Ner. testâ oblongo-ovatâ, subglobosâ, apice laterali, parum exsertâ, anfractibus rotundatis, subangustis, nitidè densè spirâliter tenuiliratis, aperturâ subincrassatâ, serratâ, arâ columellari planâ, levigatâ, rudè viximè denticulatâ; roseo-cinereâ, liris purpureo-nigris, arâ columellari luteo tinctâ.*

THE LINEATED NERITE. Shell oblong-ovate, subglobose, apex lateral, but little exerted, whorls rounded, rather narrow, neatly closely finely spirally ridged, aperture slightly thickened, serrated, columellar area flat, smooth, rudely minutely toothed; pink-ash, ridges purple-black, columellar area stained with yellow.

June, 1855.

CHEMNITZ, Conch. Cab. vol. v. pl. 191. f. 1958, 1959.

Hab. Port Essington, North Australia. Philippine Islands.

Of an elegant oblong narrowly globose form, closely sculptured throughout with neat purple-black linear ridges upon a pink-ash ground, the columellar area being conspicuously stained with yellow.

Species 14. (Mus. Cuming.)

NERITA ASCENSIONIS. *Ner. testā ovato-turbinatā, spirā subexsertā, anfractibus superne concavo-impressis, spirāliter costatis, costis rotundatis, subelevatis, nodisque tenuiserratis, interstitiis excavatis, aperturā vix incrassatā, arā columellari obsolete corrugatā, biden-*

tatā; lutescente-albā, costis maculis griseo-nigricantibus dense tessellatis, arā columellari lutescente.

THE ASCENSION NERITE. Shell ovately turbinated, spire rather exerted, whorls concavely impressed at the upper part, spirally ribbed, ribs rounded, rather elevated, finely serrated throughout, interstices excavated, aperture scarcely thickened, columellar area obsolete wrinkled, two-toothed; yellowish-white, ribs thickly tessellated with grey-black spots, columellar area yellowish.

Hab. Island of Ascension.

Of rather light growth, speckled throughout on the ribs with clouded blue-black or grey spots, the interstices being of a yellowish or pinkish hue.



Species 15. (Mus. Cuming.)

NERITA LE GUILLLOUANA. *Ner. testâ subovato-globosâ, crassâ, spirâ subseriatâ, anfractibus declivi-concavis, spiraliter costatis, costis confertis, parvis, medio et juxta suturam majoribus, aperturâ incrassatâ et serratâ, arâ columellari incrassatâ et promiscuè rugulatâ, dentatâ; cinereo-albâ, griseo-olivaceo maculatâ et variegatâ, apice luteo.*

LE GUILLLOU'S NERITE. Shell subovately globose, thick, spire a little exerted, whorls slantingly convex, spirally ribbed, ribs close-set, small, larger in the middle and next the suture, aperture thickened and serrated, columellar area thickened and promiscuously wrinkled, toothed; ash-white, mottled and variegated with grey olive, apex yellow.

RECLUZ, Rev. Zool. Soc. Cuvierienne, 1842, p. 178.

Hab. Philippine Islands.

A solid finely-ribbed species, richly mottled and variegated throughout with greyish-olive, the apex being yellow, and the columellar area much swollen and wrinkled.

Species 16. (Mus. Cuming.)

NERITA ATRATA. *Ner. testâ semiglobosâ, crassâ, spirâ rix exsertâ, anfractibus rotundatis, juxta apicem compressis, spiraliter elevato-striatis, aperturâ raldè incrassatâ, leviter serratâ, rotundato-expansâ, arâ columellari concavâ, minute dentatâ; carbonario-atrâ, inter strias pallidâ.*

THE BLACK NERITE. Shell semiglobose, thick, spire scarcely exerted, whorls rounded, compressed next the spire, spirally elevated striated, aperture much thickened, slightly serrated, rotundately expanded, columellar area concave, minutely toothed; coal-black, pale between the striae.

CHEMNITZ, Coneh. Cab. vol. v. pl. 190, p. 296, f. 1954, 1955.

Hab. Bay of Islands, New Zealand.

The surface of this species is not depressly grooved, as described by Lamarek, but merely finely linearly impressed, or, as Chemnitz characterizes it, "lineis obsolete vix manifestis in fundo nigerrimo circumdata."

Species 17. (Mus. Cuming.)

NERITA MAURA. *Ner. testâ oblongo-oratâ, crassâ, solidâ, spiram versus compressâ, spirâ rix exsertâ, anfractibus spiraliter sulcatis, sulcis linearibus, subconfertis, aperturâ incrassatâ et leviter serratâ, ampliter expansâ, arâ columellari obsolete verrucoso-corrugatâ, dentatâ; griseo-nigricante, cinereo-albo sparsim interruptâ, columellâ pallidè late-sculâ.*

THE MOOR NERITE. Shell oblong-ovate, thick, solid,

compressed towards the spire, spire scarcely exerted, whorls spirally grooved, grooves linear, rather close-set, aperture thickened and slightly serrated, largely expanded, columellar area obsoletely wart-wrinkled, toothed; grey-black, sparingly interrupted with ash-white, columella faintly yellowish.

RECLUZ, Rev. Zool. Soc. Cuvierienne, 1842, p. 179.

Hab. Australia.

An oblong solid shell, rather compressed near the spire, and boldly expanded at the aperture.

Species 18. (Mus. Cuming.)

NERITA CHRYSOSTOMA. *Ner. testâ oratâ, Turbiniformi, crassâ, spirâ exsertâ, anfractibus concavis, spiraliter sulcatâ, sulcis linearibus, subregularibus, aperturâ incrassatâ et serratâ, subexpansâ, arâ columellari promiscuè corrugatâ, dentatâ; sordidè lutescente-albâ, nigricante-olivaceo flexuoso-variegatâ, arâ columellari et aperturâ vitellinis.*

THE GOLDEN-MOUTHED NERITE. Shell ovate, Turbo-shaped, thick, spire exerted, whorls convex, spirally grooved, grooves linear, rather irregular, aperture thickened and serrated, rather expanded, columellar area promiscuously wrinkled, toothed; dull yellowish-white, flexuously variegated with blackish-olive, aperture and columellar area tinged with yell.-yellow.

RECLUZ, Rev. Zool. Soc. Cuvierienne, 1841, p. 104.

Hab. Island of Burias, Philippines (on the reefs at low water); Cuming.

This species when laid upon the aperture has, more than any other, the aspect of a *Turbo*, having externally the typical form, sculpture, and marking of that genus.

Species 19. (Mus. Cuming.)

NERITA SEMIRUGOSA. *Ner. testâ oblongo-globosâ, solidâ, spirâ plano-concavâ, apice exserto, anfractibus liris confertis nitidè spiraliter foveolatis, aperturâ incrassatâ et serratâ, arâ columellari semirugosâ, dentatâ; olivaceo-cinereâ, flammis undatis rosaceis et nigris obliquè undulatis, apice luteo.*

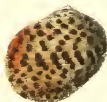
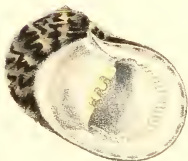
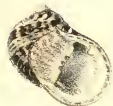
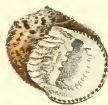
THE HALF-WRINKLED NERITE. Shell oblong-globose, solid, spire flatly concave, with the apex exerted, whorls neatly spirally corded with close-set ridges, aperture thickened and serrated, columellar area half-wrinkled, toothed; olive-ash, obliquely clouded with wavy pink and black flames, apex yellow.

RECLUZ, Rev. Zool. Soc. Cuvierienne, 1841, p. 102.

Eadem var. *Nerita Chemnitzii*, Recluz.

Hab. Island of Ternate, Moluccas.

Distinguished by the neat regularity of its corded ridges and oblique flame-clouded colouring.



NERITA.

PLATE V.

Species 20. (Fig. 16, Mus. Cuming.)

NERITA ARABICA. *Ner. testâ compressâ globosâ, solidâ, spirâ vix exsertâ, anfractibus rotundatis, spirâliter lineari-sulcatis, sulcis superficialibus, aperturâ incrassatâ et tenuiserratâ, arâ columellari verrucoso-rugosâ et dentatâ; olivaceo-viridi, roseo linctâ, punctis et maculis nigris nudique tessellatâ.*

THE ARABIC NERITE. Shell compressly globose, solid, spire scarcely exerted, whorls rounded, spirally linearly grooved, grooves rather superficial, aperture thickened and finely serrated, columellar area wart-wrinkled and toothed; olive-green, tinged with rose, tessellated throughout with black dots and spots.

Hab. Aden, Arabia.

A compressly globose species, superficially linearly grooved, of a rose-stained olive-green hue, tessellated in a characteristic manner with black dots and spots.

Species 21. (Fig. 17, Mus. Cuming.)

NERITA NERITINOIDES. *Ner. testâ ovali, subangustâ, solidâ, spirâ leviter obtusè exsertâ, anfractibus superne concavo-declivibus, lævigatis, aperturâ simplici, arâ columellari concavo-planatâ, obsolete minutè denticulatâ; intense nitente-atrâ, arâ columellari pallidè aurantiâ.*

THE NERITINA-LIKE NERITE. Shell ovate, rather narrow, solid, spire slightly obtusely exerted, whorls concavely slanting at the upper part, smooth, aperture simple, columellar area concavely flattened, obsoletely minutely toothed; intense shining black, columellar area pale orange.

Hab. — ?

A smooth shining black species, partaking in a striking manner of the characters of *Neritina*.

Species 22. (Fig. 18, Mus. Cuming.)

NERITA MAXIMA. *Ner. testâ oblongâ, compressâ, solidâ, subconsertâ, spirâ vix exsertâ, anfractibus superne concavo-planatis, deinde rotundatis, obsolete spirâliter lineari-sulcatâ, lævigatâ, nitente, aperturâ incrassatâ et tenuiserratâ, arâ columellari pallidâ, dentatâ; nigro et albo undato-vehulatâ, nigro prævalente.*

THE VERY LARGE NERITE. Shell oblong, compressed, solid, somewhat twisted, spire scarcely exerted, whorls concavely flattened at the upper part, then rounded, obsoletely linearly spirally grooved, smooth,

shining, aperture thickened and finely serrated, columellar area polished, toothed; wave-clouded black and white, the black predominating.

CHEMNITZ, Conch. Cab. vol. v. p. 287. pl. 190. f. 1942. 1943.

Hab. — ?

This fine species, though faintly linearly grooved, is smooth and shining throughout, clouded profusely with waved black, so as almost to obscure the white.

Species 23. (Fig. 19, Mus. Cuming.)

NERITA GRISEA. *Ner. testâ oblongo-ovalâ, spirâ subersertâ, anfractibus superne concavo-impressis, deinde rotundatis, dense spirâliter sulcatis, aperturâ parvâ incrassatâ, subserratâ, arâ columellari subobsoletè corrugato-liratâ, denticulatâ; albidâ, griseo maculatâ et obscure trifasciatâ, epice pallidè intescente.*

THE GREY NERITE. Shell oblong-ovate, spire slightly exerted, whorls concavely impressed round the upper part, then rounded, closely spirally grooved, aperture but little thickened, faintly serrated, columellar area rather obsoletely wrinkle-ridged, toothed; whitish, spotted and obscurely three-banded with grey, apex pale yellow.

Hab. Island of Samar, Philippines; Cuming.

The surface of this species, having a more or less eroded appearance, is promiscuously spotted and three-banded with grey.

Species 24. (Fig. 20, Mus. Cuming.)

NERITA PICEA. *Ner. testâ ovali, solidiusculâ, Neritinae-formi, spirâ subexsertâ, anfractibus superne concavo-impressis, deinde rotundatis, spirâliter lineari-sulcatis, sulcis leviter undulatis, aperturâ vix incrassatâ, nitidè liratâ, arâ columellari plano-concavâ, minutè dentatâ; intense ceruleo-atrâ.*

THE PITCHY NERITE. Shell ovate, rather solid, Neritina-shaped, spire slightly exerted, whorls concavely impressed round the upper part, then rounded, spirally linearly grooved, grooves slightly waved, aperture scarcely thickened, neatly ridged, columellar area flatly concave, minutely toothed; deep blue-black.

RECLUZ, Rev. Zool. Soc. Cuvierienne, 1841, p. 151.

Hab. Sandwich Islands.

This shell, of a dark blue-black, engraved throughout with fine linear grooves, slightly waved, partakes very much of the characters of *Neritina*.



NERITA.

PLATE VI.

Species 25. (Fig. a, b, Mus. Cuming.)

NERITA ATRAMENTOSA. *Ner. testâ semiglobosâ, crassâ, solidâ, spirâ viz exsertâ, anfractibus convexis, subangustis, lævis vel tenuè spirâliter striatis, striis subnuditatis, labro intus incrassato, dente unico, columellâ plano-concavâ, margine minutè denticulato; cæruleo-nigrâ, punctis albidis spirâliter tenuissimâ.*

THE INKY NERITE. Shell semiglobose, thick, solid, spire scarcely exerted, whorls convex, rather narrow, smooth or finely spirally striated, striae being a little waved, lip thickened inwardly, with a single tooth, columella flatly concave, minutely toothed at the edge; blue-black, spirally freckled with white dots.

Hab. Swan River, Australia; Bacon.

A solid blue-black shell, spirally striated with slightly waved lines of whitish punctures.

Species 26. (Fig. a, b, Mus. Cuming.)

NERITA HINDSII. *Ner. testâ semiglobosâ, solidâ, spirâ viz exsertâ, anfractibus subangustis, spirâliter costatis et sulcatis, labro intus dentato-lirato, columellâ leviter granulatâ, margine minutè denticulatâ; cinereo-griseâ, costis nigro et albo promiscuè articulis, apice lutescente.*

HINDS' NERITE. Shell semiglobose, solid, spire scarcely exerted, whorls rather narrow, spirally ribbed and grooved, lip dentately ridged within, columella slightly granulated, minutely toothed at the edge; ash-grey, ribs promiscuously articulated with black and white, apex yellowish.

RECLUZ, Pro. Zool. Soc. 1843, p. 201.

Hab. Island of Panay, Philippines (under stones at low water); Cuming.

A rather spirally ribbed grey shell, promiscuously articulated with black and white, the black predominating, with a characteristic yellow apex.

Species 27. (Fig. a, b, Mus. Cuming.)

NERITA HISTRIO. *Ner. testâ orato-semiglobosâ, crassâ, spirâ concavo-planâ, viz exsertâ, anfractibus angustis, obsolete planicostatis, apertura subeffusâ, labro intus tenuè denticulato, columellâ densè callosâ, politâ, obscure corrugatâ, margine dentatâ; griseo-albâ, nigro nudique articulatâ.*

THE HARLEQUIN NERITE. Shell ovately semiglobose, thick, spire concavely flattened, scarcely exerted, whorls narrow, obsoletely flatly ribbed, aperture rather effused, lip finely denticulated within, colu-

mella thickly callous, polished, obscurely wrinkled, toothed at the edge; greyish-white, articulated with black throughout.

LINNÆUS, Syst. Nat. (12th edit.) p. 1254.

Hab. Australia.

A solid superficially ribbed shell, articulated regularly and throughout with black, with the whorls somewhat pinched towards the apex and effused towards the aperture.

Species 28. (Fig. a, b, Mus. Cuming.)

NERITA BALTEATA. *Ner. testâ ovato-subglobosâ, solidâ, spirâ declivi, viz exsertâ, anfractibus subangustis, spirâliter liratis, liris tenuibus, fuculatis, labro intus incrassato, minutè lirato, columellâ lævigatâ, superè corrugatâ, margine obsolete denticulatâ; cæruleo-nigrâ, liris hic illic albo sparsim articulis.*

THE BELTED NERITE. Shell ovate-subglobose, solid, spire slanting, scarcely exerted, whorls rather narrow, spirally ridged, ridges fine, corded, lip inwardly thickened, minutely ridged, columella smooth, wrinkled at the upper part, obsoletely toothed at the edge; blue-black, ridges here and there sparingly articulated with white.

Hab. — ?

A dark blue-black shell, finely spirally corded throughout, the cords being sparingly articulated here and there with white.

Species 29. (Fig. a, b, Mus. Cuming.)

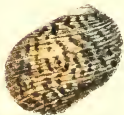
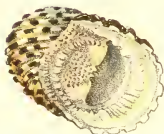
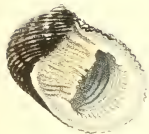
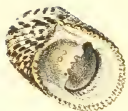
NERITA ESSINGTONI. *Ner. testâ oblongo-globosâ, spirâ subexsertâ, anfractibus superè concavo-inapressis, deinde convexis, nudique spirâliter lirato-fuculatis, labro intus parvè incrassato, dentibus lateralibus humibus, columellâ leviter corrugatâ, margine acutè denticulatâ; cinereo-griseâ, nigricante obscure fasciatâ et corrugatâ, punctis albidis aspersâ.*

THE PORT ESSINGTON NERITE. Shell oblong-globose, spire rather exerted, whorls concavely impressed at the upper part, then convex, everywhere spirally ridge-corded, lip but little thickened inwardly, with two lateral teeth, columella faintly wrinkled, sharply toothed at the edge; ash-grey, obscurely banded and variegated with pale black, sprinkled with white dots.

RECLUZ, Petit, Journ. Conch. vol. i. pl. 11. f. 9.

Hab. Port Essington, Australia.

Of a grey ground-tint, sprinkled throughout with minute whitish dots, and obscurely banded with pale black.



NERITA.

PLATE VII.

Species 30. (Fig. *u*, *b*, Mus. Cuming.)

NERITA PREGONITA. *Ner. testâ subglobosâ, spirâ vix exertâ, anfractibus densè spirâliter costatis, costis crenulatis, labro intus subincrassato, lirato, columellâ subexcavatâ, granulâ perpaucâ, margine dentatâ; albidâ, fulco et nigro profusè maculatâ, apice lutescente.*

THE KNOWN NERITE. Shell subglobose, spire scarcely exerted, whorls closely spirally ribbed, ribs crenulated, lip a little thickened inwardly, ridged, columella rather excavated, with a few granules, toothed at the edge; whitish, profusely spotted with black and fulvous, apex yellowish.

! B. ADAMS, MS. Mus. Cuming.

Hab. — ?

A very characteristic species, densely sculptured with spiral crenulated ribs, mottled throughout with black and fulvous-rust, the apex being of a yellowish tinge.

Species 31. (Fig. *a*, *b*, Mus. Cuming.)

NERITA SCALPTA. *Ner. testâ globosâ, solidiusculâ, spirâ subexertâ, anfractibus levibus, lineis impressis subtilibus spirâliter incisâ, labro intus lirato, columellâ granulâtâ, margine lenè dentatâ; nigra, lineis impressis albidis, areâ columellari pallidissimè lutescente.*

THE SCRATCHED NERITE. Shell globose, rather solid, spire somewhat exerted, whorls smooth, spirally engraved with rather distant impressed lines, lip ridged within, columella granulated, finely toothed at the edge; black, impressed lines whitish, columellar area faintly yellowish.

Hab. — ?

A coal-black shell, well distinguished by its rather distant impressed whitish lines.

Species 32. (Fig. *a*, *b*, Mus. Cuming.)

NERITA CHLOROSTOMA. *Ner. testâ subtrigono-globosâ, crassiusculâ, spirâ concavo-impressâ, anfractibus fortiter spirâliter costatis, costis rotundatis, interstitiis excavatis, interdum lirâ parvâ intercurrente, labro intus fortiter lirato, columellâ concavâ, profusè granulâtâ, margine lenè bidentatâ; fulco-albidâ, costis nigro tessellatis, areâ columellari lutescente.*

THE YELLOW-MOUTH NERITE. Shell somewhat triangularly globose, rather thick, spire concavely impressed, whorls strongly spirally ribbed, ribs rounded,

interstices excavated, sometimes with a small ridge running between, lip strongly ridged within, columella concave, profusely granuled, finely two-toothed at the edge; fulvous-white, ribs tessellated with white, columellar area yellowish.

LAMARCK, *Anim. sans vert.* vol. viii. p. 603.

Hab. Philippine Islands; Cuming.

Distinguished by the roundness of the ribs and hollowed interstices, and by the thickly-set granules of the columella.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

NERITA GRAYANA. *Ner. testâ ovato-globosâ, spirâ subexertâ, anfractibus subangustis, spirâliter foveolâto-liratis, liris subtiliter crenulatis, labro intus subcrunulato, columellâ lenè corrugatâ, margine denticulatâ; cinereo-griseâ, liris nigricantibus hic illic albi-punctatis.*

GRAY'S NERITE. Shell ovately globose, spire a little exerted, whorls rather narrow, spirally corded with ridges, ridges finely crenulated, lip faintly crenulated within, columella finely wrinkled, finely toothed at the ridge; ash-grey, ridges black, here and there white-dotted.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1843, p. 200.

Hab. Province of Ilocos, Island of Luzon, Philippines; Cuming.

A dark grey species, spirally sculptured with black cord-like ridges articulated here and there with white dots.

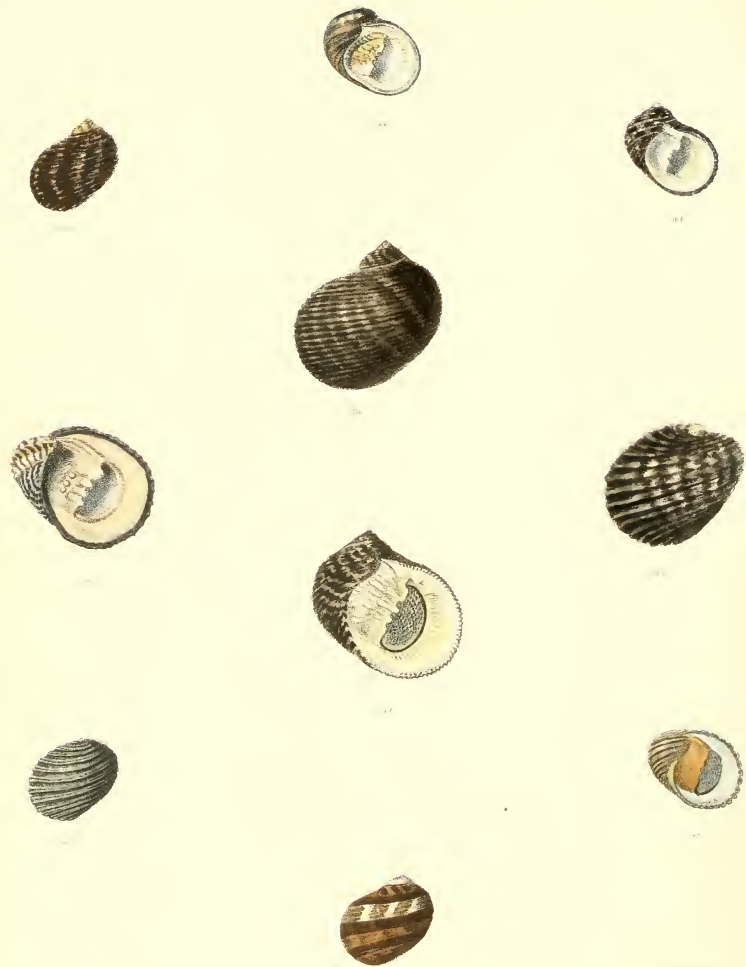
Species 34. (Fig. *a*, *b*, Mus. Cuming.)

NERITA HAUSTRUM. *Ner. testâ ovato-globosâ, spirâ vix exertâ, anfractibus leviter linearis-sulcatis, labro intus lirato, columellâ concavo-planatâ, margine obsolete denticulatâ; olivaceo-nigrâ, lutescente- albo hic illic interruptâ, columellâ pallidissimè roseo-functâ.*

THE SCOOP NERITE. Shell ovately globose, spire scarcely exerted, whorls faintly linearly grooved, lip inwardly ridged, columella concavely flattened, obsoletely toothed at the edge; olive-black, here and there interrupted with yellowish-white, columella faintly tinged with rose.

Hab. Red Sea.

Distinguished by a rather contracted hollowed aperture, the outer surface of the shell being olive-black, opening out here and there on a yellowish-white ground.



NERITA.

PLATE VIII.

Species 35. (Fig. a, b, Mus. Cuming.)

NERITA SENEGALENSIS. *Ner. testâ semiglobosâ, solidiusculâ, spirâ subexsertâ, anfractibus spirâliter linearisulcatis, subcompresso-expansis, labro intus leviter lirato, columellâ plano-excavatâ, granulatâ et bidentatâ; olivaceâ, interdum fasciatâ et variegatâ, arâ columellari medio aurantio tinctâ.*

THE SENEGAL NERITE. Shell semiglobose, rather solid, spire a little exerted, whorls spirally linearly grooved, rather compressly expanded, lip faintly ridged within, columella flatly excavated, granulated and two-toothed; olive, sometimes banded and variegated, columellar area orange-stained in the middle.

Gmelin, Syst. Nat. p. 3656.

Hab. Senegal.

This shell, distinguished among other characters by a granulated orange stain on the columellar area, is not *N. atrata*, as indicated by M. Deshayes, but *N. Senegalensis* of Gmelin, and *Le Douar* of Adanson.

Species 36. (Fig. a, b, Mus. Cuming.)

NERITA LISTERI. *Ner. testâ semiglobosâ, spirâ subexsertâ, anfractibus spirâliter liris et costatis, apertura sublatè expansâ, labro intus incrassato, trancè crenulato, columellâ plano-excavatâ, bidentatâ; intense carneo-nigrâ, costis punctis porris albis hic illic notatis.*

LISTER'S NERITE. Shell semiglobose, spire rather exerted, whorls spirally grooved and ribbed, aperture rather broadly expanded, lip thickened inwardly, finely crenulated, columella flatly excavated, two-toothed; deep blue-black, ribs here and there marked with small white dots.

Recluz, Revue Zool. Soc. Cuvierienne, 1841, p. 277.

Hab. West Indies.

A shining blue-black ribbed shell, sprinkled in a very characteristic manner on the ribs with a few white dots.

Species 37. (Fig. a, b, Mus. Cuming.)

NERITA SAVIENA. *Ner. testâ globosâ, crassissimâ, spirâ exsertâ, anfractibus convexis, latiusculis, spirâliter elevato-striatis et liris, labro intus valdè incrassato, dentato et crenulato, columellâ tumidiusculâ, granulato-corrugatâ, et dentatâ; caruleo-nigrâ, interdum fulvo obscure variegatâ, intus flavicantè.*

THE SAVIEN NERITE. Shell globose, very thick, spire exerted, whorls convex, rather broad, spirally cleftately striated and ridged, lip inwardly much thick-

ened, toothed and crenulated, columella somewhat swollen, granulately wrinkled and toothed; blue-black, sometimes faintly fulvous-variegated, interior yellowish.

Recluz, MS. Mus. Cuming.

Hab. New Ireland.

A swollen and very solid globular shell, grain-wrinkled across the columellar area.

Species 38. (Fig. a, b, Mus. Cuming.)

NERITA ATRO-PURPUREA. *Ner. testâ trigono-semiglobosâ, spirâ minutâ, plano-impressâ, anfractibus angustis, ad spiram compressis, ad apertura latè expansis, spirâliter densè costatis et liris, labro incrassato et latè effuso, columellâ planâ, medio granulâ, dentatâ, superiè sinuatâ; atro-purpureâ, purpurascente-albo undulatâ, apertura fulcâ.*

THE DARK PURPLE NERITE. Shell angularly semiglobose, spire very small, flatly impressed, whorls narrow, compressed at the spire, broadly expanded at the aperture, spirally densely ribbed and ridged, lip thickened and broadly effused, columella flat, granulated in the middle, toothed, sinuated at the upper part; dark purple, waved with purple-white, aperture fulvous.

Recluz, Rev. Zool. Soc. Cuvierienne, 1841, p. 107.

Hab. Island of Negros, Philippines; Cuming.

A very characteristic pinched shell, stained with intense purple, broken up over the spire into pale wave streaks.

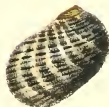
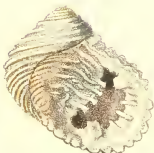
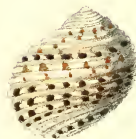
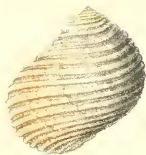
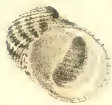
Species 39. (Fig. a, b, Mus. Cuming.)

NERITA BIsecta. *Ner. testâ subglobosâ, subexpanâ, spirâ non exsertâ, anfractibus convexis, spirâliter costatis, costis regularibus, subdistinctis, sulco antiquè bisectis, labro intus effuso, minutè crenulato, columellâ planâ, viz denticulatâ; caruleo-nigrâ, arâ columellari vitellinâ, nitente.*

THE DIVIDED NERITE. Shell subglobose, rather expanded, spire not exerted, whorls convex, spirally ribbed, ribs regular, rather distinct, divided throughout by a groove, lip effused within, minutely crenulated, columella flat, scarcely toothed; blue-black, columellar area yelk-yellow, shining.

Hab. West Africa; Fraser.

Curiously spirally sculptured with a regular series of ribs, each of which is divided by a linear groove. The columellar area is of a shining yelk-yellow.



NERITA.

PLATE IX.

Species 40. (Fig. a, b, Mus. Cuming.)

NERITA GEMMULATA. *Ner. testâ ovato-semiglobosâ, tenuiculâ, spirâ subexsertâ, apice mucronatâ, anfractibus coarctatis, spirâ lineariter liratis, liris crenulato-gemmatâ, columellâ plano-excavatâ, margine integro; griseo-albidâ, liris cœruleo-nigro et opaco-albo tenuè articulatis, apice lutescente.*

THE GEMMED NERITE. Shell ovately semiglobose, rather thin, spire slightly exerted, sharp-pointed at the apex, whorls convex, spirally linearly ridged, ridges crenulately gemmed, columella flatly excavated, with the margin entire; greyish-white, ridges finely articulated throughout with blue-black and opaque-white, apex yellowish.

Hab. — ?

A shell of light substance with elegantly crenulated ridges, articulated with blue-black and opaque-white.

Species 41. (Fig. a, b, Mus. Cuming.)

NERITA FRAGUM. *Ner. testâ globosâ, spirâ vix exsertâ, anfractibus rotundatis, spirâ tenuè confertim costatâ, labro intus incrassato, tenuè lirato, columellâ declivi-excavatâ, granulatâ et corrugatâ; cœruleo-nigrâ, strigis perpaucis luteis erosis notatâ, arcu columellari sanguineo-linâtâ.*

THE STRAWBERRY NERITE. Shell globose, spire scarcely exerted, whorls rounded, spirally finely closely ribbed, lip thickened inwardly, finely ridged, columella slantingly excavated, grained and wrinkled; blue-black, marked with a few yellowish eroded streaks, columellar area stained with a blood spot.

Hab. — ?

Chiefly distinguished by a characteristic blood spot on the granulated area of the columella.

Species 42. (Fig. a, b, c, d, Mus. Cuming.)

NERITA PLICATA. *Ner. testâ globosâ, solidâ, spirâ declivi-exsertâ, apice mucronatâ, anfractibus coarctatis, spirâ lineariter plicatis, interstitiis excavatis, labro intus incrassato, ampliter dentato et lirato, columellâ tumidâ, verrucoso-corrugatâ, et dentatâ; albidâ, maculis nigris et olivaceis interdum fasciatâ.*

THE PLEATED NERITE. Shell globose, solid, spire slantingly exerted, pointed at the apex, whorls convex, spirally rib-pleated, interstices excavated, lip thickened inwardly, largely toothed and ridged, columella swollen, wart-wrinkled, and toothed; whitish, sometimes banded with black and olive spots.

LINNEUS, Syst. Nat. (10th edit.) p. 779.

Hab. West Indies.

A very characteristic species, of *Monodonta*-like form, remarkable for its strong development of ribs, teeth, and wart-wrinkles.

Species 43. (Fig. a, b, Mus. Cuming.)

NERITA TESSELLATA. *Ner. testâ ovato-subglobosâ, spirâ parum exsertâ, anfractibus coarctatis, fortiter spirâ lineariter costatis, costis irregularibus, confertis, superne angulatis, labro intus tenuè crenulato, columellâ plano-excavatâ, tenuè granulatâ, margine arcuatâ; cœruleo-nigro et albo nudiq̄ tessellatâ.*

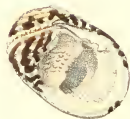
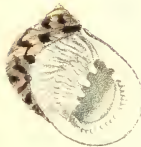
THE TESSELLATED NERITE. Shell ovately subglobose, spire slightly exerted, whorls convex, strongly spirally ribbed, ribs irregular, close-set, and at the upper part angled, lip faintly crenulated within, columella flatly excavated, finely granuled, arched at the edge; everywhere tessellated blue-black and white.

GMELIN, Syst. Nat. p. 3685.

Le Tadia, Adanson.

Hab. Senegal.

Encircled throughout with close-set strongly tessellated ribs, which towards the spire are broader and angulated.



NERITA.

PLATE X.

Species 44. (Fig. *a, b*, Mus. Cuming.)

NERITA SIGNATA. *Ner. testâ depresso-semiglobosâ, spirâ subexsertâ, sed impressâ, anfractibus supernè convexis, deinde concavis, spirâlyter costatis et striatis, costis striisque nodulatis et tenuè crenulatis, aperturâ subexpansâ, columellâ plano-excaratâ, verrucoso-corrugatâ, tenuè denticulatâ; caralescente-olivâ, costis striisque caruleo-nigro et fulvo-roseo tenuiter articulatis. areâ columellari sanguineo-luctâ.*

THE MARKED NERITE. Shell depressly semiglobose, spire a little exerted but impressed, whorls concave round the upper part, then convex, spirally ribbed and striated, ribs and striae noduled and finely crenulated, aperture rather expanded, columella flatly excavated, wart-wrinkled, finely toothed; bluish-white, ribs and striae finely articulated with blue-black and fulvous-rose, columellar area blood-stained.

MACLEAY, Lamarek, Anim. sans vert. vol. vii. p. 610.

Hab. New Holland; Macleay. Island of Masbate, Philippines; Cuming.

A very beautifully sculptured and prettily painted species, with a deep blood-stain on the columellar area.

Fig. 45. (Mus. Cuming.)

This shell, from the Mauritius, proves to be a variety of *N. bisecta* from West Africa, described at Plate VIII. Sp. 39, without the bright yellow columella which distinguishes that variety.

Species 46. (Fig. *a, b*, Mus. Cuming.)

NERITA ORYZARUM. *Ner. testâ globosâ, solidiusculâ, spirâ obtusâ, parva exsertâ, anfractibus convexis, interdum leviter liris, interdum retasè costatis, labro intus incrassato, et lirato, columellâ corrugatâ et granulatâ, tenuè denticulatâ; nigricante-olivaceâ, maculis albis substantiatis peculiariter variegatâ et tessellatâ.*

THE RICE-MARKED NERITE. Shell globose, rather solid, spire obtuse, but little exerted, whorls convex, sometimes faintly ridged, and sometimes bluntly ribbed, lip thickened inwardly and ridged, columella wrinkled and granuled, faintly toothed; blackish-olive, peculiarly mottled and tessellated with distant white spots.

RECLUZ, Revue Zool. Soc. Curvienne, 1841, p. 178.

Hab. Bombay and Malacca.

Of this characteristic white-mottled species, Mr. Cuming possesses a ribbed variety from Malacca, and a variety in which the ribs are almost obsolete from Bombay.

Species 47. (Fig. *a, b*, Mus. Cuming.)

NERITA OLEAGINA. *Ner. testâ ovalo-globosâ, spirâ exsertâ, macronatâ, anfractibus convexis, spirâlyter elevato-striatis, labro intus incrassato, vie crenulato, dente unico laterali, columellâ convexiusculâ, prominè verrucoso-corrugatâ, fortiter dentatâ; nigricante-olivaceâ, interdum nigro-fasciatâ, maculis albidis undatis nigro-nubratris obliquè variegatâ.*

THE OLIVE NERITE. Shell ovately globose, spire exerted, pointed, whorls convex, spirally elevately striated, lip thickened inwardly, scarcely crenulated, with a single lateral tooth, columella rather convex, promiscuously wart-wrinkled, strongly toothed; blackish-olive, sometimes banded with black, obliquely mottled with black-shaded waved white spots.

Hab. — ?

Slightly resembling the preceding species in its peculiar style of painting, but distinct in form and sculpture.

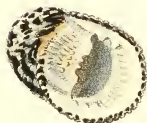
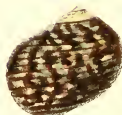
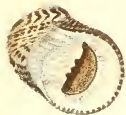
Species 48. (Fig. *a, b*, Mus. Cuming.)

NERITA FILOSA. *Ner. testâ globoso-turbinatâ, spirâ exsertâ, macronatâ, anfractibus supernè declivibus, deinde concavis, liris minutè bisectis spirâlyter filosis, labro intus incrassato, minutè crenulato, dente laterali acuto utrinque armato, columellâ levigatâ, denticulatâ; ferrugineo-spadicâ, liris eximè caruleo-nigricantibus.*

THE THREADED NERITE. Shell globose-turbinated, spire exerted, sharp-pointed, whorls slanting at the upper part, then convex, spirally threaded with minutely divided ridges, lip inwardly thickened, minutely denticulated, with a sharp lateral tooth on each side, columella smooth, finely toothed; rusty fawn-colour, ridges delicately blue-black.

Hab. — ?

An extremely delicate and neatly sculptured species, being encircled with dark thread-like ribs, which are nevertheless minutely bisected by a groove, upon a rust-fawn ground.



NERITA.

PLATE XI.

Species 49. (Fig. *a, b*, Mus. Cuming.)

NERITA AURANTIA. *Ner. testâ semiglobosâ, solidiusculâ, spirâ parvâ, exsertâ, mucronatâ, anfractibus convexis, spirâliter confertius liratis, interstitiis regulariter concavis, labro intus multo incrassato, effuso, minute crenulato, dentibus duobus lateralibus, columellâ subconveâ, subobsoletè corrugatâ, fortiter dentatâ; rufo-aurantiâ, liris hic illic nigricante undatis.*

THE ORANGE NERITE. Shell semiglobose, rather solid, spire small, exserted, sharp-pointed, whorls convex, spirally closely ridged, interstices regularly concave, lip much thickened interiorly, effused, minutely crenulated with two lateral teeth, columella slightly convex, rather obsoletely wrinkled, strongly toothed; reddish-orange, ridges here and there waved with black.

RECLUZ. *Petit, Journ. Conch. vol. i. pl. 11. f. 11.*

Hab. Island of Bohol, Philippines; Cuming.

Distinguished by its small pointed spire, and very regular series of close-set spiral ridges, faintly waved with black upon a rich reddish-orange ground.

Species 50. (Fig. *a, b*, Mus. Cuming.)

NERITA FULIGINATA. *Ner. testâ ovato-semiglobosâ, spirâ subexsertâ, anfractibus convexis, spirâliter densè linearis-sulcatis, columellâ plano-excavatâ, tenuè denticulatâ; carneâ, lineis rufis undulatis confertis variegatâ, intusè nigro nudique plus minus insuânatâ.*

THE SOOTY NERITE. Shell ovately semiglobose, spire rather exserted, whorls convex, spirally densely linearly grooved, columella flatly excavated, finely toothed; flesh-tinged, variegated with waved red lines, close-set, more or less smeared over with inky-black.

Hab. —?

A peculiarly red-waved shell, almost entirely besmeared with inky-black.

Species 51. (Fig. *a, b*, Mus. Cuming.)

NERITA FULGURANS. *Ner. testâ globosâ, crassâ, spirâ plano-depressâ, anfractibus convexis, densè spirâliter liratis, liris obsoletè crenulatis, interstitiis linearibus, labro intus fortiter crenato, dentibus duobus lateralibus utrinque armato, columellâ granulatâ, tenuè denticulatâ; carulescente-âlbâ, caruleo-nigro profusè undato-variegatâ.*

THE LIGHTNING-MARKED NERITE. Shell globose, thick, spire flatly depressed, whorls convex, densely spirally ridged, ridges obsoletely crenulated, interstices

linear, lip strongly crenated within, with two lateral teeth on each side, columella granulated, faintly toothed; bluish-white, profusely wave-variegated with blue-black.

Gmelin, Syst. Nat.

Hab. Honduras (on the rocks); Dyson.

Very characteristic both in sculpture and painting, the whorls being marked throughout with regular ridges, so close-set, that the interstices between them are merely linear; the painting consists of a promiscuous splashing of deep indigo upon a blue-white ground.

Species 52. (Fig. *a, b*, Mus. Cuming.)

NERITA LONGII. *Ner. testâ globosâ, solidâ, spirâ subexsertâ, anfractibus concavo-declivibus, dente convexis, spirâliter linearis-sulcatis, interstitiis concavo-planatis, labro intus crenulato, dente calido laterali, columellâ verrucoso-corrugatâ, dentatâ; intescente-âlbâ, oliveo-cicridâ tinctâ, purpureo-nigro nebulatâ et articulatâ.*

LONG'S NERITE. Shell globose, solid, spire slightly exserted, whorls concavely slanting at the upper part, then convex, spirally linearly grooved throughout, interstices convexly flattened, lip crenulated within, with a strong lateral tooth, columella wart-wrinkled, toothed; yellowish-white, stained with olive-green, clouded and articulated with purple-black.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1842, p. 178.

Hab. Bombay.

A solid shell, of pale greenish hue, much darkened with clouded purple-black articulated blotches.

Species 53. (Fig. *a, b*, Mus. Cuming.)

NERITA ARGUS. *Ner. testâ semiglobosâ, depressiusculâ, spirâ planâ, ferè obsoletâ, anfractibus angustis, dente latioribus, expansis, superiè et inferiè linearis-sulcatis, medio levigatis, columellâ plano-concavâ, tenuè granulatâ, minute denticulatâ; intusè caruleo-nigrâ, punctis albidis obsoletè leuitigiosâ.*

THE ARGUS NERITE. Shell semiglobose, rather depressed, spire flat, almost obsolete, whorls narrow, then broader and expanded, above and below linearly grooved, smooth in the middle, columella flatly concave, finely granulated, minutely toothed; dark blue-black, obsoletely speckled with white dots.

RECLUZ, Revue Zool. Soc. Cuvierienne 1841, p. 150.

Hab. Island of Masbate, Philippines; Cuming. Fernando Po, West Africa; Fraser.

The speckling of white dots, which has suggested the name of this species, is somewhat indistinctly portrayed.



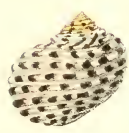
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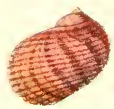
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NERITA.

PLATE XII.

Species 54. (Fig. a, b, Mus. Cuming.)

NERITA ERUBESCENS. *Ner. testâ globoso-turbinatâ, crassâ, spirâ prominatâ, anfractibus convexis, spiraliter liris et striatis, labro deute acuto laterali, columellâ leeviter corrugatâ et dentatâ; pallidâ rufâ, aut carneo-âlbâ, punctis rufoscutibus aspersâ et fasciatâ.*

THE BLUSHING NERITE. Shell globosely turbinated, thick, spire prominent, whorls convex, spirally ridged and striated, lip with a sharp lateral tooth, columella faintly wrinkled and toothed; pale red, or flesh-white, sprinkled and banded with reddish dots.

Hab. ——— ?

A solid shell, stained with pale bright red or sprinkled with pinkish dots, having somewhat the appearance of a *Littorina*.

Fig. 55. (Mus. Cuming.)

The shell here figured proves to be an immature specimen of *N. bisecta*, described at Plate VIII. Sp. 39, but it is important to note that the ribs are more prominently developed and more distinctly bisected.

Species 56. (Fig. a, b, c, d, Mus. Cuming.)

NERITA VERSICOLOR. *Ner. testâ ovato-globosâ, crassâ, spirâ subsertâ, anfractibus superâ declivi-depressis, deinde convexis, spiraliter costatis, interstitiis interdum superficialis, interdum excavatis, columellâ tumidâ et corrugatâ, fortiter dentatâ; albâ, maculis nigris et roseis plus minus fasciatâ et tessellatâ, interdum omnino interruptè griseo-nigrâ.*

THE VARI-COLOURED NERITE. Shell ovately globose,

thick, spire rather exerted, whorls slantingly depressed round the upper part, then convex, spirally ribbed, interstices sometimes superficial, sometimes excavated, columella swollen and wrinkled, strongly toothed; whitish, more or less banded and tessellated with black and pink spots, sometimes altogether interrupted grey-black.

LAMARCK, Anim. sans vert. vol. vii. p. 606.

Hab. West Indies.

This species varies in being more banded with pink spots than in the specimens here represented.

Species 57. (Fig. a, b, Mus. Cuming.)

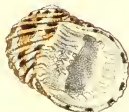
NERITA BERNHARDI. *Ner. testâ semiglobosâ, subdepressâ, spirâ obtusè planatâ, anfractibus convexis, subcompressis, versus aperturam expansis, spiraliter densè liris, liris obscurè crenulatis, labro effuso, fortiter crenato et dentato, columellâ plano-convexâ, granulatâ, viz denticulatâ; nigrâ, virescente aut punctis lutescentibus variegatâ.*

BERNHARD'S NERITE. Shell semiglobose, rather depressed, spire obtusely flattened, whorls convex, subcompressed, expanded towards the aperture, spirally closely ridged, ridges obscurely crenulated, lip effused, strongly crenated and toothed, columella flatly excavated, granulated, scarcely toothed; black, variegated with pale green, or yellowish dots.

RECLUS, Petit, Journ. Couch. vol. i. p. 285.

Hab. Peru.

A small depressly globose shell, with expanded aperture and granulated columella, strongly toothed within the lip.



NERITA.

PLATE XIII.

Species 58. (Fig. *a, b*, Mus. Cuming.)

NERITA ORBIGNYANA. *Ner. testâ oblongo-ovata, spirâ obtusè planatâ, anfractibus subangustis, concentricè striatis, labro tenuicollato, columellâ plano-convexatâ, medio obsolete corrugatâ; semipellucido-albâ, punctis caeruleo-nigris, in strigis acutè unctatis, opaco-albo variegatis, dispositis, promiscuè notatâ.*

ORBIGNY'S NERITE. Shell oblong-ovate, spire obtusely flattened, whorls rather narrow, concentrically striated, lip rather thin, columella flatly excavated, obsoletely wrinkled in the middle; semitransparent-white, promiscuously marked with blue-black dots, disposed in zigzag waves, edged with opaque-white.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 108.

Hab. — ?

A shell of rather light and narrow structure, marked with characteristic zigzag waves of opaque-white, promiscuously charged with blue-black dots.

Species 59. (Fig. *a, b*, Mus. Cuming.)

NERITA NOVE-GUINEE. *Ner. testâ semiglobosâ, depressâ, spirâ parvâ exsertâ, mucronatâ, anfractibus convexis, versus aperturam expansis, spiraliter confertim filoso-liratis, columellâ latè corrugatâ, denticulatâ; caeruleo-nigrâ, lirarum interstitiis pallidioribus.*

THE NEW GUINEA NERITE. Shell semiglobose, depressed, spire but little exerted, pointed, whorls convex, expanded towards the aperture, spirally closely thread-ribbed, columella broadly wrinkled, toothed; blue-black, interstices between the ridges lighter.

LESSON, *Petit, Journ. Conch.* vol. i. p. 283.

Hab. New Guinea.

Of a dark unspotted blue-black colour, encircled with regular thread-like ridges.

Species 60. (Fig. *a, b, c, d*, Mus. Cuming.)

NERITA STELLA. *Ner. testâ subglobosâ, crassâ, spirâ parvâ exsertâ, obtusâ, anfractibus convexis, spiraliter costatis, costis irregularibus, interdum obtusè angulatis, labro intus fortiter crenato, columellâ granulatâ, minute obsolete denticulatâ; albâ, rufo et virescente variegatâ, olivaceo-nigro radiatâ et reticulatâ.*

THE STAR NERITE. Shell subglobose, thick, spire but little exerted, obtuse, whorls convex, spirally ribbed, ribs irregular, sometimes obtusely angled, lip strongly crenated within, columella granulated, minutely obsoletely toothed; whitish, variegated with green and red, rayed and reticulated with olive-black.

CHEMNITZ, *Conch.* Cab. vol. xi. pl. 197. f. 1907, 1908.

Hab. Philippines.

A beautifully painted species, named after the star-like pattern which is sometimes formed on the spire by the dark radiating blotches.

Species 61. (Fig. *a, b*, Mus. Cuming.)

NERITA ALBIPUNCTATA. *Ner. testâ ovato-semiglobosâ, spirâ subexsertâ, obtusâ, anfractibus angustis, superne concavo-depressis, spiraliter liratis, liris rudè crenulatis, interstitiis punctatis, columellâ plano-convexatâ, sparsim granulatâ, obsolete minutissimè denticulatâ; caeruleo-nigrâ, lirarum interstitiis albipunctatis.*

THE WHITE-PUNCTURED NERITE. Shell ovately semiglobose, spire rather exerted, obtuse, whorls narrow, concavely depressed at the upper part, spirally ridged, ridges rudely crenulated, interstices punctured, columella flatly excavated, sparsely granulated, obsoletely very minutely toothed; blue-black, interstices between the ridges white dotted.

Hab. — ?

A dark blue-black spirally ridged shell, marked between the ridges with white-eroded punctures.



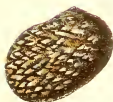
67a



67b



67c



67d



67e



67f



67g



67h



67i



67k

NERITA.

PLATE XIV.

Species 62. (Fig. *a* to *k*, Mus. Cuming.)

NERITA RUMPHII. *Ner. testâ oblongo-globosâ, crassiusculâ, politâ, spirâ obtusè impressâ, anfractibus subangustis, convexis, concentricè striatis, labro intus incrassato, viz crenulato, columellâ concavo-planâ, interdum paucis granulis, minutè denticulatâ, dentibus interdum obsolete; colore variâ.*

RUMPHIUS' NERITE. Shell oblong-globose, rather thick, polished, spire obtusely impressed, whorls rather narrow, convex, concentrically striated, lip thickened inwardly, scarcely crenulated, columella concavely flattened, sometimes with a few granules, minutely toothed, teeth sometimes obsolete; colour various.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 147.

Nerita polita pars, Chemnitz.

Hab. Philippine Islands; Cuming.

So extremely variable is this species in its painting, that

it has been thought necessary to devote a plate to a selection of its most characteristic states. Fig. *a*, a uniform bright orange; fig. *b*, ivory-white, with a broad band of interrupted dark ash-black blotches; fig. *c*, encircled with three rose bands upon a greyish-white ground, sprinkled with minute black and white dots; fig. *d*, sprinkled with black white-splashed dots upon an olive-grey ground; fig. *e*, encircled with four bright orange bands, sprinkled with black dots upon a bright green ground; fig. *f*, clouded with crimson bands and blotches upon a dark olive-grey ground, freckled in the interstices with black dots, here and there splashed with white; fig. *g*, grey and white, freckled with broad interrupted bands of light orange-fawn blotches; fig. *h*, flesh-pink, encircled with yellowish-white stripes; fig. *i*, dark grey, freckled with black and white-splashed dots, encircled round the middle with a light band; fig. *k*, regularly encircled with broad equally clearly defined bands of black and white.



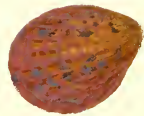
Nerita



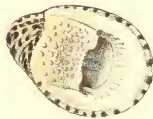
Nerita



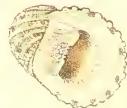
Nerita



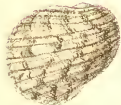
Nerita



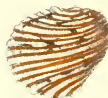
Nerita



Nerita



Nerita



Nerita

NERITA.

PLATE XV.

Species 63. (Fig. *a* to *f*, Mus. Cuming.)

NERITA SQUAMULATA. *Nat. testā suborbiculari, latè depressā, spirā obtusè planatā, anfractibus convexis, versus aperturam latè expansis, dense spiraliter litatā, liris irregularibus, plus minus squamulatis, labro ampliter effuso, intus crenato, columellā concavā, medio tenuè granulatā, minutè denticulatā; colore variā.*

THE SCALY NERITE. Shell suborbicular, broadly depressed, spire obtusely flattened, whorls convex, broadly expanded towards the aperture, densely spirally ridged, ridges irregular, more or less scaly, lip largely effused, crenated within, columella concave, finely granulated in the middle, minutely toothed, colour various.

LE GUILLOU, *Revue Zool. Soc. Cuvierienne.*

Hab. Philippine Islands and Singapore; Cuming.

An interesting species, well characterized by its broadly effused aperture and pinched spire, and scaly sculpture. In colour it is almost as variable as the species of the preceding plate. Fig. *a*, a bright uniform crimson-orange; fig. *b*, *c*, an orange-yellow, broadly splashed and waveclouded with black; fig. *d*, *e*, opaque-white, very delicately obliquely wave-sprinkled with minute grey dots; fig. *f*, pink, with the ridges conspicuously picked out in white, encircled with three bands of open black network.

Species 64. (Fig. *a* to *d*, Mus. Cuming.)

NERITA ALBICILLA. *Ner. testā subtrigono-ovatā, depressissimā, spirā obtusè planā, ferè obsoletā, anfractibus angustis, versus aperturam gradatim expansis, spiraliter costatis, costis confertis, plus minus obtusis, intertum obsoletis, labro latè effuso, intus multo incrassato, viz crenulato, arēā columellari amplā, nudique granulatā, minutissimè denticulatā; colore variā.*

THE OX-PALATE NERITE. Shell somewhat triangularly ovate, very depressed, spire obtusely flattened, almost obsolete, whorls narrow, gradually expanded towards the aperture, spirally ribbed, ribs close-set, more or less obtuse, and sometimes obsolete, lip broadly effused, much thickened inwardly, scarcely crenulated, columellar area large, granulated throughout, very minutely toothed; colour various.

LINNEUS, *Syst. Nat.* (10th edit.) p. 778.

Hab. Philippine Islands and Mauritius; Cuming.

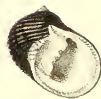
This species is well distinguished from all others by its very depressed oblong-ovate form, and narrow pinched spire, the columellar area being unusually large and profusely granulated. In colour it is extremely variable; fig. *a*, *d*, a dark purple-black, freckled and clouded with greyish-white; fig. *b*, *c*, a brilliant crimson-orange, banded with a light sprinkling of irregular grey-black dots.



66a



67a



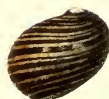
68a



67a



67a



68a



67a



67a



68a



67a

NERITA.

PLATE XVI.

Species 65. (Fig. a, b, Mus. Cuming.)

NERITA VEXILUM. *Ner. testâ oratâ, spirâ subexsertâ, anfractibus rotundatis, juxta suturam impressis, spiritaliter regulariter liris, columellâ convexo-planâ, acutè denticulatâ; fasciis latis nigris et luteis cingulatâ, nigro luteo-punctatâ.*

THE FLAG NERITE. Shell ovate, spire rather exerted, whorls rounded, impressed next the suture, spirally regularly ridged, columella concavely flattened, sharply toothed; encircled with broad black and yellow bands, the black yellow-dotted.

Hab. — ?

Encircled in a very characteristic manner with broad black and yellow bands, the black bands being interrupted with yellow dots.

Species 66. (Fig. a, b, Mus. Cuming.)

NERITA NIVOSA. *Ner. testâ oratâ, spirâ subexsertâ, anfractibus juxta spiram declivibus, deinde convexis, spiritaliter impressis et lineari-sulcatis, sulcis raldè irregularibus, labro intus subincrassato, deute unico laterali, columellâ declivi, obsolete corrugatâ, denticulatâ; intus cœruleo-viridi, albo sparsim nebulatâ.*

THE SNOWY NERITE. Shell ovate, spire rather exerted, whorls slanting next the spire, then convex, spirally ridged and linearly grooved, grooves very irregular, lip slightly thickened inwardly with a single lateral tooth, columella slanting, obsolete wrinkled, toothed; dark blue-green, sparingly clouded with white.

Hab. — ?

A very dark green shell, sparingly and somewhat obscurely clouded with white spots or small blotches.

Species 67. (Fig. a, b, Mus. Cuming.)

NERITA MARMORATA. *Ner. testâ orbiculari-depressâ, crassiusculâ, spirâ obtusè impressâ, anfractibus convexis, versus aperturam latis, irregulariter spiritaliter liris et lineari-sulcatis, aperturâ expansâ, labro effuso, columellâ declivi, interiora minute denticulatâ; cœrulescenti-albâ, cœruleo-nigro sparsim marmoratâ.*

THE MARBLED NERITE. Shell orbicularly depressed, rather thick, spire obtusely impressed, whorls convex, broad towards the aperture, irregularly spirally

ridged, and linearly grooved, aperture expanded, lip effused, columella slanting, sometimes minutely toothed; bluish-white, sparingly mottled with blue-black.

Hab. — ?

A very characteristic broadly expanded species, with the spire impressly flattened, mottled here and there in obscure bands with blue-black upon a bluish-white ground.

Species 68. (Fig. a, b, Mus. Cuming.)

NERITA ACHATINA. *Ner. testâ oratâ, spirâ subexsertâ, anfractibus angustis, convexis, versus aperturam latioribus, impressè lineari-sulcatis, sulcis raldè irregularibus, labro intus lirate, columellâ declivi, obsolete granulatâ, denticulatâ; carbonario-nigra, nitrate, sulcis linearibus pallidâ.*

THE AGATE NERITE. Shell ovate, spire slightly exerted, whorls narrow, convex, broader towards the aperture, impressly linearly grooved, grooves very irregular, lip ridged within, columella slanting, obsolete granuled, toothed; coal-black, shining, with the linear grooves pale.

Hab. — ?

A characteristic shining coal-black shell, encircled at very irregular intervals with pale impressed linear grooves.

Species 69. (Fig. a, b, Mus. Cuming.)

NERITA NERITOPSIDES. *Ner. testâ orato-turbinatâ, spirâ exertâ, mucronatâ, anfractibus rotundatis, conspicuè deusè spiritaliter liris, labro intus incrassato, minute crenulatâ, deute minute laterali, columellâ turmidiusculâ, obliquè corrugatâ, fortiter denticulatâ; pallidè stramineâ.*

THE NERITOPSIS-LIKE NERITE. Shell ovately turbinated, spire exerted, pointed, whorls rounded, conspicuously closely spirally ridged, lip thickened within, minutely crenulated, with a minute lateral tooth, columella rather swollen, obliquely wrinkled, strongly toothed; pale straw-colour.

Hab. — ?

A solid turbinated species, very closely spirally ridged, of a pale straw-colour, reminding one somewhat of a *Neritopsis*.



20



21



22



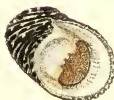
23



24



25



26



27



28



29

NERITA.

PLATE XVII.

Species 70. (Mus. Cuming.)

NERITA ELECTRINA. *Ner. testâ suborbiculari, depressâ, spirâ subexsertâ, mucronatâ, anfractibus concavis, densè spiritaliter liralis, interstitiis obsolete punctatis, columella tenuè denticulatâ; lutescens-auriculâ, immixtâ.*

THE AMBER NERITE. Shell suborbicular, depressed, spire slightly exerted, pointed, whorls convex, densely spirally ridged, interstices obsoletely punctured, columella finely toothed; yellowish-orange, unspotted.

Hab. Isle of Panay, Philippines; Cuming.

A delicate clear orange-yellow shell, closely spirally ridged throughout, the interstices between the ridges being obsoletely punctured.

Species 71. (Fig. a, b, Mus. Cuming.)

NERITA DOMEYI. *Ner. testâ suborbiculari, spirâ obtusè pluviatâ, anfractibus angustis, deinde latioribus, densè spiritaliter liralis, liris linearibus, colorè irregularibus, apertura effusa, columellâ concavo-excavatâ, medio granulatâ, edentulatâ; cærulescente-plumbicâ.*

DOMEY'S NERITE. Shell somewhat orbicular, spire obtusely flattened, whorls narrow, then broader, densely spirally ridged, ridges linear, very irregular, aperture effused, columella concavely excavated, granulated in the middle, edentulate; bluish lead-colour.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 149.

Hab. Bombay.

A dull slate-coloured species, with a rather broad effused aperture, having the columellar area gently excavated and granulated in the middle.

Species 72. (Fig. a, b, Mus. Cuming.)

NERITA COMMA-NOTATA. *Ner. testâ ovatâ, spirâ obtusè exsertâ, anfractibus subangustis, superne declivibus, spiritaliter densè liralis et sulcatis, columellâ levigatâ, leviter denticulatâ; cæruleo-nigrâ, punctis albis commaeformibus aspersâ.*

THE COMMA-MARKED NERITE. Shell ovate, spire obtusely exerted, whorls rather narrow, slanting at the upper part, spirally closely ridged and grooved, columella smooth, slightly toothed; blue-black, sprinkled with white comma-shaped marks.

Hab. ———

An extremely characteristic species, of dark blue-black colour, sprinkled throughout with opaque-white comma-shaped dots.

Species 73. (Fig. a, b, Mus. Cuming.)

NERITA SPENGLERIANA. *Ner. testâ orbiculari-ovata, crassiusculâ, spirâ subexsertâ, mucronatâ, anfractibus concavis, spiritaliter obsolete liralis, decussatim striatis, apertura effusa, columellâ callosâ, edentulatâ; lutescente-albâ, nigro interruptè fasciatâ.*

SPENGLER'S NERITE. Shell orbicularly ovate, rather thick, spire slightly exerted, pointed, whorls convex, spirally obsoletely ridged, decussately striated, aperture effused, columella callous, edentulate; yellowish-white, interruptedly banded with black.

RECLUZ, *Pro. Zool. Soc.* 1843, p. 201.

Hab. Isle of Panay, Philippines (under stones at low water); Cuming.

Nearly smooth, with a callous effused edentulate aperture, stained in a very interrupted manner with a sneaky black band.

Species 74. (Fig. a, b, Mus. Cuming.)

NERITA GEORGINA. *Ner. testâ ovatâ, depressiusculâ, spirâ pluviatâ-impressâ, parvè, mucronatâ, anfractibus subangustis, spiritaliter costatis, costis tenuibus, subdistantiibus, interstitiis striis concentricis densè cancellatis, arvi columellari amplâ, levigatâ, edentulatâ; sordidè roseo-lutescente, nigro tessulatâ.*

THE GEORGE NERITE. Shell ovate, rather depressed, spire flatly impressed, small, pointed, whorls rather narrow, spirally ribbed, ribs thin, rather distant, interstices densely cancellated with concentric striae, columellar area large, smooth, edentulate; dull pinkish-yellow, tessellated with black.

RECLUZ, *Revue Zool. Soc. Cuvierienne*, 1841, p. 180.

Hab. King George's Island.

A light rather depressed shell, sculptured with thin rather distant ribs, having the interstices densely latticed with crossed striae.

Species 75. (Fig. *a, b*, Mus. Cuming.)

NERITA RINGENS. *Ner. testā globosā, parvā, solidā, spirā
leviter exsertā, anfractibus rotundatis, spirāliter regu-
lariter costatis, labro et columellā fortissimè denta-
tis, areā columellari tumidā et corrugatā; iatensē
plumbēā.*

THE GRINNING NERITE. Shell globose, small, solid, spire

slightly exserted, whorls rounded, spirally regularly
ribbed, lip and columella very strongly toothed, co-
lummellar area swollen and wrinkled; dark lead-
colour.

Hab.——?

A small globose pea-like shell, distinguished by the
strongly developed teeth of the lip and columella.



76



77a



77b



78a



78b



79a



79b



80a



80b



81

NERITA.

PLATE XVIII.

Species 76. (Mus. Cuming.)

NERITA BULLULA. *Ner. testâ ovatâ, spirâ obtusâ, vix exsertâ, anfractibus subangustis, lævibus vel spiruliter striatis, columellâ excavato-planâ, subangustâ, tenuissimè obsolete denticulatâ; carbonario-nigrâ.*

THE BUBBLE NERITE. Shell ovate, spire obtuse, scarcely exerted, whorls rather narrow, smooth or spirally striated, columella excavately flattened, rather narrow, finely obsolete toothed; coal-black.

Hab. — ?

A small shining black species, with the whorls rather narrow, and the spire slightly slantingly exerted.

Species 77. (Fig. a, b, Mus. Cuming.)

NERITA GENUANA. *Ner. testâ orbiculari-ovata, depressiusculâ, spirâ impresso-planâ, anfractibus subangustis, versus aperturam latioribus, spiruliter tenuitricatis, labro intus fortiter crenato, columellâ declivi-convexâ, profusè granulatâ, edentulatâ; intensè nigrâ, zonis duabus latis intus aut roseis cingulatâ.*

THE GARTERED NERITE. Shell orbicularly ovate, rather depressed, spire impressly flattened, whorls rather narrow, broader towards the aperture, spirally finely ridged, lip strongly crenated within, columella slantingly excavated, profusely granuled, edentulate; intense black, encircled with broad reddish or yellow bands.

Hab. — ?

A jet-black species, encircled below and around the suture with a very characteristic broad yellow or rose band.

Species 78. (Fig. a, b, Mus. Cuming.)

NERITA ANNULATA. *Ner. testâ suborbiculari, depressiusculâ, crassâ, spirâ leviter exsertâ, uniconatâ, anfractibus superne depressis, deinde obsolete angulatis, convexis, spiruliter annulato-costatis, aperturâ expansâ, labro effuso, intus crenulato, columellâ superne obscure verruculâ, subdentatâ; nigrâ, punctis punctis latis variegatâ, inferne fasciis duabus albis latis cinctâ.*

THE RINGED NERITE. Shell somewhat orbicular, rather depressed, thick, spire slightly exerted, pointed,

whorls depressed at the upper part, then obsolete angled, convex, spirally annulately ribbed, aperture expanded, lip effused, crenulated within, columella obscurely wrinkled at the upper part, faintly toothed; black, variegated with a few yellow dots, encircled round the upper part with two broad white bands.

Hab. — ?

A solid orbicularly expanded shell, encircled throughout with ring-like ribs.

Species 79. (Fig. a, b, Mus. Cuming.)

NERITA GRANULATA. *Ner. testâ depresso-globosâ, solidiusculâ, spirâ plano-impressâ, anfractibus spiculiter latis, aperturâ expansâ, labro intus crenato, columellâ profusè granulatâ; carbonio-nigrâ, columellâ pallidissime verruculato-lucidâ.*

THE GRANULATED NERITE. Shell depressly globose, rather solid, spire flatly impressed, whorls spirally ridged, aperture expanded, lip crenulated within, columella profusely granuled; blue-black, columella faintly tinged with orange.

Hab. — ?

An orbicularly solid blue-black shell, distinguished in having the columellar area more than usually granulated.

Species 80. (Fig. a, b, Mus. Cuming.)

NERITA HELICINOIDES. *Ner. testâ ovato-turbinatâ, spirâ subaequali, exsertâ, anfractibus jacto spiram depressiusculis, rotundatis, subangustis, versus aperturam contractis, spiruliter tenuicostatis, aperturâ parvâ, labro effuso, columellâ declivi, obscure denticulatâ; lutescente, punctis nigris et roseis alternatim fasciatâ.*

THE HELICINA-LIKE NERITE. Shell ovately turbinated, spire rather large, exerted, whorls somewhat depressed next the spire, rounded, rather narrow, contracted, spirally finely ribbed towards the aperture, aperture small, lip effused, columella slanting, obscurely toothed; yellowish, encircled with alternate bands of black and red spots.

Hab. — ?

Of a peculiar contracted ovately turbinated form, be-gamged with alternate bands of black spots and rose

spots, reminding one of the *Helicina Tankervillei* or *pulcherrima*.

Species 81. (Mus. Cuming.)

NERITA AFFINIS. *Ner. testā ovato-turbinatā, spirā valdē exsertā, anfractibus superne concavis, deinde rotundatis, subangustis, versus aperturam contractis, spiraliter subobsolete liris, aperturā parvā, columellā declivi, edentulatā; griseo-albā, caeruleo-nigro obscure strigatā.*

THE ALLIED NERITA. Shell ovately turbinated, spirals much exerted, whorls concave round the upper part, then rounded, rather narrow, contracted towards the aperture, spirally rather obsolete ridged. aperture small, columella slanting, edentulate; greyish-white, faintly streaked with blue-black.

Hab. ———?

Of the same peculiar contracted turbinated type as the preceding species, faintly ridged, and grey-mottled.



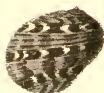
87 a



88 a



89 b



90 a



91 a



92 b



93 b



94 a



95 b



96 b

NERITA.

PLATE XIX.

Species 82. (Fig. a, *b*, Mus. Cuming.)

NERITA YOLDII. *Ner. testâ semiglobosâ, depressiventâ, crassâ, spirâ obtusè planâ, anfractibus juxta spiram declivibus, obtusè obscurè liris, aperturâ expansâ, labro effuso, intus incrassato, columellâ obsolete corrugatâ et granulatâ, minutè denticulatâ; nigrâ, maculis flavis et nigricantibus punctatis notatâ.*

YOLDI'S NERITE. Shell semiglobose, rather depressed, thick, spire obtusely flattened, whorls slanting next the spire, obtusely faintly ridged, aperture expanded, lip effused, thickened within, columella obsoletely wrinkled and granulated, minutely toothed; black, marked with zigzag spots and flames.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 151.

Hab. Red Sea.

A thickened obtusely expanded species, distinguished by a characteristic zigzag style of marking on an intensely black ground.

Species 83. (Fig. a, *b*, Mus. Cuming.)

NERITA PELLIS-SERPENTIS. *Ner. testâ ovato-turbinatâ, spirâ exsertâ, mucronatâ, anfractibus rotundatis, undique densè liris, aperturâ parvâ, columellâ obscurè dentatâ; albidâ, punctis rufis densè promiscuè tessellatâ.*

THE SNAKE-SKIN NERITE. Shell ovately turbinated, spire exserted, pointed, whorls rounded, closely ridged throughout, aperture small, columella obscurely toothed; whitish, thickly promiscuously tessellated with red dots.

Hab. — ?

A small contractedly turbinated species, densely promiscuously tessellated with red dots.

Species 84. (Fig. a, *b*, Mus. Cuming.)

NERITA PATULA. *Ner. testâ depresso-semiglobosâ, plus minus dilatâ, spirâ minutâ, impressâ, anfractibus*

spiraliter lineari-liris, angustis, gradatim latioribus, aperturâ ampliter expansâ, columellâ plano-excavatâ, mediè granulato-corrugatâ, edentulatâ; purpurascens-roseâ, lineis fasciisque nigris albipunctatis cingulatâ, columellâ dilatè aurantiâ, rugis nigrescentibus.

THE OPEN NERITE. Shell depressly semiglobose, more or less lirate, spire minute, impressed, whorls spirally linearly ridged, narrow, gradually broader, aperture largely expanded, columella flatly excavated, granularly wrinkled in the middle, edentulate; purple-rose, encircled with black lines and bands white-dotted, columella faintly tinged with orange, wrinkles black.

RECLUZ, Revue Zool. Soc. Cuvierienne, 1841, p. 148.

Hab. Dumaguete, Island of Negros, Philippines; Cuming.

A light *Crepidula*-shaped species, prettily painted with white-dotted lines and bands upon a purple-rose ground.

Species 85. (Fig. a, *b*, *c*, *d*, Mus. Cuming.)

NERITA BEANIANA. *Ner. testâ depresso-oratâ, spirâ impresso-planatâ, anfractibus angustis, lævibus vel spiraliter lineari-liris, aperturâ expansâ, columellâ concavo-excavatâ, tenuè corrugatâ; caruleo-nigrâ, fasciis roseis punctisque albis cingulatâ, interdum lineis albis, rugis columellaribus nigrescentibus.*

BEAN'S NERITE. Shell depressly ovate, spire impressly flattened, whorls narrow, smooth or spirally linearly ridged, aperture expanded, columella concavely excavated, finely wrinkled; blue-black, sometimes encircled with rose bands and white dots, sometimes with white lines, columellar wrinkles black.

RECLUZ, Pro. Zool. Soc. 1843, p. 200.

Hab. Island of Corrigidor, Philippines (under stones at low water); Cuming.

Allied to the preceding species, but narrower, and with the aperture less dilated. The fine black wrinkles on the columellar area are particularly characteristic.

NERITA.

archatina, <i>Reeve</i>	XVI	68	<i>livoglyphica</i> , <i>Chemnitz</i>	I.	2
affinis, <i>Reeve</i>	XVIII	81	<i>Helicoides</i> , <i>Reeve</i>	XVIII	80
albicilla, <i>Linnaeus</i>	XV.	64	<i>Hindsii</i> , <i>Recluz</i>	VI.	26
albipunctata, <i>Reeve</i>	XIII.	61	<i>histrio</i> , <i>Linnaeus</i>	VI.	27
annulata, <i>Reeve</i>	XVIII.	78	<i>Le Guillouana</i> , <i>Recluz</i>	IV.	15
antiquata, <i>Recluz</i>	II.	5	<i>lineata</i> , <i>Chemnitz</i>	III.	13
<i>Arctica</i> , <i>Reeve</i>	V.	20	<i>Listeri</i> , <i>Recluz</i>	VIII.	36
<i>Argus</i> , <i>Recluz</i>	XI.	53	<i>Longii</i> , <i>Recluz</i>	XI.	52
<i>Ascensionis</i> , <i>Chemnitz</i>	III.	14	<i>Molaccensis</i> , <i>Lamarck</i>	I.	1
<i>aterrima</i> , <i>Gmelin</i>	III.	11	<i>marmorata</i> , <i>Reeve</i>	XVI.	67
<i>atramentosa</i> , <i>Reeve</i>	VI.	25	<i>Maura</i> , <i>Recluz</i>	IV.	17
<i>atrata</i> , <i>Chemnitz</i>	IV.	16	<i>maxima</i> , <i>Chemnitz</i>	V.	22
<i>atro-purpurea</i> , <i>Recluz</i>	VIII.	38	<i>Neritoides</i> , <i>Reeve</i>	V.	21
<i>aurantia</i> , <i>Recluz</i>	XI.	49	<i>Neritopsoides</i> , <i>Reeve</i>	XVI.	69
<i>balteata</i> , <i>Reeve</i>	VI.	28	<i>nigerrima</i> , <i>Chemnitz</i>	III.	11
<i>Beauviana</i> , <i>Recluz</i>	XIX	85	<i>nigra</i> , <i>Chemnitz</i>	I.	2
<i>Bernhardi</i> , <i>Recluz</i>	XII.	57	<i>nivosa</i> , <i>Reeve</i>	XVI.	66
<i>bidens</i> , <i>Gmelin</i>	I.	2	<i>Novae-Guineae</i> , <i>Lesson</i>	XIII.	59
<i>bifasciata</i> , <i>Gmelin</i>	I.	2	<i>olegina</i> , <i>Reeve</i>	X.	47
<i>bisecta</i> , <i>Reeve</i>	VIII.	39	<i>Orbignyana</i> , <i>Recluz</i>	XIII.	58
<i>bullula</i> , <i>Reeve</i>	XVIII.	76	<i>ornata</i> , <i>Sowerby</i>	I.	3
<i>Chemnitzii</i> , <i>Recluz</i>	IV.	19	<i>oryzarum</i> , <i>Recluz</i>	X.	46
<i>chlorostoma</i> , <i>Lamarck</i>	VII.	32	<i>patula</i> , <i>Recluz</i>	XIX.	84
<i>chrysostoma</i> , <i>Recluz</i>	IV.	18	<i>pellis-serpentis</i> , <i>Reeve</i>	XIX.	83
<i>commu-notata</i> , <i>Reeve</i>	XVII.	72	<i>peloronta</i> , <i>Linnaeus</i>	II.	8
<i>costata</i> , <i>Chemnitz</i>	II.	6	<i>picea</i> , <i>Recluz</i>	V.	24
<i>Deshayesii</i> , <i>Recluz</i>	II.	7	<i>plexa</i> , <i>Chemnitz</i>	III.	12
<i>Dombeyi</i> , <i>Recluz</i>	XVII.	71	<i>plicata</i> , <i>Linnaeus</i>	IX.	42
<i>electricina</i> , <i>Reeve</i>	XVII.	70	<i>polita</i> , <i>Linnaeus</i>	I.	2
<i>erubescens</i> , <i>Reeve</i>	XIII.	54	<i>præcognita</i> , <i>C. B. Adams</i>	VII.	30
<i>Essingtoni</i> , <i>Recluz</i>	VI.	29	<i>quadricolor</i> , <i>Gmelin</i>	I.	4
<i>exuvia</i> , <i>Linnaeus</i>	I.	1	<i>ringens</i> , <i>Reeve</i>	XVII.	75
<i>exuvia</i> , <i>Lamarck</i>	III.	12	<i>Rumphii</i> , <i>Recluz</i>	XIV.	62
<i>filosa</i> , <i>Reeve</i>	X.	48	<i>Savienna</i> , <i>Recluz</i>	VIII.	37
<i>flavescens</i> , <i>Chemnitz</i>	I.	2	<i>scalpta</i> , <i>Reeve</i>	VII.	31
<i>fragum</i> , <i>Reeve</i>	IX.	41	<i>semirugosa</i> , <i>Recluz</i>	IV.	19
<i>fulgurans</i> , <i>Gmelin</i>	XI.	51	<i>Scægalensis</i> , <i>Gmelin</i>	VIII.	35
<i>fuliginata</i> , <i>Reeve</i>	XI.	50	<i>signata</i> , <i>Macleay</i>	X.	44
<i>funiculata</i> , <i>Reeve</i>	II.	9	<i>Spengleriana</i> , <i>Recluz</i>	XVII.	73
<i>gemmulata</i> , <i>Reeve</i>	IX.	40	<i>squamulata</i> , <i>Le Guillou</i>	XV.	63
<i>genuana</i> , <i>Reeve</i>	XVIII.	77	<i>stella</i> , <i>Chemnitz</i>	XII.	60
<i>Georgina</i> , <i>Recluz</i>	XVII.	74	<i>tessellata</i> , <i>Gmelin</i>	IX.	43
<i>granulata</i> , <i>Reeve</i>	XVIII.	79	<i>tertilis</i> , <i>Gmelin</i>	III.	12
<i>Grayana</i> , <i>Recluz</i>	VII.	33	<i>versicolor</i> , <i>Lamarck</i>	XII.	56
<i>grisea</i> , <i>Reeve</i>	V.	23	<i>vexillum</i> , <i>Reeve</i>	XVI.	65
<i>grossa</i> , <i>Linnaeus</i>	III.	10	<i>Yoldii</i> , <i>Recluz</i>	XIX.	82
<i>haustrum</i> , <i>Reeve</i>	VII.	34			

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