



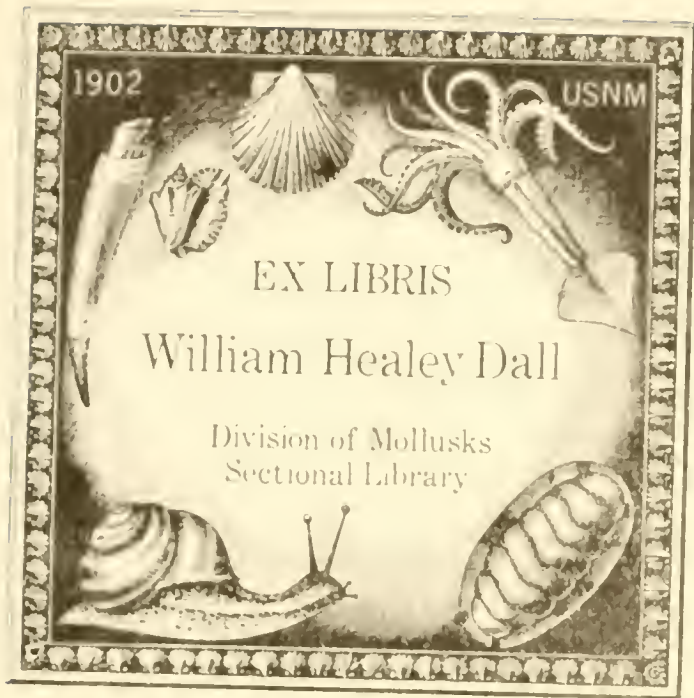
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CONCHOLOGIA ICONICA:  
OR,  
ILLUSTRATIONS  
OF THE  
SHELLS OF MOLLUSCOUS ANIMALS.

VOL. VII.

CONTAINING A MONOGRAPH OF THE GENUS

HELIX.

BY

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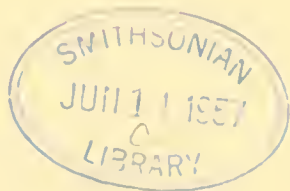
But who hath praise enough? Nay, who hath any?  
None can express Thy works but he that knows them  
And none can know Thy works, which are so many  
And so complete, but only He that owes them."—*Heb. vi.*

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# HELIX.

## PLATE I.

Species 1. (Fig. 1, 2, 4, Mus. Cuming.)

HELIX OVUM. *Hel. testâ subumbilicatâ, globoso-depressâ, obliquè striatâ et irregulariter rugosâ, lineis impressis, apice confertissimis, in anfractu ultimo remotis et irregularibus subdeccussatâ, nonnunquam rugoso-malleatâ, obtusè carinatâ, fulvo-castaneâ, interdum fasciâ supra carinam pallidâ, infra carinam purpureo-nigricante ornatâ; suturis canaliculatis; anfractibus quinque, supernè tumidis, ultimo ad columellam excavato; aperturâ lunato-ellipticâ, intus nitidè lacteâ; peristomate simplici, crasso, margine dextro arcuatim dilatato.*

THE EGG HELIX. Shell scarcely umbilicated, globosely depressed, obliquely rugose, subdeccussated with impressed lines, very close-set at the apex, remote and irregular on the last whorl, sometimes roughly indented, obtusely keeled, fulvous chestnut, sometimes encircled with a pale band above the keel, tinged with purple-black below the keel; sutures channelled; whorls five, swollen at the upper part, the last whorl excavated about the columella; aperture lunar-elliptical, shining white within; lip simple, thick, right edge areuately dilated.

VALENCIENNES, Voy. Humboldt and Bonpland, Zool. vol. ii. p. 242. pl. 56. f. 4.

*Helix Otahaitana*, Férussac.

*Helix meridionalis*, Wood.

*Hab.* Islands of Luzon and Panay, Philippines; Cuming.

The three specimens here figured represent the extreme varieties of the species, Fig. 4 being the type, Fig. 1 the variety  $\beta$  of Pfeiffer, and fig. 2 the variety  $\gamma$  of the same author. In the first the whorls are broad and compressed, in the second they are more swollen and encircled by a band of light epidermis. The third variety is chiefly remarkable for its wrinkled indented sculpture. At first

they seemed to represent so many distinct species, and are numbered accordingly in the plate, but upon further examination they prove to be, as defined by Pfeiffer, different states of the same.

The specimen of *H. ovum* figured by M. Valenciennes in Humboldt and Bonpland's Voyage, from the collection of a gentleman who resided at Manilla, is a dead bleached shell deprived of its epidermis.

For Sp. 2 and 4, see Pl. IX.

Species 3. (Mus. Cuming.)

HELIX SAGITTIFERA. *Hel. testâ subumbilicatâ, depressâ, obliquè striatâ et obsolete rugosâ, fulvâ, maculis sagittiformibus et ad carinam obsolete fasciâ unicâ rufâ ornatâ; suturis impressis, ad anfractum ultimum subcanaliculatis; anfractibus quatuor ad quinque, planiusculis, ultimo inflato; aperturâ perobliquâ, lunato-ovali, intus lacteâ; peristomate simplici, ad columellam subincrassato, vix reflexo, margine supero dextro.*

THE ARROW-HEAD-MARKED HELIX. Shell sub-umbilicated, depressed, obliquely striated and obsolete wrinkled, fulvous, ornamented with arrow-headed marks and an obsolete red band at the keel; sutures impressed, rather channelled in the last whorl; whorls four to five, rather flattened, last whorl inflated; aperture very oblique, lunar-oval, white within; lip simple, rather thickened about the columella, but little reflected, upper edge deflected.

PFEIFFER, Pro. Zool. Soc. 1842, p. 86.

*Hab.* Island of Luzon, Philippines; Cuming.

The arrow-head marks in this species are exceedingly characteristic; they are sometimes nearly obsolete, but, however faint, are sufficient to distinguish the species.







# HELIX.

## PLATE II.

Species 5. (Fig. *a, b*, Mus. Cuming.)

**HELIX SARCINOSA.** *Hel. testâ imperforatâ, ovato-globosâ, sublævigatâ, absque nitore, coloribus variâ, nunc virescente aut brunneâ, nunc flavo-brunneâ, fasciâ fusco-rubrá medio cingulatâ, epidermide variâ; spirâ latè conoideâ, apice obtusâ; anfractibus quinque, convexiusculis, ultimo magno, inflato, interdum obsolete angulato; columellâ roseâ, subrectâ, basi intortâ, subtruncatâ; aperturâ lunato-subovali, intus nitidè lacteâ; peristomate violascente-rubro, expanso, reflexiusculo, marginibus callo tenui, nitido, introrsum diffuso, junctis.*

**THE BURDENSOME HELIX.** Shell imperforated, ovately globose, nearly smooth, without glitter, various in colour, sometimes greenish or brownish, sometimes yellowish-brown, encircled round the middle with a brown-red band, epidermis variable; spire broadly conoid, obtuse at the apex, whorls five, rather convex, the last whorl large, inflated, sometimes obsoletely angled; columella pinkish, nearly straight, twisted at the base, slightly truncated; aperture lunar-suboval, shining milk-white within; edge of the lip violet-red, expanded, slightly reflected, margins joined by a thin shining callosity diffused inwards.

FERUSSAC, *Prodrome*, p. 323, *Hist. Moll.* pl. 109. f. 1-3.

*Hab.* Islands of Masbate, Guimaras, and Negros, Philippines.

This fine species is extremely variable both in colour

and in the pattern afforded by the layers of epidermis, divested of which, it has the appearance represented by Ferussac.

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

**HELIX TURBINOIDES.** *Hel. testâ imperforatâ, conico-globosâ, lineis incrementi obliquè striatâ, viridi, fasciâ albis hydrophanis cingulatâ, apice saturatè fulvo-rubrá; spirâ obtusè conicâ; anfractibus quinque, tumidis, ultimo spiram subæquante; columellâ arcuatâ, purpureo-fuscâ; aperturâ lunato-subovali, ferè circulari, intus nitidissimè lacteâ; peristomate simplici, reflexo, brunneo-marginato.*

**THE TOP-LIKE HELIX.** Shell imperforated, conically globose, obliquely striated with lines of growth, green, encircled with white hydrophanous bands, dark fulvous-red about the apex; spire obtusely conical, whorls five, swollen, the last nearly equal to the spire; columella arched, purple-brown; aperture lunar-suboval, nearly circular, glittering milk-white within; edge of the lip simple, reflected, purple-brown.

BRODERIP, *Pro. Zool. Soc.* 1840. p. 23.

*Hab.* Island of Luzon, Philippines; Cuming

The colouring of this elegantly formed species, a rich blue-green, varies only a very little in shade. The spiral bands differ according to the arrangement of the epidermis









# HELIX.

PLATE III.

Species 7. (Mus. Cuming.)

**HELIX CRYPTICA.** *Hel. testâ imperforatâ, globoso-depressâ, solidâ, striatâ, rugis obliquis sculptâ et lineis elevatis cinctâ, purpureo-brunneâ, epidermide fuscâ indutâ; spirâ brevi, nulâ; anfractibus quatuor, convexiusculis, ultimo medio angulato, anticè descendente; columellâ declivi, valdè dilatâ, carneâ; aperturâ perobliquâ, lunato-orali, intus argenteo-cærulescente; peristomate latè expanso, incrassato, reflexo, carneo-livido.*

**THE CONCEALED HELIX.** Shell imperforated, globosely depressed, solid, striated, sculptured with oblique wrinkles and encircled with raised lines, purple-brown, covered with a brownish epidermis; spire short; whorls four, rather convex, last whorl slightly angled in the middle, descending anteriorly; columella slanting, much dilated, flesh-tinted; aperture very oblique, lunar-oval, silvery-bluish within; edge of the lip thickened, reflected, livid flesh-colour.

BRODERIP, *Pro. Zool. Soc.* 1841, p. 22.

*Hab.* Island of Samar, Philippines; Cuming.

This species is of a rounded form, and has a peculiar glaucous-livid roughened surface.

Species 8. (Mus. Cuming.)

**HELIX PORPHYRIA.** *Hel. testâ perforatâ, depressâ, solidâ, obliquè rugoso-striatâ, rufâ, maculis et strigis creberrimis, flavido-albidis, subprominulis marmoratâ, carinatâ, infra carinam fusco-fasciatâ, basi olivaceo-fulvâ, nitidiorè; anfractibus quatuor ad quinque, planulatis, regulariter accrescentibus, ultimo circa perforationem apertam excavato; aperturâ subrhombè; peristomate simplici, tenui, margine columellari arcuatim reflexo.*

**THE PORPHYRY HELIX.** Shell perforated, depressed, solid, obliquely roughly striated, red, marbled with rather prominent close yellowish-white blotches and streaks, keeled, banded with brown below the keel, fulvous-olive and more shining at the base; whorls four to five, rather flattened, regularly increasing, the last excavated around the umbilicus; aperture subrhomboid; edge of the lip simple, thin, arcuately reflected over the columellar margin.

PFEIFFER, *Pro. Zool. Soc.* 1842, p. 57.

*Hab.* Island of Burias, Philippines; Cuming.

The upper surface of the shell is neatly characterized by a mottled disposition of the epidermis.

Species 9. (Mus. Cuming.)

**HELIX HEPATICA.** *Hel. testâ umbilicatâ, depressâ, striis confertis spiralibus et obliquis minutè decussata subcarinatâ, fumco-castaneâ, apicem versus rubicundâ, ad carinam zonulâ fulvâ cingulatâ, infra saturatè; subtus olivaceâ; spirâ parum exertâ; anfractibus quatuor, planiusculis; aperturâ lunato-orali; peristomate simplici, margine supèro inflexo, columellari valdè dilatato-reflexo.*

**THE LIVER-COLOURED HELIX.** Shell umbilicated, rather depressed, minutely decussated with close-set spiral and oblique striae, slightly keeled, smoky-chestnut colour, reddish towards the apex, encircled with a narrow yellow zone at the keel, darker below, olive underneath; spire but little exerted; whorls four in number, rather flattened; aperture lunar-oval, edge of the lip simple, upper margin inflected, columellar margin dilately reflected back.

*Hab.* Bulinao, Province of Zambales, Island of Luzon (under decayed leaves); Cuming.

This species is always distinguished from *H. baluana*, to which it is nearest allied, by its peculiar smoky-brown colour, its narrow yellow keel-zone, and firmer growth.

Species 10. (Mus. Cuming.)

**HELIX LATITANS.** *Hel. testâ umbilicatâ, globoso-depressâ, solidâ, longitudinaliter striatâ, sulcis concentricis flexilele notatâ, atro-rufescente, epidermide tenui, flavo-olivaceâ indutâ, medio rufo-fasciatâ; spirâ brevi; anfractibus quatuor, convexiusculis, ultimo obliquo angulato; columellâ declivi, latâ, planâ, fusco-carneâ; aperturâ perobliquâ, lunato-orali, intus villosâ, orbi peristomate intus fusco-carneo, latè expanso, tenui, arcuato, sic reflexo, marginibus callo nitido junctis, supra arcuato, basali cum columellari angustè fere unito.*

**THE LURKING HELIX.** Shell umbilicated, globosely depressed, solid, longitudinally striated, concentrically marked with concentric grooves, black-red, covered with a thin yellowish-grey epidermis, red-banded about the middle; spire short; whorls four, rather

convex, the last obsoletely angled; columella slanting, broad, flat, brownish-flesh; aperture rather oblique, lunar-oval, livid and shining within; edge of the lip brown-flesh within, broadly expanded, rather thin, but little reflected, margins joined by a thin shining callous layer, forming an angle at the base with the columella.

BRODERIP, Pro. Zool. Soc. 1841, p. 3.

*Hab.* Island of Bohol, Philippines; Cuming.

This fine species is of a dark mahogany-colour, the epidermis showing chiefly below the periphery of the last whorl. The lip is broadly expanded and of a strong flesh-tint.

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Species 11. (Mus. Cuming.)

HELIX MONOCHROA. *Hel. testâ profundè umbilicatâ, semiglobosâ, tenuiusculâ, pallidè brunneâ, interdum rufo variè fasciatâ, minutè rugulosâ; spirâ mediocri; anfractibus quatuor ad quinque, convexiusculis, ultimo rufo bifasciato; aperturâ perobliquâ, lunato-ovali, intus lacteâ; peristomate extus cœruleo-fusco, subincrassato, reflexo, columellari crasso, latè expanso, umbilicum semitigente.*

THE YELLOW-TINGED HELIX. Shell deeply umbilicated, semiglobose, rather thin, pale yellowish-brown, sometimes variously banded with red, minutely wrinkled; spire middling; whorls four to five, rather convex, the last red-banded; aperture very oblique, lunar-oval, milk-white within; lip blue-brown without, rather thickened, reflected; columella thick, broadly expanded, half-covering the umbilicus.

SOWERBY, Pro. Zool. Soc. 1841, p. 1.

*Hab.* Island of Tablas, Philippines; Cuming.

Of rather globose form, of a peculiar yellowish tinge, with a livid blue-white lip.

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Species 12. (Mus. Cuming.)

HELIX CADUCIOR. *Hel. testâ obliquè umbilicatâ, depressâ, carinatâ, supra carinam minutè granulatâ, infra carinam rugulosâ, pallidè olivaceâ, fasciâ angustâ*

*nigricante, spirâ parum elevatâ; anfractibus quatuor ad quinque, planiusculis et minutè decussatis; aperturâ latè ellipticâ, intus opalinâ; peristomate simplici, tenui, dilatato, umbilicum obliquum semitigente.*

THE MORE BRITTLE HELIX. Shell obliquely perforated, depressed, keeled, minutely granulated above the keel, wrinkled below it, light olive, with a narrow blackish band below the keel; spire but little raised—whorls four to five, rather flat and minutely decussated; aperture broadly elliptical, interior opaline. lip simple, thin, dilated at the columella, reflected, half-covering the oblique umbilicus.

*Hab.* Island of Masbate, Philippines; Cuming.

Of thin brittle substance and yellowish-olive hue, minutely granulated above, minutely wrinkled below.

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Species 13. (Mus. Cuming.)

HELIX CRETATA. *Hel. testâ umbilicatâ, depresso-globosâ, solidâ, subepidermide griseo-flavidâ, sæpe obscurè zonatâ, nitidè atro-rufescente; spirâ subelevatâ, semiglobosâ, strigis epidermidis variegatâ; anfractibus quatuor, convexis, ultimo lineis elevatis, concentricis cincto et irregulariter malleato; columellâ declivi, strictiusculâ, dilatatâ, planâ, albâ vel rubellâ; aperturâ amplâ, lunato-ovali, intus iridescente; peristomate latè expanso, reflexo, margine supero arcuato, basali cum columellari angulum obtusum formante.*

THE CHALKY HELIX. Shell umbilicated, depressly globose, solid, shining dark red, covered with a yellowish-grey epidermis, often zoned; spire somewhat raised, semiglobose, variegated with streaks of epidermis; whorls four, convex, the last encircled with raised lines and irregularly dented; columella slanting, rather drawn out, dilated, flat, white or reddish, aperture large, lunar-oval, iridescent within; lip broadly expanded, reflected, upper edge arched, basal edge forming an obtuse angle with the columella.

BRODERIP, Pro. Zool. Soc. 1841, p. 23.

*Hab.* Island of Leyte, Philippines; Cuming.

The surface of this shell, covered with a thick chalky epidermis, is peculiarly dented throughout







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# HELIX.

## PLATE IV.

Species 14. (Mus. Cuming.)

**HELIX STOLEPHORA.** *Hel. testâ umbilicatâ, subdiscoideâ, sublævigatâ, obliquè striatâ, obtusè angulatâ, supernè depressâ, pallidissimè carneo-fulvescente, basi convexâ, infra angulum fasciâ rufâ, deorsum pallescente, reticulato-striatâ circumdatâ; anfractibus quatuor, planiusculis; aperturâ perobliquâ, valdè depressâ; peristomate vix incrassato, marginibus callo umbilicum ferè tegente junctis.*

**THE ROBED HELIX.** Shell umbilicated, subdiscoid, rather smooth, obliquely striated, obtusely angled, depressed at the upper part, very light flesh-brown, base convex, surrounded with a red band beneath the angle, then pale and reticulately striated; whorls four, rather flat; aperture very oblique, very depressed; lip scarcely thickened, margins joined by a callous layer, which nearly covers the umbilicus.

VALENCIENNES, Voy. Humboldt and Bonpland, Zool. p. 242. pl. 56. f. 4.

*Helix buphtalmus*, Férussac.

*Hab.* New Spain; Valenciennes.

Distinguished chiefly by its depressly flattened growth and purplish flesh-brown colouring.

Species 15. (Mus. Cuming.)

**HELIX BULLA.** *Hel. testâ subumbilicatâ, globoso-depressâ, tenuissimâ, pellucidâ, striis confertis spiralibus et obliquis minutè decussatâ, subcarinatâ, pallidè fulvâ, ad carinam rufo-cingulatâ; suturis vix impressis; spirâ parum exsertâ; anfractibus quatuor, planiusculis; aperturâ lunato-rotundatâ, intus iridescente, unifasciatâ; peristomate simplici, margine supero introrsum flexo, columellari vix expanso.*

**THE BUBBLE HELIX.** Shell sub-umbilicated, globosely depressed, very thin, pellucid, very closely decussated with close-set spiral and oblique striae, slightly keeled, light fulvous, encircled with a red band at the keel; sutures slightly impressed; spire but little exerted; whorls four, rather flattened; aperture lunar-shaped, iridescent and one-banded within; lip simple, upper edge slightly inflected, columellar edge very little expanded.

PFEIFFER, Pro. Zool. Soc. 1842, p. 151.

*Hab.* Province of Albay, Island of Luzon, Philippines; Cuming.

A very slight transparent shell, similar in form and design to *H. hepatica*.

Species 16. (Mus. Cuming.)

**HELIX EXILIS.** *Hel. testâ umbilicatâ, subdiscoideâ, varinatâ, pellucidâ, tenerâ, pallidè fulvidâ, supernè depressâ, argutè striatâ, subtilis convexiore, striis minus distinctis; anfractibus sex, planiusculis, ultimo condescendente, fasciâ angustâ, rufâ, infra carinam ornata; areâ umbilicali interdum rufo-fuscâ; aperturâ latâ, ellipticâ; peristomate simplici, acuto, margine columellari brevissimè reflecto.*

**THE SLENDER HELIX.** Shell sub-umbilicated, discoid, keeled, pellucid, light, pale fulvous, depressed at the upper part, prominently striated, more convex beneath, with the striae less distinct; whorls six in number, rather flattened, the last not descending, ornamented with a narrow red band beneath the keel; area of the umbilicus sometimes reddish-brown; aperture broad elliptical; lip simple, sharp, columellar edge very shortly reflected.

MULLER, Verm. vol. ii. p. 22.

*Helix explanata*, Quoy.

*Hab.* New Guinea; Quoy. Island of Ticao, Philippines; Cuming.

The upper convex surface of this shell is remarkable for its crowded concentric striae.

Species 17. (Mus. Cuming.)

**HELIX ZEUS.** *Hel. testâ obliquè umbilicatâ, subdepresso-convexâ, solidâ, rugis obliquis striis per spiralem lateralis sculptâ, rufâ, strigis albis foveatis superornatâ; anfractibus quatuor aliquid plus, convexiore basi convexo, medio angulato, infra carinam sub profundis concentricis excavato; aperturâ perispirali, subtrapeziformi; peristomate simplici, margine columellari brevi, supra umbilicum reflecto.*

**THE RAIN-SHOWER HELIX.** Shell obliquely umbilicated, somewhat depressly convex, solid, sculptured with oblique wrinkles and raised spiral striae, not ornamented about the upper part with zig-zag striae, whorls four to five, convex, the last convex at the base, angled in the middle, ploughed with deep concentric grooves beneath the keel, aperture very



*aperturâ*, *simplex*, *lipâ* sharp, straight, columnellar edge sharp, reflected over the umbilicus.

JONAS, Proc. Zool. Soc. 1842, p. 188.

*Hab.* Island of Mindoro, Philippines; Cuming.

This is a very distinct species, first, in form, owing to a peculiar depression of the sutures, secondly, in marking, which consist of a shower of zigzag marks upon a dark chestnut ground.

Species 18. (Mus. Cuming.)

HELIX RAPA. *Hel. testâ obliquè umbilicatâ, convexo-rotundatâ, basi concentricâ, supra spirâ bus decussatâ, pulchre nigro-fulvâ; anfractibus ultimo fasciâ angustâ concentricâ circumscriptâ, et his utriusque circumle malleatis; aperturâ obliquâ, lunato-ovali; peristomate simplici, largiæ columellari breviter dilatato, umbilicis partem tegente.*

THE RAPE HELIX. Shell obliquely umbilicated, convexly rounded, decussated with concentric lines and spiral grooves, pale olive-brown; last whorl encircled with a narrow chestnut band, minutely indented throughout beneath, spire rather raised; aperture oblique, lunar oval; lip simple, columnellar edge shortly dilated, nearly covering the umbilicus.

MULLER, Verm. vol. ii. p. 67.

*Hab.* Island of Amboyna; Beek.

This species is referred to Muller's *H. rapa*, but it is distinct out of the several allied species now known, to say which is the original type.

Species 19. (Mus. Cuming.)

HELIX MULLERI. *Hel. testâ rix umbilicatâ, convexo-orbiculatâ, subcarinatâ, solidâ, fulvâ, basi saturatiore infra carinam fasciâ latâ rufâ notatâ, anfractibus quatuor ad quinque, supremis planis minutè rugoso-reticulatis ultimo convexo aperturam convexo, irregulariter malleato-rugoso, aperturâ lunato-ovali; peri-*

*stomate simplici, largiæ supra sub flexo, columellari breviter expanso, peristomate tegente.*

MULLER'S HELIX. Shell umbilicated, convexly orbicular, slightly keeled, solid, fulvous, darker at the base, marked with a broad red band beneath the keel, whorls four to five, upper ones flattened, minutely rugosely reticulated, last whorl convex towards the aperture, irregularly roughly indented; aperture lunar-oval; lip simple, upper edge slightly inflected, columnellar edge shortly expanded, covering the umbilicus. PFEIFFER, Zeitschrift für Malac. 1844, p. 178.

*Hab.* Island of Mindoro, Philippines; Cuming.

Of an orbicular form, with a rather roughly indented surface.

Species 20. (Mus. Cuming.)

HELIX LAMARCKIANA. *Hel. testâ obliquè umbilicatâ, depressâ, subcarinatâ, tenui, supra carinam minuti granulosa, infra rugulosa, olivaceo-rufâ, infra carinam fasciâ nigro-rufâ, dorsum dilatâ, ornatâ; suturis impressis; spirâ parum elevatâ; anfractibus quatuor ad quinque, supremis planiusculis, minutissimè decussatis et malleatis; aperturâ late ellipticâ, intus lacteâ vel opalinâ; peristomate simplici, tenui, ad columellam dilatato, reflexo, umbilicum obliquè semitegente.*

LAMARCK'S HELIX. Shell obliquely umbilicated, depressed, irregularly striated and wrinkled, olive-red, ornamented with a black-red band beneath the keel then fading; sutures impressed; spire but little raised; whorls four to five, the uppermost rather flat, indented and very minutely decussated; aperture broadly elliptical, milk-white or opaline within. lip simple, thin, dilated and reflected at the columella, half-covering the oblique umbilicus.

LEA, Trans. Amer. Phil. Soc. vol. vii. p. 461. pl. 12. f. 11.

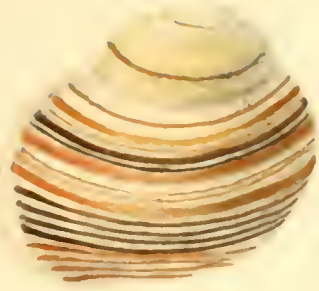
*Hab.* Island of Masbate, Philippines; Cuming.

A bold, rather solid shell, with the upper surface thickly rudely indented.





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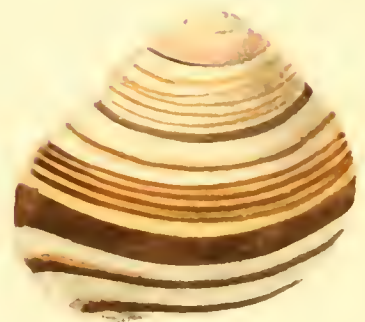
23.



24 a



24 b



24 c



25.

# HELIX.

PLATE V.

Species 21. (Mus. Cuming.)

**HELIX NORRISII.** *Hel. testā imperforatā, globoso-depressā, solidā, obsolete malleatā, glabrā, fulco-citrinā, zonis opacis, candidis, et infra suturas maculis irregularibus albis notatā; spirā semiglobosā; anfractibus quatuor ad quinque, convexis, ultimo ad columellam latam, callosam, arcuatim prolongatam, excavato: aperturā lunato-subcirculari, intus lacteā; peristomate crasso, latissimè expanso.*

**NORRIS'S HELIX.** Shell imperforated, globosely depressed, solid, obsolete indented, smooth, fulvous-lemon, with opake white epidermis zones, and marked with irregular white epidermis spots below the sutures; spire semiglobose; whorls four to five, convex, the last excavated at the broad, callous, arcuately prolonged columella; aperture lunar-subcircular, white within; lip thick, very broadly expanded.

**SOWERBY, Pfeiffer, Pro. Zool. Soc. 1842, p. 55.**

*Hab.* Islands of Luzon and Mindanao, Philippines; Cuming.

This delicate species comes very near *H. pulcherrima*, but is certainly distinct. It is always of a clear uniform fulvous lemon-colour, zoned and blotched with opake white epidermis.

Species 22. (Mus. Cuming.)

**HELIX DUBIOSA.** *Hel. testā imperforatā, depresso-globosā, tenui, obsolete malleatā, fulvā, fasciā suturali et areā columellari nigro-rufis, fasciisque plurimis epidermidis hydrophanæ albidæ ornatā; spirā subsemiglobosā; anfractibus quatuor, convexiusculis, celeriter accrescentibus; columellā planulatā, declivi; aperturā lunato-rotundatā, peristomate tenui, albo, latè expanso, eix reflexiusculo, margine basali cum columellā angulum obsolete formante.*

**THE DOUBTFUL HELIX.** Shell imperforated, depressly globose, thin, obsolete indented, fulvous, ornamented with black-red in bands and in columellar area, and with numerous white epidermis bands and lines; spire sub-semiglobose; whorls four in number, rather convex, enlarging rapidly; columella flattened, slanting; aperture lunar-rounded; lip thin, white, broadly expanded, scarcely reflected, basal margin forming an obsolete angle with the columella.

**PFEIFFER, Pro. Zool. Soc. 1845, p. 123.**

*Helix decipiens, var. Sowerby.*

*Hab.* Island of Samar, Philippines; Cuming.

This species is distinct from the following, but it comes very near to *H. mirabilis*, so much so as to make it doubtful whether it is distinguished by anything more than a different kind of epidermis.

Species 23. (Mus. Cuming.)

**HELIX DECIPIENS.** *Hel. testā imperforatā, subglobosā, tenui, lævi, non nitente, pellucidā, fulcā vel sulphureā, epidermide hydrophanā albā strigatā et fasciatā; spirā subelatā; anfractibus quatuor, rotundatis; columellā albā, subarcuatā; aperturā lunato-subcirculari, intus lacteā; peristomate expanso.*

**THE DECEPTIVE HELIX.** Shell imperforated, subglobose, thin, smooth, not shining, pellucid, fulvous or sulphurous, streaked and banded with white hydrophanous epidermis; spire slightly raised; whorls four, rounded; columella white, subarcuate; aperture lunar-subcircular, white within; lip expanded.

**SOWERBY, Pro. Zool. Soc. 1840, p. 96.**

*Hab.* Island of Luzon, Philippines; Cuming.

Several of Mr. Sowerby's varieties are to be excluded from this species, which is of light substance, streaked longitudinally with broken lines of white hydrophanous epidermis.

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

**HELIX PAN.** *Hel. testā imperforatā, conoide-globosā, obliquè striatā, epidermide hydrophanā ubique lacteā, albidā vel fuscā, zonis variis fulvis et nigricantibus ornatā; spirā elatā; anfractibus quinque, planiusculis; columellā subrectè descendente, albidā, dilatā; aperturā lunato-ovali, intus lacteā; peristomate angustè reflexo, intus brunneo vel albid.*

**THE PAN HELIX.** Shell imperforated, conoid-globose, obliquely striated, covered everywhere with hydrophanous epidermis, whitish or brown, ornamented with various fulvous and blackish zones, spire raised, whorls five, rather flattened, columella nearly straight, descending, whitish, dilated, aperture lunar-oval, white within, lip narrowly reflected, brownish or whitish within.

BRODERIP, Pro. Zool. Soc. 1841, p. 23.

*Hab.* Island of Bohol, Philippines; Cuming.

This is more covered with epidermis than most species. The rich-brown bands are variously disposed, and the lip has a livid purplish tinge.

Species 25 (Mus Cuming.)

HELIX CHRYSOCHEILA. *Hel. testâ imperforatâ, depresso-globosâ, crassiusculâ, obliquè striatâ, rubellâ, epidermide nitulâ olivaceo-luteâ indutâ; spirâ obtusâ; anfractibus quatuor ad quinque, convexis, ultimo valdè inflato; columellâ perobliquâ, dilatâ, profundè intrante, subexcavatâ, vitellinâ; aperturâ lunato-rotun-*

*datâ, intus albâ; peristomate lato, reflexo, valdè incrassato, vitellino.*

THE GOLDEN-LIP HELIX. Shell imperforated, depressly globose, rather thick, obliquely striated, pale rose-tinted, covered with an olive-yellow shining epidermis; spire obtuse; whorls four to five, convex, the last much inflated, columella very oblique, dilated, entering deeply, slightly excavated, egg-yolk coloured, aperture lunar-rounded, white within; lip broad, reflected, much thickened, egg-yolk coloured.

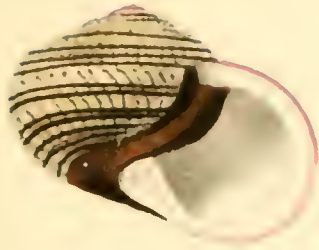
SOWERBY, Pro. Zool. Soc. 1841, p. 3.

*Hab.* Island of Luzon, Philippines; Cuming.

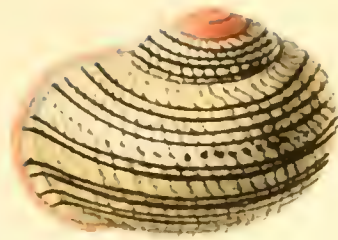
A fine solid shell, remarkable for its brilliant golden-yellow colouring and shining horny epidermis, without pattern or marking.







25 a



25 b



25 c



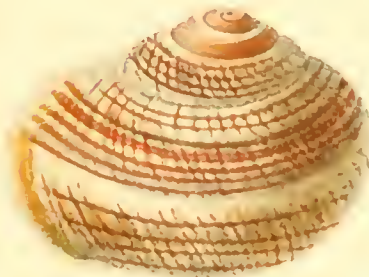
25 d



25 e



25 f



25 g



26 a



26 b



26 c

# HELIX.

PLATE VI.

Species 26. (Fig. *a* to *k*, Mus. Cuming.)

**HELIX PULCHERRIMA.** *Hel. testâ subglobosâ, imperforatâ, unicolore vel coloribus variis pulchrè pictâ, plerumque epidermide albidâ elegantissimè reticulato-fasciatâ; spirâ parculâ, obtusè conoideâ, apice nitidè sanguineâ; anfractibus quatuor ad quinque, convexis, ultimo valdè inflato, ad columellam excavato; columellâ obliquâ, albedo-callosâ, supernè obsolete unidentatâ; aperturâ lunato-circulari, intus nitidissimâ; peristomate simplici, expanso.*

**THE VERY BEAUTIFUL HELIX.** Shell imperforated, subglobose, of one uniform colour, or beautifully painted with various colours, generally very elegantly reticulatedly banded with a whitish epidermis; spire rather small, obtusely conoid, shining blood-rose tint at the apex; whorls four to five, convex, last whorl much inflated, excavated at the columella; columella ob-

lique, white and callous, obsolete one-toothed at the upper part; aperture lunar-circular, very shining within; lip simple, expanded.

SOWERBY, Pro. Zool. Soc. 1840, p. 90.

*Hab.* Province of Cagayan, Island of Luzon, Philippines. Cuming.

The colours and varieties of epidermis-pattern exhibited in this beautiful species are so numerous, that the accompanying ten figures are insufficient to illustrate it fully. The prevailing colours are dark chestnut, rose, and yellow, and all are remarkable for their peculiar delicacy and clearness. The lip is white, mostly edged with rose, and the apex is generally rose, whether the body of the shell is light or dark-coloured.

Mr. Cuming collected this species in the island of Luzon, where he discovered it in all its varieties within a very limited area.

March, 1851.









27.



28.



29.



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31.



32.



33.

# HELIX.

PLATE VII.

Species 27. (Mus. Cuming.)

**HELIX CHLOROCHROA.** *Hel. testā imperforatā, subglobosā, tenuiusculā, fulvidā vel pallidē brunneā, albo-marmoratā et strigatā, epidermide cinereo-fuscescente indutā; spirā semiglobosā; anfractibus quatuor ad quinque, convexiusculis, ultimo ad peripheriam obsolete angulato; columellā obliquē arcuatā, denticulatā; aperturā rotundato-lunari; peristomate subincrassato, expanso, fusco.*

**THE YELLOWISH HELIX.** Shell imperforated, subglobose, rather thin, yellowish or pale brown, marbled and streaked with white, covered with a light ash-brown epidermis; spire semiglobose; whorls four to five, rather convex, last whorl obsolete angled at the periphery; columella obliquely arched, denticulated; aperture rounded-lunar; lip rather thickened, expanded, brown.

SOWERBY, Pro. Zool. Soc. 1841, p. 2.

*Hab.* Island of Bohol, Philippines; Cuming.

It is somewhat doubtful whether this is not a light unspotted variety of *H. Mindanaensis*.

Species 28. (Mus. Cuming.)

**HELIX CUVIERIANA.** *Hel. testā umbilicatā, tenui, pellucidā, obliquē striatā, carinatā, olivaceo-lutescente, infra carinam fuscā latā rufo-virescente, deorsum dilutā, ornatā; spirā vix elatā; anfractibus quinque, planulatis, ultimo basi convexo; aperturā latā, lunari; peristomate simplici, acuto, margine columellari breviter reflexiusculo.*

**CUVIER'S HELIX.** Shell umbilicated, thin, pellucid, obliquely striated, keeled, olive-yellow, ornamented with a broad red-green band beneath the keel, diluted below; spire scarcely raised; whorls five, flattened, last whorl convex at the base; aperture broad, lunar; lip simple, sharp, columellar edge shortly reflected.

LEA, Trans. Amer. Phil. Soc. vol. vii. p. 461. pl. 12. f. 12.

*Hab.* Island of Luzon, Philippines; Cuming.

A thin convexly flattened shell, very sharply keeled at the periphery, of a rich horny-green colour underneath.

Species 29. (Mus. Cuming.)

**HELIX FULVIDA.** *Hel. testā subumbilicatā, globoso-tur-*

*binatā, tenui, pellucidā, pallidē fulrescente, supernè sub lente confertissimè granulosa, basi glabrā, nitidā; spirā subelatā, apice obtusā; anfractibus quinque ad sex, supremis planis, ultimo rotundato; aperturā lunari; peristomate simplici, margine columellari subincrassato, ad perforationem obsoletam reflexo.*

**THE FULVOUS HELIX.** Shell slightly umbilicated, globosely turbinated, thin, pellucid, pale fulvous, very closely granulated beneath the lens at the upper part, smooth and shining at the base; spire slightly raised, obtuse at the apex; whorls five to six, the uppermost flattened, the last rounded; aperture lunar; lip simple, columellar margin rather thickened, reflected about the obsolete umbilicus.

PFEIFFER, Pro. Zool. Soc. 1842, p. 87.

*Hab.* Island of Mindanao, Philippines; Cuming.

This differs mainly from the preceding species in having the surface minutely granulated, and in the whorls being rounder and little keeled.

Species 30. (Mus. Cuming.)

**HELIX GRANDIS.** *Hel. testā imperforatā, globoso-turbinatā, solidā, ponderosā, striatā, nigricante-rufā, epidermide griseo-fuscescente fasciatim obductā; spirā conicā, apice pallidā; anfractibus sex, vix convexiusculis, ultimo spirā breviorē, basi inflato, fortius striato; columellā verticali, brevi, subtortā; aperturā latē lunari; peristomate nigricante, latē expanso, margine basali incrassato, reflexo, cum columellari valdē dilatato, albido, angulum obtusum formante.*

**THE LARGE HELIX.** Shell imperforated, globosely turbinated, solid, heavy, striated, blackish-red, covered with a greyish-brown epidermis disposed in bands; spire conical, apex pale; whorls six, rather convex, the last shorter than the spire, inflated and more strongly striated at the base; columella vertical, short, rather twisted; aperture broadly lunar; lip blackish, broadly expanded, basal margin thickened, reflected, with the columellar edge strongly dilated, whitish, forming an obtuse angle.

PFEIFFER, Pro. Zool. Soc. 1845, p. 43.

*Hab.* Near Bangui, Province of Hocos, Island of Luzon, Philippines; Cuming.

April, 1851.

The locality of this species is given with some accuracy, as the specimen there collected, from which our drawing is made, is the only one at present known.

Species 31. (Fig. a, b, Mus. Cuming.)

HELIX FULGENS. *Hel. testā imperforatā, globoso-conicā, crassiusculā, laxi, supernè albidā, basi fusco-fulvā, fasciis aliquot nigris cinctā; spirā elatā, oblusiusculā; anfractibus quatuor ad quinque, convexiusculis; aperturā lunato-subcirculari, intus albā; columellā dilatā, albo-callosā; peristomate breviter reflexo.*

THE SHINING HELIX. Shell imperforated, globosely conical, rather thick, smooth, whitish round the upper part, brown-fulvous below, encircled by a few black bands; spire raised, rather obtuse; whorls four to five, rather convex; aperture lunar-subcircular, white within; columella dilated, white-callous; lip shortly reflected.

SOWERBY, Pro. Zool. Soc. 1841, p. 3.

*Hab.* Island of Mindoro, Philippines; Cuming.

The varieties of this species here figured show that the dark bands are variably disposed, with sometimes a very dark one beneath the sutures.

Species 32. (Mus. Cuming.)

HELIX MINDANAENSIS. *Hel. testā imperforatā, globoso-conicā, solidā, obliquè rugoso-striatā, opice obtusā, pallidā, luteo-fuscā, opacā, maculis variis rufis pellucidis ornatā; spirā conoideā; anfractibus quatuor ad quinque, convexiusculis, ultimo medio obtusè angulato, infra angulum fasciā latā hydrophanā albidā signato; columellā lividā, subrectè descendente, medio subintortā; aperturā tetragono-ovali, intus plumbeā; peristomate subiucrassato, parum reflexo, livido-fusco, margine supero arcuatim dilatato.*

THE MINDANAO HELIX. Shell imperforated, globosely conical, solid, obliquely rugosely striated, obtuse at the apex, pale, yellowish-brown, opaque, ornamented with variable transparent reddish spots; spire conoid; whorls four to five, rather convex, last whorl obtusely angled in the middle, marked with a broad whitish hydrophanous band below the angle; columella livid, descending nearly straight, slightly twisted in the middle; aperture quadrangularly oval, lead-colour within; lip slightly thickened, but little reflected, livid brown, upper edge arcuately dilated.

SOWERBY, Pfeiffer, Pro. Zool. Soc. 1842, p. 85.

*Hab.* Island of Mindanao, Philippines; Cuming.

Of a dull gloomy brown hue, interspersed with dark chocolate-brown spots and dashes.







33



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# HELIX.

## PLATE VIII

### Species 33. (Mus. Cuming.)

**HELIX CAILLIAUDI.** *Hel. testâ imperforatâ, depresso-globosâ, solidâ, longitudinaliter ruguloso-striatâ. lineis concentricis impressis nonnullis notatâ, luteo-fuleâ, fasciis duabus nigro-castaneis, pluribusque angustis epidermidis albidæ hydrophanæ cinctâ; spirâ brevi, apice obtusâ; anfractibus quinque, supremis planulatis, reliquis convexis, ultimo magno, basi subplanulato, concentricè sulcato, anticè paululum descendente; columellâ obliquâ, latâ, albâ, excavatâ; aperturâ amplâ, perobliquâ, lunato-obovata, intus nitidè albâ; peristomate latè expanso, breviter reflexo, albo.*

**CAILLIAUD'S HELIX.** Shell imperforated, depressly globose, solid, longitudinally roughly striated, marked with some impressed concentric lines, fulvous, encircled with two blackish-chestnut bands and several narrow bands of white hydrophanous epidermis: spire short, obtuse at the apex; whorls five, upper ones flattened, the rest convex, the last large, rather flattened at the base, concentrically grooved, descending a little anteriorly; columella oblique, broad, white, excavated: aperture large, very oblique, lunar-oval, shining white within; lip broadly expanded, shortly reflected, white.

DESHAYES, Guerin's Mag. de Zool. 1839, pl. 5.

Eadem var. *Helix ferruginea*, Lea.

*Hab.* Islands of Luzon and Mindanao, Philippines; Cuming.

This is a very elegantly formed species, the last whorl forming a gracefully reflected curve at the lip. In marking, it is encircled by two narrow remote dark bands and numerous lines of opake white epidermis.

### Species 34. (Mus. Cuming.)

**HELIX CURTA.** *Hel. testâ imperforatâ, ovato-conicâ, crassiusculâ, substriatâ, luteâ, epidermide palidâ hydrophanâ strigatâ et marmoratâ, apice rubellâ, nitidâ; spirâ elevatâ, conicâ, obtusiusculâ; anfractibus sex, planulatis, ultimo anticè paululum descendente, basi brunnescente, epidermide griseâ radiato; columellâ obliquâ, albâ, introrsum valdè dilatatâ, dentato-truncatâ; aperturâ coarctatâ, irregulariter semiovali; peristomate crassiusculo, albo, nitidè, breviter reflexo.*

**THE SHORT HELIX.** Shell imperforated, ovately conical,

rather thick, somewhat strongly brownish streaked and marbled with a paler yellowish epidermis reddish and shining at the apex; spire small, conical rather obtuse; whorls six, rather flattened, the last descending a little anteriorly, five white at the base, rayed with a grey epidermis; columella oblique, white, much dilated towards, but slightly truncated; aperture coarctated, irregularly semi-oval; lip rather thick, white, slightly shortly reflected.

SOWERBY, Pro. Zool. Soc. 1841, p. 20.

*Hab.* Island of Luzon, Philippines; Cuming.

A stout conical shell, with a small contracted aperture and thickened reflected lip.

### Species 35. (Mus. Cuming.)

**HELIX LIBATA.** *Hel. testâ imperforatâ, globoso-conicâ, solidiusculâ, apice obtusâ, longitudinaliter ruguloso-striatâ, obscure fasciatâ, indurâ; anfractibus quinque, ultimâque, subrotundata; columellâ obliquâ, albâ, subinfundè intrate, nitidâ, fasciâ nigricante circumdatâ; aperturâ subquadrato-rotundatâ; peristomate pallidè reflexo, purpureo-fusco.*

**THE SACRIFICED HELIX.** Shell imperforated, globose conical, rather solid, obtuse at the apex, yellowish covered with an obscurely banded brown epidermis; whorls four to five in number, somewhat rounded, columella nearly straight, broad, entering rather deeply, white, surrounded by a blackish band; aperture somewhat squarely rounded; lip thin, slightly reflected, purple-brown.

*Helix Belleri*, var. Pfeiffer.

*Hab.* Island of Luzon, Philippines; Cuming.

This species appears to be distinct from *H. Belleri*, both in form and in the character of its epidermis. It was procured by Mr. Cuming from the mountains of the Erigetes, an elevated triangular island near the western part of Luzon, by the command of the Spanish Government.

### Species 36. (Mus. Cuming.)

**HELIX HARETTII.** *Hel. testâ imperforatâ, globoso-conicâ, solidiusculâ, substriatâ, fasciâ epidermidis hydrophanæ fasciâ tricolorâ circumdatâ, nitidâ, albâ, peristomate pallidè fasciatâ; spirâ elevatâ, apice obtusâ, nitidâ.*



*nitidâ; anfractibus quatuor ad quinque, vix convexiusculis, ultimo obsolete angulato; columellâ obliquâ, medio incrassatâ, carneo-fuscâ; aperturâ lunato-ovali, intus carulescente-albidâ; peristomate subincrassato, breviter reflexo, carneo-fusco marginato.*

**HARFORD'S HELIX.** Shell imperforated, globosely sub-turbinated, substriated, fulvous, covered with an hydrophanous epidermis, tessellately blotched with brown, with a light band of epidermis round the periphery; spire somewhat raised, obtuse at the apex, pale, shining; whorls four to five, slightly convex, last whorl obsolete angled; columella oblique, thickened in the middle, flesh-brown; aperture lunar-oval, blue-white within; lip rather thickened, shortly reflected, edged with flesh-brown.

*Hab.* Island of Negros, Philippines; Cuming.

This fine species is mainly distinguished by its globular form, freckled epidermis, and flesh-brown colouring of the lip and columella.

Species 37. (Mus. Cuming.)

**HELIX BUTLERI.** *Hel. testâ imperforatâ, globosâ, tenuiusculâ, levi, apice obtusâ, albâ; spirâ semiglobosâ; suturâ mediocri; anfractibus quatuor ad quinque, planiusculis, ultimo inflato, pallidè lutescente, lineis confertis, fuscis, interruptis, ornato; columellâ subrectâ, latâ, profundè intrantè; aperturâ rotundato-lunari; peristomate simplici, albo, margine dextro vix expanso, basali subincrassato, cum columellâ angulum obtusum formante.*

**BUTLER'S HELIX.** Shell imperforated, globose, rather thin, smooth, apex obtuse, white; spire semiglobose; suture middling; whorls four to five, rather flattened, the last inflated, pale yellow, ornamented with close-set interrupted brown lines; columella nearly straight, broad, entering deeply; aperture rotundately lunar; lip simple, white, right edge scarcely expanded, basal edge rather thickened, forming an obtuse angle with the columella.

*PFEIFFER, Pro. Zool. Soc. 1842, p. 87.*

*Hab.* Island of Penang, Philippines; Cuming.

This interesting species is named in honour of Mr. Butler, an amateur collector of shells resident at Manilla,

to whom Mr. Cuming was much attached and indebted for many kind services during his sojourn in that country.

Species 38. (Mus. Cuming.)

**HELIX BRUGUIERIANA.** *Hel. testâ imperforatâ, turbinato-globosâ, solidâ, nigro-castaneâ, epidermide hydrophanâ, fuscâ, strigatâ, sursum pallescente, obductâ; spirâ conoidè, apice obtusâ, purpureâ, nitidâ; anfractibus quinque, convexiusculis, ultimo basi vix convexo, denudato; columellâ intrantè, obliquâ, planatâ, albâ; aperturâ lunato-ovali, intus lacteâ; peristomate simplici, brevissimè reflexiusculo, intus nigro-marginato.*

**BRUGUIER'S HELIX.** Shell imperforated, globosely turbinated, solid, blackish-chestnut, covered with a streaked dusky brown hydrophanous epidermis, lighter towards the apex; spire conoid, obtuse at the apex, purple, shining; whorls five in number, rather convex, last whorl scarcely convex and denuded at the base; columella entering, oblique, flattened, white; aperture lunar-oval, cream-coloured within; lip simple, very shortly reflected, edged with black within.

*PFEIFFER, Pro. Zool. Soc. 1845, p. 44.*

*Hab.* Philippine Islands.

Allied to *H. carbonaria*, but of a more globosely conical form.

Species 39. (Mus. Cuming.)

**HELIX CEPOIDES.** *Hel. testâ imperforatâ, subglobosâ, tenui, glabriusculâ, ad suturas concentricè sulcatâ et striatâ, rufâ, basi pallidiore; spirâ conoidè; anfractibus septem, tumidis; columellâ brevissimâ, contortâ, albo-callosâ, unidentatâ; aperturâ latè lunari, intus albâ; peristomate tenui, subreflexo.*

**THE ONION-LIKE HELIX.** Shell imperforated, nearly globose, thin, rather smooth, concentrically grooved and striated at the sutures, red, paler at the base; spire conoidal; whorls seven in number, swollen; columella very short, twisted, white-callous, one-toothed; aperture broadly lunar, white within; peristome thin, a little reflected.

*LEA, Trans. Amer. Phil. Soc. 1841, p. 462, pl. 12, f. 14.*

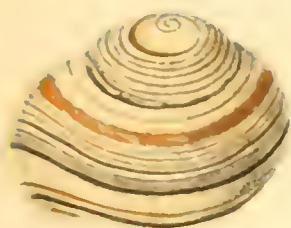
*Hab.* Island of Luban, Philippines; Cuming.

This singular species is well characterized by its globular form and numerous whorls, and by its convex base and short twisted columella.





2a



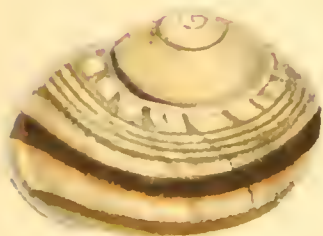
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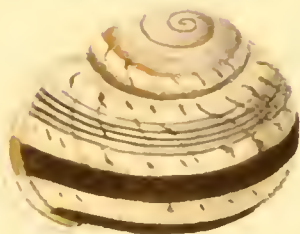
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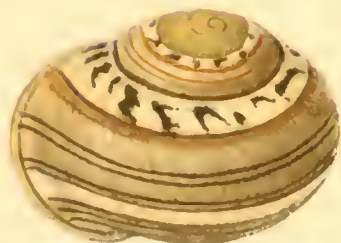
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7

# HELIX.

## PLATE IX.

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

**HELIX BATANICA.** *Hel. testâ imperforatâ, tenuiculâ, subgloboasă, corneo-fulvâ, fasciis duabus castaneo-nigris ornatâ, epidermidis opaco-albæ lineis fasciisque variè cingulatâ; spirâ obtusâ; columellâ planatâ, subexcavatâ; peristomate tenui, albo, latè effuso, rix reflexo.*

**THE BATAN HELIX.** Shell imperforated, rather thin, subglobose, horny-fulvous, ornamented with two chestnut-black bands, variously encircled with bands and lines of opake-white epidermis; spire obtuse; columella flattened, slightly excavated; lip thin, white, broadly effused, but little reflected.

*Hab.* Island of Batan, north of the Philippine Group; Beleher.

This species is peculiar to the island of Batan, where it was found by Captain Beleher in great abundance, and is the predominant snail of the locality. It is quite distinct from *H. pulcherrima*, which is restricted to a limited area in Cagayan, a province of the neighbouring island of Luzon. It is of a lighter and more horny substance, and has the lip less thickly reflected.

Species 4. (Fig. a to d, Mus. Cuming.)

**HELIX ZONIFERA.** *Hel. testâ imperforatâ, subgloboasă, tenui, fulvâ, plerumque castaneo-fasciatâ, zonis variis opacis lutescenti-albidis epidermidis ornatâ; anfractibus quatuor, convexis, supremis depressis; columellâ planâ, rectâ, elongatâ; aperturâ lunato-rotundatâ, intus nitidâ; peristomate simplici, expanso, albo.*

**THE ZONED HELIX.** Shell imperforated, subglobose, thin, fulvous, generally banded with chestnut, and ornamented with various opake yellowish-white bands of epidermis; whorls four, convex, depressed at the upper part; columella flattened, straight, elongated; aperture lunar-rounded, shining within; lip simple, expanded, white.

SOWERBY, Pfeiffer, Pro. Zool. Soc. 1842, p. 85.

*Hab.* Island of Leyte, Samar, and Mindanao, Philippines; Cuming.

The colouring of this species, as may be seen in the accompanying figures, is extremely variable; but they have all the same form, and are characterized by the same idea of pattern.

Species 40. (Mus. Cuming.)

**HELIX LIGNARIA.** *Hel. testâ imperforatâ, subglobosâ, depressâ, solidâ, lavigatâ, purpureo-castaneâ, fasciis variis epidermidis fusco-cinereæ obductâ; spirâ rix elevatâ, obtusâ; anfractibus quatuor ad quinque, rix convexiusculis, celeriter accrescentibus, ultimo ad peripheriam subangulato; columellâ perobliquâ, latâ, planâ, purpureo-fuscâ; aperturâ rotundato-lunari, intus nitidâ; peristomate subincrassato, brevissimè reflexo, fusco-marginato.*

**THE WOODEN HELIX.** Shell imperforated, globosely depressed, solid, smooth, purple-chestnut, covered with various bands of brown-ash epidermis; spire not little raised, obtuse; whorls four to five in number, scarcely convex, rapidly increasing, the last slightly angled at the periphery; columella very oblique, broad, flattened, purple-brown; aperture rotundately lunar, whitish within; lip rather thickened, very shortly reflected, edged with brown.

PFEIFFER, Pro. Zool. Soc. 1846, p. 111.

*Hab.* Surigao, Island of Mindanao, Philippines; Cuming.

This species is stouter and more depressed than the preceding, and of a rich purple-chestnut colouring, more thickly clothed with an epidermis, of which the band below the sutures is interrupted in a very distinctive manner with bruised patches.





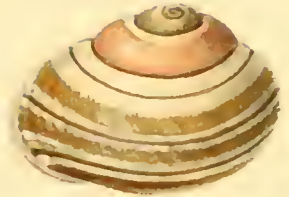




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# HELIX.

## PLATE X.

Species 41. (Mus. Cuming.)

**HELIX LUZONICA.** *Hel. testā imperforatā, conico-globosā, crassiusculā, obliquè striatā, rufā, apice sanguineā. epidermide ferè omnino tectā, medio fasciā latā albidā ornatā; spirā conoideā; anfractibus quinque ad sex, convexiusculis; columellā obliquā, dilatatā, tuberosā; aperturā lunato-circulari, intus lacteā; peristomate incrassato, latè reflexo, albo vel purpureo-roseo latè limbato.*

**THE LUZON HELIX.** Shell imperforated, conically globose, rather thick, obliquely striated, red, rose-pink at the apex, almost entirely covered with an epidermis, ornamented with a broad white band round the middle; spire conoidal; whorls five to six in number, rather convex; columella oblique, dilated, tubercular; aperture lunar-circular, white within; lip thickened, broadly reflected, broadly edged with white or purple-rose.

SOWERBY, Pfeiffer, *Pro. Zool. Soc.* 1842, p. 85.

*Hab.* Island of Luzon, Philippines; Cuming.

The lip of this species is mostly characterized by a deep purple-rose colour; sometimes, however, it is colourless. The white-lipped varieties are mostly of smaller size.

Species 42. (Fig. a to f, Mus. Cuming.)

**HELIX SPECIOSA.** *Hel. testā imperforatā, depresso-globosā, tenui, subpellucidā, lavi, castaneā, fultā, spadiceā, vel olivaceā, apice obtuso, purpureo-roseo; spirā semiglobosā; anfractibus quatuor ad quinque, rapidè accrescentibus, ultimo magno; columellā planā, declivi, albā; aperturā lunato-subcirculari, intus lacteā; peristomate reflexo, extus fusco-marginato.*

**THE BEAUTIFUL HELIX.** Shell imperforated, depressly globose, thin, semitransparent, smooth, chestnut, fulvous, fawn, or olive, obtuse and purple-rose at the apex; spire semiglobose; whorls four to five in number, rapidly increasing, last whorl large; columella flat, slanting, white; aperture lunar-subcircular, white within; lip reflected, edged with brown.

JAY, *Catalogue of Shells*, 1836, pl. 3. f. 9.

*Helix coccomelos*, Sowerby.

Eadem var. *Helix cromyodes*, Pfeiffer.

*Hab.* Island of Tablas, Philippines; Cuming.

The most constant character in this species is the purple-rose colouring of the apex. The ground-colour of the shell is dark chestnut, or fawn, or fulvous, or green, banded sometimes with darker colour, sometimes with strips of light epidermis. Fig. a and b, which are of lighter substance, represent *H. cromyodes*, Pfeiffer.







120



121



122



123



124



125



126

# HELIX.

## PLATE XI.

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

**HELIX FLORIDUS.** *Hel. testā imperforatā, ovato-conoideā, crassiusculā, lævi, viridi vel olivaceā, infra suturam sæpe fasciā nigrā vel fuscā ornatā, apice obtusā, pallidā; suturā distinctā, angustè albo-marginatā; anfractibus quinque ad sex, convexis; columellā albā, dilatatā, arcuatā; aperturā perobliquā, lunato-ovali, intus lacteā; peristomate reflexo.*

**THE FLORID HELIX.** Shell imperforated, ovately conical, rather thick, smooth, green or olive, often eneirolel beneath the suture with a black or brown band, apex obtuse, pale; suture distinct, narrowly edged with white; whorls five to six, convex; columella white, dilated, arched; aperture very oblique, lunar-oval, white within; lip reflected.

SOWERBY, Pro. Zool. Soc. 1840, p. 87.

*Hab.* Island of Mindoro, Philippines; Cuming.

Distinguished by its solid growth and very delicate smooth colouring, the sutures being very finely edged with white.

Species 44. (Fig. a to d, Mus. Cuming.)

**HELIX POLYCHROA.** *Hel. testā imperforatā, ovato-cono-*

*ideā, tenui, lævigatā, nitidā, apice obtuso albidā vel fulvidā aut viridi, aut intensè castaneā; anfractibus quinque, convexis, strigis obliquis saturatioribus et cingulo lato albo ad suturam ornatis; columellā verticali, subrectā, dilatatā; aperturā irregulariter lunato-rotundatā, intus niveā; peristomate simplici, albo breviter reflexo.*

**THE MANY-COLOURED HELIX.** Shell imperforated, ovately conical, thin, smooth, shining, apex obtuse, white or fulvous, or green, or dark chestnut; whorls five, convex, obliquely marked with darker streaks, and ornamented with a broad white band beneath the suture; columella vertical, nearly straight, dilated; aperture irregularly lunar-rounded, white within; lip simple, white, shortly reflected.

SOWERBY, Pro. Zool. Soc. 1840, p. 87.

*Bulimus virido-striatus*, Lea.

*Helix galactites*, var., Grateloup.

*Hab.* Island of Temple, Philippines; Cuming.

This species differs from the preceding in being of a larger and lighter growth, and in being constantly eneirolel beneath the suture with a broad white band, however variable may be the pattern and colour in other respects. Mr. Cuming observed that this was the only snail in the Philippines which was attacked and eaten by the birds.

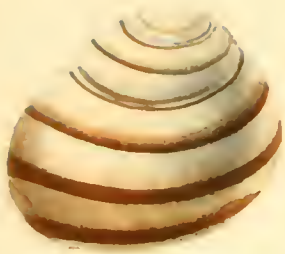




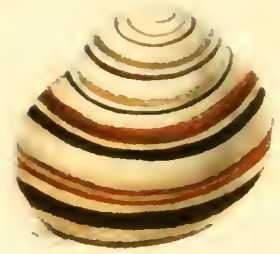




45 a



45 b



45 c



45 d



45 e



45 f



45 g

# HELIX.

## PLATE XII.

Species 45. (Fig. a to g, Mus. Cuming.)

**HELIX MIRABILIS.** *Hel. testā imperforatā, subglobosā, solidiusculā, lævissimā, nitente; candidā, fasciis nigricantibus vel aurantio-castaneis variè et irregulariter cingulatā, epidermide tenui corneā indutā; spirā obtusā; anfractibus quatuor ad quinque, convexiusculis, ultimo plerumque trifasciato; suturā marginatā; columellā arcuatā, intrante, leviter excavatā; aperturā amplā, lunato-ovali, basi effusā; peristomate albo, margine dextro latè reflexo, basali subincrassato, appresso, fasciis pone labrum peculiariter interruptis.*

**THE WONDERFUL HELIX.** Shell imperforated, subglobose, rather solid, very smooth, shining; white, variously and irregularly encircled with blackish or orange-chestnut bands, covered with a thin horny epidermis; spire obtuse; whorls four to five in number, rather convex, last whorl generally three-banded; suture margined; columella arched, enter-

ing, slightly excavated; aperture large, lunar-oval, effused at the base; lip white, right edge broadly reflected, basal edge rather thickened, appressed, bands peculiarly interrupted behind the lip.

FERUSSAC, Prodrôme, p. 320. Hist. Moll. pl. 31. f. 4-6.

*Helix formosa*, Wood.

*Helix galactites*, Lamarck.

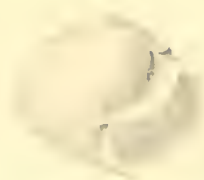
*Hab.* Islands of Luzon and Marinduque, Philippines, Cuming.

The specimens selected for the illustration of this species show that it varies greatly both in form and colouring. The whorls are convoluted, now into a globose, now into a comparatively oblong form, and the bands are sometimes broad, black or pale orange-chestnut, and sometimes linear. The surface is mostly covered by a thin shining horny epidermis. It is a peculiarity worth noting in this species, that the colouring abruptly ceases just before reaching the reflected lip.









16 a



16 b



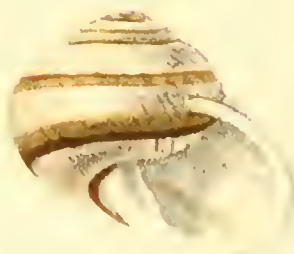
16 c



17.



18 a



18 b



18 c

# HELIX.

PLATE XIII.

Species 67. (Fig. 46 a, Mus. Cuming.)

**HELIX MICANS.** *Hel. testā imperforatā, globosā, tenui, fragili, striatūlā, lineis confertissimis obsolete decussatā, diaphanā, albidā; spirā parvulā; anfractibus quatuor, planiusculis, rapidè accrescentibus, ultimo inflato; columellā tenui, intrante, excavatā; aperturā rotundato-lunari; peristomate simplici, recto, margine dextro antrorsum subarcuato.*

**THE GLITTERING HELIX.** Shell imperforated, globose, thin, fragile, finely striated, obsoletely decussated with very close-set lines, diaphanous, white; spire rather small; whorls four, rather flattened, increasing rapidly, the last inflated; columella thin, entering, excavated; aperture rotundately lunar; lip simple, straight, right edge slightly arched forward.

PFEIFFER, Pro. Zool. Soc. 1845, p. 71.

*Hab.* Cagayan, Island of Luzon, Philippines; Cuming.

A delicate uncoloured shell with a sharp simple lip, quite distinct from the species which follows. The error in the numbering of the accompanying figure is accidental.

Species 46. (Fig. b, c, Mus. Cuming.)

**HELIX AURATA.** *Hel. testā imperforatā, depressā, tenui, longitudinaliter et concentricè obsolete et confertim striatā, aurēā, fasciā latā rubellā prope suturam et plerumque unguatā caruleā supra peripheriam ornatā; spirā vix exsertā, apice obtusā, purpureā; anfractibus quatuor ad quinque, planiusculis, ultimo inflato, non descendentes; columellā leviter arcuatā, excavatā, albā; aperturā parvam obliquā, lunari; peristomate simplici, breviter expanso, margine superno antrorsum dilatato.*

**THE GILT HELIX.** Shell imperforated, depressed, thin, longitudinally and concentrically obsoletely and closely striated, gold-tinged, with a broad pale red band next the suture, and mostly ornamented with a blue line at the periphery; spire scarcely exerted, apex obtuse, purple; whorls four to five, rather flattened, the last inflated, not descending; columella slightly arched, excavated, white; aperture but little oblique, lunar; lip simple, shortly expanded, upper edge dilated in front.

SOWERBY, Pro. Zool. Soc. 1840, p. 100.

*Hab.* Island of Luzon, Philippines; Cuming.

Mr. Cuming collected only a very few of this species, some with the light red band and blue ring, and some without, as represented in the accompanying figures.

Species 47. (Mus. Cuming.)

**HELIX PONDEROSA.** *Hel. testā imperforatā, globoso-depressā, tumidā, solidā, ponderosā, læviusculā, striis incrementi et concentricis confertissimis vix conspicuis, albā, basi epidermide nitidā pallidè corneā indutā, anfractibus quatuor ad quinque, convexiusculis, ultimo subangulato, fasciis albis hydrophanis infra angulum interdum obsolete notato; columellā rectā, latā, perobliquā; aperturā subauriformi, intus albā; peristomate latè reflexo.*

**THE HEAVY HELIX.** Shell imperforated, globose-depressed, swollen, solid, heavy, rather smooth, striae of growth and very close-set concentric striae little conspicuous, white, covered towards the base with a thin shining horny epidermis; whorls four to five in number, rather convex, the last slightly angled, sometimes obsoletely marked with white hydrophanous bands beneath the angle; columella straight, broad, very oblique; aperture subauriform, interior white; lip broadly reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 38.

*Hab.* Province of Ilocos, Island of Luzon, Philippines; Cuming.

A stout unspotted shell, with an unusually broadly reflected lip.

Species 48. (Fig. a, b, c, Mus. Cuming.)

**HELIX ALBAIENSIS.** *Hel. testā imperforatā, depressā, globosā, tenui, nitidā, albā, unicolore vel fuscā, striatā, spirā depressā; suturā lineari; anfractibus quatuor, planiusculis, ultimo subtus inflato; columellā tenui subrectā, declivi, profundè excavatā; aperturā reniformi, margine superno subdepresso; peristomate simplici, reflexo, albo, margine subincrassato, cuius columellā angulum distinctum formante.*

April, 1851.

THE ALBAY HELIX. Shell imperforated, depressly globose, thin, shining, white, uncoloured or zoned with brown; spire depressed; suture linear; whorls four in number, rather flattened, the last inflated below; columella thin, nearly straight, slanting, deeply excavated; aperture lunar-oval, upper edge a little depressed; lip broadly reflected, white, edge somewhat thickened, forming a distinct angle with the columella.

SOWERBY, Pro. Zool. Soc. 1840, p. 100.

*Hab.* Province of Albay, Island of Luzon, Philippines, Cuming.

The bands which characterize the coloured varieties of this species sometimes combine into one, as shown at Fig. 48 *c*. The variety represented at Fig. 48 *a* is of lighter and rather more inflated growth, from a different locality. It was collected by Mr. Cuming in the province of Cagayan, in the same island, upon orange-trees in the Governor's garden.





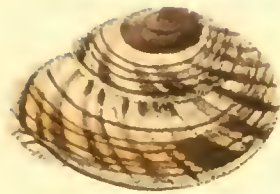
49 a



50 a



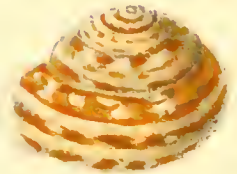
50 b



51



52



53



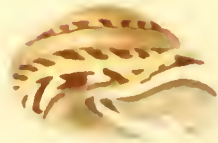
54 a



55 a



55 b



56 b

# HELIX.

## PLATE XIV.

### Species 49. (Mns. Cuming.)

**HELIX OBTUSA.** *Hel. testá imperforatá, subglobosá, tenui, striis incrementi et lineis impressis concentricis obsolete subdecussatá, nitidá, latè castaneá vel albá; spirá subelevatá, obtusá; anfractibus quatuor, convexis, ultimo inflato; columellá obliquá, acutá, albá; aperturá dilatátá, subauriformi; peristomate simplici, expanso.*

**THE OBTUSE HELIX.** Shell imperforated, subglobose, thin, faintly decussated with striæ of growth and obsolete concentric impressed lines, shining, pale chestnut or white; spire somewhat raised, obtuse; whorls four, convex, the last inflated; columella oblique, sharp, white; aperture dilated, somewhat ear-shaped; lip simple, expanded.

PFEIFFER, Pro. Zool. Soc. 1845, p. 38.

*Hab.* Island of Luzon, Philippines; Cuming.

The pale chestnut colouring of this species is due to a thin horny epidermis.

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

**HELIX FENESTRATA.** *Hel. testá imperforatá, globoso-turbinatá, solidá, crassá, nitidè castaneá, epidermide hydrophaná, fuscúlá, pallidè fasciatá, indutá, macularum epidermide destitutarum unicá serie infra suturam fenestratá; spirá turbinatá, obtusá; anfractibus quinque ad sex, convexis, ultimo basi nudo; columellá declivi, dilatátá, albá; aperturá perobliquá, lunato-ovali; peristomate intus incrassato, albo, nitido, breviter reflexo.*

**THE WINDOWED HELIX.** Shell imperforated, globosely turbinated, solid, thick, shining chestnut, covered with a light banded brownish epidermis, windowed with a row of bruised spots of epidermis beneath the suture; spire turbinated, obtuse; whorls five to six, convex, last whorl void of epidermis at the base; columella slanting, dilated, white; aperture very oblique, lunar-oval; lip thickened within, white, shining, shortly reflected.

SOWERBY, Pro. Zool. Soc. 1840, p. 137.

*Hab.* Cagayan, Island of Luzon, Philippines; Cuming.

The bruised voids of epidermis which encircle the whorls of this species beneath the suture, are of a similar character to those observed in *H. lignaria*, Sp. 40. It is constant in all examples of the species.

### Species 51. (Mus. Cuming.)

**HELIX CUMINGII.** *Hel. testá imperforatá, depressá, obtusè angulatá, apice obtusá, obliquè striatá, nigricanti-rufá, epidermide fuscúlá, supernè maculis irregularibus, basi fasciis multís, ornatá; anfractibus quatuor, supremis planiusculis, ultimo subinflato; columellá rectè descendente, latè callosá; aperturá latá, subquadrangulari, peristomate latè expanso, margine inferiore incrassato.*

**CUMING'S HELIX.** Shell imperforated, depressed, obtusely angled, apex obtuse, obliquely striated, blackish-red, ornamented with a light brown epidermis showing blotches above and narrow bands below; whorls four, the uppermost rather flat, the last a little inflated; columella descending straightly, broadly callous; aperture broad, subquadrangular; lip broadly expanded, lower edge thickened.

PFEIFFER, Pro. Zool. Soc. 1842, p. 58.

*Hab.* Island of Zebu, Philippines; Cuming.

An interesting dark chestnut-purple shell, in which the epidermis is so interrupted on the upper surface of the whorls as to show oblique oblong-square bald blotches, spirally crossed with indiscriminate lines and narrow bands.

### Species 52. (Mus. Cuming.)

**HELIX AMICTA.** *Hel. testá imperforatá, depresso-conicá, apice obtusá, albá, epidermide fulvá corneá immaculatá nitente indutá; anfractibus quinque, rotundatis; columellá arcuatá, subprofundè intrante; aperturá subquadrato-ovatá; peristomate reflexo, albo.*

**THE CLOTHED HELIX.** Shell imperforated, depressly conical, obtuse at the apex, white, covered with a shining horny unspotted fulvous epidermis; whorls five, rounded; columella arched, entering rather deeply; aperture somewhat squarely oval; lip reflected, white.

*Hab.* Island of Tablas, Philippines; Cuming.

This is certainly distinct from *H. cullodes*, with which species it has been arranged.

### Species 53. (Mus. Cuming.)

**HELIX PLATYODON.** *Hel. testá imperforatá, depresso-turbinatá, minutissimè granulato-striatá, albá, fasciis fuscis albo-guttatis ornatá; spirá elevatá, obtusiusculá,*



*anfractibus sex, viz convexiusculis, ultimo basi subplanulato, anticè deflexo; aperturâ perobliquâ, lunato-orali, intus albâ; peristomate latè expanso, reflexo, marginibus callo albo junctis, columellari per dilatato, appresso, dente lato munito.*

THE BROAD-TOOTHED HELIX. Shell imperforated, depressly turbinated, very minutely granularly striated, white, ornamented with white-speckled brown bands; spire raised, rather obtuse; whorls six, but little convex, last whorl rather flattened at the base, deflected anteriorly; aperture very oblique, lunar-oval, white within; lip broadly expanded, reflected, margins joined by a white callosity, columellar edge much dilated, appressed, furnished with a broad tooth.

PFEIFFER, Pro. Zool. Soc. 1845, p. 132.

*Hab.* — ?

The main peculiarities of this species consist in the broad appressed tooth against the columellar edge of the lip, and in the white dots with which the light-brown bands are promiscuously speckled.

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

HELIX COLUMBARIA. *Hel. testâ umbilicatâ, depressâ, obliquè subtiliter striatâ, stramineâ, brunneo variè zonatâ, maculis sulphureo-albidis tessellatis ad suturam et basin variegatâ; spirâ parum clatâ; anfractibus quinque, convexis, ultimo juxta aperturam valdè constricto; umbilico angusto, perio; aperturâ subauriformi; peristomate carneo, marginibus junctis, supero expanso, basali reflexo, obsoletè unidentato.*

THE PIGEON-HOLED HELIX. Shell umbilicated, depressed, obliquely finely striated, straw-coloured, variously zoned with brown, tessellated beneath the sutures and variegated beneath the base with sulphur-

white blotches; spire but little raised; whorls five, convex, the last much constricted next the aperture; umbilicus narrow, conspicuously open; aperture somewhat ear-shaped; lip flesh-tinted, margins joined, upper edge expanded, basal edge reflected, absolutely one-toothed.

SOWERBY, Pro. Zool. Soc. 1841, p. 19.

*Hab.* Island of Luzon, Philippines; Cuming.

This beautiful species is very singularly marked. The shell is of a dull straw-colour, encircled with reddish-chestnut bands which are very conspicuously tessellated and variegated with opaque sulphur-white epidermis.

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

HELIX PHLOIDES. *Hel. testâ imperforatâ, depressâ, solidâ, sub epidermide corticinâ, strigis saturatoribus variegatâ, nitidè nigricanti-rufâ; spirâ subplanulatâ, suturâ profundâ; anfractibus quatuor ad quinque, convexis; columellâ subrectâ, perobliquâ, subexcavatâ; aperturâ latè lunari, intus lividâ; peristomate incrassato, reflexo, fusco.*

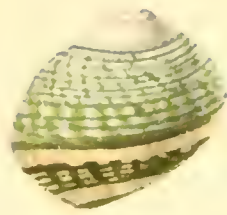
THE BARK-CLAD HELIX. Shell imperforated, depressed, solid, shining blackish-red beneath a bark-like epidermis, which is variegated with darker streaks; spire rather flattened, suture deep; whorls four to five, convex; columella rather straight, very oblique, slightly excavated; aperture broadly lunar, livid in the interior; lip thickened, reflected, brown.

PFEIFFER, Pro. Zool. Soc. 1842, p. 151.

*Hab.* Island of Zebu, Philippines; Cuming.

A stout, very dark purple, lenticular shell, covered with a thick brown epidermis, variegated with numerous concentric streaks.





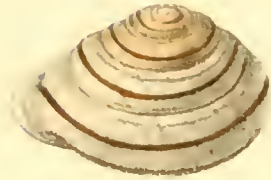
56.



57. a



57. b



58



59. a



59. c



59. b



60. a



60. b



61

# HELIX.

PLATE XV.

Species 56. (Mus. Cuming.)

**HELIX LEYTENSIS.** *Hel. testā imperforatā, globosā, tenuisimā, fragili, læviusculā, pallidè virente, fasciis interruptis, albis, opacis ornatā; spirā parvā, parum elatā; anfractibus quatuor, rapidè accrescentibus, planiusculis, ultimo permagno, subangulato; columellā tenui, subrectā; aperturā amplā, rotundato-lunari; peristomate simplici, breviter expanso.*

**THE LEYTE HELIX.** Shell imperforated, globose, very thin, fragile, rather smooth, pale green, ornamented with interrupted opaque white bands; spire rather small, but little raised; whorls four, increasing rapidly, rather flat, the last very large, somewhat angular; columella thin, nearly straight; aperture large, rotundately lunar; lip simple, shortly expanded.

*Helix fragilis*, Sowerby (not of Pfeiffer), *Pro. Zool. Soc.* 1841.

*Helix Leytensis*, Pfeiffer.

*Hab.* Island of Leyte, Philippines; Cuming.

The mature form of this extremely delicate and characteristic species is not as yet known. The specimen here figured, collected by Mr. Cuming at the island of Leyte, is doubtless an entire whorl short of its adult growth.

Species 57. (Mus. Cuming.)

**HELIX IGNOBILIS.** *Hel. testā imperforatā, conoideo-globosā, tenui, striis concentricis minutissimis sculptā, albidā, castaneo-bifasciatā; spirā conoideā, apice obtusiusculā; anfractibus quatuor ad quinque, planulatis, ultimo obtusè angulato; columellā obliquā, dilatā, albā; aperturā lunato-subcirculari; peristomate latè expanso, margine incrassato.*

**THE IGNOBLE HELIX.** Shell imperforated, conically globose, thin, sculptured with minute concentric striae, white, with two chestnut bands; spire conoidal, rather obtuse at the apex; whorls four to five, rather flattened, the last obtusely angled; columella oblique, dilated, white; aperture lunar-subcircular; lip broadly expanded, edge thickened.

SOWERBY, *Pro. Zool. Soc.* 1840, p. 102.

*Hab.* Islands of Romblon and Tablas, Philippines; Cuming.

The colouring of this species is very simple, and there

is little variety in it. In the specimen represented at Fig. 57 *b* the bands are rather broader, and the shell is suffused at the base with an olive-green hue.

Species 58. (Mus. Cuming.)

**HELIX MORICANDI.** *Hel. testā umbilicatā, semiglobosā, basi planiusculā, nitidā, albidā, fasciis rufis cinctā, anfractibus quinque ad sex, convexis, ultimo margine dextro subitò deflexo; umbilico angusto, percio; aperturā horizontali, transversè pyriformi; peristomate connexo, margine supero expanso, basali latè reflexo, ad basin deute unico crasso instructo.*

**MORICAND'S HELIX.** Shell umbilicated, semiglobose, rather flattened at the base, shining, whitish, encircled by two or three red bands; whorls five to six, convex, last whorl with the right edge suddenly deflected; umbilicus narrow, open; aperture horizontal, transversely pyriform; lip continuous, upper edge expanded, basal broadly reflected, furnished with a single thick tooth at the base.

SOWERBY, Pfeiffer, *Pro. Zool. Soc.* 1842, p. 86.

*Hab.* Island of Bohol, Philippines.

A depressly convoluted shell, concave at the base, with the aperture perfectly horizontal.

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

**HELIX ARATA.** *Hel. testā umbilicatā, cylindraceo-ovata, pupiformi, crassiusculā, fuscā, albo-unifasciatā, interdum albō vel pallidè lutescente, costis obliquis magis minusve confertis exaratis; suturā profundā; anfractibus sex, inflatis; columellā rectè descendente, dilatā, latissimè reflexā, plicā latā umbilicali intrinseca; aperturā lunato-rotundatā, intus albā; peristomate latè reflexo, intus nigro-marginato, basi bolet dentato, marginibus callo junctis.*

**THE PLOUGHED HELIX.** Shell umbilicated, cylindrically ovate, pupa-shaped, rather thick, brown, with a single white band, sometimes white or yellowish, ploughed with more or less close-set oblique ribs; suture deep; whorls six, inflated; columella straightly descending, dilated, very broadly reflected, with an umbilical fold broad, entering; aperture lunar-rotundate, white within; lip broadly reflected, edged

within with black, base absolutely toothed, margins joined by a callosity.

SOWERBY, Pro. Zool. Soc. 1840, p. 89.

*Balimus aratus*, Pfeiffer.

*Hab.* Island of Tablas, Philippines; Cuming.

It is somewhat difficult to determine to what genus this interesting species should be referred, for it partakes alike of the characters of *Helix*, *Balimus*, and *Pupa*.

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

HELIX ORBITULA. *Hel. testā imperforatā, ovato-globosā, crassiusculā, lavi, albā, basi fusco-lutescente, fasciis rufis et viridibus variè ornatā; anfractibus quatuor ad quinque, convexiusculis; suturā distinctā, crenulatā, albā; columellā latā, albā, subarcuatā; aperturā lunato-rotundatā, intus albā; peristomate simplici, latè expanso.*

THE IMPRESSED HELIX. Shell imperforated, ovately globose, rather thick, smooth, white, brown-yellow at the base, variously ornamented with red and green bands; whorls four to five, rather convex; suture distinct, crenulated, white; columella broad, white, slightly arched; aperture lunar-rotundate, white within; lip simple, broadly expanded.

SOWERBY, Pro. Zool. Soc. 1840, p. 87.

*Hab.* Island of Mindoro, Philippines; Cuming.

The last whorl of this species is mostly tinged with olive-green, leaving a white band next the suture as in

*H. polychroa*, but narrower. The burnt-brown colouring of the base is constant and characteristic.

Species 61. (Mus. Cuming.)

HELIX DIMERA. *Hel. testā imperforatā, subgloboso-conicā, apice obtusā, tenuiusculā, epidermide viridi-flavā; anfractibus quinque, convexis, obliquè striatis, primis purpurascensibus, penultimo albo, ultimo coloribus bipartitis, dimidio supremo albo, altero purpureo-nigro; suturā distinctā, purpureo-nigrā, marginalā; aperturā semilunari, intus albā; peristomate angustè reflexo, fusco-nigro; columellā obliquè descendente, albidā, dilatatā.*

THE BIPARTITE HELIX. Shell imperforated, somewhat globosely conical, obtuse at the apex, rather thin, covered with a pale green epidermis; whorls five in number, convex, obliquely striated, the first tinged with purple, the last but one white, the last equally divided in respect of colour, the upper half white, the lower half purple-black; suture distinct, purple-black; aperture semilunar, interior white; lip thinly reflected, brown-black; columella obliquely descending, white, dilated.

JONAS, Mollusk. beitr. p. 23. pl. 11. f. 17.

*Hab.* Philippine Islands; Cuming.

The divided colouring of the whorls of this species is very characteristic, the lower half being of a rich purple-black, the upper half white, covered with a delicate pale green epidermis.







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

**HELIX TENERA.** *Hel. testā imperforatā, globoso-conicā, tenui, lævi, albā, fasciis nigricantibus et viridibus ornatā, subhyalinā; spirā depresso-conoideā; anfractibus quatuor ad quinque, convexiusculis; columellā subrectā, tenui, subexcavatā; aperturā lunato-rotundatā; peristomate simplici, parum expanso.*

**THE DELICATE HELIX.** Shell imperforated, globosely conical, thin, smooth, white, ornamented with blackish and green bands, subhyaline; spire depressly conoid; whorls four to five, rather convex; columella nearly straight, thin, slightly excavated; aperture lunar-rounded; lip simple, but little expanded.

**SOWERBY**, Pro. Zool. Soc. 1840, p. 102.

*Hab.* Islands of Tablas and Mindoro, Philippines; Cuming.

The bands are exceedingly variable in this species, being sometimes very broad, and irregular, sometimes almost wanting.

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

**HELIX CARBONARIA.** *Hel. testā imperforatā, subtrochiformi, lævi, purpureo-nigricante, epidermide fuscā, hydrophanā, obliquè strigatā, apice rubrā vel violaceā; suturā lineari; anfractibus quinque, planiusculis, ultimo carinato, basi plano; basi subrectā, dilatata, fuscidulā; aperturā subtetragonā, intus lividā; peristomate simplici, vix incrassato.*

**THE COAL-BLACK HELIX.** Shell imperforated, somewhat Trochus-shaped, smooth, purple-black, obliquely-streaked with a brown epidermis, apex reddish or violet; suture linear; whorls five, rather flat, the last keeled, flat at the base; columella nearly straight, dilated, brownish; aperture subquadrangular, livid within; lip simple, scarcely thickened.

**SOWERBY**, Pfeiffer, Pro. Zool. Soc. 1842, p. 86.

*Hab.* Island of Zebu, Philippines; Cuming.

The specimen represented at Fig. 63 *a* has an obliquely streaked pattern upon the epidermis; in that at Fig. 63 *b* there is no pattern beyond what is derived from the ordinary lines of growth.

Species 64. (Fig. *a, b*, and Fig. 65, Mus. Cuming.)

**HELIX COLLODES.** *Hel. testā imperforatā, subsemiglobosā, tenui, intensè castaneā vel fusco-lutescente, nitidā,*

*apice carneā; suturā distinctā, rufo-marginatā; anfractibus quinque, convexiusculis, ultimo basi subangulato; columellā brevi, obliquā, tenui; aperturā rotundato-lunari, intus albā; peristomate expanso, subincrassato, nigricante.*

**THE GUMMED HELIX.** Shell imperforated, subsemiglobose, very dark chestnut or yellowish, shining, apex flesh-colour; suture distinct, edged with red; whorls five, rather convex, the last rather flattened at the base; columella short, oblique, thin, aperture rotundately lunar, white within; lip expanded, slightly thickened, blackish.

**SOWERBY**, Pro. Zool. Soc. 1840, p. 102.

*Hab.* Island of Tablas, Philippines; Cuming.

In both the specimens here figured, differing so materially in colour, the form is identical, and each has a naturally polished surface.

For Fig. 65, see Pl. XXI.

Species 66. (Mus. Cuming.)

**HELIX CAMPANULA.** *Hel. testā umbilicatā, globosā, solidā, subtiliter et regulariter obliquè striatā, castaneā, spirā semiglobosā, apice obtusā, pallidā; anfractibus quatuor ad quinque, convexiusculis, ultimo antecedentem vix latiore, anticè vix descendente, medio pallide emgulato; aperturā perobliquā, lunato-ovali, intus lutescente, peristomate fusco, incrassato, breviter reflecto, marginibus callo junctis, basali introrsum obsolete adunidentato, extrorsum dilatato, umbilicum angustum profundum semiocculante.*

**THE LITTLE BELL HELIX.** Shell umbilicated, globose, solid, finely and regularly obliquely striated, dark chestnut; spire semiglobose, apex obtuse, whorls four to five, rather convex, the last but one broader than the preceding, scarcely descending in front, encircled round the middle with a pale band; aperture very oblique, lunar-oval, bluish white; lip brown, thickened, shortly reflected, margins joined by a callosity, inwardly obscurely white-toothed at the base, outwardly dilated, half covered by a narrow deep umbilicus.

**PFEIFFER**, Pro. Zool. Soc. 1845, p. 65.

*Hab.* —?

The form of this species is chiefly remarkable for the slightly apparent increase of the last whorl







69.a



68



96.b



70.a



71.



71



72

# HELIX.

PLATE XVII.

Species 68. (Mus. Cuming.)

**HELIX LANGUIDA.** *Hel. testâ imperforatâ, globosâ, tenuiusculâ, regulariter et confertim obliquè striatâ, apice obtuso, lutescente; suturâ lineâ fuscâ nitidâ notatâ; anfractibus quatuor ad quinque, convexiusculis, ultimo rufo, epidermide hydrophanâ cinerascete induto, albolineolato, basi nudo, nitido; columellâ verticali, albo-callosâ.*

**THE FEEBLE HELIX.** Shell imperforated, globose, rather thin, regularly and closely obliquely striated, obtuse and yellowish at the apex; suture marked with a shining brown line; whorls four to five, rather convex, the last reddish, covered with an ash-brown white-lined hydrophanous epidermis, base naked, shining; columella vertical, callous, white.

PFEIFFER, Pro. Zool. Soc. 1842, p. 150.

*Hab.* Island of Siquijor, Philippines; Cuming.

This is merely a young shell described by Dr. Pfeiffer from the circumstance of its not being referable to any known adult species. Two specimens were collected by Mr. Cuming at the above-named locality in the leaf of a palm-tree.

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

**HELIX HYDROPHANA.** *Hel. testâ imperforatâ, obovatâ, tenuiusculâ, lutescente, fasciis rufis ornatâ, nitidâ, epidermide tenuissimâ, subpellucidâ, hydrophanâ indutâ; spirâ apice obtusissimâ; anfractibus quatuor ad quinque, convexiusculis; columellâ subrectâ, latâ, nivâ, in tuberculum obsoletum productâ, nigro-cingulatâ; aperturâ lunato-rotundatâ, intus nitidissimè albâ; peristomate subincrassato, parum expanso, candido.*

**THE HYDROPHANOUS HELIX.** Shell imperforated, obovate, rather thin, yellowish, ornamented by two red bands, shining, covered with a very thin subpellucid hydrophanous epidermis; spire very obtuse at the apex; whorls four to five, rather convex; columella nearly straight, broad, snowy-white, produced into an obsolete tubercle, encircled by a black band; aperture lunar-rotundate, very shining, white within; lip rather thickened, but little expanded, white.

SOWERBY, Pro. Zool. Soc. 1840, p. 88.

*Hab.* Island of Mindoro, Philippines; Cuming.

It is very much to be doubted whether this species is anything more than a local variety of the following. The shell is smaller and thinner in substance, but in structure

and plan of colouring there is no difference whatever, excepting perhaps half a whorl less in convolution.

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

**HELIX METAFORMIS.** *Hel. testâ imperforatâ, oblongo-ovatâ, solidâ, lævi, luteâ, apice rubescente, fasciis rufis variè ornatâ, epidermide tenui hydrophanâ indutâ; anfractibus quinque, convexis, ultimo spirâ breviorâ columellâ crassâ, dilatâ, basi tuberculato-truncatâ plerumque nigro-cingulatâ; aperturâ obliquâ, lunato-ovati, intus lacteâ; peristomate incrassato, albo, breviter reflexo.*

**THE CONICAL HELIX.** Shell imperforated, oblong-ovate, solid, smooth, yellowish, reddish at the apex, variously ornamented with red bands and covered by a thin epidermis; whorls five, convex, last whorl shorter than the spire; columella thick, dilated, tubercularly truncated at the base, generally encircled with black; aperture oblique, lunar-oval, milk-white within; lip thickened, white, shortly reflected.

FERUSSAC, Hist. Moll. pl. 108. f. 2.

*Helix oraturis*, Menke.

*Hab.* Island of Luzon, Philippines; Cuming.

There is only one band in some examples of this species, and in others it is altogether wanting.

Fig. 71. (Mus. Cuming.)

This appears to be the coloured *H. obtusa*, described with a figure of the white variety at Pl. XIV. Fig. 19.

For Sp. 71, see Pl. XXV.

Species 72. (Mus. Cuming.)

**HELIX HELICOIDES.** *Hel. testâ imperforatâ, subglobosâ, obliquè striatâ, apice obtusâ, albâ, immixta, anfractibus quinque ad sex, subrotundatis, subrectâ, planulatâ, subarcuatâ; aperturâ subcircari peristomate subreflexo, effuso.*

**THE HELICOID HELIX.** Shell imperforated, subglobose, obliquely striated, obtuse at the apex, white, unspotted; whorls five to six, somewhat rounded, columella flattened, slightly arched; aperture nearly circular; lip slightly reflected, effused.

*Bulinus helicoides*, Pfeiffer, (Mus. Cuming.)

*Hab.* Philippine Islands.

The portion of the body-whorl within the aperture is characterized in this species by a thin horny layer of epidermis, extending round the columella









73. b.



73. a.



73. c.



74.



75. a.



75. b.



76.

# HELIX.

PLATE XVIII

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

**HELIX ROISSYANA.** *Hel. testâ imperforatâ, subglobosâ, crassiusculâ, lævi, variè coloratâ, epidermide hydrophanâ plerumque obductâ; spirâ obtusissimâ; anfractibus quinque, convexiusculis, ultimo ventricoso; columellâ declivi, latiusculâ, planâ; aperturâ sublunari, intus albâ; peristomate expanso, nigro-marginato.*

**ROISSY'S HELIX.** Shell imperforated, subglobose, rather thick, smooth, variously coloured, generally covered with a hydrophanous epidermis; spire very obtuse; whorls five, rather convex, the last ventricose; columella slanting, rather broad, flat; aperture sublunar, white within; lip expanded, edged with black.

**FERUSSAC,** Hist. Moll. pl. 104. f. 2, 3.

*Hab.* Island of Mindoro, Philippines; Cuming.

The colouring, though variously disposed, is mostly of a dark burnt chestnut.

Species 74. (Mus. Cuming.)

**HELIX UNICA.** *Hel. testâ imperforatâ, globosâ, solidiusculâ, obliquè striatulâ, albidâ; suturâ profundâ; anfractibus quinque ad sex, inflatis, supremis planiusculis; columellâ profundè intrante, arcuatâ, subcanaliculatâ; aperturâ perobliquâ, subcirculari, intus albâ; peristomate latè expanso, intus fulvido, marginibus approximatis, basali incrassato.*

**THE UNIQUE HELIX.** Shell imperforated, globose, rather solid, obliquely striated, white; suture deep; whorls five to six, inflated, the uppermost rather flat; columella entering deeply, arched, slightly channelled; aperture very oblique, nearly circular, white within; lip broadly expanded, fulvous internally, margins approximated, basal margin thickened.

**PFEIFFER,** Pro. Zool. Soc. 1842, p. 151.

*Hab.* Samboanga, Island of Mindanao, Philippines; Cuming.

Mr. Cuming possesses only a worn discoloured specimen of this species. It is very distinct in form; particularly as regards the roundness of the lower whorls.

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

**HELIX MATRUELI.** *Hel. testâ imperforatâ, globoso-depressâ, tenuiusculâ, obliquè striatâ, nigricante, epidermide fusco-cinereâ hydrophanâ indutâ; arcuâ columellari nitidè luteâ, fasciâ nigricante circumdatâ; spirâ*

*parum elatâ; suturâ lævi; anfractibus quatuor, supremis complanatis; columellâ obliquè validè (interdum obsolete) dentatâ, extorsiva dilatâ, brunneâ, aperturâ subtapezoidali, intus lividâ; peristomate incrassato, expanso, brunneo-marginato.*

**THE ALLIED HELIX.** Shell imperforated, globose, depressed, rather thin, obliquely striated, blackish, covered with a brown-ash hydrophanous epidermis, area round the columella shining yellow, surrounded with a blackish band; spire but little raised; suture smooth; whorls four, the uppermost smooth; columella obliquely strongly toothed, the tooth being sometimes rather obsolete, dilated outwardly, brown. aperture subtrapeziform, livid within; lip thickened, expanded, edged with brown.

**SOWERBY,** Pro. Zool. Soc. 1841, p. 24.

*Hab.* Island of Mindanao, Philippines; Cuming.

The yellowish colouring about the area of the columella is derived from a thin horny epidermis which covers this part, differing from the hydrophanous epidermis which terminates with the encircling dark band.

Species 76. (Mus. Cuming.)

**HELIX MONTFORTIANA.** *Hel. testâ imperforatâ, turbinatâ, crassâ, ponderosâ, nigricanti-rufâ, epidermide fusco-cinereâ hydrophanâ indutâ; spirâ conoidâ, apice violaceo-purpurascete, nudâ, nitidâ, obtusâ, anfractibus quatuor ad quinque, vix convexiusculis, ultimo angulato, angulo anticè evanescente, columellâ declivi, callosâ, albâ, basi subdentatâ; aperturâ subtragonâ, intus nitidè albâ; peristomate breviter reflexo, nigro-fusco limbato.*

**MONTFORT'S HELIX.** Shell imperforated, turbinated, thick, ponderous, blackish-red, covered with a brown-ash hydrophanous epidermis; spire conoid, apex obtuse, naked, violet-purple; whorls four to five, but little convex, last whorl angled, angle disappearing towards the front; columella slanting, callous, white, slightly toothed at the base; aperture somewhat square, white and shining within; lip shortly reflected, edged with black-brown.

**PFEIFFER,** Pro. Zool. Soc. 1846, p. 38

*Hab.* Philippine Islands; Cuming.

A short, Trochus-shaped, rather solid species, allied to *H. carbonaria*.







78 a



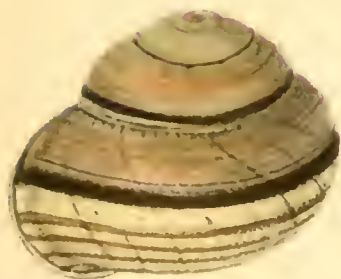
77



75 b



79



56 a



80 b



57

# HELIX.

## PLATE XIX.

Species 77. (Mus. Cuming.)

**HELIX ADUSTA.** *Hel. testá umbilicatá, cylindræco-ovatá, Pupaformi, solidiusculá, obliquè striatá, castaneá, apice pallidá; suturá lævi; anfractibus sex, convexiusculis, ultimo pallidè unifasciató; columellá rectè descendente, intus suborto-truncatá; aperturá rotundato-ovali; peristomate castaneo, latè expanso, reflexo, margine columellari per dilatato, reflexo, subappresso.*

**THE BURN'T HELIX.** Shell umbilicated, cylindrically ovate, Pupa-shaped, rather solid, obliquely striated, chestnut, pale at the apex; suture smooth; whorls six, rather convex, the last faintly one-banded; columella descending straightly, slightly twisted and truncated within; aperture rotundately oval; lip chestnut, broadly expanded, reflected, columellar edge very much dilated, reflected, and appressed.

SOWERBY, Pro. Zool. Soc. 1841, p. 39.

*Bulinus adustus*, Pfeiffer.

*Hab.* Island of Mindoro, Philippines; Cuming.

This species, like *H. brachyodon*, partakes almost in equal measure of the characters of *Helix*, *Bulinus*, and *Pupa*.

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

**HELIX CINERASCENS.** *Hel. testá imperforatá, globoso-turbinatá, tenuiusculá, stramineá, fasciis nigricantibus supra infraque ornatá, epidermide tenui, hydrophaná, cinereá indutá; spirá breviter turbinatá, apice obtusá; anfractibus quinque ad sex, convexiusculis, ultimo basi inflato; columellá subarcuatá, carneo-fuscá; aperturá rotundato-lunari, intus albá; peristomate breviter expanso, subincrassato, castaneo-limbato.*

**THE PALE ASH HELIX.** Shell imperforated, globosely turbinated, rather thin, straw-coloured, ornamented above and below, on each whorl, with two blackish bands, covered with a thin hydrophanous ash epidermis; spire shortly turbinated, obtuse at the apex; whorls five to six, rather convex, last whorl inflated at the base; columella slightly arched, flesh-brown; aperture rotundately lunar, interior white; lip broadly expanded, rather thickened, edged with chestnut.

PFEIFFER, Pro. Zool. Soc. 1845, p. 54.

*Hab.* Island of Masbate, Philippines; Cuming.

A very characteristic species, of which Mr. Cuming collected only a few specimens.

Species 79. (Mus. Cuming.)

**HELIX BRACHYODON.** *Hel. testá umbilicatá, ovatá vel globosá, castaneá, pallidè fasciatá, obliquè striatulá; suturá distinctá; anfractibus sex, convexiusculis, ultimo ad aperturam deflexo; columellá latè reflexá, intus unidentatá, albo-callosá; aperturá lunato-rotundatá, perobliquá, basi unidentatá; peristomate latè reflexo nigro-fusco marginato.*

**THE SHORT-TOOTHED HELIX.** Shell umbilicated, ovate or globose, chestnut, faintly banded, obliquely finely striated; suture distinct; whorls six, rather convex, the last deflected at the aperture; columella broadly reflected, one-toothed within, white, callous; aperture lunar-rounded, very oblique, one-toothed at the base. lip broadly reflected, edged with black-brown.

SOWERBY, Pro. Zool. Soc. 1840, p. 59.

*Bulinus brachyodon*, Pfeiffer.

*Hab.* Island of Mindoro, Philippines; Cuming.

This curious species may always be recognized by the callous tooth-like processes at the columellar base of the aperture, as represented in the accompanying figure.

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

**HELIX MELANOCHILLA.** *Hel. testá imperforatá, depresso-globosá, crassiusculá, fuscá, epidermide hydrophaná cinereo-fuscá fasciatim obductá, fasciis nigris ornatá; spirá depresso-semiglobosá; anfractibus quatuor ad quinque, vix convexiusculis; columellá perobliquá, latè expansá, albá; aperturá lunato-rotundatá, intus albá, peristomate subincrassato, expanso, nigricante.*

**THE BLACK-LIPPED HELIX.** Shell imperforated, depressly globose, rather thick, brown, covered with a banded ash-brown hydrophanous epidermis, ornamented with black bands; spire depressly semiglobose; whorls four to five, rather convex; columella very oblique, broadly expanded, white; aperture lunar-rounded, interior white; lip slightly thickened, expanded, blackish.



VALENCIENNES, Grateloup, Trans. Soc. Nat. Hist. Bordeaux, vol. xi. p. 397. pl. 4. f. 12.

*Helix brunnea*, Sowerby.

*Hab.* Island of Mindoro, Philippines. Cuming.

An extremely interesting species, allied in form and general aspect to *H. Pan.* but perfectly distinct on comparison.

Species 81. (Mus. Cuming.)

HELIX TURBO. *Hel. testâ imperforatâ, turbinatâ, solidiusculâ, distinctè striatâ, sub epidermide tenuissimâ, deciduâ, flavescente, albâ, medio rufo-fasciatâ; spirâ conoideâ, obtusâ; anfractibus quinque, planiusculis, ultimo obsolete angulato, basi vix convexo, columellâ*

*subverticali, dilatato, albido, operturâ irregulariter lunari; peristomate expanso, margine columellari dilatato, reflexo.*

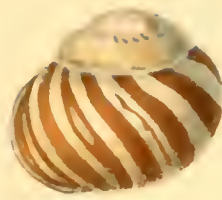
THE TOP HELIX. Shell imperforated, turbinated, rather solid, distinctly striated, white, faintly red-banded in the middle, beneath a very thin deciduous yellowish epidermis; spire conoid, obtuse; whorls five, rather flat, last whorl obsolete angled, base slightly convex, columella subvertical, dilated, whitish; aperture irregularly lunar: lip expanded, columellar edge dilated, reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 64.

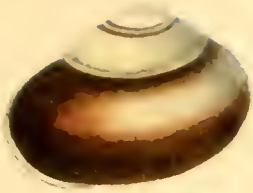
*Hab.* Philippine Islands; Cuming.

The epidermis of this species is of a thin horny character, and does not form any pattern upon the shell.





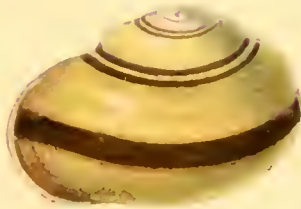
92



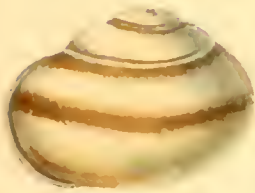
53. a



53. b.



53 c



53. d



53. e



53 f

# HELIX.

PLATE XX.

Species 82. (Mus. Cuming.)

**HELIX RETUSA.** *Hel. testá imperforatá, subglobosá, apice retusá, tenui, lævigatá, basi concentricè striolatá, castaneo-fulvâ, epidermide hydrophanâ, albidâ, deciduâ, partim strigatâ et flammulatâ, sursum pallescente, castaneo-fasciatâ; spirâ brevi; anfractibus quatuor, converiusculis, ultimo subangulato, vix descendente; columellâ intrante, albâ; aperturâ rotundato-lunari, intus iridescente; peristomate latè expanso, reflexo.*

**THE BLUNT HELIX.** Shell imperforated, subglobose, blunt at the apex, thin, smooth, concentrically finely striated round the base, fulvous chestnut, broadly streaked and flamed with white hydrophanous epidermis, partially deciduous, pale above, faintly chestnut-banded; spire short; whorls four, rather convex, last whorl slightly angled, but little descending; columella entering, white; aperture rotundately lunar, iridescent within; lip broadly expanded, reflected.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 132.

*Hab.* Island of Samar, Philippines; Cuming.

This shell is quite transparent except where the whorls are streaked by opaque-white hydrophanous epidermis. It is of a peculiar blunt globose form.

Species 83. (Fig. a to f, Mus. Cuming.)

**HELIX INTORTA.** *Hel. testá imperforatá, depresso-globosâ, tenui, diaphanâ, subtilissimè striatâ, coloribus caldè variante; suturâ lineari, opaco-albâ, plerumque rufo-tingulatâ; anfractibus quatuor ad quinque, vix convexiusculis, supremis depressis, ultimo subtus inflato, columellâ obliquè descendente, acutâ, subexcavatâ; aperturâ lunato-rotundatâ; peristomate simplici, reflexiusculo.*

**THE CURLED HELIX.** Shell imperforated, depressly globose, thin, diaphanous, very finely striated, varying considerably in colour; suture opaque white, generally edged with red; whorls four to five, slightly convex, the uppermost depressed, last whorl inflated below; columella obliquely descending, sharp, slightly excavated; aperture lunar-rotundate; lip simple, a little reflected.

SOWERBY, *Pro. Zool. Soc.* 1840, p. 168.

*Hab.* Islands of Bohol, Capul, Negros, and Siquijor, Philippines; Cuming.

The form of this species is always the same, but the colouring is extremely variable, consisting of delicately tinted brown, or green, or yellowish-olive. One characteristic feature of the species is that the sutural line of the spire is always finely picked out with opaque white.







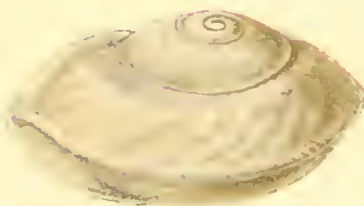
66



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# HELIX.

PLATE XXI.

Species 66. (Mus. Cuming.)

**HELIX PUELLA.** *Hel. testā imperforatā, globoso-depressā, tenui, striatulā, non nitente, albā, diaphanā; spirā fornicatā; suturā lineari; anfractibus quatuor, vix convexiusculis, rapidē accrescentibus, ultimo basi inflato, medio carinato, ad carinam fusco-cingulato; columellā declivi, strictiusculā; aperturā irregulariter lunari; peristomate simplici, margine supero expanso, basali reflexo, cum columellari unguatim juncto.*

**THE DANSEL HELIX.** Shell imperforated, globosely depressed, thin, finely striated, not shining, white, diaphanous; spire vaulted over; suture linear; whorls four, slightly convex, increasing rapidly, last whorl inflated at the base, keeled round the middle, encircled with a narrow brown band at the keel; columella slanting, rather twisted; aperture irregularly lunar; lip simple, upper margin expanded, basal margin reflected, angularly joined with the columellar margin.

*Carocolla puella*, Broderip, Pro. Zool. Soc. 1841, p. 45.

*Helix puella*, Pfeiffer.

*Hab.* Island of Camiguin, Philippines; Cuming.

This species is mainly distinguished by a brown band, which only appears in the latter half of the last whorl, increasing gradually in intensity as the shell approaches maturity.

Species 84. (Mus. Cuming.)

**HELIX FILARIS.** *Hel. testā imperforatā, depresso-globosā, tenui, striis incrementi validis notatā, albidā, epidermide pallidē corneā, deciduā, instructā; spirā parum elevatā, obtusā, apice fuscā; suturā lineari, fusco vel albo-marginatā; anfractibus quatuor, planiusculis, ultimo obtusē angulato; columellā obliquā, margine granulosa; aperturā dilatatā, lunari; peristomate nigro, subincrassato, parum expanso.*

**THE THREAD-MARKED HELIX.** Shell imperforated, depressly globose, thin, marked with conspicuous striae of growth, whitish, furnished with a pale horny deciduous epidermis; spire but little raised, obtuse, brown at the apex; suture linear, edged with brown or white; whorls four, rather flat, last whorl obtusely angled; columella oblique, granulous at the edge;

aperture dilated, lunar; lip black, rather thickened, but little expanded.

VALENCIENSIS, Pfeiffer, Pro. Zool. Soc. 1845, p. 38

*Hab.* Island of Marinduque, Philippines; Cuming.

The lip of this species is stained with black-brown, and the apex is tinged with the same colour.

Species 85. (Mus. Cuming.)

**HELIX NYMPHA.** *Hel. testā imperforatā, globoso-depressā, tenui, obliquē striatulā, nitidā, diaphanā, circumscissā; spirā brevissimā, apice obtusā; suturā albifidā; anfractibus quatuor, subplanis, rapidē accrescentibus, ultimo subdepresso, basi convexo; columellā verticale, subverticali, compressā, albā; aperturā obliqua, late lunari; peristomate simplici, tenui, castaneo-lucato, margine supero recto, basali breviter reflexo, cum columellā angulum obtusum formante.*

**THE NYMPH HELIX.** Shell imperforated, globosely depressed, thin, obliquely finely striated, shining, diaphanous, greenish-white; spire very short, obtuse at the apex; suture white-threaded; whorls four, rather flat, rapidly increasing, the last rather depressed, convex at the base; columella entering, subvertical, compressed, white; aperture oblique, broadly lunar, lip simple, thin, edged with chestnut, upper margin straight, basal shortly reflected, forming an obtuse angle with the columella.

PFEIFFER, Pro. Zool. Soc. 1849, p. 129

*Hab.* Philippine Islands.

This species is but little distinguished from the preceding; the spire is more elevated, so as to give a depression to the suture, and the apex has no tinge of colour but these differences are of no great value.

Species 86. (Mus. Cuming.)

**HELIX CASTA.** *Hel. testā imperforatā, depressā, supero infraque subequaliter emixta, carinatā, striatā, undique peculiariter valentā, nitidā, subepidermide deciduā pallidē lutescente-albā; suturā lineari, reticulatā; anfractibus quatuor, subplanis, vix elevatis, ultimo suturam et infra carinam obsidetē angulato; columellā brevi, declivi, excavatā, basi subrectā, aperturā sub-*

*trapeziá; peristomate expanso, albo, margine basali leviter arcuato, cum columellá angulum formante.*

**THE CHASTE HELIX.** Shell imperforated, depressed, about equally convex above and below, keeled, finely striated, peculiarly indented throughout, shining, yellowish-white, beneath a pale deciduous epidermis; suture linear, chalky; whorls four, rather flattened, the last obsoletely angled, columella short, slanting, excavated, slightly twisted towards the base; aperture subtrapezoid; lip expanded, white, basal margin slightly curved, forming an angle with the columella.

PFEIFFER, Pro. Zool. Soc. 1848, p. 110.

*Hab.* — ?

This interesting species is mainly distinguished by a character which Dr. Pfeiffer has incidentally overlooked. The entire surface of the shell is peculiarly superficially indented.

Species 87. (Mus. Cuming.)

**HELIX VALENCIENNESII.** *Hel. testá imperforatá, globoso-depressá, tenui, diaphaná, nitidulá, minutè striatá, albá; spirá parvá, supernè depressá; suturá lineari, supernè rufo-marginatá; anfractibus quatuor, planiusculis, ultimo subamplo, obsoletè angulato; columellá declivi, subexcavatá; aperturá lunato-ellipticá; peristomate simplici, expanso.*

**VALENCIENNES' HELIX.** Shell imperforated, globosely depressed, thin, diaphanous, shining, minutely striated, white; spire small, depressed at the upper part; suture linear, edged at the upper part with red; whorls four, rather flat, the last somewhat large, obsoletely angled; columella slanting, slightly excavated, aperture lunar-elliptical; lip simple, expanded.

EYDOUX, Guerin's Mag. de Zool. 1838, pl. 115. f. 2.

*Hab.* Island of Capul, Philippines; Cuming.

A delicate subpellucid greenish-white shell, with the sutural line tinged with red towards the apex. It is allied in form to *H. Albaiensis*.

Species 88. (Mus. Cuming.)

**HELIX BRODERIPPI.** *Hel. testá imperforatá, globoso-de-*

*pressá, striatulá, tenui, albidá, carinatá; spirá circulatá, apice ferè impressá; anfractibus quatuor, planulatis, celeriter accrescentibus, ultimo basi inflato; columellá subdeclivi, supernè intrante; aperturá transversè latè lunari, intus nitidá; peristomate simplici, margine supéro et basali expansis, columellari incrassato-reflexo.*

**BRODERIP'S HELIX.** Shell imperforated, globosely depressed, finely striated, thin, whitish, keeled; spire scarcely raised, almost impressed at the apex, whorls four, flattened, increasing quickly, the last inflated at the base; columella rather slanting, entering at the upper part; aperture transversely broadly lunar, shining interiorly; lip simple, upper and basal edges expanded, columellar edge thickly reflected.

*Carocolla dealbata*, Broderip, Pro. Zool. Soc. 1841, p. 45.

*Helix Broderippii*, Pfeiffer.

*Hab.* Island of Siquijor, Philippines; Cuming.

This approaches very closely to *H. casta*, but the shell is not so sharply angled, and is not indented upon the surface.

Species 89. (Mus. Cuming.)

**HELIX VIRGO.** *Hel. testá imperforatá, supernè depressá, subtilis inflatá, acutè carinatá, subtiliter striatá, nitidá, diaphaná, pallidè stramineá; anfractibus quatuor, planiusculis; columellá obliquè descendente, basi gibbulá; aperturá securiformi; peristomate simplici, rufo, margine supéro recto, basali vix reflexiusculo.*

**THE VIRGIN HELIX.** Shell imperforated, depressed at the upper part, inflated beneath, sharply keeled, finely striated, shining, diaphanous, pale straw-colour; whorls four in number, rather flat; columella obliquely descending, rather gibbous at the base; aperture wedge-shaped; lip simple, red, upper edge straight, basal edge slightly reflected.

*Carocolla virgo*, Broderip, Pro. Zool. Soc. 1841, p. 44.

*Helix virgo*, Pfeiffer.

*Hab.* Island of Zebu, Philippines; Cuming.

Always of a uniform pale straw-colour, with the lip edged with red-brown.

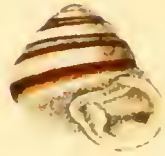




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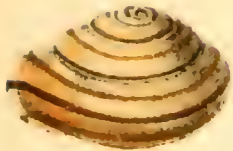
91. a



91. b.



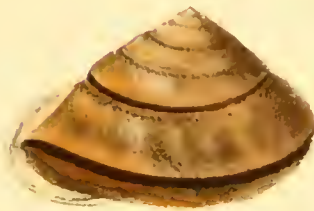
92. a.



93 a



93. b



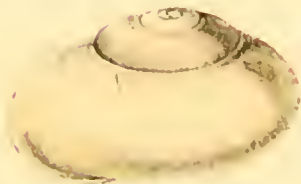
92. b



94 a



94 b



95.

# HELIX.

PLATE XXII.

Species 90. (Mus. Cuming.)

HELIX PAPYRACEA. *Hel. testâ imperforatâ, depressâ, tenuissimâ, striis longitudinalibus et concentricis subtilissimè decussatâ, pellucidâ, pallidè stramineâ; spirâ depressâ, planiusculâ; anfractibus tribus ad quatuor, subplauulatis, ultimo basi inflato, acutè carinato; columellâ brevi, declivi; aperturâ subtrapeziâ; peristomate tenui, simplici, margine supero recto, basali brevissimè reflexo, cum columellari dilatato, albo, calloso, angulum formante.*

THE PAPER HELIX. Shell imperforated, depressed, very thin, very finely decussated with longitudinal and concentric striae, pellucid, pale straw-colour; spire depressed, rather flat; whorls three to four, somewhat flattened, the last inflated at the base, sharply keeled; columella short, slanting; aperture subtrapezoid; lip thin, simple, upper margin straight, basal very slightly reflected, with the columellar edge dilated, white, callous, forming an angle.

*Carocolla papyracea*, Broderip, Pro. Zool. Soc. 1841, p. 36.

*Helix papyracea*, Pfeiffer.

*Hab.* Island of Mindoro, Philippines; Cuming.

Extremely sharply angled and remarkably broadly appressed at the base of the columella.

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

HELIX CODONODES. *Hel. testâ umbilicatâ, globoso-conoidèâ, solidâ, obliquè striatulâ, lineis spiralibus confertis subtilissimè sculptâ, nitidâ, albâ vel stramineâ, castaneo-fuscatâ; spira campanulatâ, apice obtusiusculâ; anfractibus quinque ad sex, vix convexis, ultimo anticè descendente, basi juxta aperturam gibboso-subconstricto; aperturâ obliquâ, subquadrangulâ-rotundatâ; peristomate incrassato, reflexo, marginibus subapproximatis, callo nitido junctis, columellari intus protuberantiâ dentiformi munito, extus dilatato, patente, sinuoso.*

THE BELL-LIKE HELIX. Shell umbilicated, globosely conoid, solid, obliquely finely striated, very finely sculptured with close-set spiral lines, shining, white or pale straw-colour, encircled with one or two chestnut bands; spire bell-shaped, rather obtuse at the apex; whorls five to six, slightly convex, the last descending in front, gibbosely constricted at the base next the aperture; aperture oblique, somewhat

squarely rounded; lip thickened, reflected, margins nearly approximated, joined by a shining callous; columellar margin furnished inwardly with a tooth-like protuberance, dilated outwardly, open, sinuous.

PREIFFER, Pro. Zool. Soc. 1846, p. 112.

*Hab.* Island of Nicobar; T. Philippi.

The aperture of this species is characterized by a strongly reflected callous lip, dilated over the umbilicus where it is furnished with a tooth-like protuberance.

Species 92. (Fig. a, b, Mus. Cuming.)

HELIX LABIUM. *Hel. testâ angustè umbilicatâ, conoidea, obliquè striatulâ, nitidâ, tenui, pallidè fulvâ, rufo-umbringulatâ; spirâ latè conoidèâ, apice acutâ; anfractibus sex, convexiusculis, ultimo depressiusculo, basi subplano; columellâ brevi, obliquâ; aperturâ unguatuloari, intus albidâ, fasciâ pellucente; peristomate tenui, latissimè expanso, reflexo, albo, latere dextro angulato, margine columellari umbilicium semioccultante.*

THE LIP HELIX. Shell narrowly umbilicated, conoidal, obliquely finely striated, shining, thin, pale fulvous, encircled round the middle with a dark red band; spire broadly conoidal, sharp at the apex, whorls six, rather convex, the last rather depressed, somewhat flattened at the base; columella short, oblique; aperture angularly lunar, whitish within, with the band showing through; lip thin, very broadly expanded, reflected, white, with the right side angled, columellar margin half-covering the umbilicus.

FERUSSAC, Hist. Moll. pl. 64. f. 6.

*Hab.* Island of Mindanao, Philippines; Cuming.

The form of this shell is that of a depressed cone with a widely expanded lip to the aperture.

Species 93. (Fig. a, b, Mus. Cuming.)

HELIX LITUS. *Hel. testâ umbilicatâ, orbiculatâ, conoidèâ, apice obtusâ, nitidâ, albicante, luteo-fuscâ vel rufocastaneâ, zonâ rufâ vel nigricante circumdatâ; anfractibus sex, sensim accrescentibus, convexiusculis, ultimo basi planiusculo; aperturâ transversè ovali, peristomate valdè reflexo, intus nigricante vel rufescente, margine basali strictiusculo, cum columellari dilatato, intus valdè tegente, angulum formante.*



THE TRUMPET HELIX. Shell umbilicated, orbicularly conoid, obtuse at the apex, shining, whitish, yellowish-brown or reddish-chestnut, encircled with a red or blackish zone; whorls six, increasing gradually, rather convex, the last rather flat at the base; aperture transversely ovate; lip strongly reflected, blackish or tinged with rose within, basal margin rather drawn out, with the columellar margin dilated, almost covering the umbilicus and forming an angle.

LESSON, Voy. de la Coquille, p. 309.

*Helix Ardouinii*, Deshayes.

*Helix Papeensis*, Quoy and Gaimard.

*Hab.* New Guinea.

A fulvous red-zoned orbicular shell, of which the aperture is suffused with purplish-red.

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Species 94. (Mus. Cuming.)

HELIX ZONATA. *Hel. testâ umbilicatâ, globoso-depressâ, leviter striatâ, albido-flacâ, fasciis castaneis cingulatâ; anfractibus quinque ad sex, convexiusculis, ultimo anticè vix descendente; umbilico mediocri, percio; aperturâ lunato-subcirculari; peristomate albo, reflexo, marginibus disjunctis, columellari obtusè unidentato.*

THE ZONED HELIX. Shell umbilicated, globosely depressed, slightly striated, whitish-yellow, encircled with three to four chestnut bands; whorls five to

six, rather convex, the last descending but little anteriorly; umbilicus middling, open; aperture lunar-subcircular; lip white, margins disjoined, columellar margin obtusely one-toothed.

FLEISSAC, Hist. Moll. pl. 70. f. 3.

*Hab.* Moluccas.

This has a rather more swollen form than the preceding species and is painted with more decided bands, especially around the base.

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Species 95. (Mus. Cuming.)

HELIX AGROTUS. *Hel. testâ imperforatâ, subgloboso-depressâ, obliquè tenuistriatâ; spirâ convexâ, apice obtusâ, albidâ, epidermide tenui stramineâ indulatâ; anfractibus quatuor, convexiusculis; aperturâ lunari-oratâ; columellâ declivi, appressâ; peristomate vix reflexo.*

THE SICKLY HELIX. Shell imperforated, somewhat globosely depressed, obliquely finely striated; spire convex, obtuse at the apex, white, covered with a thin straw-coloured epidermis; whorls four, rather convex; aperture lunar-ovate; columella slanting, appressed; lip slightly reflected.

*Hab.* Island of Mindoro, Philippines; Cuming.

This is distinct throughout from *H. Albaiensis*, but chiefly in the appressed part of the columella.







96



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98



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98 a



98 b



99



100



101



102

# HELIX.

PLATE XXIII.

Species 96. (Fig. a, b, c, Mus. Cuming.)

**HELIX SIRENA.** *Hel. testâ imperforatâ, globoso-depressâ, diaphanâ, spiritaliter minutissimè et confertissimè striatâ, pallidè viridè aut stramineâ, fasciis rufis et saturatè viridibus ornatâ; spirâ parvâ elevatâ; suturâ lævi; anfractibus quatuor, convexiusculis, ultimo ad peripheriam interdum subangulato, albido-cingulato, anticè subito deflexo; columellâ brevè, arcuatâ, maculâ fuscâ circumdatâ; aperturâ lunato-ellipticâ, intus fasciatâ; peristomate simplici, latè expanso, nigricante vel albo, marginibus conniventibus.*

**SIREN'S HELIX.** Shell imperforated, globosely depressed, diaphanous, spirally very minutely and closely striated, pale green or straw-colour, ornamented with red and darker green bands; spire but little raised; suture smooth; whorls four, rather convex, the last sometimes slightly angled at the periphery, encircled with white, suddenly deflected in front; columella short, arched, surrounded with a brown blotch; aperture lunar-elliptical, banded within; lip simple, broadly expanded, blackish, or white, with the edges closing inwards.

BECK, Pfeiffer, Symbolæ, vol. ii. p. 39.

*Hab.* Island of Panay, Philippines; Cuming.

Distinguished by a peculiarly compressed form, the shell is of rather transparent substance, with the lip as frequently white as it is black.

Species 97. (Mus. Cuming.)

**HELIX OPALINA.** *Hel. testâ imperforatâ, pyramidali, apice obtusâ, tenui, hyalinâ, virescente-albidâ, lævi, nitidâ; suturâ lineari, albo-marginatâ; anfractibus sex, planis, ultimo obtusè carinato; columellâ tenui, arcuatâ, subdentatâ, sulco obsolete circumdatâ; aperturâ perobliquâ, lunato-subcirculari; peristomate simplici, vir expanso.*

**THE OPAL HELIX.** Shell imperforated, pyramidal, obtuse at the apex, thin, hyaline, greenish-white, smooth, shining; suture linear, edged with white; whorls six, flat, the last obtusely keeled; columella thin, arched, somewhat toothed, surrounded by an obsolete groove; aperture very oblique, lunately subcircular; lip simple, scarcely expanded.

SOWERBY, Pro. Zool. Soc. 1840, p. 98.

*Hab.* Cagayan, Island of Luzon, Philippines; Cuming.

This species, from its pyramidal plan of convolution, approaches the *Bulinus* form; it must not, however, be confounded on that account with *B. opalinus*.

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

**HELIX OOMORPHA.** *Hel. testâ umbilicatâ, ovato-oblongâ, crassiusculâ, longitudinaliter minutè striatâ et subdecussatim malleatâ, castaneâ, prope suturâ fuscâ fasciatâ; spirâ obtusè ovato-conoidâ; anfractibus quinque, convexis, ultimo spirâ paulo breviorè; aperturâ subverticali, ovali, intus nitidè albâ; peristomate latè expanso, reflexo, marginibus approximatis, columellar margine valdè dilatato, reflexo, umbilicum relanè.*

**THE EGG-SHAPED BULIMUS.** Shell umbilicated, ovately oblong, rather thick, longitudinally minutely striated and subdecussately indented, chestnut, with a pale band near the suture; spire obtusely ovately conical, whorls five in number, convex, the last rather shorter than the spire; aperture subvertical, oval, shining white within; lip broadly expanded, reflexed, with the margins approximated, columellar margin much dilated, reflected, covering the umbilicus.

SOWERBY, Pro. Zool. Soc. 1840, p. 103.

*Bulinus oomorphus*, Pfeiffer.

*Hab.* Island of Tablas, Philippines; Cuming.

A rather solid shell, obliquely superficially indented with a characteristic light band near the suture.

Species 99. (Mus. Cuming.)

**HELIX OBLONGA.** *Hel. testâ umbilicatâ, oblongâ, subcylindricâ, tenui, brunneâ, subrugosâ; spirâ minus minus elongatâ, apice obtusiusculâ; anfractibus quinque ad sex, convexis, ultimo spirâ paulo breviorè; aperturâ subverticali, oblongo-ovali, intus livida; peristomate expanso, subreflexo, marginibus approximatis, columellar margine valdè dilatato, umbilicum subocculante.*

**THE OBLONG HELIX.** Shell umbilicated, oblong, subcylindrical, thin, brown, subrugose; spire more or less elongated, rather obtuse at the apex, whorls five to six in number, convex, the last much shorter than the spire; aperture subvertical, oblong-oval, livid within; lip expanded, slightly reflected, columellar margin much dilated, nearly concealing the umbilicus.

June, 1851.

SOWERBY, Pro. Zool. Soc. 1851, p. 40.

*Helix* I. L. L. n. s., Pfeiffer.

*Hab.* Island of Luban, Philippines.

This approaches nearer to the type of *Belanus*, but it was hardly necessary to remove the species to that genus, when it involved the necessity of altering the specific name.

SPECIES 100. (Mus. Cuming.)

HELIX GARDNERI. *Hel. testâ imperforatâ, conoidâ, luvâs aliquas nitidissime subleucosulâ, pallide flavo-roseâ, striâs undulâs et flammis fuscis pictâ, suturâ impressâ; anfractibus sex, planiusculis, ultimo basi angustâ, columellâ obliquâ, dilatâ, superiâ incrassatâ, aperturâ subhorizontali, lunato-ellipticâ, peristomate late expanso, albo, marginibus approximatâs.*

GARDNER'S HELIX. Shell imperforated, conoid, very minutely decussated with oblique lines, pale yellowish, painted with brown wavy streaks and flames: suture impressed, whorls six, rather flat, the last angled at the base; columella oblique, dilated, thickened at the upper part, aperture nearly horizontal, lunar-elliptical; lip broadly expanded, white, margins approximated.

LESSON, Voy. de la Coquille, vol. ii. p. 314.

*Helix trochus*, Quoy and Gaimard.

*Helix trochoides*, Lamurek.

*Hab.* New Guinea, Quoy.

This has completely the form of a *Trochus*, and is characterized by broad closely painted zigzag streaks of rust-brown.

SPECIES 101. (Mus. Cuming.)

HELIX CONFORMIS. *Hel. testâ imperforatâ, orbiculato-conoidâ, lævâ, albiflavo-roseâ, fuscis fuscis expansisculatis ornatâ; suturâ profundâ, anfractibus quinque, convexis, ultimo basi planiusculâ, antiâ descendente, aperturâ perobliquâ, linguâ, acili, peristomate late, tenui, late expanso, marginibus convergentibus, basi reflexo, columellâ dilatâ, appressâ.*

THE CONE-SHAPED HELIX. Shell imperforated, orbicularly conoid, smooth, whitish-brown, ornamented with brown bands which are often articulated; suture deep, whorls five, convex, the last rather flattened at the base, descending in front; aperture very oblique, large, oval; lip white, thin, broadly expanded, margins drawn inwardly, basal margin reflected, columellar dilated, appressed.

FERTSSAC, Hist. Moll. pl. 108. f. 1.

*Helix turbinata*, Deshayes.

*Helix Faffeti*, Lesson.

*Hab.* New Ireland.

This approaches very closely to the preceding species, it is chiefly characterized by the whorls being rounder and forming a deeper suture.

SPECIES 102. (Mus. Cuming.)

HELIX DUMONTI. *Hel. testâ imperforatâ, coniformi, apice obtusiusculâ, albidâ; anfractibus quinque, latis, convexiusculis, ultimo basi subplanulato, ad peripheriam lineâ nigricante cincto; columellâ intraute, obliquâ, dilatâ; aperturâ perobliquâ, lunato-ovali; peristomate simplici, breviter expanso, margine supero anteriorum arcuato, basali subreflexo.*

DUMONT'S HELIX. Shell imperforated, cone-shaped, rather obtuse at the apex, whitish; whorls five, broad, rather convex, the last rather flattened at the base, encircled with a single black line at the periphery; columella entering, oblique, dilated; aperture very oblique, lunar-oval; lip simple, shortly expanded, upper margin arched in front, basal margin slightly reflected.

PRETZLER, Philippi, Abbild. und Besch. Conch. *Helix*, pl. 7. p. 6.

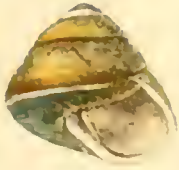
*Hab.* Island of Mindoro, Philippines, Cuming.

The black line which encircles this shell is covered by the whorls, in their convolution, at the suture, which is of an opaque white. It is not a line of colouring matter, but a line of deciduous epidermis deposited in a narrow groove.





103 a



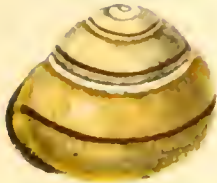
103 b



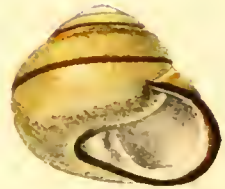
103. c.



104 a



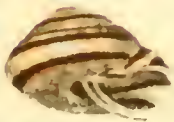
104 b



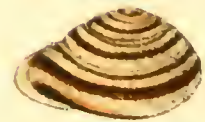
104. c.



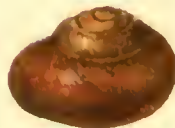
104 d



105 a



105. b



106



# HELIX.

PLATE XXIV.

Species 103. (Fig. *a, b, c*, Mus. Cuming.)

**HELIX MONTICOLA.** *Hel. testā imperforatā, semiovatā, tenui, obliquè striatā, flavā, absque nitore, rufo-fasciatā, basi ærugineā; apice obtuso; anfractibus quatuor ad quinque, planulatis; suturā lineari; columellā tenui, excavatā, arcuatā, albā; aperturā lunato-ovati; peristomate simplici, reflexiusculo, margine dextro anticè subconstricto, autrorsum arcuato.*

**THE HILL-INHABITING HELIX.** Shell imperforated, semi-ovate, thin, obliquely striated, yellow, without glitter, red-banded, base blue-green; apex obtuse: whorls four to five, rather flattened; suture linear; columella thin, excavated, arched, white; aperture lunar-oval; lip simple, a little reflected, right margin sub-constricted in front, arched anteriorwards.

SOWERBY, Pro. Zool. Soc. 1840, p. 167.

*Hab.* Island of Luzon, Philippines; Cuming.

The most constant character in this species is its blue-green base. As illustrated by the accompanying figures, it is sometimes encircled with mottled brown bands on opaque-white epidermis, sometimes with only a single band, and sometimes without any.

Species 104. (Fig. *a, b, c, d*, Mus. Cuming.)

**HELIX SPHERICA.** *Hel. testā imperforatā, globosā, obliquè irregulariter rugulosā, flavā, haud nitente, fasciā niveā ad suturam, saturatè rufā ad peripheriam ornatā, interdum fusco-strigatā; anfractibus quatuor ad quinque, convexiusculis, ultimo juxta aperturam constricto; columellā latā, albā, subtuberosā, areā nigricante circumdatā; aperturā lunato-circulari, intus nitidè niveā; peristomate reflexo, nigro-marginato.*

**THE SPHERICAL HELIX.** Shell imperforated, globose, obliquely irregularly rugulose, yellow, not shining, with a snow-white band at the suture, ornamented with a dark red band at the periphery, sometimes streaked with brown; whorls four to five, rather convex, last whorl constricted next the aperture; columella broad, white, subtuberos, surrounded with a blackish area; aperture lunately circular, shining white within; lip reflected, edged with black.

SOWERBY, Pro. Zool. Soc. 1841, p. 26.

*Hab.* Islands of Luzon and Zebu, Philippines.

This species is marked by a very rounded form, and is of rather unusually thick substance.

Species 105. (Mus. Cuming.)

**HELIX BIGONIA.** *Hel. testā umbilicatā, depresso-conoidē, tenui, obliquè striatū, fulcido-albā, fasciis rufis ornatā, basi planulatā; suturā lineari; spirā latè conoidē; anfractibus quatuor ad quinque, planiusculis, ultimo basi angulato; umbilico angusto, percio, aperturā horizontali, ellipticā; peristomate simplici, margine supero expanso, basali latè reflexo.*

**THE TWO-ANGLED HELIX.** Shell umbilicated, depresso-conoidal, thin, obliquely finely striated, fulvous white, ornamented with reddish bands, flat at the base; suture linear; spire broadly conoidal; whorls four to five, rather flat, the last angled at the base; umbilicus narrow, open; aperture horizontal, elliptical; lip simple, upper edge expanded, basal broadly reflected.

FERUSSAC, Hist. Moll. pl. 70. f. 2.

*Helix Samarensis*, Pfeiffer.

*Hab.* Island of Samar, Philippines; Cuming.

Conspicuously encircled throughout with red-brown bands upon a yellowish-white ground.

Species 106. (Mus. Cuming.)

**HELIX FODIENS.** *Hel. testā umbilicatā, subglobosā, tenuiusculā, diaphanā, rufo-corneā, obliquè confertim plicatā; anfractibus quinque ad sex, convexiusculis, ultimo subangulato; umbilico angusto, percio; operturā lunato-subcirculari, intus nitidè carneā; peristomate subexpanso, margine columellari dilatato, reflexo.*

**THE PIERCED HELIX.** Shell umbilicated, subglobose, rather thin, diaphanous, reddish-horny, obliquely closely plicated; whorls five to six, rather convex, last whorl slightly angled; umbilicus narrow, open; aperture lunately subcircular, shining flesh-tinged within; lip slightly expanded, columellar edge dilated, reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 39.

*Hab.* Island of Luzon, Philippines; Cuming.

The horny substance of this species is quite unlike that of the Philippine *Helices* in general. The aperture is nearly round, with the lip tinged with flesh-pink.









*71 a*



*71 b*



*71 c*



*107 a*



*108 a*



*108 b*



*107 b*



*109 a*



*109 c*



*109 b*

# HELIX.

PLATE XXV.

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

**HELIX BALTEATA.** *Hel. testâ imperforatâ, elongato-globosâ, solidâ, pallidè sulphurèâ, zonis viridibus et griseo-violaceis elegantissimè notatâ, apice obtuso, plerumque rosso; anfractibus quinque, convexiusculis; columellâ latâ, perobliquâ, superne obsoletè tuberculatâ, albâ, purpureo-roseo tinctâ; aperturâ lunari; peristomate subincrassato, vir expanso, extus viridi, intus violaceo.*

**THE BELTED HELIX.** Shell imperforated, elongately globose, solid, pale sulphur-coloured, elegantly marked with green and greyish-violet zones, apex obtuse, mostly rose; whorls five, rather convex: columella broad, very oblique, obsoletely tubercled at the upper part, white, tinged with purple-rose; aperture lunar; lip somewhat thickened, slightly expanded, green without, violet within.

SOWERBY, Pro. Zool. Soc. 1840, p. 136.

*Hab.* Island of Luzon, Philippines.

The predominating colours of this species, in which there is little variety, are in grey and green rings upon a bright yellow ground, the apex and columella being mostly tinged with purple-rose.

Species 107. (Fig. a, b, Mus. Cuming.)

**HELIX FESTIVA.** *Hel. testâ imperforatâ, crassâ, globosâ, purpurascente-roseâ, epidermide hydrophanâ, fusciatâ et obliquè striatâ, indulatâ; spirû obtusè conicâ; anfractibus quinque, subrotundatis; columellâ obliquâ, intrante, vividè roseâ; peristomate valdè incrassato, latè expanso, roseo.*

**THE FESTIVE HELIX.** Shell imperforated, thick, globose, purple-rose, covered with a banded and obliquely streaked hydrophanous epidermis; spire obtusely conical: whorls five, somewhat rounded; columella oblique, entering, bright pink; lip very much thickened and broadly expanded, pink.

DONOVAN, Naturalist's Repository, vol. iii. pl. 103.

*Hab.* San Juan, Province of Cagayan, Island of Luzon, Philippines; Cuming.

This elegant species was described and admirably figured many years since by Mr. Donovan in his 'Naturalist's Repository,' from a specimen in the possession of Mrs. Mawe. It partakes of the characters of the *H. pulcherrima* and *Luzonica*, subsequently discovered by Mr. Cuming at the Philippine Islands, and is from the same

locality. It is chiefly distinguished by its solid globose form, and broadly expanded thickened lip.

Species 108. (Fig. a, b, Mus. Cuming.)

**HELIX PERDITA.** *Hel. testâ imperforatâ, globoso-conicâ, tenuiculâ, obliquè striatâ, apice subobtusâ, caruteo-albicante, apice rufo-aurantiâ, interdum omnino rufo-aurantiâ; anfractibus quinque ad sex, convexis; columellâ arcuatâ, subintrante; aperturâ orbiculari-ovata, subverticali; peristomate tenui, parum reflexo.*

**THE LOST HELIX.** Shell imperforated, globosely conical, rather thin, obliquely finely striated, rather obtuse at the apex, bluish-white, red-orange at the apex, sometimes entirely red-orange; whorls five to six, convex; columella arched, somewhat entering; aperture orbicularly ovate, nearly vertical; lip thin, but little reflected.

*Hab.* Island of Batan, north of the Philippine group. Belcher.

A considerable number of this species, extremely delicately coloured, were collected at the above-named island, by Sir Edward Belcher, during the voyage of the *Samarang*. It was thought to be a variety of *H. Buschi*, but does not agree with Dr. Pfeiffer's description of that species.

Species 109. (Fig. a, b, c, Mus. Cuming.)

**HELIX ILOCONENSIS.** *Hel. testâ imperforatâ, ovato-globosâ, crassiusculâ, lævi, coloribus diversissimis ornata; spirû conoidèâ, obtusâ; anfractibus quinque, convexiusculis; columellâ subrectâ, latâ; aperturâ lunato-orali, intus lacteâ; peristomate albo, simplici, latè expanso, margine dextro extus medio impresso.*

**THE ILOCOS HELIX.** Shell imperforated, ovately globose, rather thick, smooth, ornamented with different colours; spire conoid, obtuse; whorls five, rather convex; columella nearly straight, broad, aperture lunar-oval, milk-white within; lip white, simple, broadly expanded, right margin impressed without in the middle.

SOWERBY, Pro. Zool. Soc. 1840, p. 116.

*Hab.* Province of Ilocos, Island of Luzon, Philippines, Cuming.

Mr. Sowerby enumerates eighteen varieties of this species. They partake mostly of yellow and grey, encircled with light and red rings







110. b



110. a



110. c



111. a



112



113.



111. b



110. d



114



110. e

# HELIX.

PLATE XXVI.

Species 110. (Fig. *a, b, c, d, e*, Mus. Cuming.)

**HELIX ANNULATA.** *Hel. testâ imperforatâ, ovato-globosâ, crassiusculâ, aurantiâ vel citrinâ, fasciis purpureis rufis et violaceo-brunneis variè ornâtâ; anfractibus quinque, vix convexiusculis, ultimo interdum subangulato; columellâ latâ, crassâ, albâ, roseo circumdatâ; aperturâ rotundato-lunatâ, intus albâ; peristomate incrassato, expanso, extus rufescente.*

**THE RINGED HELIX.** Shell imperforated, ovately globose, rather thick, orange or lemon colour, ornamented with purple or red or violet-brown bands; whorls five in number, rather convex, the last sometimes slightly angled; columella broad, thick, white, rose-encircled; aperture rotundately lunar, interior white; lip thickened, expanded, reddish without.

SOWERBY, Pro. Zool. Soc. 1840, p. 135.

*Hab.* Province of Hocos, Island of Luzon, Philippines; Cuming.

This little thickened species is variously banded, but has always an orange or yellow ground-tint. The suture of the spire is mostly painted with a deep crimson-red ring.

Species 111 (Fig. 111 *a, b*, and Fig. 114, Mus. Cuming.)

**HELIX SPILÆRION.** *Hel. testâ imperforatâ, globulosâ, tenuiculâ, striatulâ, luteo-fulvâ, epidermide non nitente, tenuissimâ, indutâ; spirâ semiglobosâ, apice obtuso, albo, nitido; suturâ pallidè marginatâ; anfractibus quatuor ad quinque, supremis planulatis, ultimo inflato; columellâ tenui, arcuatâ, subexcavatâ, albâ; aperturâ lunato-ovali, intus lacteâ, anticè fusciculâ; peristomate simplici, vix expansiusculo, margine supero antrorsum arcuato.*

**THE LITTLE GLOBE HELIX.** Shell imperforated, globular, rather thin, finely striated, fulvous-yellow, covered with a thin dull epidermis; spire semiglobose, obtuse, white, and shining at the apex; suture finely edged with white; whorls four to five, the uppermost rather flat, the last inflated; columella thin, arched, subexcavated, white; aperture lunar-oval, brown-tinted towards the front; lip simple, but little expanded, upper edge curved anteriorly.

SOWERBY, Pro. Zool. Soc. 1841, p. 2.

*Hab.* Islands of Leyte and Mindoro, Philippines; Cuming.

A light thin globular shell of fulvous or dark chestnut colour, characterized by a fine white edging round by the suture.

Species 112. (Mus. Cuming.)

**HELIX TEPHRODES.** *Hel. testâ imperforatâ, ovato-globosâ, solidâ, ponderosâ, fulvescente, undique rufo-fusca subfasciatâ, strigis epidermidis cinereæ hydrophana fere oblectâ; anfractibus quatuor ad quinque, convexis, supremis depressis, rotundatis; columellâ latâ, albâ, subarcuatâ; aperturâ lunato-subcirculari, intus albâ, peristomate simplici, reflexo.*

**THE ASH-COLOURED HELIX.** Shell imperforated, subglobose, solid, ponderous, yellowish, encircled throughout with broad red-brown bands, almost covered with streaks of ash-coloured hydrophanous epidermis; whorls four to five, convex, the uppermost depressed rounded; columella broad, white, slightly arched; aperture lunar-subcircular, white within; lip simple reflected.

PFEIFFER, Pro. Zool. Soc. 1842, p. 151.

*Hab.* Island of Luzon, Philippines; Cuming.

This partakes very much of the characters of *H. hydrophana* and *metaformis*. All three are probably different states of one and the same species.

Species 113. (Mus. Cuming.)

**HELIX JONASI.** *Hel. testâ imperforatâ, globosâ, tenui, solidiusculâ, levigatâ, non nitente, pallidè ceriseâ; spirâ obtusè conicâ; anfractibus quinque, arcuatis, ultimo basi subplanato; columellâ albâ, subplanâ; aperturâ lunari; peristomate breviter incrassato, margine columellari subdilato, appresso.*

**JONAS'S HELIX.** Shell imperforated, globosely convex, rather solid, smooth, not shining, pale sea-green; spire obtusely conical; whorls five, rather convex, the last rather flattened at the base; columella white, oblique; aperture lunar; lip shortly thickened, columellar margin slightly dilated, appressed.

PFEIFFER, Pro. Zool. Soc. 1845, p. 126.

*Hab.* Island of Mindoro, Philippines; Cuming.

This is apparently a white shell, its light sea-green colouring being chiefly due to the presence of a thin epidermis.

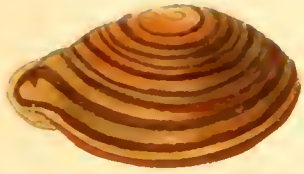








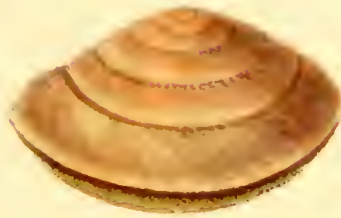
115



116 a



116 b



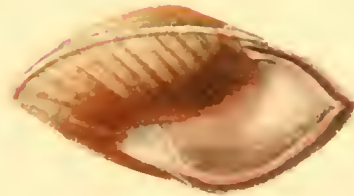
117 a



117 b



118



119

# HELIX.

PLATE XXVII.

Species 115. (Fig. 115 and Fig. 117 a, b, Mus. Cuming.)

*HELIX SEMIGRANOSA.* *Hel. testâ obtusè umbilicatâ, depressâ, orbiculari, plus minus carinatâ, crassiusculâ, superne olivaceo-fuscâ et minutè granulatâ, subtilus radiatum striatâ et nitidissimè olivaceo-viridi, ad carinam rufo-fusco fasciatâ; spirâ depresso-conoideâ, rufescente tinctâ; anfractibus sex, nunc planulatis, nunc convexis; aperturâ angulatè lunari, intus albâ; peristomate simplici, basi incrassatâ, ad columellam sub-expanso.*

THE HALF-GRAINED HELIX. Shell umbilicated and covered, depressed, orbicular, more or less keeled, rather thick, olive-brown and minutely granulated over the upper part, radiately striated and very shining olive-green beneath, banded with red-brown at the keel; spire depressly conoidal, tinged with red; whorls six, now flattened, now convex; aperture angularly lunar, whitish within; lip simple, thickened at the base, rather expanded at the columella.

SOWERBY, *Pro. Zool. Soc.* 1841, p. 26.

*Helix Blainvilliana*, Lea.

Eadem var. *Helix Panayensis*, Pfeiffer.

*Hab.* Islands of Luban and Panay, Philippines; Cuming.

The upper and lower surfaces of this species present a striking contrast; the one being finely granulated, whilst the other is highly polished.

Species 116. (Fig. a, b, Mus. Cuming.)

*HELIX HORIZONTALIS.* *Hel. testâ umbilicatâ, depressâ, obliquè striatâ, plus minus carinatâ, luteo rufo-fasciatâ, fasciis duabus supra, unâ infra, unâ ad carinam; anfractibus quinque, planis, ultimo ad aperturam subitè serè verticaliter deflexo; aperturâ horizontali, integrâ, oblongâ; peristomate crasso, reflexo, carneo, marginibus junctis.*

THE HORIZONTAL HELIX. Shell umbilicated, depressed, obliquely striated, more or less keeled, yellowish, red-banded, two bands above the keel, one on the keel, and one below it; whorls five, flat, the last suddenly almost vertically deflected at the aperture; aperture horizontal, entire, oblong; lip thick, reflected, flesh-tinged, margins joined.

*Helix horizontalis*, Pfeiffer, *Pro. Zool. Soc.* 1845, f. 40.

Eadem var. *Helix Reeveanu*, Pfeiffer.

*Hab.* Islands of Bantayan and Zebu, Philippines; Cuming.

Encircled throughout with rather broad red zones, while the aperture is characterized by having its bevelled lip continuous.

Species 118. (Mus. Cuming.)

*HELIX SEMIGLOBOSA.* *Hel. testâ subumbilicatâ, semiglobosâ, tenui, lutescenti-cornèâ, supra minutè granulatâ; suturâ vicè impressâ; anfractibus sex planis, ultimo carinato, infra carinam lineâ rufescenti fasciâ dilatâ brunneâ notatâ; aperturâ angulatè lunari; peristomate simplici, acuto, margine columellari latè reflexo, umbilicum angustissimè sub-terente.*

THE SEMIGLOBOSE HELIX. Shell slightly umbilicated, semiglobose, thin, yellowish-hornny, minutely granulated over the upper part; suture scarcely impressed, whorls six in number, flattened, the last keeled, smooth and shining below the keel, marked with a dilute brownish band; aperture lunar-lipped, lip simple, acute, columellar margin broadly reflected, half-covering the very confined umbilicus.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 38.

*Hab.* Islands of Leyte and Samar, Philippines; Cuming.

This only differs from *H. semigranosa* by its thin flattened growth, and by the minuter character of its sculpture.

Species 119. (Mus. Cuming.)

*HELIX SIQUIJORENSIS.* *Hel. testâ imperforatâ, depressâ, carinatâ, crassiusculâ, obliquè striatâ, rufi, pulexide albâ hydrophanâ obductâ; spirâ parè conoideâ; suturâ lineari; anfractibus quatuor ad quinque, planulatis, ultimo non deflexo; carinâ acutâ, aperturâ securiformi; peristomate intus alido, superè peribasi reflexo, ad columellam arcuatè sub-expanso.*

THE SIQUIJOR HELIX. Shell imperforated, depressed, keeled, rather thick, obliquely finely striated, red, covered with a whitish hydrophanous epidermis, spire but little exerted; suture linear, whorls four to five, rather flattened, the last not deflected; keel sharp; aperture wedge-shaped, lip shining white, expanded above, reflected at the base, somewhat thickened towards the arched columella.

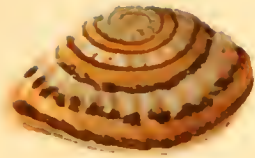
*Carocolla Siqujorensis*, Broderip, *Pro. Zool. Soc.* 1841, f. 18.

*Hab.* Island of Siquijor, Philippines; Cuming.

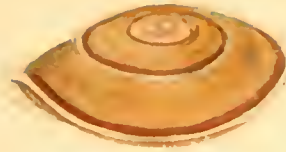
This fine species is of a rich chestnut-red colour, covered partially with a slight hydrophanous epidermis, and tinged about the lip with purple.







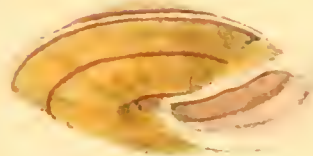
*120. a.*



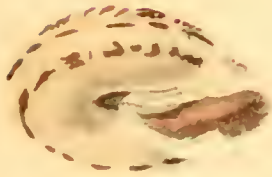
*120. d.*



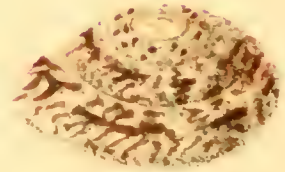
*120. b.*



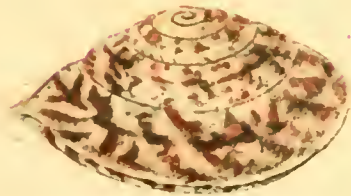
*120. c.*



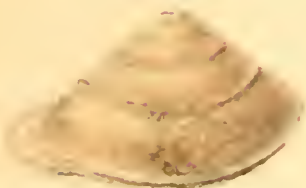
*121. a.*



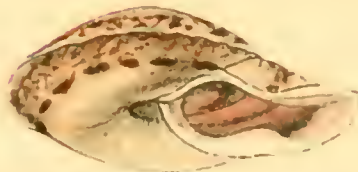
*121. b.*



*122. a.*



*123. a.*



*123. d.*



*123. c.*



# HELIX.

PLATE XXVIII

Species 120. (Fig. a, b, Mus. Cuming.)

**HELIX PARMULA.** *Hel. testá umbilicatá, depressissimá, discoideá, carinatá, lenuí, obliquè striatá, pallidè fultá, fasciis angustis rufis circumdatá; spirá vix elatá; anfractibus quatuor ad quinque, planis, ultimo ad aperturam rugoso et angulatim deflexo; cariná acutissimá, albá; umbilico mediocri, percio; aperturá horizontali, lanceolatá; peristomate simplici, marginibus junctis, supero expanso, basali latè reflexo.*

**THE LITTLE SHIELD HELIX.** Shell umbilicated, very depressed, discoid, keeled, thin, obliquely striated. light fulvous colour, encircled with narrow red bands; spire scarcely raised; whorls from four to five, flat, the last rough and angularly deflected at the aperture; keel very sharp, whitish; umbilicus middling, open; aperture horizontal, lanceolately ovate; lip simple, with the margins joined, upper margin expanded, basal broadly reflected.

*Carocolla parmula*, Broderip, Pro. Zool. Soc. 1841, p. 35.

*Hab.* Islands of Negros and Zebu, Philippines; Cuming.

This species is remarkable for its flatly compressed lenticular form.

Species 121. (Fig. a, b, Mus. Cuming.)

**HELIX LASALLII.** *Hel. testá umbilicatá, depressá, crassiusculá, lævi, fulvescente, brunneo trizonatá et epidermide albidá hydrophaná marmoratá; spirá vix elatá; anfractibus quatuor ad quinque, planiusculis, ultimo tereti, ad aperturam subitò deflexo; umbilico mediocri, percio; aperturá horizontali, auriformi; peristomate valdè incrassato, reflexo, continuo, margine supero sinuoso, impresso, basali obsolete dentato.*

**LASALLE'S HELIX.** Shell umbilicated, depressed, rather thick, smooth, fulvous, encircled with three dark brown zones, marbled with whitish hydrophanous epidermis; spire scarcely raised; whorls four to five, rather flattened, the last lengthened, suddenly deflected at the aperture; umbilicus middling, open; aperture horizontal, ear-shaped; lip very much thickened, reflected, continuous, upper margin sinuous, compressed, basal margin obsolete toothed.

EYNOUX, Guerin's Mag. de Zool. pl. 115. f. 1.

*Helix nereatrix*, Sowerby.

*Hab.* Island of Luzon, Philippines; Cuming.

Very conspicuously zoned, beneath a light net-work of epidermis, with a bold open umbilicus.

Species 122. (Fig. a, b, c, d, Mus. Cuming.)

**HELIX PLANULATA.** *Hel. testá umbilicatá, orbiculato-convexá, lenticulari, solidá, lævisculá, albá, fasciis griseo marmoratá et interruptè fasciatá; spirá brevi, obtusá anfractibus quinque, plus minus planis, ultimo tereti interdum subangulato, antiè subitè deflexo; umbilico mediocri, percio; aperturá horizontali, integrá, simplicíá, peristomate incrassato, marginibus junctis, supero expanso, basali reflexo, unidentato.*

**THE FLATTENED HELIX.** Shell umbilicated, orbicularly convex, lenticular, solid, rather smooth, white marbled and banded in an interrupted manner with grey-brown; spire short, obtuse; whorls five in number, more or less flat, the last lengthened, sometimes a little angled, anteriorly suddenly deflected; umbilicus middling, open; aperture horizontal, entire, elliptical; lip thickened, with the margins joined, upper margin expanded, basal margin reflected, one-toothed.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. vi. p. 40.

*Helix auriculata*, Swainson.

*Helix papilionacea*, Valenciennes.

*Helix collapsa*, Férussac.

*Helix Listeri*, Gray.

*Hab.* Islands of Mindoro, Luban, Negros, and Luzon, Philippines; Cuming.

This species varies extremely in form, being sometimes very flat and lenticular, sometimes rounded and convex. It is always characterized by the same idea of grey-spotted painting.

Species 123. (Fig. a, b, Mus. Cuming.)

**HELIX PENNANTIANA.** *Hel. testá angustè umbilicatá orbiculato-convexá, acutè carinatá, tenui, striatá, irregulariter et leviter marmoratá, virescente, cariná supero purpurascente; anfractibus quatuor ad sex, vix incrassatis, ultimo antè vix desistente, basi peristomate unidentato; aperturá periclypá, angustato-lanceolata, subitè deflexa.*

*peristomate purpureo-roseo, latè expanso, margine basali reflexo, columellari brevi, umbilicum ferè tegente*

PENNANT'S HELIX. Shell narrowly umbilicated, orbicularly conoid, sharply keeled, thin, finely striated, irregularly and lightly indented, pale nankeen colour, purplish at the apex; whorls five to six, scarcely convex, the last but little descending anteriorly, rather flattened at the base; aperture very oblique, an-

gularly lunar, interior white, lip purple-rose, broadly expanded, basal margin reflected, columellar margin short, almost covering the umbilicus.

PEIFFER, Pro. Zool. Soc. 1845, p. 67.

*Hab.* — ?

This is a very characteristic species, and at present one of great rarity. Its locality is unknown.





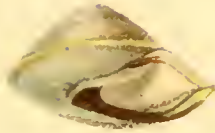
124 a



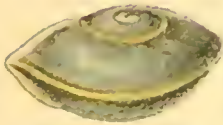
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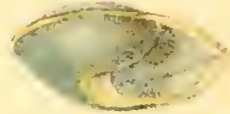
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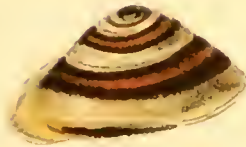
124 b



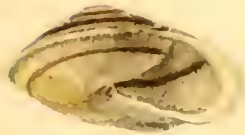
125 a



125 b



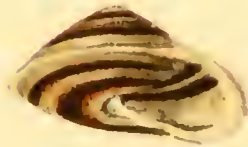
126 a



126 c



126 d



126 b

# HELIX.

PLATE XXIX.

Species 124. (Fig. *a, b, c, d*, Mus. Cuming.)

**HELIX DRYOPE.** *Hel. testā imperforatā, orbiculato-convexā, tenui, subtilissimè decussatā, nitidulā, fluorescenti-viridī, acutè carinatā; spirā subelevatā, apice nigricante; anfractibus quatuor ad quinque, subplanulatis, ultimo basi planiusculo, anticè breviter reflexo; aperturā subhorizontali, angulato-ellipticā, ad carinam subcanaliculatā; peristomate simplici, tenui, margine supero recto, basali breviter reflexo, columellari dilatato, appresso, albo vel nigro.*

**DRYOPE'S HELIX.** Shell imperforated, orbicularly convex, thin, very finely decussated, shining, yellowish-green, sharply keeled; spire slightly raised, blackish at the apex; whorls four to five, rather flattened, the last rather flattened at the base, shortly deflected in front; aperture nearly horizontal, angularly elliptical, slightly channelled at the keel; lip simple, thin, upper margin straight, basal margin shortly reflected, columellar dilated, appressed, white or black.

*Carocolla Dryope*, Broderip, Pro. Zool. Soc. 1841, p. 37.

*Helix prasina*, Koch.

*Hab.* Island of Burias and Luzon, Philippines; Cuming.

A delicate semitransparent sea-green shell, sometimes encircled with a black-brown spiral band. Where the columella is black-brown the colour is mostly continued along the lip.

Species 125. (Fig. *a, b*, Mus. Cuming.)

**HELIX REGINÆ.** *Hel. testā imperforatā, depressā, tenuissimā, subtiliter striatā, lineis minutissimis concentricis subdecussatā, pellucidā, nitidā, smaragdīnā; spirā depressā, planiusculā; anfractibus quatuor, subplanulatis, rapidè accrescentibus, ultimo acutè carinato, basi inflato; aperturā angulato-lunari; peristomate simplici, tenui, margine supero expanso, basali breviter reflexo, columellari leviter arcuato, subdilatato, appresso.*

**THE QUEEN'S HELIX.** Shell imperforated, depressed very thin, finely striated, slightly decussated with very minute concentric lines, transparent, shining, emerald-blue; spire depressed, rather flattened. whorls four, rather flattened, increasing rapidly, the last sharply keeled, inflated at the base. aperture angularly lunar; lip simple, thin, upper margin expanded, basal margin shortly reflected, columellar margin slightly arched, dilated, and appressed.

*Carocolla Reginæ*, Broderip, Pro. Zool. Soc. 1841, p. 36.

*Hab.* Island of Zebu, Philippines; Cuming.

This extremely delicate and beautiful species is truly remarkable for its fine emerald-blue colouring.

Species 126. (Fig. *a, b, c, d*, Mus. Cuming.)

**HELIX THERSITES.** *Hel. testā imperforatā, subconvexatā, gibbā, tenui, subdiaphanā, sulphureā, castaneofasciatā; spirā parum elatā; suturā lineari; anfractibus quatuor ad quinque, planiusculis, ultimo non deflexo, acutè carinato, prope aperturam subitò rotundato, gibbo; aperturā subhorizontali, semiorali; peristomate simplici, latè expanso.*

**THERSITES' HELIX.** Shell imperforated, somewhat smooth, gibbous, thin, rather diaphanous, sulphur-coloured, banded with chestnut; spire but little raised; suture linear; whorls four to five, rather flattened, the last not deflected, sharply keeled, suddenly rounded near the aperture, gibbous. aperture almost horizontal, semioral; lip simple, broadly expanded.

*Carocolla Thersites*, Broderip, Pro. Zool. Soc. 1841, p. 35.

*Hab.* Island of Mindoro, Philippines; Cuming.

This species is characterized by a singular contracted growth just before reaching maturity. It has the appearance of an accidental distortion, but is constant in all specimens.









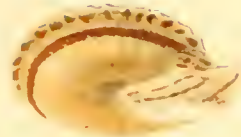
127 a



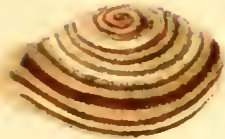
127 b



127 c



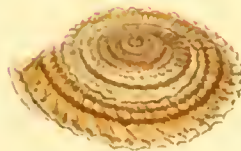
128 a



129 a



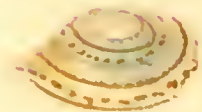
129 b



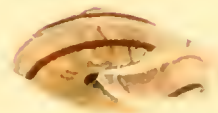
128 b



130 a



130 b



131.

# HELIX.

PLATE XXX

Species 127. (Fig. a, b, c, Mus. Cuming.)

**HELIX SOLARIOIDES.** *Hel. testá umbilicatá, valdè depressá, lenticulari, tenui, pellucidá, pallidè castaneá aut lutescente, fasciá fuscá aut nigricante ad suturam ornatá, suturá interdum albo-marginatá; anfractibus quinque, planiusculis, ultimo acutè carinatá; umbilico subamplo, percio; aperturá subhorizontali, compresso-ovatá; labro tenui, simplici.*

**THE SOLARIUM-LIKE HELIX.** Shell umbilicated, very depressed, lenticular, thin, pellucid, light chestnut or pale yellow, ornamented with a brown or black band at the suture; suture sometimes edged with white; whorls five, rather flattened, the last sharply keeled; umbilicus rather large, wide open; aperture nearly horizontal, compressly ovate; lip thin, simple.

*Hab.* Dalaguete, Philippines; Cuming.

A thin flatly depressed transparent shell, formed very much like a *Solarium*, encircled with a characteristic dark band next the suture.

Species 128. (Fig. a, b, Mus. Cuming.)

**HELIX ROTA.** *Hel. testá umbilicatá, depresso-lenticulari, supernè planiusculá, basi inflatá, carinatá, irregulariter crispato-corrugatá, costis basalibus validioribus, obtusis, sordidè albidá vel spadiceá, fasciis angustis castaneis, supra et infra carinam acutam, tuberculis albis undulatam, ornatá; anfractibus quatuor ad quinque, planis, ultimo anticè subitè deflexo; umbilico mediocri, percio; aperturá lanceolatá, ovatá; peristomate simplici, latè expanso, marginibus junctis, basali unidentato.*

**THE WHEEL HELIX.** Shell umbilicated, depressly lenticular, rather flat above, inflated at the base, keeled, irregularly crisply wrinkled, the basal ribs being stronger; dull white or fawn-colour, encircled with narrow chestnut bands, two above and one below the keel, which is sharp and undulated with white tubercles; whorls four to five, flattened, the last suddenly deflected anteriorly; umbilicus middling, open; aperture lanceolately ovate; lip simple, broadly expanded, margins joined, basal margin one-toothed.

*Carocolla rota*, Broderip, Pro. Zool. Soc. 1841, p. 45.

*Hab.* Island of Siquijor, Philippines; Cuming.

This very pretty species is well characterized by its numerous concentric crisped wrinkles, while the keel at the periphery of the shell obtains a crimped pattern

Species 129. (Fig. a, b, Mus. Cuming.)

**HELIX MARGINATA.** *Hel. testá umbilicatá, lenticulari acutè carinatá, obliquè striatá, pallidè fulvescente, fasciis pluribus rufis ornatá; spirá parum elatá, anfractibus quatuor, planiusculis, ultimo juncta apertura supra inflato, valdè deflexo; cariná albá, usque ad apicem conspicuá; umbilico angusto, percio; aperturá horizontali, ellipticá; peristomate simplici, marginibus junctis supero latè expanso, basali reflexo.*

**THE MARGINED HELIX.** Shell umbilicated, lenticular, sharply keeled, obliquely striated, pale fulvous, ornamented with numerous red lines; spire but little raised; whorls four, rather flat, the last inflated at the upper part near the aperture, very much deflected; keel white, conspicuous as far as the apex; umbilicus narrow, open; aperture horizontal, elliptical; lip simple, margins joined, upper margin broadly expanded, basal reflected.

*MULLER*, Vermium terr. et fluv. Hist. vol. ii. p. 41.

*Helix scabrosa*, Férussac.

*Helix Grayana*, Pfeiffer.

*Hab.* Island of Cuming, Philippines; Cuming

Dr. Pfeiffer refers this species to *H. marginata* of Muller, but it is difficult to identify it without some doubt

Species 130. (Fig. a, b, Mus. Cuming.)

**HELIX GALLINULA.** *Hel. testá umbilicatá, lenticulari acutè carinatá, solidá, flavescenti-griscá, fasciis nonnullis rufis et epidermide hydróphaná, maculas tria juvenis pallidas formante, ornatá; anfractibus quatuor ad quinque, planis, ultimo ad aperturam subitè deflexo, aperturá horizontali, ellipticá; peristomate simplicissimo, marginibus callo tenui junctis, basali reflexo, ad umbilicem mediocrem, percium arcuato.*

**THE LITTLE HEN HELIX.** Shell umbilicated, lenticular, sharply keeled, solid, yellowish-grey, ornamented with some red bands and a hydropneous epidermis forming light triangular blotches; whorls four to five

flat, the last suddenly deflected at the aperture; aperture horizontal, elliptical; lip slightly thickened, with the margins joined by a thin callosity, basal margin reflected, arched towards the umbilicus, which is large and open.

PFEIFFER, Pro. Zool. Soc. 1845, p. 40.

*Hab.* Islands of Zebu and Luzon, Philippines; Cuming.

This approaches very nearly to some varieties of *H. planulata*, but is apparently distinct.

Species 131. (Mus. Cuming.)

HELIX SCROBICULATA. *Hel. testā umbilicatā, lenticulari, tenui, obliquè rugosā, fulcideo-albidā, fusco-zonatā, carinatā, basi lineis minutissimis concentricis ornatā; spirā parum elatā, apice obtuso, nitido, glabro; suturā lineari; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè angulatim deflexo, basi prope aperturam gibboso-inflato; carinā subacutā; umbilico angusto, percio; aperturā transversè pyriformi; peristo-*

*mate simplici, continuo, supernè expanso, basi latè reflexo, unidentato; dente obtuso, extus scrobiculum formante.*

THE FURROWED HELIX. Shell umbilicated, lenticular, thin, obliquely rugose, fulvous-white, zoned with brown, keeled, marked at the base with minute concentric lines; spire but little raised, apex obtuse, shining, smooth; suture linear; whorls four to five, rather convex, the last angularly deflected anteriorly, gibbously inflated at the base near the aperture; keel rather sharp; umbilicus narrow, open; aperture transversely pear-shaped; lip simple, continuous, expanded at the upper part, broadly reflected at the base, one-toothed; tooth obtuse, forming outwardly a furrow.

PFEIFFER, Pro. Zool. Soc. 1842, p. 88.

*Hab.* Island of Bohol, Philippines; Cuming.

Allied in some measure to *H. rota*, but wanting in the peculiar crisped wrinkles and crimped keel which characterize that species.

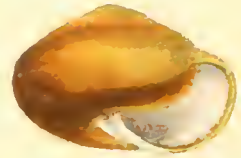




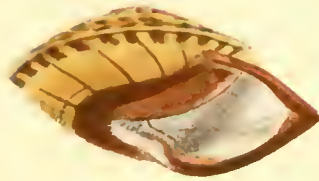
132 b



132 a



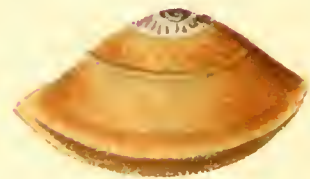
132 c.



133 a.



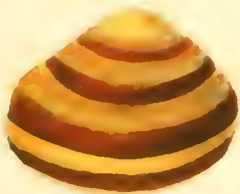
133 b.



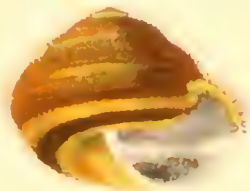
133 d.



133 b



134 a



135



134 b.

# HELIX.

PLATE XXXI.

Species 132. (Fig. *a, b, c*, Mus. Cuming.)

**HELIX XANTHOTRICHIA.** *Hel. testā oblectè subumbilicatā, subdepressā, cinnamomeā, interdum fasciatā, supernè et ultra peripheriam regulariter et minutè granulatā, epidermide velutiā indulā, pilis confertis, brevibus, aureis; suturā profundā; anfractibus sex, rotundatis, ultimo basi glabro, nitido; aperturā latā, lunari, intus lacteā, fusco-marginatā; peristomate simplici, acuto, margine columellari valdè incrassato.*

**THE YELLOW-HAIRED HELIX.** Shell concealedly slightly umbilicated, rather depressed, cinnamon-coloured, sometimes banded, regularly and minutely granulated above and beyond the periphery, covered with a fleecy epidermis, of which the hairs are close-set, short, and of a golden colour; suture deep; whorls six, rounded, the last smooth and shining at the base; aperture broad, lunar, milk-white within, edged with brown; lip simple, sharp, columellar edge much thickened.

*Helix velutina*, Sowerby (not of Lamarck), Pro. Zool. Soc. 1841, p. 25.

*Helix xanthotricha*, Pfeiffer.

An eadem var.? *Helix Morchiana*, Pfeiffer.

*Hab.* Islands of Guimaras and Negros, Philippines; Cuming.

The shell represented at Fig. 132 *a* is the variety which Dr. Pfeiffer has now elevated to the rank of a species. It is of lighter substance and banded, but is characterized by precisely the same peculiar granulated sculpture and yellow hairs.

Species 133. (Fig. *a, b*, Mus. Cuming.)

**HELIX ZEBUENSIS.** *Hel. testā imperforatā, depressā, saturatè rufā, epidermide liberā, hydrophanā, rugulosā, variegatā vel omnino obductā, acutè carinatā, basi sæpè multifasciatā et radiatā, apice nitidā, nigricante; anfractibus quatuor ad quinque, planiusculis, ultimo vir deflexo; columellā subrectā, dædovi, callosā; aperturā securiformi, intus nitidè carulescente; peristomate supernè tenuè expanso, basi incrassato, reflexo.*

**THE ZEBU HELIX.** Shell imperforated, depressed, dark red, variegated or altogether covered with a free wrinkled hydrophanous epidermis, often many-banded and rayed at the base, shining and blackish at the

apex; whorls four to five, rather flat, the last scarcely deflected; columella nearly straight, slanting, callosous; aperture wedge-shaped, shining pale blue within; lip sometimes thin, expanded, thickened and reflected at the base.

*Carocolla Zebuensis*, Broderip, Pro. Zool. Soc. 1841, p. 46.  
*Hab.* Island of Zebu, Philippines; Cuming.

The epidermis of this very interesting species is sometimes obliquely tessellated as at Fig. *a, b*, and sometimes plain as at Fig. *c, d*; but in the latter case it is the exterior of a fibrous texture.

Species 134. (Fig. *a, b*, Mus. Cuming.)

**HELIX GUMMATA.** *Hel. testā subumbilicatā, emarginatè subdepressā, supernè striis longitudinalibus et transversis minutim decussatā, fuscā, absque nitore, epidermide gummacēā indulā, basi lævi, nitidissimā, fusco-atrescente, fasciā latā lacteā ad peripheriam, latè circumdata subtilis circumdatā; anfractibus sex ad septem, convexis, angustis; aperturā latā, lunari; peristomate simplici, margine columellari incrassato, reflexo, umbilicum ferè obtegente.*

**THE GUMMED HELIX.** Shell slightly umbilicated, emarginately subdepressed, minutely decussated at the upper part with longitudinal and transverse striae, brown, not shining, covered with a gummed epidermis, base smooth, very shining, brownish-yellow, bordered with a broad yellow band at the periphery and a broader red band underneath; whorls six to seven, convex, narrow; aperture broad, lunar; lip simple, columellar edge thickened, reflected, almost covering the umbilicus.

SOWERBY, Pro. Zool. Soc. 1841, p. 23.

*Helix luteo-fasciata*, Lea.

*Hab.* Island of Luzon, Philippines; Cuming.

Well characterized by the upper portion of the whorls having a peculiar gummed-like epidermis upon them, while below this they are shiny as porcelain.

Species 135. (Mus. Cuming.)

**HELIX SETIGERA.** *Hel. testā oblectè subumbilicatā, subdepressā, setigerosā, testā brunneā, nitidā, et supernè granulosā.*



*latā, epidermide seriatim setigerā indutā, basi glabrā, nitidā, lutescente, fasciā latā brunneā infra peripheriam; spirā depresso-conoideā; anfractibus sex, convexis; aperturā subrotundo-lunari; peristomate simplici, margine columellari incrassato.*

**THE BRISTLY HELIX.** Shell concealedly slightly umbilicated, somewhat semiglobose, thin, brown, granulated at the middle and upper part, covered with an epidermis planted with rows of bristles, base smooth, shining, yellowish, with a broad brown band beneath

the periphery; spire depressly conoid; whorls six; convex; aperture subrotundately lunar; lip simple, columellar edge thickened.

SOWERBY, Pro. Zool. Soc. 1841, p. 25.

*Hab.* Island of Luzon, Philippines: Cuming.

This species agrees with the preceding in the shiny porcelain character of the shell, below the portion that is covered with an epidermis; but the epidermis is of quite another character, being thick-set with a profusion of delicate bristles.







136 b



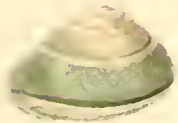
136. a



136. c.



137. a



138 a.



138. b



137. b



136 d



136. e



136. f.

# HELIX.

PLATE XXXII.

Species 136. (Fig. *a to f*, Mus. Cuming.)

**HELIX HUGELI.** *Hel. testā imperforatā, lenticulari, solidiusculā, plus minus carinatā, nitidā, subtiliter striatā, lineis minutissimis spiratibus sub lente decussatā, flavidā, viridi aut fusco variè cingulatā; spirā vix elevatā; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè breviter descendente; aperturā subhorizontali, elliptico-ovatā; peristomate simplici, albo, marginibus conniventibus, supero breviter reflexo, basali leviter arcuato, appressè reflexo.*

**HUGEL'S HELIX.** Shell imperforated, lenticular, rather solid, more or less keeled, shining, finely striated, decussated beneath the lens with very minute spiral lines, yellowish, variously encircled with green or brown; spire but little raised; whorls four to five in number, rather convex, the last shortly descending in front; aperture nearly horizontal, elliptically ovate; lip simple, white, margins approximating, upper edge shortly reflected, basal edge slightly arched, appressed, reflected.

*Carocolla bifasciata*, Lea, Trans. Acad. Sci. Philadelphia, 1841, p. 465, pl. 12. f. 18.

*Helix Hugeli*, Pfeiffer.

Eadem var. *Helix amona* and *H. Hanleyana*, Pfeiffer.

*Hab.* Island of Luzon, Philippines; Cuming.

This is an extremely variable species, both with respect to form and colouring. The sharply keeled state represented at Fig. *d* and *e* is *H. Hanleyana*, and the grey variety at Fig. *f* is *H. amona*.

Species 137. (Fig. *a, b*, Mus. Cuming.)

**HELIX FIBULA.** *Hel. testā imperforatā, lenticulari, solidā, acutè carinatā, obliquè striatulā, lutescente-albā, utrinque fasciā unicā latiusculā griseo-nigricante, à carinā remotā, lineāque suturali castaneā ornatā; spirā vix elevatā; anfractibus quatuor ad quinque, vix convexiusculis, ultimo anticè breviter deflexo; aperturā subhorizontali, angulato-ellipticā; peristomate simplici, marginibus remotis, supero vix expanso, basali reflexo, appresso.*

**THE BUTTON HELIX.** Shell imperforated, lenticular, solid, sharply keeled, obliquely finely striated, yellowish-

white, with a single rather broad grey-black band on each side remote from the keel, and ornamented with a chestnut sutural line; spire but little raised, whorls four to five, rather convex, the last shortly deflected in front; aperture nearly horizontal, angularly elliptical; lip simple, margins distant, upper margin a little expanded, lower reflected, appressed.

PFEIFFER, Mon. Helic. viv. vol. i. p. 300.

*Carocolla fibula*, Broderip.

*Hab.* Island of Luzon, Philippines; Cuming.

There is little or no variation in this species. Of the many specimens collected in the above-named locality by Mr. Cuming, all are of the same uniform size and colouring.

Species 138. (Fig. *a, b*, Mus. Cuming.)

**HELIX GMELINIANA.** *Hel. testā imperforatā, globoso-depressā, solidulā, irregulariter rugoso-maculatā, carinatā, nitidā, pallidè viridi, ad suturam et infra carinam albo-cingulatā; spirā subelevatā, apice obtusā, albidā; anfractibus quatuor ad quinque, vix convexiusculis, sensim accrescentibus, ultimo non descendente, basi planiusculo; aperturā angulato-lunari; peristomate subincrassato, margine supero breviter expanso, antrosum arcuato, basali reflexo, columellari declivi, dilatato, albo-calloso.*

**GMELIN'S HELIX.** Shell imperforated, globosely depressed, rather solid, irregularly rugosely indented, keeled, shining, pale green, encircled with white at the suture and beneath the keel; spire slightly raised, obtuse and whitish at the apex; whorls four to five, rather convex, increasing gradually, the last not descending, rather flattened at the base; aperture angularly lunar; lip rather thickened, upper edge shortly expanded, arched anteriorly, basal edge reflected, columellar edge slanting, dilated, callous-white.

PFEIFFER, Pro. Zool. Soc. 1845, p. 13.

*Hab.* Island of Luzon, Philippines; Cuming.

A delicate and very characteristic species, of which the surface is irregularly indented throughout. It is of a peculiar light sea-green colour, encircled by a narrow opaque-white band of epidermis beneath the spiral keel.







140. a



139.



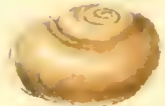
140. b



141.



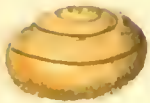
142. a



142. b.



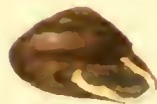
143



144. a



144. b.



145

# HELIX.

PLATE XXXIII.

Species 139. (Mus. Cuming.)

**HELIX CYATHUS.** *Hel. testā umbilicatā, orbiculato-conicā, supernè arcuulim costulato-striatā, unicolore, fuscā; spirā elevatā, obtusè conicā; suturā distinctā, crenulato-marginatā; anfractibus sex ad septem, convexiusculis, ultimo carinato, basi subævigato, planiusculo; umbilico magno, profundo, cyathiformi; aperturā subverticali, angulato-lunari; peristomate simplici, margine supero recto, basali arcuato, reflexiusculo, columellari breviter descendente.*

**THE CUP HELIX.** Shell umbilicated, orbicularly conical, sculptured over the upper part with arched rib-like striae, uniform brown colour; spire raised, obtusely conical; suture distinct, crenulately margined; whorls six to seven, slightly convex, the last keeled, rather smooth and flattened at the base; umbilicus large, deep, cup-shaped; aperture rather vertical, angularly lunar; lip simple, upper edge straight, basal edge arched, a little reflected, columellar edge shortly descending.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 123.

*Hab.* St. Juan, Province of Cagayan, Island of Luzon, Philippines; Cuming.

A thin horny sharp-angled species, having the form of *Solarium*.

Species 140. (Fig. a, b, Mus. Cuming.)

**HELIX ACUTIMARGO.** *Hel. testā depressā, supra planiusculā, basi convexā, tenui, pellucidā, pallidè corneā, aculè carinatā, supra carinam striis nonnullis spiralibus confertis notatā; anfractibus sex, lentè accrescentibus; umbilico mediocri, pervio; aperturā angulato-lunari; peristomate simplici, acuto.*

**THE SHARP-EDGED HELIX.** Shell depressed, rather flat at the upper part, convex at the base, thin, transparent, light horny, sharply keeled, marked above the keel with a few close-set spiral lines; whorls six, increasing slowly; umbilicus middling, open; aperture angularly lunar; lip simple, acute.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 40.

*Hab.* Island of Negros, Philippines; Cuming.

This has very much the form of *H. planorbis*, but it is of a different substance, pale horny and transparent. The keel forms a kind of thread around the spire, and is seen throughout in the place of the suture.

Species 141. (Mus. Cuming.)

**HELIX RADULA.** *Hel. testā umbilicatā, depressā, subreticulari, solidiusculā, pallidè corneā, carinatā, striis incrementi confertis et lineis aculè prominentibus spiralibus exasperatā; anfractibus sex, convexiusculis, lentè accrescentibus, ultimo basi inflato, confertis et radialiter costulato-striato; umbilico mediocri, pervio; aperturā lunato-ellipticā; peristomate simplici, eix incrassatis marginibus callo lineari junctis.*

**THE GRATER HELIX.** Shell umbilicated, depressed, sub-lenticular, rather solid, light horny, keeled, roughened with close-set striae of growth and sharply prominent spiral lines; whorls six, rather convex, increasing slowly, last whorl inflated and sculptured at the base with close-set rayed rib-like striae; umbilicus middling, open; aperture lunar-elliptical; lip simple, but little thickened, margins joined by a linear callosity.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 40.

*Hab.* Province of Ilocos, Island of Luzon, Philippines; Cuming.

The chief peculiarity of this species consists in the delicate raised lines which encircle the spire.

Species 142. (Fig. a, b, Mus. Cuming.)

**HELIX QUIETUS.** *Hel. testā umbilicatā, subdiscoidēā, fulvescente-corneā, diaphanā, sub lente undique minutissimè granoso-punctatā; spirā depressā; anfractibus quinque, eix convexis, ultimo ventricosō; umbilico mediocri, profundo, pervio; aperturā lunato-rotundatā, verticali; peristomate carneo-albicante, suberectis, arcuatim descendente.*

**THE UNDISTURBED HELIX.** Shell umbilicated, subdiscoid, fulvous horny, diaphanous, beneath the lens everywhere minutely granosely punctured, spire depressed; whorls five, convex, last whorl ventricosely umbilicus middling, deep, open, aperture lunately rounded, vertical; lip flesh-white, a little expanded, arcuately descending.

*Hab.* Province of Misamis, Island of Mindanao, Philippines; Cuming.

This approaches very nearly in form to *H. denticulata* Férussac, but it will be found to be distinct on a comparison.

Species 143. (Mus. Cuming.)

**HELIX MICHELIANA.** *Hel. testā subdiscoidēā, pallidè*



*subpellucidâ, valdè et confertum plicatâ, in interstitiis minutè spiritaliter striatâ, rufâ vel lutescente-fuscâ; spirâ conoideo-semiglobosâ; anfractibus quinque, convexis, ultimo ventricosâ, anticè vix descendente, circa umbilicum angustum compresso; aperturâ subverticali, rotundato-lunari; peristomate vix expanso, albo, margine columellari dilatato-patente.*

**MIGHELS' HELIX.** Shell umbilicated, globose, subpellucid, strongly and closely plicated, minutely spirally striated in the interstices, reddish or yellowish-brown; spire conoidal-semiglobose; whorls five, convex, the last ventricose, scarcely descending in front, compressed around a narrow umbilicus; aperture nearly vertical, rotundately lunar; lip scarcely expanded, white, columellar edge dilately open.

PFEIFFER, Pro. Zool. Soc. 1846, p. 110.

*Hab.* Surigao, Island of Mindanao, Philippines; Cuming.

Characterized throughout by an irregular closely plicated concentric sculpture.

Species 144. (Fig. *a, b*, Mus. Cuming.)

**HELIX BREVIDENS.** *Hel. testâ umbilicatâ, depressâ, tenuiusculâ, minutè granulatâ, pallidè fuscâ, lineâ fuscâ superiù circumdatâ; spirâ subplanulatâ; anfractibus quatuor, planiusculis, ultimo basi inflato; umbilico angusto, semitecto; aperturâ lunari, intus albâ; peristomate simplici, reflexo, margine columellari expanso, basali unidentato.*

**THE SHORT-TOOTH HELIX.** Shell umbilicated, depressed, rather thin, minutely granulated, pale brown, encircled at the upper part by a brown line; spire rather flattened; whorls four, rather flat, the last inflated at

the base; umbilicus narrow, half-covered; aperture lunar, interior white; lip simple, reflected, columellar edge expanded, basal edge one-toothed.

SOWERBY, Pro. Zool. Soc. 1841, p. 25.

*Hab.* Puerto Galero, Island of Mindoro, Philippines; Cuming.

The granules by which this species is characterized appear to belong to the epidermis.

Species 145. (Fig. *a, b*, Mus. Cuming.)

**HELIX BECKIANA.** *Hel. testâ umbilicatâ, orbiculari, tenui, obliquè striatâ, fuscâ, vix nitidulâ; spirâ parum elatâ; suturâ lineari; anfractibus sex, planiusculis, ultimo deflexo, basi planiusculo, ad peripheriam angulato; angulo ad aperturam obsolete; umbilico majusculo, percio; aperturâ ferrè horizontali, subtropozoidali; peristomate calloso, margine columellari brevi, basali reflexo, quasi in tuberculum incrassato.*

**BECK'S HELIX.** Shell umbilicated, orbicular, obliquely striated, brown, scarcely shining; spire but little raised; suture linear; whorls six, rather flattened, the last deflected, rather flattened at the base and angled at the periphery; angle obsolete next the aperture; umbilicus rather large, open; aperture nearly horizontal, subtrapezoid; lip callous, columellar edge short, basal edge reflected as though it were thickened into a tubercle.

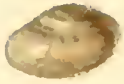
PFEIFFER, Pro. Zool. Soc. 1842, p. 87.

Eadem var. *Helix Kierulffi*, Pfeiffer.

*Hab.* Island of Luzon, Philippines; Cuming.

The callous thickening of the lip is a peculiarity to be observed in this species. The variety noticed above is of lighter substance, with the whorls more spread.





147 a



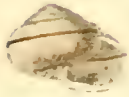
148



147 b



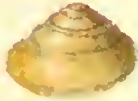
149 a



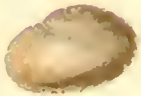
149 a



149 b



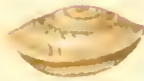
149 b



150



151



152

# HELIX.

PLATE XXXIV.

Species 146. (Mus. Cuming.)

**HELIX SARCODES.** *Hel. testā vir umbilicatā, tenuissimā, lævi, fragili, stramineo-corneā, pellucidā; spirā parum elevatā, suturā marginatā; anfractibus quatuor, plano-convexis, ultimo multo majore, inflato; aperturā latissimē lunari; peristomate simplici, margine columellari tenuiter reflexo.*

**THE FLESH-TINTED HELIX.** Shell umbilicated, very thin, smooth, fragile, straw-coloured horny, transparent; spire but little raised, suture margined; whorls four, flatly convex, last whorl much larger, inflated; aperture very broadly lunar; lip simple, columellar edge thinly reflected.

PFEIFFER, MSS. Mus. Cuming.

*Hab.* Philippine Islands; Cuming.

This species has more the form of *Vitrina* than *H. Vitrinoides*, by reason of the broader and more inflated growth of the last whorl.

The shell represented at Fig. 147 *a, b*, named in Mr. Cuming's cabinet *H. subcentralis*, Beck, proves to be a variety of Sp. 150, *H. ceratodes*.

Species 148. (Fig. *a, b*, Mus. Cuming.)

**HELIX SPECTABILIS.** *Hel. testā vir umbilicatā, turbinate-depressā, solidā, nitidissimā, corneo-luteā, fasciā unicā rufā vel nigricante percurrente interdum ornatā; spirā magis minusve elevatā, apice sæpe rubicundā; anfractibus quinque ad sex, convexiusculis, ultimo infra fasciam angulato; aperturā latē lunari; peristomate simplici, acuto, margine columellari subreflexo, umbilicum tegente.*

**THE REMARKABLE HELIX.** Shell scarcely umbilicated, turbinate-depressed, solid, very shining, horny yellow, sometimes encircled by a red or blackish band; spire more or less raised, often reddish at the apex; whorls five to six, rather convex, the last angled below the band; aperture broadly lunar; lip simple, acute, columellar edge a little reflected, covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 41.

*Hab.* Islands of Samar and Leyte, Philippines; Cuming.

A rather solid, shining, horny species, mostly encircled with a conspicuous band. The shell can hardly be said to be umbilicated.

Species 149. (Fig. *a, b*, Mus. Cuming.)

**HELIX SIMILARIS.** *Hel. testā angustē umbilicatā, subdepresso-globosā, minutē striatā, diaphanā, corneā, interdum rufi-zonatā; spirā magis minusve elevatā; anfractibus quinque, convexiusculis; aperturā rotundato-unari, peristomate albo, reflexo, margine columellari subdilato.*

**THE SIMILAR HELIX.** Shell narrowly umbilicated, somewhat depressly globose, minutely striated, diaphanous, pale horny, sometimes encircled by a red zone, spire more or less raised; whorls five in number, rather convex; aperture rotundately lunar; lip white, reflected, columellar margin slightly dilated.

FÉRUSSAC, Hist. Moll. pl. 25 B. f. 1, 4, and pl. 27 *t. f. 5*

*Helix translucens*, King.

*Helix Woodiana*, Lea.

*Helix costus*, Benson.

Eadem var. *Helix addita*, FÉRUSSAC.

*Hab.* Brazil, Bourbon and Cuba, Java, Seychelles, Mauritius, Bengal, China, Philippine Islands.

Whilst most *Helices* are extremely local in their habitation, this obtains a singularly wide range. It is found with little variation in all the localities above recorded.

Species 150. (Mus. Cuming.)

**HELIX CERATODES.** *Hel. testā vir umbilicatā, globose-depressā, tenui, minutē striatulā, nitidulā, pellucidā, corneā; spirā parum elevatā; anfractibus quinque, subplanulatis, celeriter accrescentibus, ultimo subdepresso; aperturā amplā, obliquē lunari; peristomate simplici, acuto, margine columellari breviter reflexiusculo, umbilicum fere occultante.*

**THE WAX-LIKE HELIX.** Shell slightly umbilicated, globose-depressed, thin, minutely striated, shining, transparent, horny; spire but little raised, whorls five, rather flattened, increasing rapidly, last whorl slightly depressed; aperture large, obliquely lunar, lip simple, sharp, columellar margin shortly moderately reflected, almost concealing the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 128.

*Hab.* Islands of Luzon and Mindoro, Philippines; Cuming.

A simple horny shell, distinguished from its allied species by a row of short arched striae next the suture.

## Species 151. (Mus. Cuming.)

**HELIX VITRINOIDES.** *Hel. testá víx umbilicatá, depressá, tenui, lævigatá, fragili, pallidè corneá; spirá víx elevatá; suturá marginatá; anfractibus sex, víx convexiusculis, ultimo lato, basi convexiore; aperturá latè lunari; peristomate simplici, recto, acuto, margine columellari víx reflexiusculo.*

**THE VITRINA-LIKE HELIX.** Shell scarcely umbilicated, depressed, thin, smooth, fragile, pale horny; spire but little raised; suture margined; whorls six, slightly convex, the last broad, more convex at the base; aperture broadly lunar; lip simple, straight, sharp, columellar edge very little reflected.

DESHAYES, Guerin's Mag. de Zool. 1831, pl. 26.

*Hab.* Philippine Islands.

Very similar to the preceding species, but smaller, more compressed, and of a lighter horny substance.

## Species 152 (Mus. Cuming.)

**HELIX EXCENTRICA.** *Hel. testá subumbilicatá, superne planiusculá, basi inflatá, tenui, cereá, nitidá, striis excentricis subcostulatá, acutè carinatá; anfractibus quatuor, supra planis, rapidè accrescentibus; aperturá securiformi; peristomate simplici, acuto, ad perforationem angustissimam dilatato-reflexo.*

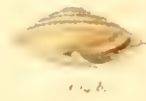
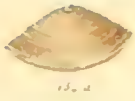
**THE EXCENTRIC HELIX.** Shell slightly umbilicated, rather flat at the upper part, inflated at the base, thin, wax-like, shiny, faintly ribbed with fine excentric striae, sharply keeled; whorls four, flat above, increasing rapidly; aperture wedge-shaped; lip simple, sharp, dilatedly reflected over the very narrow umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 41.

*Hab.* Island of Siquijor, Philippines; Cuming.

Of the true *Carovolla* type, with all the appearance of being an immature shell.







# HELIX.

PLATE XXXV.

The shells figured in the central column of this Plate at Fig. 153 *a, b*, and 156 *a, b*, prove, upon a careful examination and comparison of many specimens, to be identical with *H. Metcalfei*, Pfeiffer, described and figured by me at Plate XXX. as a new species, in error, with the name *H. Solarioides*. The shell figured in the accompanying plate at 153 *a, b*, is *H. albocincta*, Pfeiffer, but all these now appear to be so many different varieties of *H. planorbis*, Lesson, Voy. de la Coquille, p. 312. pl. 13. f. 4. I propose, therefore, to regard *H. Metcalfei*, *Solarioides*, and *albocincta*, as synonyms of *H. planorbis*, Sp. 127.

Species 154. (Fig. *a, b*, Mus. Cuming.)

HELIX BOHOLENSIS. *Hel. testā imperforatā, depressā, lenticulari, acutè carinatā, tenui, corneo-albidā; spirā convexiusculā; anfractibus septem, planulatis, regulariter confertim striatis, supra carinam lineis duabus acutè elevatis approximatis cinclis, ultimo basi convexiusculo, striatulo, medio vix impresso, anticè non descendente; aperturā verticali, depressissimā, angulato-lunari; peristomate simplici, acuto, margine supero brevissimo.*

THE BOHOL HELIX. Shell imperforated, depressed, lenticular, sharply keeled, thin, horny white; spire rather convex; whorls seven, flattened, regularly closely striated, encircled above the keel with two sharply elevated approximating lines, last whorl rather convex at the base, finely striated, scarcely impressed in the middle, not descending anteriorly; aperture vertical, very depressed, angularly lunar; lip simple, sharp, upper edge very short.

PFEIFFER, Pro. Zool. Soc. 1845, p. 123.

*Hab.* Island of Bohol, Philippines; Cuming.

There is a great deal of character in the upper surface of this shell, each whorl being closely striated in delicate concentric folds, and encircled next the keel by two fine linear ridges.

Species 155. (Fig. *a, b*, Mus. Cuming.)

HELIX ANCEPS. *Hel. testā subumbilicatā, lenticulari, pallidè coruā, acutè carinatā, supra striatā, subtus*

*nitidā; anfractibus sex, cæcè convexiusculis, ultimo basi convexiore, latigato, infra carinam compresso breviter prominente lineis nonnullis impressis concentricis punctato; aperturā angulato-lunari; peristomate simplici, tenui, margine columellari cæcè reflexiusculo.*

THE TWO-FACED HELIX. Shell slightly umbilicated, lenticular, pale horny, sharply keeled, striated above, shining below; whorls six, scarcely convex, last whorl more convex, smooth, marked with a few impressed lines beneath the keel, which is rather prominent; aperture angularly lunar; lip simple, thin, columellar edge but little reflected.

*Carocolla anceps*, Gould, Boston Journ. Nat. Hist. vol. iv. p. 454. p. 24. f. 4.

*Hab.* Tavoy, Burmah.

The striae which characterize the upper surface of this species are very thickly and irregularly sculptured, and have the appearance of concentric folds.

For Species 156 see Pl. XXXIX.

Species 157. (Fig. *a, b*, Mus. Cuming.)

HELIX BIANGULATA. *Hel. testā subumbilicatā, convexo-orbiculari, tenui, corneo-rubellā, leviter striatā, antidiusculā; anfractibus septem, lentè acroscutibus, ultimo bicarinato, carinā inferiore filari ad peripheriam, superiore per omnes anfractus ascendente; aperturā lunato-ovali; peristomate simplici, acuto, umbilicum angustissimum fere occultante.*

THE TWO-ANGLED HELIX. Shell slightly umbilicated, convexly orbicular, thin, horny, ruddy, closely striated, rather shining; whorls seven, increasing slowly, last whorl two-keeled, lower keel thread-like around the periphery, upper keel ascending throughout the spire; aperture lunar-oval; lip simple, sharp, almost concealing the very narrow umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 40.

*Hab.* Province of Cagayan, Island of Luzon, Philippines; Cuming.

The upper and lower keels are both seen throughout the spire, the latter having a more distinct thread-like form.







*159 a*



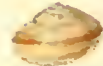
*159 b*



*160 a*



*161 a*



*161 b*



*162 c*



*162 a*



*162 b*



*163*

# HELIX.

PLATE XXXVI

Species 158. (Mus. Cuming.)

**HELIX FILOCINCTA.** *Hel. testâ umbilicatâ, depressâ, tenui, pellucidâ, corneâ, striatulâ, nitidâ; spirâ parum elevatâ, obtusâ; anfractibus quinque ad sex, convexiusculis, carinatis, ultimo basi convexo; curinâ filiformi, in anfractibus superioribus conspicuâ, sed non exsertâ; aperturâ verticali, lunato-subauriformi; peristomate simplici, recto, margine columellari perobliquo, elongato, descendente, ad dextrum subitò ascendente.*

**THE THREAD-GIRT HELIX.** Shell umbilicated, depressed, thin, pellucid, horny, finely striated, shining; spire but little elevated, obtuse: whorls five to six, rather convex, keeled, last whorl convex at the base; keel thread-like, conspicuous in the upper whorls, but not exserted; aperture vertical, lunately subauriform; lip simple, straight, columellar margin very oblique, elongated, descending, ascending suddenly to the right.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 124.

*Hab.* Cagayan, Province of Misamis, Island of Mindanao, Philippines; Cuming.

The keel of this little horny species is rather prominent, and passes around the spire like a fine thread.

Species 159. (Fig. a, b, Mus. Cuming.)

**HELIX ORTHOSTOMA.** *Hel. testâ umbilicatâ, depressâ, supernè confertim subarcuato-striatâ, tenui, pellucidâ, pallidè corneâ; spirâ rix elevatâ, obtusâ; anfractibus sex, angustis, convexis, suturis impressis, ultimo basi sublævigato; umbilico majusculo, cylindraco; aperturâ verticali, obliquè lunari; peristomate simplici, acuto, margine supero brevi, basali valdè arcuato, columellari dilatato, sinuato.*

**THE STRAIGHT-MOUTH HELIX.** Shell umbilicated, depressed, closely subarcuately striated above, thin, pellucid, pale horny; spire scarcely raised, obtuse; whorls six, narrow, very convex, with the sutures impressed, last whorl rather smooth at the base; umbilicus somewhat large, cylindrical; aperture vertical, obliquely lunar; lip simple, sharp, upper edge short, basal edged much arched, columellar edge dilated, sinuated.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 124.

*Hab.* Dingle, Island of Panay, Philippines; Cuming.

The whorls of this little species are so convex at the upper part as to give the sutures of the spire a very impressed character.

Species 160. (Fig. o, b, Mus. Cuming.)

**HELIX STRIGILIS.** *Hel. testâ umbilicatâ, depressâ, lenticulari, tenui, pellucidâ, pallidè corneâ, corneâ carinata, spirâ parum elevatâ; anfractibus sex, angustis, rix convexiusculis, supernè confertim radiatim costato-striatis, lineis elevatis, spiralibus reticulatis, ultimo basi convexiore, lævigato, nitido; umbilico mediocri, cylindraco; aperturâ subverticali, angulato-lunari, peristomate simplici, acuto, margine supero brevi, basali valdè arcuato.*

**THE FINELY STREAKED HELIX.** Shell umbilicated, depressed, lenticular, thin, pellucid, pale horny, sharply keeled; spire but little raised; whorls six, narrow, slightly convex, closely radiately sculptured with minute rib-like striæ and reticulated with raised spiral lines, last more convex at the base, smooth, shining; umbilicus middling, cylindrical; aperture subvertical, angularly lunar; lip simple, acute, upper edge short, basal edge much arched.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 124.

*Hab.* Island of Negros, Philippines; Cuming.

Well distinguished by the minutely reticulated sculpture of the upper surface of the whorls.

Species 161. (Fig. a, b, Mus. Cuming.)

**HELIX SUCCINEA.** *Hel. testâ depressâ, obsoletè subumbilicatâ, tenui, pellucidâ, nitidâ, succineâ, medio sub-orale fasciatâ; suturâ mediocri, submarginatâ; anfractibus quinque, celeriter accrescentibus, rix convexiusculis, aperturâ lunari; peristomate simplici, acuto, margine columellari subreflexo, umbilico obsoletè tertio.*

**THE AMBER HELIX.** Shell depressed, obsoletely slightly umbilicated, thin, pellucid, shining, amber-coloured, banded darker round the middle, suture middling slightly margined; whorls five, increasing rapidly, scarcely convex, aperture lunar, lip simple, sharp, columellar edge a little reflected, covering the obsolete umbilicus.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 39.

*Hab.* Island of Luzon and Mindoro, Philippines; Cuming.

This little species may be recognized by its bright transparent amber-colour, forming a darker band around the periphery.

Species 162. (Fig. a, b, Mus. Cuming.)

HELIX WINTERIANA. *Hel. testā umbilicatā, depressā, supernè convexiusculā, pallidè carneā, nitidulā, obsolete carinatā; anfractibus quinque ad sex, planiusculis, ultimo descendente; umbilico lata, pervio; aperturā subcirculari; peristomate tenui, simplici, marginè basali subreflexa.*

WINTER'S HELIX. Shell umbilicated, depressed, slightly convex above, pale horny, but little shining, obsolete keeled; whorls five to six, rather flattened, the last descending; umbilicus broad, open; aperture nearly circular; lip thin, simple, basal margin slightly reflected.

PFEIFFER, *Symbolæ*, vol. ii. p. 41.

*Hab.* Java; Winter. Island of Guimaras, Philippines; Cuming.

This little species has a rather dull silky appearance, and the keel is more prominent in some specimens than in others.

Species 163. (Mus. Cuming.)

HELIX GOULDI. *Hel. testā umbilicatā, orbiculato-conicā, tenuiusculā, subtiliter striatulā, vix nitidulā, unicolore fuscā; spirā elevatā, conoideā; anfractibus sex, convexiusculis, ultimo carinato, anticè subrotundato, basi planiore; umbilico mediocri, pervio; aperturā lunato-circulari; peristomate simplici, marginibus subconniventibus, dextra recto, columellari subdilato, patente, basali reflexiusculo.*

GOULD'S HELIX. Shell umbilicated, orbicularly conical, rather thin, very finely striated, uniform bright brown; spire raised, conoid; whorls six, slightly convex, the last keeled, subrounded anteriorly, flatter at the base; umbilicus middling, open; aperture lunately circular; lip simple, with the margins inclined to approximate, right edge straight, columellar edge subdilated, patent, basal edge a little reflected.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 124.

*Hab.* Islands of Luzon and Negros, Philippines; Cuming.

A light semitransparent golden-brown shell, of which the whorls are convoluted more into the form of a cone.







164.



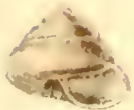
165. a



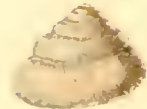
165. b



166.



167. a



167. b



168.



169. a



169. b



170.

# HELIX.

PLATE XXXVII.

Species 164. (Mus. Cuming.)

**HELIX LUCIDELLA.** *Hel. testā minutā, umbilicatā, depressā, striatulā, nitidissimā, rufescente-brunneā; spirā subplanulatā; suturā albo-marginatā; anfractibus quatuor, planis, ultimo basi vix convexiore, medio impresso, angustissimè umbilicato; aperturā obliquè lunari; peristomate simplici, obtuso, margine columellari declivi, vix incrassato.*

**THE GLITTERING HELIX.** Shell minute, umbilicated, depressed, finely striated, glittering, red-brown; spire rather flattened; suture white-edged; whorls four, flat, the last more convex at the base, impressed in the middle, very narrowly umbilicated; aperture obliquely lunar; lip simple, obtuse, columellar edge slanting, scarcely thickened.

PFEIFFER, *Pro. Zool. Soc.* 1846, p. 41.

*Hab.* Cagayan, Island of Luzon, Philippines; Cuming.

An extremely small shining horny shell of reddish hue, in which the suture shows like a fine white thread.

Species 165. (Fig. a, b, Mus. Cuming.)

**HELIX GRADATA.** *Hel. testā imperforatā, globoso-turbinatā, striatulā, tenui, hyalinā; spirā turbinatā, apice acutā; anfractibus sex, convexiusculis, gradatis, ultimo medio acutè carinato, basi convexo, sub lente minutissimè concentricè striato; aperturā subtrigono-lunari; peristomate simplici, acuto, margine columellari breviter et verticaliter descendente.*

**THE STEP-BUILT HELIX.** Shell imperforated, globosely turbinated, finely striated, thin, hyaline; spire turbinated, sharp at the apex; whorls six, rather convex, arranged like steps, the least whorl sharply keeled round the middle, convex at the base, beneath the lens very minutely concentrically striated; aperture somewhat quadrangularly lunar; lip simple, sharp, columellar edge shortly vertically descending.

PFEIFFER, *Pro. Zool. Soc.* 1846, p. 110.

*Hab.* Island of Leyte, Philippines; Cuming.

A small glassy shell turbinated somewhat pyramidally in the form of a *Trochus*.

Species 166. (Mus. Cuming.)

**HELIX TONGANA.** *Hel. testā imperforatā, orbiculato-co-*

*nicā, striatulā, fragili, pellucidā, carinatā, convexo-convexante; anfractibus sex, convexiusculis, ultimo medio impresso; aperturā angulato-lunari; peristomate simplici, acuto, margine columellari brevissimè reflecto.*

**THE TONGA HELIX.** Shell imperforated, orbicularly conical, finely striated, fragile, pellucid, keeled, horny-whitish; whorls six, rather convex, the last somewhat impressed at the base; aperture angularly lunar; lip simple, sharp, columellar edge very shortly reflected.

QUOY and GAIMARD, *Voy. de l'Astrolabe*, vol. ii. p. 150 p. 11. f. 19-23.

*Hab.* Island of Tonga Tabou; Quoy—Island of Negros, Philippines; Cuming.

This is of a less pyramidal form than the preceding species, and broader and more impressed at the base.

Species 167. (Fig. a, b, Mus. Cuming.)

**HELIX TURBINIFORMIS.** *Hel. testā umbilicatā, Trochiformi, obliquè striatulā, corneo-albidā; spirā erecta, apice acutā; anfractibus quinque, convexis, parvis, exsertis; aperturā lunari; peristomate simplici, acuto.*

**THE TOP-SHAPED HELIX.** Shell umbilicated, Trochus-shaped, obliquely finely striated, horny-white, spire raised, sharp at the apex; whorls five, convex, but little exserted; aperture lunar, lip simple, sharp.

PFEIFFER, *Wiegman's Archives*, 1839, p. 350.

*Helix pyramidaloides*, D'Orbigny.

*Helix subpyramidalis*, Adams.

Eadem var. *Helix depressa*, Adams.

*Hab.* Islands of Cuba and Jamaica; Adams.

This little glassy species differs from the preceding species in being umbilicated and not keeled.

Species 168. (Fig. a, b, Mus. Cuming.)

**HELIX GEMMA.** *Hel. testā suborbiculatā, corneo-albidulā, tenui, lævigatā, nitidā, perovulā, convexo-convexante; spirā depresso-convexā; suturā submarginatā; anfractibus quatuor, vix convexiusculis, sensu convexiusculis, ultimo non descendente; aperturā parvo-angulā, rotundato-lunari; peristomate simplici, recto, margine columellari brevi, arcuato, superius reflecto.*

**THE GEM HELIX.** Shell slightly umbilicated, conoid

orbiculated, thin, smooth, shining, transparent, greenish-hyaline; spire depressly conoid; suture slightly margined; whorls four, scarcely convex, increasing gradually, last whorl not descending; aperture but little oblique, rotundately lunar; lip simple, straight, columellar edge short, arched, a little reflected at the upper part.

PFLEFFER, Pro. Zool. Soc. 1848, p. 109.

*Hab.* Islands of Camiguin and Luzon, Philippines, Cuming.

A small delicate species having somewhat the form of *Vitra*, and referred to that genus in manuscript by Dr. Beck, under the name *V. suturalis*.

Species 169. (Fig. a, b, Mus. Cuming.)

HELIX ARCUATA. *Hel. testâ umbilicatâ, orbiculato-convexâ, tenui, pellucidâ, pallidè corniâ, confertim et regulariter arcuato-plicatâ; spirâ latè conoidiâ, apice obtusiusculâ; anfractibus sex, vix cœcciusculis, corinâ acutè serrulatâ marginatis, ultimo circa umbilicum magnam fere cylindraceam subcompressa; aperturâ angulato-lunari, latâ; peristomate simplici, acuto, margine columellari brevi, verticali.*

THE ARCUATED HELIX. Shell umbilicated, orbicularly convex, thin, pellucid, pale horny, closely and regularly arcuately plicated; spire broadly conoidal, rather obtuse at the apex; whorls six, but little convex, edged with a sharp serrulated keel, last whorl compressed around the umbilicus, which is large and almost cylindrical; aperture angularly lunar, broad;

lip simple, sharp, with the columellar edge short and vertical.

PFLEFFER, Pro. Zool. Soc. 1846, p. 110.

*Hab.* Cagayan, Island of Luzon, Philippines; Cuming.

The whorls of this species are convoluted round a broad perspective umbilicus, and are delicately sculptured on the upper surface by close-set plicated striae.

Species 170. (Mus. Cuming.)

HELIX CYTHELLUS. *Hel. testâ umbilicatâ, conicâ, obliquè plicato-striatâ, costatâ, tenuiculâ, corniâ; spirâ pyramidatâ, acutiusculâ; anfractibus novem, angustissimis, corinâ fœformi cinctis, ultimo basi planiuscula, subhæcigato; umbilico majusculo, percio; apertura depressâ, angulato-lunari; peristomate simplici, margine supero brevi, recto, basali leviter arcuato, brevissimè reflexo.*

THE LITTLE-CUP HELIX. Shell umbilicated, conical, obliquely plicately striated, very thin, horny; spire pyramidal, rather sharp; whorls nine, very narrow, encircled by a thread-like keel, last whorl rather flat and smooth at the base; umbilicus large, open; aperture depressed, angularly lunar; lip simple, upper edge short, straight, basal edge slightly arched, very shortly reflected.

PFLEFFER, Pro. Zool. Soc. 1846, p. 41.

*Hab.* Dingle, Island of Panay, Philippines; Cuming.

Very similar in form to the preceding species, but larger, with more whorls.





172 a



171



172 b



173



174 a



174 b



175



# HELIX.

PLATE XXXVIII.

Species 171. (Mus. Cuming.)

**HELIX LANX.** *Hel. testâ latè umbilicatâ, depressâ, obtusè carinatâ, obliquè striatâ et rugoso-maculatâ, fuscâ, infra carinam saturatiore, circum umbilicum olivaceo-tubâ; anfractibus quinque, planiusculis, ultimo anticè subdeflexo; umbilico per amplo, perverso; aperturâ lunato-ellipticâ, intus subiridescente; peristomate reflexo, intus carulescente-albo, marginibus approximatis, callo tenui junctis, dextro sinuoso.*

**THE DISH HELIX.** Shell broadly umbilicated, depressed, obtusely keeled, obliquely striated and rugosely indented, brown, darker beneath the keel, olivaceous-yellow around the umbilicus; whorls five, rather flat, the last a little deflected in front; umbilicus very large, open; aperture lunately elliptical, rather iridescent within; lip reflected, inner edge bluish-white, margins approximated, joined by a thin callosity, right edge sinuated.

FERUSSAC, Hist. Moll. pl. 65. f. 7.

Eadem. *Helix Rudama*, Lesson.

*Hab.* Madagascar.

A very characteristic species allied in form to *H. sepulchralis* and *Cunninghami*.

Species 172. (Fig. a, b, Mus. Cuming.)

**HELIX OVIFORMIS.** *Hel. testâ vicè umbilicatâ, ovatâ, tenuiusculâ, minutissimè striato-granulatâ, rugis obliquis obsolete sculptâ, rufescente-fuscâ, castaneo bifasciatâ; spirâ brevi, subconoidèâ, apice retusâ; anfractibus quatuor, rapidè accrescentibus, ultimo multo inflato; columellâ albâ, subintortâ; aperturâ amplâ, lunato-ovali, intus lividâ; peristomate simplici, latè expanso, breviter reflexo, marginibus callo tenuissimo junctis, columellari dilatato, appresso.*

**THE EGG-SHAPED HELIX.** Shell scarcely umbilicated, ovate, rather thin, very minutely striately granuled, and obsolete sculptured with oblique wrinkles, reddish-brown, marked with two chestnut bands; spire short, subconoid, blunt at the apex; whorls four, increasing rapidly, the last much inflated; columella white, rather twisted; aperture large, lunar-oval, livid within; lip simple, broadly expanded, shortly reflected, margin joined by a very thin callosity, columellar margin dilated, appressed.

GRATELOUP, Act. Soc. Lum. de Bordeaux, vol. XI. p. 206 pl. 2. f. 2.

An eadem? *Helix amphibalana*, Ferussac.

*Hab.* Madagascar.

The columella has a very characteristic peculiarity in this species, giving an elegant curvature to the aperture, which serves to distinguish it, among other peculiarities, from the larger *H. Goulottiana*.

Species 173. (Mus. Cuming.)

**HELIX CORNU-GIGANTEUM.** *Hel. testâ angustè impresso-ovatâ, auriformi, tenuiculâ, vix autè et rarisimè obliquè sculptâ, rugulosâ, sub epidermide maculatâ olivaceâ, deciduâ, pallidè rufescente; spirâ brevè, subconoidèâ, apice retusâ; anfractibus quatuor, rapidissimè accrescentibus, ultimo per amplo, ad peripheriam costis vix perceptis, breviter cincto, subtus concavo; aperturâ perobliquè ellipticâ, peristomate incrassato, reflexo, marginibus latè et angulatim junctis, columellari dilatato, sublimè reflexo.*

**THE GIANT'S HORN HELIX.** Shell umbilicated, impresso-ovate, ear-shaped, rather thin, minutely and especially obliquely sculptured, rugulose, pale chestnut beneath a deciduous chestnut or olive glaucous; spire scarcely raised; whorls four, increasing very rapidly, the last very large, encircled at the periphery by a few obsolete ribs, concave beneath; aperture very oblique, oval; lip thickened, reflected, margins angularly joined by a thick callosity, columellar dilated, almost covering the umbilicus.

CHEMNIZ, Conch. Cab. vol. XI. p. 247. pl. 208. f. 207. 2.

*Helix vesicalis*, Lamarck.

*Leistana vesicula*, Swainson.

*Hab.* Madagascar.

Among the peculiarities of this species may be chiefly noticed the concavely impressed growth of the last whorl in the vicinity of the umbilicus.

Species 174. (Fig. a, b, Mus. Cuming.)

**HELIX GOULOTTIANA.** *Hel. testâ angustè impresso-ovatâ, auriformi, tenuiusculâ, minutissimè striato-granulatâ, rugis obliquis obsolete sculptâ, rufescente-fuscâ, castaneo bifasciatâ; spirâ brevi, subconoidèâ, apice retusâ; anfractibus quatuor, rapidè accrescentibus, ultimo multo inflato; columellâ albâ, subintortâ; aperturâ amplâ, lunato-ovali, intus lividâ; peristomate simplici, latè expanso, breviter reflexo, marginibus callo tenuissimo junctis, columellari dilatato, appresso.*

*obliquâ, lunato-oblongâ, intus subiridescente; peristomate albo, subincrassato, breviter expanso, marginibus callo tenui junctis, dextro subarcuato, columellari superne ralde dilatato, appresso.*

GOUDOT'S HELIX. Shell imperforated, depressly ovate, rather thin, minutely granulated throughout, reddish-chestnut, with two blackish bands; spire rather small, semiglobose; whorls four to five, rather convex, increasing very rapidly, the last inflated; aperture oblique, lunately oblong, slightly iridescent within; lip white, rather thickened, shortly expanded, margins joined by a thick callus, right edge somewhat arched, columellar edge much dilated at the upper part and appressed.

FERUSSAC, Hist. Mol. pl. 10. A. f. 4-6.

*Hab.* Madagascar.

This and *H. oviformis* represent a form precisely intermediate between *Helix* and *Bulinus*, which might be referred to either genus with equal propriety.

Species 175. (Mus. Cuming.)

HELIX MAGNIFICA. *Hel. testâ imperforatâ, obliquè ovatâ, tenui, granulato-striatâ, fuleâ, fasciis plurimis nigri-*

*caute-castaneis, nunc latis nunc angustis ornata; anfractibus tribus ad quatuor, rapidissimè accrescentibus, ultimo inflato; aperturâ perobliquâ, amplâ, elongato-ovalî, intus subiridescente, fasciis perlucidis; columellâ brevi, subrectâ; peristomate tenui, cir reflexo, fusco, marginibus callo tenui junctis, columellari dilatato, appresso.*

THE MAGNIFICENT HELIX. Shell imperforated, obliquely ovate, thin, granulately striated, fulvous, ornamented with numerous blackish-chestnut bands, now broad, now narrow; whorls three to four, increasing very rapidly, the last inflated; aperture very oblique, large, elongately oval, slightly iridescent within, with the bands transparent; columella short, nearly straight; lip thin, scarcely reflected, brown, margins joined by a thin callosity, columellar edge dilated, appressed.

FERUSSAC, Hist. Moll. pl. 10. f. 4.

*Helix polygonalis*, Lamarek.

*Hab.* Madagascar.

This shell, it may be observed, is composed of only three to four whorls, convoluted, with the last prolonged very obliquely into an inflated oblong oval.







147. a.



147. b.



147. c.



153.



156. a.



156. b.



176.

# HELIX.

PLATE XXXIX.

Species 147. (Fig. a, b, c, Mus. Cuming.)

**HELIX SEPULCHRALIS.** *Hel. testâ latè umbilicatâ, depressâ, tenui, laxigatâ, carâ obliquè plicatâ, castaneâ, albo-zonatâ vel pallidè fulvescente; spirâ brevissimâ, vix emersâ; anfractibus quatuor, rapidè accrescentibus, sulco concentrico impressis, ultimo basi convexiusculo, circa umbilicum infundibuliformem angulato, anticè deflexo; aperturâ perobliquâ, elliptico-ovali, intus cærulescente; peristomate latè reflexo, marginibus callo tenui junctis, dextro medio angulatim dilatato.*

**THE SEPULCHRAL HELIX.** Shell broadly umbilicated, depressed, thin, smooth, variously obliquely plicated, chestnut, zoned with white or pale yellow; spire very short, but slightly raised; whorls four, rapidly increasing, impressed with a concentric groove, last whorl rather convex at the base, angular and funnel-shaped around the umbilicus, deflected anteriorly; aperture very oblique, elliptically oval, bluish within; lip broadly reflected, margins joined by a thin callous layer, right margin angularly dilated in the middle.

FERUSSAC, Hist. Moll. pl. 75. f. 1. and pl. 75 C. f. 1-12.

*Helix labrella*, Lamarek.

*Helix trivittata*, Born.

*Hab.* Madagascar.

This elegantly-formed species is variously banded, the umbilicus being sometimes dark chestnut within, as in Fig. 147 b, and sometimes yellow, as in Fig. 147 c. The first of these varieties differs slightly in form, while it is more compressly flattened around the umbilicus, of more solid structure, and the dark purple-chestnut colouring of the bands runs into the blue-white of the lip.

Species 153. (Mus. Cuming.)

**HELIX STUDERIANA.** *Hel. testâ imperforatâ, subgloboâ, tenui, saturatè brunneâ vel olivaceo-fusâ, obliquè striatâ et transversim minutissimè rugulosâ; spirâ semigloboâ; anfractibus sex, summis planulatis, elegantè granulatis, ultimo inflato, obsolete angulato vel sulco impresso ad peripheriam notato; aperturâ rotundâ lunari, intus margaritatâ; columellâ subcontortâ, callosâ; peristomate reflexo, intus albo.*

**STUDER'S HELIX.** Shell imperforated, subglobose, thin, dark brown or olive-brown, obliquely striated, and transversely very minutely wrinkled: spire semi-

globose, whorls six, upper ones rather flattened, elegantly granulated, the last inflated, obliquely angled, or marked at the periphery with an impressed groove; aperture rotundately lunar, pearly within; columella slightly twisted, callous; lip reflected white within.

FERUSSAC, Hist. Moll. pl. 103. f. 11.

*Hab.* Seychelle Islands.

Of a peculiar semiglobose inflated form, with an inclination in the columella to become twisted.

Species 156. (Fig. a, b, Mus. Cuming.)

**HELIX UNIDENTATA.** *Hel. testâ imperforatâ, orbiculato-conoidâ, striatâ, rugulis concentricis brevibus minutè obliquè decussatis sculptâ, saturatè castaneâ, spirâ brevè conoidâ; anfractibus sex, convexis, ultimo ad peripheriam angulato, basi convexo; columellâ breviter et validè truncato-dentatâ, contortâ; aperturâ latè lunari, intus margaritacâ, peristomate superè reflexo, latè reflexo, marginibus callo tenuissimè junctis.*

**THE ONE-TOOTHED HELIX.** Shell imperforated, orbicularly conoid, striated, sculptured with concentric wrinkles and obliquely decussated minute lines, dark chestnut: spire obtusely conoid, whorls six, convex, the last angled at the periphery, convex at the base, columella shortly and strongly one-toothed, twisted; aperture broadly lunar, pearly within; lip expanded at the upper part, reflected at the base, margins joined by a very thin callous layer.

CHEMNITZ, Conch. Gêl. vol. vi. p. 273. pl. 208. t. 204. c. 7.

*Helix unidentata*, Deshayes.

*Helix unidentata*, Jan.

*Hab.* Seychelle Islands.

This species is from the same locality as the preceding and belongs to the same exact type. The one-toothed columella notated in *H. Studeriana* is here fully developed. The dark chestnut colouring is mostly masked by a faint band running around the periphery of each whorl.

Species 176. (Mus. Cuming.)

**HELIX FURSTMANI.** *Hel. testâ imperforatâ, subgloboâ, tenui, saturatè brunneâ vel olivaceo-fusâ, obliquè striatâ et transversim minutissimè rugulosâ;*

*acutè carinata, carinâ subflexuosâ et utrinque malleatâ; anfractibus quatuor ad quinque, vir convexiusculis, ultimo infra carinam inflato, anticè deflexo; aperturâ irregulariter ellipticâ; peristomate subincrassato, latè expanso, igneo, marginibus callo junctis, columellari dilatato, plano, obsolete dentato, basali reflexo.*

THE RED-MOUTH HELIX. Shell imperforated, depressed, convex on both sides, finely striated, shining, fulvous white, sharply keeled, keel subflexuous and indented on each side; whorls four to five, rather

convex, the last inflated beneath the keel, deflected anteriorly; aperture irregularly elliptical; lip rather thickened, broadly expanded, fiery red, margins joined by a callous layer, columellar margin dilated, flat, obsolete toothed, basal margin reflected.

FERUSSAC, Hist. Moll. pl. 15. f. 3, 4.

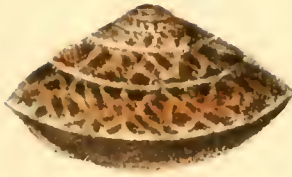
*Hab.* —?

This species is one of extreme rarity, unknown, so far as I am aware, in fine condition with epidermis.





177. a



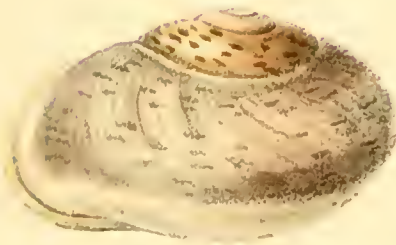
177. b



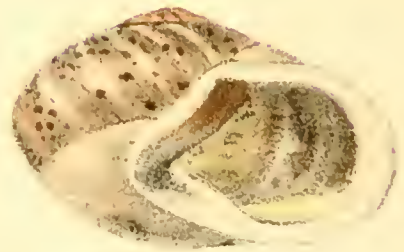
178



179.



180. a



180. b



181.



# HELIX.

PLATE XL.

Species 177. (Fig. a, b, Mus. Cuming.)

**HELIX INVERSICOLOR.** *Hel. testâ imperforatâ, orbiculari, utrinque convexâ, aculè corinatâ, supernè rufâ, striatâ, basi nigricante, striatâ et lineis concentricis distantibus decussatâ; spirâ brevi; anfractibus septem, planulatis; columellâ brevi, obliquâ, callosâ; aperturâ subquadrangulâri; peristomate subincrassato, marginibus callo tenui junctis, supèro arcuato.*

**THE INVERSE-COLOURED HELIX.** Shell imperforated, orbicular, convex on each side, sharply keeled, reddish and striated above, blackish beneath, striated and decussated with concentric lines; spire short; whorls seven, rather flattened; columella short, oblique, callous; aperture somewhat square; lip slightly thickened, margin joined by a thin callous layer, upper margin arched.

FERUSSAC, Hist. Moll. pl. 58 A. f. 7-12.

*Carocolla bicolor*, Lamarck.

*Carocolla Mauritianâ*, Lamarck.

Eadem var. *Helix puerocunæ*, Péron.

*Hab.* Mauritius.

This species in fine condition is covered about the upper surface with a delicate net-work of epidermis, as in the specimen Fig. 177 b.

Species 178. (Mus. Cuming.)

**HELIX DUVALII.** *Hel. testâ umbilicatâ, orbiculatâ, conico-depressâ, castaneâ, transversim longitudinaliterque striatâ; anfractibus quatuor ad quinque, depresso-converiusculis, suturâ impressâ separatis et fasciâ brunneâ marginalis, ultimo medio zonâ lutescente circumdatâ, sublus lutescente, ad umbilicum medio-crem percrem compresso; aperturâ amplâ, ovali; peristomate simplici, tenui, marginibus conniventibus, dextro vix expanso, basali breviter reflexo.*

**DUVAL'S HELIX.** Shell umbilicated, orbicular, conically depressed, chestnut, transversely and longitudinally striated; whorls four to five, somewhat depressly convex, separated by an impressed suture and edged with a brown band, last whorl encircled round the middle with a yellowish band, yellowish beneath, compressed about the open umbilicus; aperture large, oval; lip simple, thin, margins approximating, right margin a little expanded, basal margin shortly reflected.

PETIT, Mag. de Zool. 1844, pl. 93.

*Hab.* Madagascar.

The striae with which this species is transversely and longitudinally sculptured have a granular character.

Species 179. (Mus. Harleby.)

**HELIX CAFFRA.** *Hel. testâ umbilicatâ, inflatâ, subdepresso-globosâ, tenui, fragili, costulato-striatâ, crassâ, fusco-viridi irregulariter strigatâ; spirâ brevi, obtusâ; anfractibus quatuor, converiusculis, ultimo subdepresso aperturâ magnâ, lunato-ovalî, intus margaritaceâ. peristomate tenui, acuto, simplici, marginibus callo tenui junctis, columellari reflexo, perforationem semiocculente.*

**THE CAFFRE HELIX.** Shell umbilicated, inflated, subdepressly globose, thin, fragile, marked with rib-like striae, greenish, irregularly streaked with brown-ligreen; spire short, obtuse; whorls four, rather convex, the last rather depressed; aperture large, lunato-oval, pearly within; lip thin, sharp, simple, margin joined by a thin callous layer, columellar margin reflected, half-concealing the umbilicus.

*Hab.* Cape of Good Hope.

An elegantly convoluted shell of delicate texture, concentrically corded, covered with a green epidermis, and peculiarly iridescent in the interior.

Species 180. (Fig. a, b, Mus. Cuming.)

**HELIX COGNATA.** *Hel. testâ imperforatâ, depressâ, subdepresso-globosâ, transversè ovalâ, obliquè striatâ, obsolete granulata, nitidâ, spatio-griseâ, punctis rufis irregulariter dispersâ; spirâ brevissimâ; anfractibus quatuor, planulatis, ultimo intus medio pallidè circumdatâ, albo, inflato, anticè breviter deflexo; aperturâ plicatâ, transversè ovali, intus nitidâ, basi, peristomate albo, crasso, breviter reflexo, marginibus callo tenui dilatato, appresso, excavato.*

**THE ALLIED HELIX.** Shell imperforated, depressed, solid, transversely ovate, obliquely striated, obscurely granulated, shining, fawn-grey, irregularly speckled with reddish dots; spire very short, whorls four, rather flattened, the last sometimes faintly beaded round the middle, base white, inflated, anteriorly shortly deflected; aperture very oblique, transversely oval, shining and hard within; lip white, the suture



shortly reflected, columellar margin dilated, appressed, excavated.

FERUSSAC, Hist. Moll. pl. 44. f. 4.

*Hab.* West Indies?

An extremely characteristic species of exactly the same typical form as *H. aspera*. It is of a shining fawn-grey colour, marked in the spiral direction with oblong linear dots, somewhat after the manner of *H. sagittiferu*. The body-whorl is stained interiorly with glazed chestnut, as in *H. aspera*, and the aperture is of the same oblong form, but toothless.

Species 181. (Mus. Cuming.)

HELIX CARMELITA. *Hel. testâ imperforatâ, suborbiculari, granulato-striatâ, carinatâ, obliquè striatâ, nitidè castaneâ, fasciâ unicâ pallidiore supra carinam ornatâ; anfractibus quatuor ad quinque, planulatis, ultimo basi inflato, anticè vix descendente; aperturâ perobliquâ,*

*lunato-ellipticâ; peristomate reflexo, intus albo, marginibus callo lato junctis, columellari dilatato, introrsum obsolete unidentato.*

THE CARMELITE HELIX. Shell imperforated, suborbicular, granulately striated, keeled, obliquely striated, shining chestnut, ornamented with a lighter band above the keel; whorls four to five, rather flattened, the last inflated at the base, slightly descending in front; aperture very oblique, lunar-elliptical; lip reflected, white within, margins joined by a broad callosity, columellar margin dilated, obsoletely one-toothed inwardly.

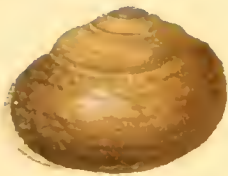
FERUSSAC, Hist. Moll. pl. 32. f. 4.

*Helix mora*, Gray.

*Hab.* —?

A well-defined species of obliquely depressed solid growth, characterized by a broadly flattened callous deposit in the place of the umbilicus.

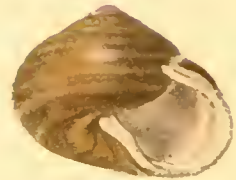




183 a



182



183 b



184



155 a



155 b



156 a



157 a



157 b



156 b

# HELIX.

PLATE XLI.

Species 182. (Mus. Cuming.)

**HELIX VIRIDIS.** *Hel. testā imperforatā, turbinato-globosā, tenui, lævigatā, sub epidermide viridi albā, fasciis variis nigricante-rufis ornatā; spirā conoideā, apicē obtusiusculā; anfractibus quinque ad sex, convexiusculis; columellā obliquē strictiusculā; aperturā lunato-ovali; peristomate breviter incrassato, subreflexo, margine columellari dilatato.*

**THE GREEN HELIX.** Shell imperforated, turbinately globose, thin, smooth, white beneath a green epidermis, encircled with various blackish-red bands; spire conoid, rather obtuse at the apex; whorls five to six, rather convex; columella oblique, rather drawn out; aperture lunar-oval; lip shortly thickened, slightly reflected, columellar margin dilated.

DESHAYES, *Anim. sans vert.* (2nd edit.) vol. viii. p. 102. *Hab.* Madagascar.

M. Deshayes takes this species to be the *Trochus hortensis* of Chemnitz (*Conch. Cab.* vol. ix. pl. 122. f. 1055-6). It is possible, but doubtful, the figure being a very obscure one.

Species 183. (Fig. a, b, Mus. Cuming.)

**HELIX CELLATURA.** *Hel. testā imperforatā, depresso-globosā, solidiusculā, striis incrementi distinctis lineisque spiralibus puncturalis irregulariter distantibus excavatā, fulvido-fuscā, apicem versus purpurascente; spirā brevī, latē conoideā; anfractibus quatuor ad quinque, convexiusculis, ultimo basi juncta columellam compresso; aperturā lunato-ovali; peristomate recto, subincrassato, margine dextro sinuoso, columellari calloso.*

**THE EMBOSSED HELIX.** Shell imperforated, depressly globose, rather solid, engraved with distinct striae of growth and irregularly distant punctured spiral lines, yellowish-brown, purplish towards the apex; spire short, broadly conoid; whorls four to five, rather convex, the last compressed at the base next the columella; aperture lunar-oval; peristome straight, rather thickened, right margin sinuous, columellar margin callous.

FERTUSSAC, *Hist. Moll.* pl. 28 f. 3, 4.

*Helix crarata*, Wiegman.

*Hab.* Island of Bourbon.

A broad Trochiform shell engraved with spiral punctured lines, and rather impressed around the seat of the columella.

tured lines, and rather impressed around the seat of the columella.

Species 184. (Mus. Cuming.)

**HELIX OMPHALODES.** *Hel. testā latē umbilicatā, depressā, solidā, leviter striatulā, nigricante-castaneā; spirā rix convexā; anfractibus quinque, planiusculis, ultimo subcarinato, anticē rix descendente, basi paulo convexiore, circa umbilicum magnum spiralem subcompresso; aperturā perobliquā, lunato-ovali; peristomate breviter reflexo, marginibus conniventibus.*

**THE SHIELD-LIKE HELIX.** Shell umbilicated, depressed, solid, finely striated, blackish-chestnut; spire but little convex; whorls five, rather flattened, last whorl slightly keeled, scarcely descending in front, base a little more convex, rather compressed around the umbilicus, which is large and spiral; aperture very oblique, lunar-oval; lip shortly reflected, brown, with the margins approximating.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 6 t.

*Hab.* — ?

Characterized by a peculiarly compressed growth about the base of the last whorl, surrounding a broad perspective umbilicus.

Species 185. (Fig. a, b, Mus. Cuming.)

**HELIX NYSTERA.** *Hel. testā umbilicatā, orbiculari, depressā, acutissimē carinatā, tenui, diaphanā, olivaceo-fuscā; suturā levissimā; anfractibus quatuor, planis, ultimo supra superficialiter ruguloso et malleato, basi convexo, circa umbilicum infundibuliformem subangulato; aperturā perobliquā, depressā, irregulari; peristomate reflexo, margine supero dilatato, columellari brevi, cum basali angulum obtusum formante.*

**THE SHORN HELIX.** Shell umbilicated, orbicular, depressed, very sharply keeled, thin, diaphanous, olive-brown; suture very smooth; whorls four, flattened, the last superficially wrinkled and indented on the upper surface, convex at the base, rather angulated around the umbilicus, which is funnel-shaped. aperture very oblique, depressed, irregular; lip reflected, upper margin dilated, columellar margin short, forming an obtuse angle with the basal margin.

VALENCIENNES, *Pfeiffer, Synboke*, vol. i. p. 41.

*Hab.* Madagascar.

Resembling the preceding species in form, but more lenticularly compressed and very sharply keeled.

Species 186. (Fig. *a, b*, Mus. Cuming.)

HELIX GLOBULUS. *Hel. testā umbilicatā, globoso-conoideā, irregulariter costulato-striatā et malleatā, sordidē albā, violascente-cinereo nebulosā; anfractibus quinque, convexis, ultimo magno, inflato, rotundato; umbilico angusto, semioblecto; columellā lævi, subarcuato; aperturā lunato-ovali, intus nitidē violaceo-purpureā; peristomate incrassato, reflexo, rubicundo, marginibus distantibus, callo diffuso violaceo-purpureo junctis, columellari dilatato, reflexo.*

THE GLOBULAR HELIX. Shell umbilicated, globosely conoid, irregularly rib-like striated and indented, dirty white, clouded with violet-ash; whorls five, convex, the last large, inflated, rounded; umbilicus narrow, half-covered; columella smooth, slightly arched; aperture lunar-oval, shining violet-purple within; lip thickened, reflected, ruddy, margins distant, joined by a diffused violet-purple layer of enamel, columellar margin dilated, reflected.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 68.

*Helix lucana*, Lamarck (not of Muller).

Eadem var. *Helix rosacea*, Muller.

*Hab.* Cape of Good Hope.

The species varies considerably in size, as may be remarked in the specimens figured, but is always characterized by the same rich violet-purple colouring about the aperture. Externally it is of a dirty fawn or ash-white, without marking.

Species 187. (Fig. *a, b*, Mus. Cuming.)

HELIX LUCANA. *Hel. testā umbilicatā, depresso-globosā, subpellucidā, nitidā, supernè fulvescente-rubrā, subtilis et in suturis albā; anfractibus quinque, supremis lentè accrescentibus, planulatis, convexis; aperturā lunato-rotundatā; peristomate crasso, reflexo, marginibus coniventibus, callo junctis.*

THE LIGHT HELIX. Shell umbilicated, depressly globose, subpellucid, shining, fulvous-red over the upper part, white beneath and in the sutures; whorls five, the uppermost ones increasing slowly, flattened, convex; aperture lunar-rounded; lip thickened, reflected, margins approximating, joined by a callous layer.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 75.

*Hab.* Cape of Good Hope?

This is quite a distinct species from the preceding. It is of a thin semitransparent texture, peculiarly white-edged in the suture, is more discoidly convoluted, with the umbilicus freely open, and has no indication of purple colouring in the aperture.





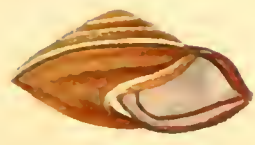
185.



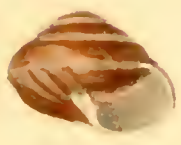
189 a



189 b



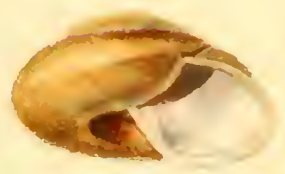
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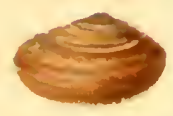
191 a



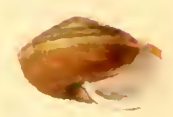
191 b.



192



193 a



193 b



194





The horny coating of this species is of a yellowish-olive colour beneath, and dull brown above. The columella is distinguished by a callous tooth-like thickening in the place of the umbilicus.

Species 192. (Mus. Cuming.)

**HELIX GALACTOSTOMA.** *Hel. testâ umbilicatâ, conœvo-orbiculari, solidâ, striatâ, sub lente granulatâ, fulvâ; spirâ brevi, forniculatâ, obtusâ; anfractibus quatuor ad quinque, conœviusculis, sensim accrescentibus, penultimo angulato, ultimo aperturam versus rotundata, anticè deflexo, basi in umbilicum subangulum subangulatione descendente: aperturâ perobliquâ, lunari-ovali, intus lacteâ; peristomate subincrassato, fusculo-limbato, marginibus conniventibus, callo junctis, dextro brevissimè expanso, basali reflexo, columellari albo, supra umbilicum dilatato-reflexo.*

**THE MILKY-MOUTH HELIX.** Shell umbilicated, convexly orbicular, solid, striated, granulated beneath the lens, fulvous; spire short, arched over, obtuse; whorls four to five, rather convex, enlarging gradually, last whorl but one angled, the last rounded towards the aperture, deflected in front, descending subangularly at the base into a rather large umbilicus: aperture very oblique, lunar-oval, milk-white within; lip slightly thickened, edged with pale brown, margins approximating, joined by a callosity, right margin very shortly expanded, basal reflected, columellar margin white, dilately reflected over against the umbilicus.

PREIFFER, *Pro. Zool. Soc.* 1849, p. 131.

*Hab.* Madagasear.

An extremely characteristic species, with a rather more depressed form than might be gathered from the foreshortened position of the shell in the accompanying figure.

Species 193. (Fig. a, b, Mus. Cuming.)

**HELIX RUFA.** *Hel. testâ umbilicatâ, depressiusculâ, tenui, confertim striatâ, lineis concentricis obsolete subdecussatâ, rufo-olivaceâ, corneâ; spirâ parum elevatâ; anfractibus sex, conœviusculis, ultimo dilatato, basi conœviore, supra medium angulato, angulo anticè recanescente; aperturâ subverticali, lineari; peristomate simplici, obtuso, margine columellari brevissimè dilatato.*

**THE RED HELIX.** Shell umbilicated, rather depressed, thin, closely striated, slightly decussated with obsolete concentric lines, reddish-olive, horny; spire but little raised; whorls six, rather convex, the last dilated, more convex at the base, angled above the middle, angle more obscure towards the aperture; aperture subvertical, lunar; lip simple, obtuse, columellar margin very shortly dilated.

LESSON, *Voyage de la Coquille*, p. 305, pl. 13, f. 2.

*Hab.* Mauritius; Guerin. New Ireland; Lesson.

Distinguished by its neat sculpture of spiral and oblique striæ, the latter of which are the stronger, and by its angular, sometimes faintly biangular, growth above the centre of the last whorl.

Species 194. (Mus. Cuming.)

**HELIX LANCULA.** *Hel. testâ umbilicatâ, orbiculari, depressâ, obliquè striatâ, lineis confertissimis spiralibus sub lente decussatâ, nitidè fulvâ, olivaceâ, carinatâ, carinâ anticè subobsoletâ; spirâ parum elatâ, pallidâ; anfractibus quatuor, planatis, ultimo basi planiusculo, circa umbilicum mediocrem, non peritium, subangulato; aperturâ perobliquâ, transversè lunato-ellipticâ; peristomate subincrassato, breviter reflexo, marginibus callo introrsum diffuso junctis, dextro dilatato, depresso, basali strictiuscula, cum columellari obliqua angulum obtusissimum formante.*

**THE SCALE-BASIN HELIX.** Shell umbilicated, orbicular, depressed, obliquely striated, decussated beneath the lens with very close-set spiral lines, shining fulvous-olive, keeled, keel somewhat obsolete anteriorly; spire but little raised, pale; whorls four, flattened, the last rather flat at the base, rather angulated around the umbilicus, which is confined; aperture very oblique, transversely lunar-elliptical; lip rather thickened, shortly reflected, margins joined by a callous layer, which is diffused internally, right margin dilated, depressed, basal margin rather drawn out, forming a very obtuse angle with the oblique columellar margin.

FERUSSAC, *Hist. Moll.* pl. 65, f. 4-6.

*Hab.* Madagasear.

Of a peculiar lenticular form, very depressed towards the periphery, with the umbilicus very much contracted.





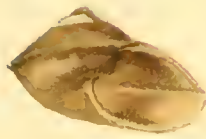
195.



196 a



196 b



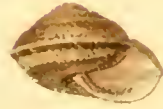
197.



198 a



198 b



199



200



201.



202

# HELIX.

PLATE XLIII.

(Figures moderately enlarged.)

Species 195. (Mus. Cuming.)

**HELIX LOVENI.** *Hel. testá umbilicatá, superne planiusculá, basi inflatá, tenui, pellucidá, corneá, obliquè vix costulata; spirá planulatá, apice acutiusculá; anfractibus quinque, supra planiusculis, ultimo supra peripheriam obtusè carinato, costellis pilosis; aperturá subangulato-lunari; peristomate simplici, acuto, margine columellari dilatato-reflexo, umbilicum partim tegente.*

**LOVEN'S HELIX.** Shell umbilicated, rather flattened at the upper part, inflated at the base, thin, horny, obliquely scarcely ribbed; spire rather flattened, rather sharp at the apex; whorls five, rather flattened above, last whorl obtusely keeled above the periphery, with the ribs hairy; aperture somewhat angularly lunar; lip simple, sharp, columellar margin dilately reflected, partially covering the umbilicus.

KRAUSS, *Sudafricanischen Moll.* p. 76. pl. 4. f. 21.

*Hab.* Natal, South Africa.

This transparent horny species, which is characterized by a peculiar depression of the upper surface, is scarcely ribbed in sculpture, but obtains that appearance from being overlaid with very delicate oblique strips of hairy epidermis.

Species 196. (Fig. a, b, Mus. Cuming.)

**HELIX DOLIOLUM.** *Hel. testá umbilicatá, turbinatá, confertissimè et minutè costulato-striatá, pellucidá, non nitente, corneá; spirá turbinatá, apice obtusiusculá; anfractibus quinque, rotundatis, ultimo basi subplanato; aperturá depressá, latè lunari; peristomate simplicissimo, recto.*

**THE LITTLE BARREL HELIX.** Shell umbilicated, turbinated, very closely minutely rib-like striated, pellucid, not shining, horny; spire turbinated, rather obtuse at the apex; whorls five, rounded, the last rather flattened at the base; aperture depressed, broadly lunar; lip very simple, straight.

PFEIFFER, *Pro. Zool. Soc.* 1846, p. 41.

*Hab.* Sibonga, Island of Zebu, Philippines; Cuming.

A minute turbinated horny species, with rounded whorls, more proportionably enlarged in the accompanying plate than the rest of the figures.

Species 197. (Mus. Cuming.)

**HELIX MICRONATA.** *Hel. testá umbilicatá, superne tenuissimá, corneá, acutè carinatá, confertè costulato-striatá, stris sparsis vix costis confertè striatis sub lente decussatá, apice acutiusculá, corneá, pellucidá; anfractibus quinque, ultimo supra peripheriam obliquè inflato, ad peripheriam acutè angulato; aperturá amplá, subhorizontali, peristomate simplici.*

**THE POINTED HELIX.** Shell imperforated, conical, thin, horny, sharply keeled, concentrically rib-like striated, and decussated beneath the lens with oblique, minute, spiral engraved striae, sharp at the apex, olive-green, pellucid; whorls four, badly convex, last whorl obliquely inflated, very sharply angulated at the periphery; aperture large, nearly horizontal, lip simple.

PFEIFFER, *Pro. Zool. Soc.* 1851.

*Hab.* Mauritius.

I doubt very much if this shell belong to a *Helix*. It is of a peculiar thin horny substance, without any indication of an internal calcareous lining.

Species 198. (Fig. a, b, Mus. Cuming.)

**HELIX VERNICOSA.** *Hel. testá umbilicatá, superne tenuissimá, pellucidá, flavido-corneá, superne subp. costulato-striatá; spirá planiusculá; anfractibus quinque, convexiusculis, ultimo basi convexo, supra peripheriam vernicoso; umbilico medio, peristomate simplici, margine suborbiculari; peristomate simplici, acuto, peristomate dextro arcuato.*

**THE VARNISHED HELIX.** Shell umbilicated, rather depressed, very thin, pellucid, yellowish-horny, concentrically rib-like striated at the upper part; spire rather flattened; whorls four, rather convex, last whorl convex at the base, rather smooth, as though varnished, umbilicus middling, open; aperture oblique, nearly orbicular; lip simple, sharp, right margin angled.

KRAUSS, *Sudafricanischen Moll.* p. 76. pl. 4. f. 20.

*Hab.* Natal, South Africa.

A Cyclostoma-like horny shell, with a peculiar shining epidermis.



Species 199. (Mus. Cuming.)

HELIX RAWNS NIS. *Hel. testá eix umbilicá, depressa, conoidea, cornea, p. lucida; a fractis quatuor ad quatuor, subbrachialis; apertura lunari, peristoma simplici, margine columellari brevissimo reflexo, umbilicus parvis tegente.*

RAWNS N'S HELIX. Shell slightly umbilicated, depressy conoid, horny, transparent; whorls six, convex at the upper part, and very closely concentrically rib-like striated, last whorl sharply keeled at the periphery, rounded and rib-like striated at the base; lip simple, columellar margin very shortly reflected, partially covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1851.

*H. l.* Mauritius.

This species is unusually rounded at the base, and concentrically rib-like striated throughout, both above and below.

Species 200. (Mus. Cuming.)

HELIX PINGUIS. *Hel. testá eix umbilicá, orbiculari, conoidea, cornea, nitida; spirá depressá; suturis distinctis; a fractis quatuor ad quatuor, l. t. accrescentibus, l. i. reclinatis; apertura lunari; peristoma simplici, a. m. margine columellari brevissimo reflexo, umbilicus parvis tegente.*

THE GREASY HELIX. Shell slightly umbilicated, orbicular, somewhat discoid, horny, shining; spire depressed; sutures distinct; whorls five, convex, slowly enlarging, the last rounded; aperture small, lunar; lip simple, sharp, columellar margin very shortly reflected, partially covering the umbilicus.

KRAUSS, S. Afr. Moll. p. 75. pl. 4 f. 19.

A small shining horny species, of regular discoid growth, approaching the form of *Planorbis*.

Species 201. (Mus. Cuming.)

HELIX APRICA. *Hel. testá umbilicá, orbiculari, testá*

*cornea, conoidea, depressa, a fractis quatuor ad quatuor, radiata; suturis distinctis; a fractis quatuor ad quatuor, subbrachialis; apertura lunari, peristoma simplici, margine columellari brevissimo reflexo, umbilicus parvis tegente.*

THE SUN-BURN'T HELIX. Shell umbilicated, orbicular, thin, horny, very closely concentrically rib-like striated throughout, spire rather depressed; sutures distinct, whorls four to five, rather rounded; aperture lunar; lip simple, columellar margin very shortly reflected, partially covering the umbilicus.

KRAUSS, S. Afr. Moll. p. 77. pl. 4 f. 26.

*H. l.* Natal.

The shell here described and figured does not answer correctly to Krauss's description and figure of *H. aprica* in the work above referred to, but it has been received by Mr. Cuming with other authentic specimens of Natal shells so named, and is characterized by a peculiar bronze-glow, just such as might have suggested the appellation of 'sun-burnt.'

Species 202. (Mus. Cuming.)

HELIX CAPENSIS. *Hel. testá umbilicá, globoso-depressá, testá, opaca, nitida, albá, apice carnea, peristoma simplici, a. m. margine columellari brevissimo reflexo, umbilicus parvis tegente; a fractis quatuor ad quatuor, concentricis; suturis distinctis; apertura lunari, l. i. l. m. f. reclinatis; peristoma simplici, nitida.*

THE CAPE HELIX. Shell umbilicated, globosely depressed, thin, opaque, rather shining, white, flesh-tinged at the apex, sprinkled with black dots, obsolete brown-rayed and banded; whorls four to five, convex; umbilicus very narrow; aperture rather large, lunar, fluvous within; lip simple, sharp.

PFEIFFER, Symbolæ, vol. i. p. 40.

*H. l.* Cape of Good Hope.

Closely allied to a well-known European term.







203 c



203 b



204



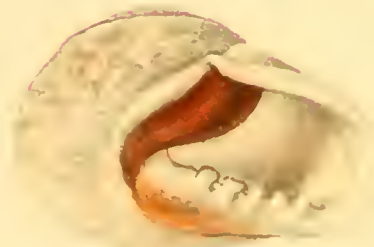
205



206 a



206 b



207

# HELIX.

PLATE XLIV.

Species 203. (Fig. a, b, Mus. Cuming.)

**HELIX SAGEMON.** *Hel. testā oblectē umbilicatā, orbiculato-converā, crassā, striatā, luteā vel rufescente, fasciis latis nigricantibus variè ornatā; spirā obtusā; anfractibus quinque ad sex, planulatis, ultimo carinato, basi planiusculo, anticè gibbo, deflexo; aperturā perobliquā, subtriangulārī; peristomate incrassato, reflexiusculo, albo vel violascente-fusco, marginibus callo lato junctis.*

**THE MILITARY CLOAK HELIX.** Shell with a covered umbilicus, orbicularly convex, thick, striated, yellow or reddish, variously ornamented with broad blackish bands; spire obtuse; whorls five to six, flattened, the last keeled, rather flattened at the base, gibbous and deflected anteriorly; aperture very oblique, somewhat triangular; lip thickened, a little reflected, white or violet-brown, margins joined by a callous layer.

*Carocolla sagemon*, Beek, Index, p. 31.

*Helix marginata*, var., Férussac.

*Helix marginatoides*, D'Orbigny.

*Hab.* Cuba.

This species has been frequently confounded with the following, from which it differs in having the spire less flatly depressed, and the umbilicus wholly or partially covered with the callous extension of the margins of the aperture.

Species 204. (Mus. Cuming.)

**HELIX BORNII.** *Hel. testā umbilicatā, orbiculato-converā, solidā, obliquè rugoso-striatā, acutè carinatā, sub epidermide lutescente deciduā albā, fasciis duabus latis nigro-castaneis ornatā; spirā obtusā; suturā lineari; anfractibus quinque, planiusculis, ultimo anticè subgibbo, paululum deflexo; aperturā perobliquā, lunato-ellipticā; peristomate incrassato, albo, reflexo, marginibus callo junctis, columellari dilatato, umbilicium amplum partim legente.*

**BORN'S HELIX.** Shell umbilicated, orbicularly convex, solid, obliquely roughly striated, sharply keeled, white beneath a yellow deciduous epidermis, ornamented with two broad blackish-chestnut bands; spire obtuse; suture linear; whorls five, rather flat, the last rather gibbous and a little deflected anteriorly; aperture very oblique, lunar-elliptic; lip

thickened, white, reflected, margins joined by a callous layer, columellar margin dilated, partially covering a large open umbilicus.

*Helix Bornii*, Chemnitz, Conch. Cab. vol. xi. p. 80, pl. 127 f. 1097.

*Helix marginata*, Born.

*Helix marginella*, Gmelin.

*Helix fasciata*, Blainville.

*Carocolla marginata*, Lamarek.

*Carocolla unifasciata*, Schumacher.

*Carocolla Lamarekii*, Sowerby.

*Carocolla indiscreta*, Beck.

*Hab.* Porto Rico.

Chiefly distinguished from the preceding species by its more depressed lenticular form, and open spiral umbilicus.

Species 205. (Mus. Cuming.)

**HELIX LAMPAS.** *Hel. testā imperforatā, sub-ticulari, tenuiusculā, rufo-castaneā, subtiliter striatā, callosatā, acutè carinatā; spirā parum elevatā, anfractibus quinque, planiusculis, ultimo anticè breviter deflexo, basi convexiore, lineis elevatis obsolete cincta; aperturā transversā, subtriangulārī, intus nitide luteo-lutescente; peristomate simplici, rix incrassato, rufo-aurantio, margine dextro expanso, basi reflexo, appresso, columellari in callo lato dilatato.*

**THE LAMP HELIX.** Shell imperforated, somewhat lens-shaped, rather thin, reddish-chestnut, finely striated, indented, sharply keeled; spire but little raised; whorls five, rather flattened, the last shortly deflected in front, more convex at the base, obsolete encircled with raised lines; aperture transverse, somewhat triangular, shining livid or yellowish within, lip simple, slightly thickened, red-orange, right margin expanded, basal reflected, appressed, columellar margin dilated into a broad callosity.

*Helix lampas*, Verm. terr. et flav. Hist. vol. ii. p. 12

*Helix carocolla*, Chemnitz.

*Helix carina*, Wood.

*Carocolla magna*, Schumacher.

*Discodonta gigas*, Swainson.

*Hab.* Island of Hayti?

This fine species is remarkable for its broad lenticular form and smooth arched spire, the entire surface being

marked with superficial indentations. The lip is of a deep vermilion-orange.

Species 206. (Fig. *a, b*. Mus. Cuming.)

HELIX ANGISTOMA. *Hel. testâ obtectè umbilicatâ, orbiculatâ, utrinque concavâ, solidâ, subtiliter striatâ, fulco-rufâ, fasciis saturatioribus ornatâ, suturis lividis; anfractibus sex ad septem, planis, quatuor ultimis subequalibus, ultimo acutè corinato; aperturâ angulato-lunari; peristomate incrassato, calloso, marginibus callo convexis, basali reflexo, perforationem prorsus tegente.*

THE NARROW-MOUTH HELIX. Shell with the umbilicus covered, orbicular, convex on both sides, solid, finely striated, fulvous-red, ornamented with darker bands; sutures livid; whorls six to seven, flat, the last four nearly equal, the last one sharply keeled; aperture angularly lunar; lip thickened, callous, margins connected by a callosity, basal margin reflected, entirely covering the umbilicus.

FERUSSAC, Hist. Moll. pl. 60. f. 1.

*Carocolla angistoma*, Lamarck.

*Hab.* West Indies.

A perfect lens-shaped form, of a foxy-red colour, with the sutures of a peculiar livid aspect.

Species 207. (Mus. Cuming.)

HELIX ASPERA. *Hel. testâ imperforatâ, transversè pyri-*

*formi, solidâ, undique confertim et irregulariter granosâ, albâ; spirâ brevi, obtusâ, strigis nonnullis rufis fulguratâ; anfractibus quatuor, planulatis, rapidè accrescentibus, ultimo obsolete angulato, turgido, a latere subcompresso, anticè deflexo; aperturâ angustâ, transversè ovali, intus nitidâ, fauce castaneâ; peristomate valdè incrassato, reflexo, marginibus callo junctis, supero repando, basali dilatato, prope columellam eariè dentato, orate calloso, bisinuoso.*

THE ROUGH HELIX. Shell imperforated, transversely pear-shaped, solid, closely and irregularly grained throughout, white; spire short, obtuse, coloured with a few reddish streaks; whorls four, flattened, rapidly enlarging, the last obsolete angled, swollen, a little compressed at the side, deflected anteriorly; aperture narrow, transversely oval, shining within, interior chestnut; lip much thickened, reflected, margins joined by a callosity, upper margin spread, basal margin dilated, variously toothed near the columella, callous and bisinuous with age.

FERUSSAC, Hist. Moll. pl. 44. f. 1-3.

*Helix granosa*, Wood.

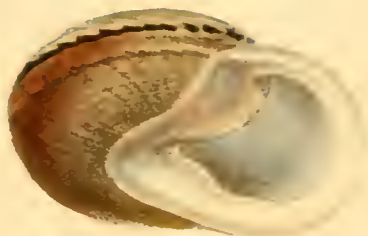
*Hab.* Jamaica.

The dentation of this singular and well-known species is extremely variable; in the specimen before me the lip is five-toothed.

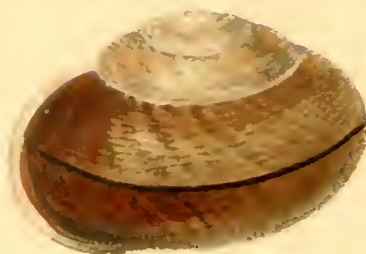




205



209. a



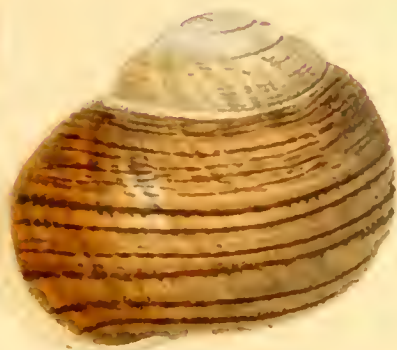
209. b



210



211. a



212



211. b



# HELIX.

PLATE XLV.

Species 208. (Mus. Cuming.)

**HELIX MACMURRAYI.** *Hel. testā imperforatā, globoso-turbinatā, tumidiusculā, lineis incrementi undique creberrimè striatā, lineis spiritalibus impressis obsolete decussatā, albā, epidermide fulvā corneā deciduā indutā; spirā obtusā; anfractibus quinque, rotundatis, supernè subconvexis, suturis tenuè marginatis; aperturā suborbiculari; columellā callosā, subcontortā; peristomate simplici, acuto.*

**MACMURRAY'S HELIX.** Shell imperforated, globosely turbinated, rather swollen, very closely striated throughout with lines of growth, obsolete decussated with impressed spiral lines, white, covered with a fulvous, deciduous, horny epidermis; spire obtuse; whorls five, rounded, rather concave round the upper part, sutures finely margined; aperture nearly orbicular; columella callous, rather twisted; lip simple, sharp.

ADAMS, Contributions to Conchology, No. 2. p. 32.

*Hab.* Jamaica.

Allied to *H. tumida*, from which it differs mainly in being larger and of more solid growth. It is a subtransparent blue-white shell, covered with a fulvous-olive horny epidermis, inclined readily to peel off in places.

Species 209. (Fig. a, b, Mus. Cuming.)

**HELIX CRASSILABRIS.** *Hel. testā imperforatā, depressā, crassā, ponderosā, irregulariter striatā et undique granulatā, albidā, lineis spiritalibus, undulatis, fuscis, fasciāque unicā castaneā ad peripheriam ornatā; spirā vix elevatā, distinctè granulatā, apice nudā, albā; anfractibus quatuor ad quinque, planiusculis, sensim accrescentibus, ultimo minutissimè granulato, medio subcarinato, anticè vix descendente; aperturā obliquā, semiellipticā, intus albā; peristomate undique incrassato-reflexo, margine dextro subsinuoso, columellari intus obsolete plicato.*

**THE THICK-LIP HELIX.** Shell imperforated, depressed, thick, ponderous, irregularly striated and granulated throughout, whitish, ornamented with brown waved spiral lines and a single chestnut band round the periphery; spire but little raised, distinctly granulated, naked and white at the apex; whorls four to five, rather flat, enlarging gradually, last whorl very minutely granulated, faintly keeled in the middle,

descending a little anteriorly; aperture oblique, semielliptical, white within; lip thickly reflected throughout, right margin rather sinuous, columellar margin obsolete plaited within.

*Hab.* Cuba.

A shell of heavy solid growth, well characterized by the callous thickening of the lip.

Species 210. (Mus. Cuming.)

**HELIX CORNU-MILITARE.** *Hel. testā imperforatā, globoso-depressā, solidā, striatā, sulcis impressis nonnullis cingulatā, albā, epidermide fuscā deciduā indutā; spirā brevi, obtusā; anfractibus quinque, planiusculis, ultimo basi inflato; aperturā rotundato-lunari, patulā, intus nitidè albā; peristomate simplici, reflexo, margine supero arcuato, columellari calloso, valdè dilatato.*

**THE MILITARY HORN HELIX.** Shell imperforated, globosely depressed, solid, striated, encircled with a few impressed grooves, white, covered with a brown deciduous epidermis; spire short, obtuse, whorls five, rather flat, the last inflated at the base; aperture rotundately lunar, wide open, shining white within; lip simple, reflected, upper margin arched, columellar margin callous, much dilated.

LINNEUS, Syst. Nat. 12th edit. p. 1243.

*Helix matum terre, Chemnitz.*

*Helix gigantea, Lamarck.*

*Hab.* — ?

This fine species, though known to Linnaeus, is still of very rare occurrence. The surface of the last whorl, in addition to the characters above recited, is sculptured with long oblique indentations, which are worthy of notice.

Species 211. (Fig. c, b, Mus. Cuming.)

**HELIX AUDERARDI.** *Hel. testā imperforatā, globoso-turbinatā, undique obliquè concentricè striatā, apice obtusā, albā, epidermide castaneā, ad partem proximè aggricantè strigatā, nudā; anfractibus quinque ad sex convexis, ad suturas subproscis, aperturā subquadrato-lunari; peristomate simplici, reflexo, accrescente-utro.*

**AUDERARD'S HELIX.** Shell imperforated, somewhat globosely turbinated, obliquely concentrically striated throughout obtuse at the apex, white, covered with

a chestnut epidermis, promiscuously obliquely marked with blackish streaks; whorls five to six, convex, rather impressed at the sutures; aperture somewhat squarely lunar, lip rather thickened, reflected, bluish-white.

PELLETER. Pro. Zool. Soc. 1850.

*Hab.* — ?

There is no spiral pattern upon this shell, the dark oblique streaks noted above follow the direction of the lines of growth.

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Species 212. (Mus. Cuming.)

HELIX UNDULATA. *Hel. testā imperforatā, globosā, solidiusculā, striatā, lutescente, lineis fimbriatis confertis inæqualibus fuscis cinctā; anfractibus quatuor ad quinque, contextiusculis, supremis albis, minutissimè granulatis, ultimo permagno; aperturā rotundato-lunari,*

*intus cerelescente-albā; peristomate candido, breviter reflexo, margine columellari dilatato, appresso.*

THE WAVED HELIX. Shell imperforated, globose, rather solid, striated, yellowish, encircled with unequal close-set fimbriated brown lines; whorls four to five, rather convex, the uppermost white, and very minutely granulated, the last very large; aperture rotundately lunar, bluish-white within; lip white, shortly reflected, columellar margin dilated, appressed.

FERUSSAC, Hist. Moll. pl. 16. f. 3-6.

*Helix lineolata*, Lamarck.

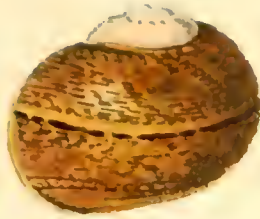
*Hab.* Island of Hayti.

The waved pattern of the lines with which this species is encircled, is produced by the intrusion of the stria of growth. The colouring matter is moved up and down by the successive uneven additions of calcareous matter, giving to the surface somewhat the appearance of an imperfectly joined piece of weaving.

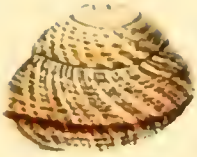
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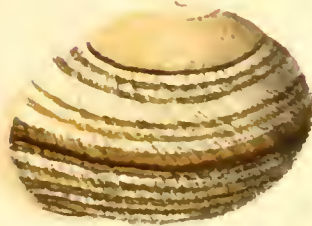
213



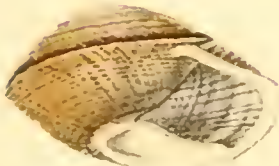
214 a



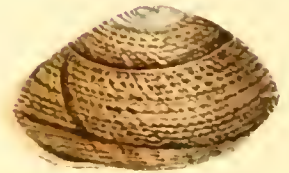
214 b



215 a



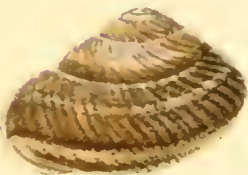
216 a



216 b



215 b



214 c



214 d



217

# HELIX.

PLATE XLVI.

Species 213. (Mus. Cuming.)

**HELIX DILATATA.** *Hel. testâ imperforatâ, obliquè sub-ovalâ, granulato-striatâ, pallidè luteâ, lineis confertissimis brunneis interruptis supra et infra fasciam concolorem medii anfractûs ultimi pictâ, apice albidâ; spirâ parvâ, obtusiusculâ; anfractibus quatuor, rapidè accrescentibus, ultimo unapliissimo; columellâ albo-callo-sâ, strictâ; aperturâ maximâ, obliquè ovali, intus luctâ; peristomate recto, subincrassato, margine dex-tero antrorsum arcuato.*

**THE DILATED HELIX.** Shell imperforated, obliquely subovate, granulatedly striated, pale yellow, marked with very close-set interrupted brown lines above and below a band round the middle of the last whorl, whitish at the apex; spire small, rather obtuse; whorls four, rapidly enlarging, the last very large; columella white, callous, drawn out; aperture very large, obliquely oval, bluish-white within; lip straight, rather thickened, right margin arched anteriorly.

PREIFFER, Pro. Zool. Soc. 1845, p. 42.

*Hab.* — ?

Of a peculiar obliquely inflated form, and the interrupted marking with which its surface is covered are fine hair lines, with a somewhat granular aspect.

Species 214. (Fig. a, b, c, d, Mus. Cuming.)

**HELIX LIMA.** *Hel. testâ imperforatâ, orbiculato-subconoidèâ, solidâ, griseo-fuscâ, granulis albis confertissimis exasperatâ; anfractibus quatuor ad quinque, plunulatis, ultimo obsolete carinato, antè gibbo, subitè deflexo; aperturâ perobliquâ, angustâ, irregulariter lunari; peristomate incrassato, marginibus callo tenui junctis, supèro reflexo, basali latè calloso, introrsum dilatato.*

**THE FILE HELIX.** Shell imperforated, orbicularly subconoid, solid, greyish-brown, roughened with very close-set white granules; whorls four to five, rather flattened, the last obsolete keeled, gibbous anteriorly, suddenly deflected; aperture very oblique, narrow, irregularly lunar; lip thickened, margins joined by a thin callous layer, upper margin reflected, basal margin broadly reflected, dilated interiorly.

FÉRUSSAC, Hist. Moll. pl. 46. f. 1, 2, and pl. 46. A. f. 4, 5.

*Helix punctifera*, Lamarek.

Eadem var. *Helix incerta*, FéruSSac.

*Hab.* Jamaica.

Though always more or less granulated, this species is extremely variable even in form. The variety represented at Fig. 214 c, d, may be regarded as the type of the species. In that at 214 a, b, representing *H. lima*, FéruSSac, the aperture is less obliquely prolonged and the callous thickening of the columella margin is proportionably abrupt and irregular.

Species 215. (Fig. a, b, Mus. Cuming.)

**HELIX DOMINICENSIS.** *Hel. testâ imperforatâ, subquadrato-globosâ, tenuiculâ, concentricè et spiritaliter obsolete striatâ, undique, præcipue raris granis, subitè ruguloso-malleatâ, opacè albâ, epidermide tenui fulvo-æreâ fasciatâ decem à undecim, spirâ brevè; anfractibus quatuor, primo arcuatis; aperturâ subquadrato-lunari; peristomate reflexo, marginibus junctis, callo tenui appressis, calloso.*

**THE DOMINGO HELIX.** Shell imperforated, somewhat obliquely globose, rather thin, concentric and spirally obsolete striated, undulating, scabrous and indented throughout, more particularly toward the apex, opaque white, covered with a thin, scabrous fulvous-bronze epidermis; spire conical, whorls four, flatly convex; aperture subquadrately lunar; lip reflected, columellar margin broadly appressed, callous.

PREIFFER, Zeitschrift für Malac. 1850, p. 71.

*Hab.* Island of St. Domingo.

An extremely interesting species with a shell covered with a bright fulvous epidermis, marked throughout with delicate bronze bands, and a single brown striated line at the periphery. The epidermis is peculiarly scabrous and peels off mostly in bands, as the specimen represented at Fig. 215 c.

Species 216. (Fig. a, b, Mus. Cuming.)

**HELIX ANGUSTATA.** *Hel. testâ imperforatâ, orbiculato-subconoidèâ, solidâ, ferrugineo-fulvâ, granulis albis confertissimis exasperatâ; anfractibus quatuor ad quinque, plunulatis, ultimo obsolete carinato, antè gibbo, subitè deflexo; aperturâ perobliquâ, angustâ, irregulariter lunari; peristomate incrassato, marginibus junctis, callo tenui appressis, calloso.*

THE PINCHED HELIX. Shell imperforated, ovately depressed, keeled, yellowish-ash, ornamented with brown waved spiral lines; whorls four, rather flattened, the last compressed at the side, gibbous and a little deflected anteriorly; aperture lunar-elliptical; lip reflected, white, margins distant, upper margin arched anteriorly, basal callous and dilately appressed.

FERUSSAC, Hist. Moll. pl. 61. f. 1.

*Hab.* Jamaica; Adams.

The waved pattern of the numerous brown lines with which this shell is spirally painted, is occasioned by the intrusion, on the surface, of the lines of growth. The species is allied to *H. lima*, but is characterized by the same peculiar lateral compression as in *H. Thersites* of the Philippine Islands.

Species 217. (Mus. Cuming.)

HELIX CRISPATA. *Hel. testā imperforatā, globosā, tenuius-*

*culā, substriatā, nitidā, fusco-lutescente, lineis brunneis confertis spiralibus undulato-crispis elegantissimè circumdatā; spirā brevi; anfractibus quatuor ad quinque, convexis, ultimo inflato; columellā arcuatā, dilatā, albā; aperturā lunato-circulari, intus lacteā; peristomate simplici, recto.*

THE CURLED HELIX. Shell imperforated, globose, rather thin, slightly striated, shining, brownish-yellow, very elegantly marked with close-set waved curly brown lines; spire short; whorls four to five, convex, the last inflated; columella arched, dilated, white; aperture lunar-circular, milk-white within; lip simple, straight.

FERUSSAC, Hist. Moll. pl. 23. f. 7, 8.

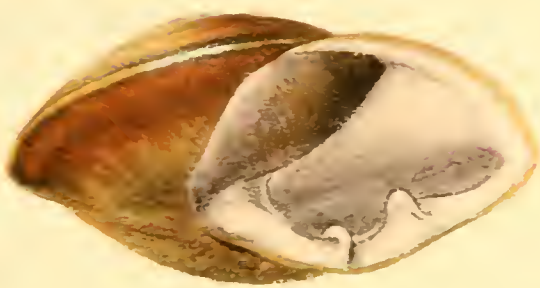
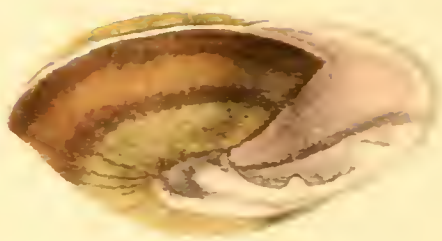
*Hab.* Island of Hayti.

The marking of this species is extremely characteristic, the entire surface being marked with very delicate short wavy brown lines.

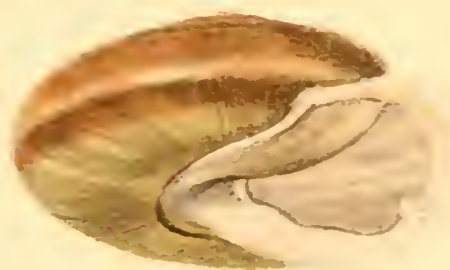




117



118



119



# HELIX.

PLATE XLVII.

Species 218. (Mus. Adams.)

**HELIX PATINA.** *Hel. testā imperforatā, lævigatā vel obsoletè granulatā, acutè carinatā; spirā fornicatā, apice obtusā, olivaceo-rufā, subtilis virescente; anfractibus quinque, planiusculis, ultimo supra concavo, infra plano-convexo; aperturā subhorizontali, purpureo-carneā, marginibus callo junctis, columellari valdè calloso, supero simplici, basali reflexo, unidentato.*

**THE PAN HELIX.** Shell imperforated, smooth or obsoletely granulated, sharply keeled; spire arched, obtuse at the apex, olive-red, greenish beneath; whorls five, rather flattened, last whorl concave above, flatly convex beneath; aperture nearly horizontal, purple-flesh colour, margins joined by a callous layer, columellar margin very callous, upper margin simple, basal margin reflected, one-toothed.

ADAMS, Contributions to Conchology, No. 2. p. 29.

*Hab.* Jamaica.

This is an authentic representation of Professor Adams's *H. patina*, and it may prove to be a variety of *H. ingens*, and not, as the author suggests, a variety of *H. acuta*.

Species 219. (Mus. Cuming.)

**HELIX ACUTA.** *Hel. testā oblectè umbilicatā, discoideā, utrinque convexā, solidā, fulvā, minutim granulosa; anfractibus quinque ad sex, planiusculis, ultimo convexo, carinato; aperturā fere horizontali, latè lunari; peristomate simplici, marginibus callo junctis, supero parum expanso, basali subrecto, latè reflexo, bidentato.*

**THE SHARP HELIX.** Shell with a partially covered umbilicus, discoid, convex on both sides, solid, fulvous, minutely granulated; whorls five to six, rather flattened, the last convex, keeled; aperture nearly horizontal, broadly lunar; lip simple, margins joined by a thin callous layer, upper margin but little expanded, basal margin nearly straight, broadly reflected, two-toothed.

LAMARCK, Encyclopédie Méthodique, pl. 462. f. 1.

*Helix Lamarckii*, Férussac.

*Caracolla Lamarckii*, Villa.

Eadem var. *Helix acutissima*, Deshayes.

*Caracolla acutissima*, Lamarck.

*Helix lucorum*, Lamarck.

*Hab.* Jamaica.

This is usually regarded to be the original *H. acuta*, although any one of the species figured in the accompanying plate may have been referred to that type at the time it was founded.

Species 220. (Mus. Adams.)

**HELIX CHEMNITZIANA.** *Hel. testā imperforatā, depressā, supernè radiatim plicato-umbilicatā, undique granulosa, sub epidermide olivaceā rufā, acutè carinatā; spirā subelevatā, obtusā; anfractibus quinque, planis, ultimo basi convexo; aperturā subtriangulari, shiningā, carneā; peristomate carneo, margine supero expanso, basali reflexo, dente valido munito, columellari stricto, dilatato, appresso, inæqualiter pluridentato.*

**CHEMNITZ'S HELIX.** Shell imperforated, depressed, radiately plicately indented round the upper part, granulated throughout, red beneath an olive epidermis, sharply keeled; spire scarcely elevated, obtuse, whorls five, flat, last whorl convex at the base, aperture nearly triangular, shining within, flesh-colour; lip flesh-colour, upper margin rather expanded, basal reflected and furnished with one strong tooth, columellar margin drawn out, dilated, appressed, unequally many-toothed.

PFEIFFER, Pro. Zool. Soc. 1845, p. 43.

*Helix fluctuata*, Adams.

*Hab.* Jamaica.

This species is chiefly characterized by a number of obliquely plicated indentations, ranging spirally on the upper surface next the periphery.

Species 221. (Fig. a, b, Mus. Cuming.)

**HELIX INGENS.** *Hel. testā imperforatā, discoideā, utrinque convexā, solidā, granulosa, rufā vel fulvâ, carinata, acutè carinatâ; spirā subelevatâ, obtusâ; anfractibus quinque, ultimo basi convexo; aperturā subtriangulari, shiningâ, carneâ; peristomate carneo, margine supero expanso, basali reflexo, dente valido munito, columellari stricto, dilatato, appresso, inæqualiter pluridentato.*

**THE LARGE HELIX.** Shell moderately inflated, somewhat sharply keeled, concave next the keel, minutely granulated, red or fulvous above, red beneath, rather obtuse, whorls five, convex beneath; aperture nearly



triangular, flesh-colour or fulvous-white, margins joined by a callous layer, upper margin flatly expanded, basal reflected, furnished with two teeth, sometimes only one.

ADAMS, Contributions to Conchology, No. 5. p. 76.

*Hab.* Jamaica.

This is the largest of this form of *Helix*, and, excepting *H. Chemnitziana*, the most sharply keeled. The umbilicus is sometimes entirely, sometimes only partially covered, and the dentition of the aperture varies. In the specimen represented at Fig. 221 *a*, there are two strong teeth and a slight indication of a third; in that at Fig. 221 *b*, which is equally an adult shell, there is but a single tooth, and that a small one.

Species 222. (Fig. *a*, Mus. Adams; and Fig. *b*,  
Mus. Cuming.)

HELIX BAINBRIDGEI. *Hel. testâ plerumque umbilicatâ, depressâ, discoideâ, solidâ, undique granulatâ, cinnamomeâ vel violacescente, basi fulvâ; spirâ vix elevatâ, obtusâ; anfractibus quinque ad sex, planis, ultimo rotundato, ad peripheriam sæpe albo-zonato, basi con-*

*ceiusculo; aperturâ perobliquâ, lunato-triangulari, carneâ; peristomate subincrassato, fusco-carneo, marginibus callo junctis, supero latè expanso, basali reflexo, subappresso, dente unico valido instructo, columellari per dilatato, umbilicum partim vel omnino obtegente.*

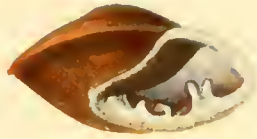
BAINBRIDGE'S HELIX. Shell generally umbilicated, depressed, discoid, solid, granulated throughout, cinnamon or violet-red, fulvous at the base; spire scarcely elevated, obtuse; whorls five to six, flat, the last rounded, often white-zoned at the periphery, rather convex at the base, aperture very oblique, lunately triangular, flesh-tinged; lip rather thickened, brown-flesh, margins joined by a callous layer, upper margin broadly expanded, basal reflected, slightly appressed, furnished with a single strong tooth, columellar margin much dilated, covering wholly or partially the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 11.

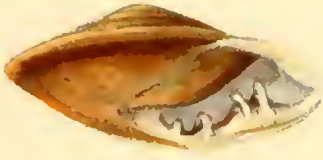
*Hab.* Jamaica. Demerara.

This species is mainly distinguished by the keelless rounded growth of the periphery. As in the preceding species, the umbilicus is sometimes partially, sometimes wholly covered.

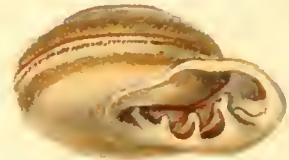




223.



224.



225.



226.



227.



228.



229.

# HELIX.

PLATE XLVIII.

Species 223. (Mus. Cuming.)

**HELIX CARA.** *Hel. testâ imperforatâ, depressâ, lenticulari, acutissimè carinatâ, lævigatâ aul minutissimè granulatâ, fusco-olivaceâ; spirâ obtusâ; anfractibus quinque, planis; aperturâ subtriangulari, marginibus callo tenui junctis; peristomate incrassato, depresso-reflexo, margine basali intus quadridentato, dentibus angustis, erectis, duobus anticis approximatis, basi callosis et elevatis.*

**THE PRECIOUS HELIX.** Shell imperforated, depressed, lens-shaped, very sharply keeled, smooth or very minutely granulated, brown-olive; spire obtuse; whorls five, flat; aperture subtriangular, margins joined by a thin callous layer; lip thickened, depressly reflected, basal margin four-toothed within, teeth narrow, erect, the two front teeth contiguous, callous and raised at their base.

ADAMS, Contributions to Conchology, No. 2. p. 29.

*Hab.* Jamaica.

An extremely interesting species, allied to the following, but readily distinguished on comparison. It is uniformly of smaller size, not so much flattened out at the periphery, and covered by a more horny kind of epidermis.

Species 224. (Mus. Cuming.)

**HELIX PERACUTISSIMA.** *Hel. testâ obtectè umbilicatâ, depressissimo-planâ, lenticulari, tenuiculâ, fuscâ, exilè granulatâ; spirâ obtusâ; anfractibus quinque, planis, ultimo in carinam lamelliformem acutissimam ad peripheriam expanso; aperturâ perdepresso-triangulari; peristomate reflexo, margine basali intus quadridentato, dentibus angustis, erectis, duobus anticis basi elevatis.*

**THE VERY SHARP HELIX.** Shell with a nearly covered umbilicus, very depressly flattened, lens-shaped, rather thin, brown, finely granuled; spire obtuse; whorls five, flat, expanded at the periphery into a very sharp lamelliform keel; aperture very depressly triangular; lip reflected, basal edge four-toothed within, teeth narrow, erect, the two front ones raised at the base.

ADAMS, Pro. Boston Nat. Hist. Soc. 1845, p. 15.

*Hab.* Jamaica.

Remarkably characterized by its depressed growth, the

last whorl being pinched and flattened round the periphery into a thin plate.

Species 225. (Mus. Cuming.)

**HELIX OKENIANA.** *Hel. testâ imperforatâ, orbiculatâ, utrinque convexâ, obtusè carinatâ, und que regulariter granulatâ, supernè fuscâ, basi pallidâ; anfractibus quinque ad sex, rotundato-planatis, ultimo antè umbilicâ basi profundè bi-scribiculato; aperturâ subtriangulâ, ellipticâ, coarctatâ; peristomate incrassato, margine basali intus quadridentato, dentibus angustis, erectis, duobus anticis approximatis, basi callosis et elevatis, ultimo supernè sulcato.*

**OKEN'S HELIX.** Shell imperforated, orbicular, convex on both sides, obtusely keeled, regularly granulated throughout, brown on the upper surface, pale on the lower; whorls five to six, rotundately flattened, last whorl deflected in front, deeply two-furrowed at the base; aperture nearly horizontal, elliptical, contracted; lip flesh-brown, thickened, margins joined by a callousness, upper margin expanded, basal reflected, three-toothed, teeth equidistant, front tooth grooved at the upper part.

PFEIFFER, Pro. Zool. Soc. 1845, p. 63.

*Hab.* Jamaica.

Distinguished by a somewhat depressly globose form with a light brown band beneath the periphery.

Species 226. (Mus. Cuming.)

**HELIX LINNEANA.** *Hel. umbilicatâ, depressâ, supra convexâ, infra rotundatâ, acutè carinatâ, pallidè fuscâ, supra rugoso-mulleatâ, infra cinlè et dilipè rugosâ; anfractibus quinque ad sex, lentè accrescentibus, planatis, ultimo basi subinflato, antè umbilicâ dèpresso-umbilico majusculo, cylindrico; aperturâ subtriangulâ, ad carinam canaliculatâ; peristomate incrassato, carnè, marginibus callo junctis, supra expanso, basali arcuato, reflexo, edentulâ, ultimo ascendente, subdilato.*

**THE LINNEAN HELIX.** Shell umbilicated, depressed, convex above, rounded beneath, sharply keeled, pale fulvous, rugosely indented above, minutely obliquely wrinkled beneath, whorls five to six, enlarging slowly, flattened, the last rather inflated at the base.

scarcely descending anteriorly; umbilicus rather large, cylindrical; aperture angularly lunar, channelled at the keel; lip thickened, flesh-tinged, margins joined by a callous layer, upper margin short, expanded, basal arched, reflected, columellar margin shortly descending, rather dilated.

PFIFFER, Pro. Zool. Soc. 1845, p. 43.

Hab. — ?

The habitat of this characteristic species, which is at present unique, in the collection of Mr. Cuming, is unknown, but it is here arranged with the large Jamaica *Helices*, because it partakes in some degree of the typical form of *H. ingens* and its congeners.

Species 227. (Mus. Cuming.)

HELIX CARACOLLA. *Hel. testâ imperforatâ, solidâ, conoideo-depressâ, striatâ, sub epidermide olivaceo-fuscâ vel nigricante-rufâ; spirâ obtusâ; anfractibus quinque ad sex, planiusculis, ultimo acutè carinato, basi convexiusculo; aperturâ subtriangulâ, intus albâ aut livido-cærulescente; peristomate incrassato, albo aut livido-cærulescente marginibus callo junctis, basali dilatato, umbilicum obtegente.*

THE CAP HELIX. Shell imperforated, solid, conoidly depressed, striated, red, beneath an olive-brown or blackish epidermis; spire obtuse; whorls five to six, rather flat, the last sharply keeled, rather convex at the base; aperture somewhat triangular, interior white or livid-blue; lip thickened, white or livid-blue, margins joined by a callous layer, basal margin dilated, covering the place of the umbilicus.

*Helix caracolla*, Linnaeus, Syst. Nat. (12th edit.) p. 1243.

*Helix tornata*, Born.

*Caracolla albilabris*, Lamarck.

Hab. West India Islands.

The lip and aperture of this ancient species are more frequently white, than of the dark livid-blue colour represented in the accompanying figure.

Species 228. (Mus. Cuming.)

HELIX SPENGLERIANA. *Hel. testâ imperforatâ, subgloboseâ, depressâ, solidâ, striatâ, nitidâ, pallidè castaneâ; spirâ parum elevatâ, obtusâ; anfractibus quinque ad sex, supremis planis, minutissimè granulatis, ultimis duobus convexis, ultimo medio obtusè carinato, basi convexiusculo; aperturâ perobliquâ, lunari, intus fuscâ; peristomate latè expanso, breviter reflexo, marginibus*

*callo nitido junctis, basali sinuoso, reflexo, subappresso, columellari per dilatato, adnato, umbilicum prorsus tegente.*

SPENGLER'S HELIX. Shell imperforated, somewhat globosely depressed, solid, striated, shining, pale chestnut; spire but little raised, obtuse; whorls five to six, the uppermost flattened and minutely granulated, the last two convex, the last obtusely keeled in the middle, slightly convex at the base; aperture very oblique, lunar, brownish within; lip broadly expanded, shortly reflected, margins joined by a callous layer, basal margin sinuous, reflected, rather appressed, columellar margin much dilated, adnate, covering the seat of the umbilicus.

Hab. Jamaica.

Scarcely distinguished from *H. Bainbridgei*, except in being of a more globosely convoluted form.

Species 229. (Mus. Cuming.)

HELIX LUCERNA. *Hel. testâ imperforatâ, orbiculari, glabrisculâ, supra convexo-planâ, rufescente-castaneâ. subtus inflatâ, olivaceo-fulvâ, minutè granulatâ; spirâ brevissimâ, suturâ lineari, marginalâ; anfractibus quinque, planulatis, ultimo convexo, obtusè carinato, anticè vix descendente; aperturâ latè lunari; peristomate simplici, marginibus callo tenuissimo junctis, supero expanso, subincrassato, columellari brevi, dilatato, umbilicum tegente, basali reflexo, calloso, bidentato, dentibus fere æqualibus, compressis.*

THE LAMP HELIX. Shell imperforated, orbicular, rather smooth, convexly flattened above and reddish chestnut, inflated beneath, olive-fulvous, minutely granulated; spire very short, suture linear, margined; whorls five, rather flattened, the last convex, obtusely keeled, scarcely descending anteriorly; aperture broadly lunar; lip simple, margins joined by a very thin callous layer, upper margin expanded, rather thickened, columellar margin short, dilated, covering the seat of the umbilicus, basal reflected, callous, two-toothed, teeth almost equal, compressed.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 13.

*Caracolla lucerna*, Lamarck.

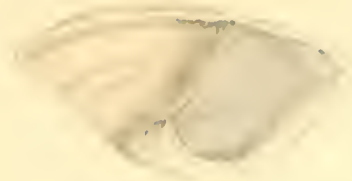
Eadem var. *Caracolla Julia*, Gray.

Hab. Jamaica.

This species approximates to the *H. acuta* type, and partakes of the same granulated sculpture and tone of colouring.



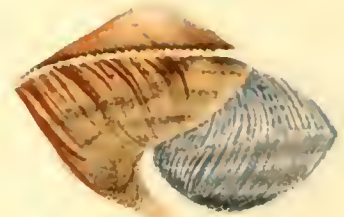




230



231 a



231 b



232



233 a



233 b



234



# HELIX.

## PLATE XLIX.

Species 230. (Mus. Cuming.)

**HELIX ANGULATA.** *Hel. testā imperforatā, depressā, superne planiusculā, ad peripheriam valdē turgidā, acutē carinatā, obliquē striatā, undique albidā; anfractibus quatuor, planulatis, rapidē accrescentibus, ultimo perinflato, juxta columellam declivem strictiusculam subcompresso; aperturā subrhombēā; peristomate subincrassato, breviter reflexo.*

**THE ANGLED HELIX.** Shell imperforated, depressed, rather flattened at the upper part, very much swollen and sharply keeled at the periphery, obliquely striated, white throughout; whorls four, flattened, enlarging rapidly, last whorl much inflated, slanting towards the columella, which is drawn out and a little compressed; aperture subrhomboid; lip rather thickened, slightly reflected.

FERUSSAC, Hist. Moll. pl. 61. f. 2.

*Helix inflata*, Deshayes.

*Caracolla inflata*, Lamarek.

*Caracolla angulata*, Gray.

*Hab.* Porto Rico.

Of a peculiar parachute-like form, the angled periphery of the last whorl being nearly on a plane with the spire, from the circumference of which the shell is attenuated gradually to the base of the columella.

Species 231. (Fig. a, b, Mus. Cuming.)

**HELIX OBLITERATA.** *Hel. testā imperforatā, orbiculatā, carinatā, supra subconicā, subtus valdē turgidā, granulosa, sub epidermide fuscescente albicante; anfractibus quatuor, subplanulatis; columellā albā, leviter arcuatā; aperturā unguolato-lunari; peristomate subincrassato, breviter reflexo, margine dilatato, calloso.*

**THE WORN HELIX.** Shell imperforated, orbicular, keeled, slightly conical at the upper part, much swollen beneath, granular, whitish beneath a light brown epidermis; whorls four, rather flattened; columella white, slightly arched; aperture angularly lunar; lip rather thickened, shortly reflected, margin dilated, callous.

FERUSSAC, Hist. Moll. pl. 61. f. 3.

*Hab.* Porto Rico.

The name given to this species by Ferrussac can only apply to a specimen in bad condition. The shell here re-

presented, from Mr. Cuming's collection, is covered with a fine fresh obliquely streaked epidermis.

Species 232. (Mus. Cuming.)

**HELIX JAMAICENSIS.** *Hel. testā imperforatā, subglobosā, striis incrementi obsoletis lineisque impressis obliquis confertissimis subreticulatā, rufo-castaneā, albo-zonatā, spirā parculā, brevi, obtusā; suturā lineari; anfractibus tribus ad quatuor, summis planis, ultimo permagno, inflato; aperturā lunato-ovalī; peristomate incrassato, expanso, marginibus callo tenui junctis.*

**THE JAMAICA HELIX.** Shell imperforated, subglobose, faintly reticulated with obsolete striae of growth and very close-set oblique impressed lines, reddish chestnut, zoned with white; spire rather small, short, obtuse; suture linear; whorls three to four, the uppermost flat, the last very large, inflated; aperture lunately oval; lip thickened, expanded, margin joined by a thin callosity.

CHEMNITZ, Conch. Cab. vol. xi. p. 115. pl. 129. f. 1140-1

*Hab.* Jamaica.

This well-known species stands out very conspicuously among the *Helices* of Jamaica, as being the only representative of a type, remarkable in its locality for form and size.

Species 233. (Mus. Cuming.)

**HELIX CEPÆ.** *Hel. testā imperforatā, depresso-globosā, obliquē irregulariter rugoso-striatā, rufā, pallidē fasciatā; spirā brevi; suturā levi; anfractibus quatuor ad quinque, converiusculis, ultimo subcarinato, juxta aperturam a latere compresso, sulcoque elongato, intus plicam validam formante, instructo; aperturā lunari; peristomate expanso, marginibus callo junctis, basali latē calloso, unidentato.*

**THE ONION HELIX.** Shell imperforated, depressly globose, obliquely irregularly rugosely striated, red, faintly banded; spire short; suture smooth; whorls four to five, slightly convex, the last faintly keeled, compressed at the side next the aperture, furnished with an elongated groove forming a strong fold internally; aperture lunar; lip expanded, margin joined by a callosity, basal margin broadly callous, one-toothed.

MULLER, Veriu. terr. et fluv. Hist. vol. ii. p. 94.

*Helix impressa*, De Blainville.

*Hab.* Island of Hayti.

Remarkably distinguished by a deeply impressed furrow behind the lip in the last whorl.

Species 234. (Mus. Cuming.)

HELIX PALLASIANA. *Hel. testâ umbilicatâ, compresso-orbiculari, discoideâ, supernè obliquè arcuatim rugosostriatâ, infra rotundatâ, albidâ, ad peripheriam fuscozonatâ; spirâ obtusâ; anfractibus quinque ad sex, convexiusculis, ultimo carinato, carinâ versus aperturam obsoletâ; aperturâ lunari-rotundatâ, labro re-*

*flexo, marginibus approximatis; umbilico amplo, profundo, pervio.*

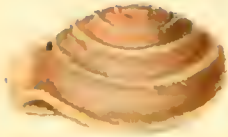
PALLAS'S HELIX. Shell umbilicated, compressly orbicular, discoid, obliquely arcuately rugosely striated at the upper part, rounded beneath, whitish, encircled with a brown zone at the periphery; spire obtuse; whorls five to six, rather convex, the last keeled, keel obsolete towards the aperture; aperture lunar-rounded; lip reflected, margins approximated; umbilicus large, deep, open.

PFEIFFER, Zeitschrift für Malac. 1850, p. 67.

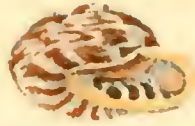
*Hab.* Bermuda.

The whorls of this species are characterized by a more than usually discoid tubular form of convolution, around a deep perspective umbilicus.





236 a



235



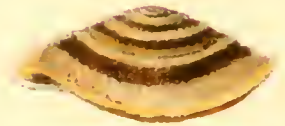
236 b



237



238 a



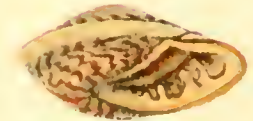
238 b



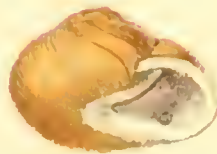
239 a



239 a



239 b



239 b

# HELIX.

PLATE L.

Species 235. (Mus. Cuming.)

**HELIX PICTURATA.** *Hel. testá imperforatá, depresso-orbiculari, ad peripheriam rotundatá, undique creberrimè granulosá, rufo-castaneá, epidermide tenui hydrophaná albidá undato-radiatá; spirá obtusá; anfractibus quinque ad sex, ultimo infra labrum quadri-scrobiculato; aperturá horizontali, angustè lunari; labro reflexo, basali calloso, quadridentato.*

**THE SPECKLED HELIX.** Shell imperforated, depressly orbicular, rounded at the periphery, very closely granuled throughout, red-chestnut, rayed in a zigzag manner with a light hydrophanous whitish epidermis; spire obtuse; whorls five to six, the last four-furrowed beneath the lip; aperture horizontal, narrowly lunar; lip reflected, basal lip callous, four-toothed.

ADAMS, Contributions to Conchology, No. 2. p. 30.

*Hab.* Jamaica.

Readily distinguished by a conspicuous zigzag pattern, derived from an overlying light hydrophanous epidermis.

Species 236. (Fig. a, b, Mus. Cuming.)

**HELIX SCHROETERIANA.** *Hel. testá imperforatá, depresso-orbiculari, ad peripheriam obtusè carinatá, solidá, obsolete granulatá, olivaceo-castaneá, zoná luteolá cingulatá; spirá convexá; anfractibus quinque, ultimo anticè deflexo, infra labrum scrobiculato; aperturá horizontali, oblongo-lunari; peristomate incrassato, reflexo, marginibus callo tenui junctis, basali expanso, appresso, intus quadridentato, dentibus duobus anticis basi approximatis et callosis.*

**SCHROETER'S HELIX.** Shell imperforated, depressly orbicular, obtusely keeled at the periphery, solid, obsolete granuled, olive-chestnut, encircled with a yellow zone; spire convex; whorls five, last whorl deflected in front, furrowed beneath the lip; aperture horizontal, oblong-lunar; lip thickened, reflected, margins joined by a thin callous layer, basal margin expanded, appressed, four-toothed within, the two front teeth approximated and callous at their base.

PFEIFFER, Pro. Zool. Soc. 1845, p. 44.

*Hab.* Jamaica.

A solid olivaceous-tinted shell, with the lip strongly coloured with a swarthy flesh-colour.

Species 237. (Mus. Cuming.)

**HELIX TUMIDA.** *Hel. testá imperforatá, globosá, rugosè striatá, nitidiusculá, albá, epidermide flosculatá tenui indutá; spirá parvulá, elevatá, apice nudá; anfractibus quinque, tumidis, ultimo perisomato; columella subverticali, elongatá, albo-calloso, basi antice aperturá amplá, lunato-rotundatá, intus carinata, peristomate simplici, recto, margine dextro arcuato, basali cum columellá angulum formante.*

**THE SWOLLEN HELIX.** Shell imperforated, globose, rugosely striated, rather shining, white, covered with a fulvous-olive epidermis; spire rather small, rounded, apex deprived of epidermis; whorls five, swollen, the last very large; columella subvertical, elongated, white-callous, slightly twisted at the base, aperture large, lunar-rounded, bluish within; lip simple, straight, right edge arched, basal edge forming an angle with the columella.

PFEIFFER, Pro. Zool. Soc. 1845, p. 130.

*Hab.* West Indies?

A light inflated shell, with a peculiarly contracted appressed columella.

Species 238. (Fig. a, b, Mus. Cuming.)

**HELIX SOROR.** *Hel. testá umbilicatá, depressá, orbiculari, acutè carinatá, obliquè striatá, granulatá, castaneofuscá, medio latè albulo-cingulatá; anfractibus quinque ad quinque, planulatis, ultimo anticè deflexo, infra labrum convexo, anticè scrobiculato; aperturá horizontali, obliquatá; peristomate subincrassato, argenteo-calloso, marginibus supero sinuoso, expanso, basali reflexo, dentibus mediocrem semitegente, dentibus anterioribus lamelliformibus, intrantibus arcuato.*

**THE SISTER HELIX.** Shell umbilicated, depressly orbicular, sharply keeled, obliquely striated, granuled, violet-brown, broadly encircled with white round the middle; whorls four to five, rather flat, the last deflected in front, but little convex at the base, furrowed anteriorly; aperture horizontal, oblique, lip rather thickened, margins joined by a callous layer, upper margin sinuous, expanded, basal edge half-covering a middle and others, armed with two entering teeth, which are long, firm and equidistant.

FERRUSSAC, Hist. Moll. pl. 54. f. 4

*Carocolla soror*, Wood.

*Carocolla quadridentata*, Menke.

*Hab.* Jamaica.

Remarkable for its compressed lens-shaped form, flattened out at the periphery into a very thin sharp keel.

Species 239. (Fig. *a, b*, Mus. Cuming.)

HELIX AURICOMA. *Hel. testā imperforatā, depresso-globosā, solidū, supernè plicis obliquis confertis sculptā, basi nitidā, striatā, citrinā; spirā brevi, obtusā; suturā mediocri; anfractibus quatuor ad quinque, convexiusculis, utlimo inflato; aperturā irregulari, coarctatā, intus albā; peristomate incrassato, margine dextro arcuato, columellari dilatato, stricto, peculiariter appresso, subexcavato.*

THE GOLDEN HAIR HELIX. Shell imperforated, depressly globose, solid, sculptured at the upper part with close-set oblique folds, striated and shining at the base, citron-colour; spire short, obtuse; suture middling; whorls four to five, rather convex, the last inflated; aperture irregular, contracted, interior white; lip thickened, right margin arched, columellar margin dilated, long drawn out, peculiarly appressed, slightly excavated.

FERUSSAC, *Hist. Moll.* pl. 46. f. 7-9.

*Helix Bonplandi*, Valenciennes (not of Lamarck).

*Eadem minor. Helix microstoma*, Lamarck.

*Helix noscibilis*, Férussac.

*Hab.* Cuba.

The small variety, Fig. 239 *b*, described by Férussac and Lamarck as a distinct species, is of rather more solid growth. The species is mainly characterized by its contracted aperture, and by the hollow appressed growth of its basal margin.

Species 240. (Fig. *a, b*, Mus. Cuming.)

HELIX CHITTYANA. *Hel. testā imperforatā, depresso-orbiculari, lenticulari, fusco-rufā, ad peripheriam acutè carinatum albicante, epidermide tenui hydrophanā in strigis tenuibus, acutè undatis, supra et infra profusè radiatā; spirā obtusā; anfractibus quatuor ad quinque, planulatis; aperturā horizontali, oblongo-lunari; peristomate reflexo, fusco-carneo, marginibus callo tenui junctis, basali incrassato, intus quadridentato.*

CHITTY'S HELIX. Shell imperforated, depressly orbicular, lens-shaped, brown-red, whitish at the sharply keeled periphery, profusely rayed with a thin hydrophanous epidermis deposited in thin sharply zigzag streaks; spire obtuse; whorls four to five, flattened; aperture horizontal, oblong-lunar; lip reflected, brow-flesh. margins joined by a thin callous layer, basal margin thickened, four-toothed within.

ADAMS, *Contributions to Conchology*, No. 2. p. 30.

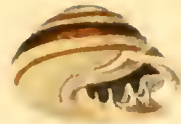
*Hab.* Jamaica.

This very characteristic new species is named by Professor Adams in honour of the Hon. E. Chitty, Chairman of Quarter Sessions, Jamaica, an assiduous conchologist, by whom he was greatly assisted during his researches in that island.









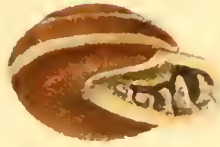
2+1



2+2 a



2+2 b



2+3



2+4 a



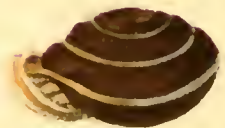
2+4 b



2+5



2+6 a



2+6 b



2+7

# HELIX.

PLATE LI.

Species 241. (Mus. Cuming.)

**HELIX BRONNI.** *Hel. testâ imperforatâ, semiglobosâ, tenuistriatâ, punctatâ, nitidulâ, castaneâ, ad apicem obtusum pallidâ; anfractibus quinque, convexis, ultimo obsolete carinato, basi planulato, granuloso, et cœrulescente-albido, fasciâ castaneâ unicâ infra carinam, anticè depresso, profundè scrobiculato; aperturâ subhorizontali, elliptico-oblongâ; peristomate latè incrassato, marginibus callo tenui junctis, basali dilatato, reflexo, fusco-maculato, intus quadridentato.*

**BRONN'S HELIX.** Shell imperforated, semiglobose, finely striated, punctured, shining, chestnut, pale at the apex which is obtuse; whorls five, convex, the last obsolete keeled, rather flattened, granulated and bluish-white at the base, ornamented with a single chestnut band beneath the keel, deflected anteriorly, deeply furrowed; aperture nearly horizontal, elliptically oblong; lip broadly thickened, margins joined by a thin callous layer, basal margin dilated, reflected, brown-blotched, four-toothed within.

PFEIFFER, Pro. Zool. Soc. 1845, p. 131.

*Helix sinuata, var.,* Férussac.

*Hab.* Jamaica.

Distinguished by its compact globose form and absence of chestnut colouring at the base.

Species 242. (Fig. a, b, Mus. Cuming.)

**HELIX INVALIDA.** *Hel. testâ imperforatâ, subglobosâ, undique minutè granulatâ et punctatâ, ad peripheriam carinâ tenui cingulatâ, rufo-castaneâ, zonulâ albâ medio ornatâ; spirâ elevatâ, obtusâ; anfractibus quinque, rotundatis, ultimo anticè depresso, tri-scrobiculato; aperturâ horizontali, oblongo-lunari, marginibus approximatis, basali reflexo, appresso, intus quadridentato.*

**THE WEAK HELIX.** Shell imperforated, subglobose, minutely granulated and punctured throughout, encircled round the periphery with a fine keel, reddish chestnut, ornamented with a narrow white zone round the middle; spire raised, obtuse; whorls five, rounded, the last deflected in front, three-furrowed; aperture horizontal, oblong-lunar, margins approximated, basal margin reflected, appressed, four-toothed within.

ADAMS, Contributions to Conchology, No. 5, p. 79.

Eadem var. *H. candescens*, Adams.

*Hab.* Jamaica

This, and one or two other allied species, are characterized by a fine thread-like keel which encircles the last whorl in the centre of a narrow white band.

Species 243. (Mus. Cuming.)

**HELIX SINUATA.** *Hel. testâ imperforatâ, depressè globosâ, solidâ, undique minutè granulatâ, saturetè castaneâ fasciâ pallidâ cingulatâ, basi pallidâ, rotundâ, spirâ semiglobosâ; anfractibus quinque, convexis, ultimo carinato, basi convexo, anticè depresso, rotundè striato, reflexo; aperturâ horizontali, angustè lunari; peristomate latè incrassato, marginibus callo tenui junctis, supero expanso, basali appresso, quadridentato, dentibus compressis, intrantibus.*

**THE SINUATED HELIX.** Shell imperforated, depressly globose, solid, minutely granulated throughout, dark chestnut, encircled with a faint band, violet-tinged at the base; spire semiglobose; whorls five, convex, the last keeled, convex at the base, deflected anteriorly, much drawn out, and furrowed; aperture horizontal, narrowly lunar; lip somewhat thickened, margins joined by a thin callous layer, upper margin expanded, basal margin appressed, four-toothed, teeth compressed, entering.

MULLER, Verm. terr. et fluv. Hist. vol. ii, p. 18

*Hab.* Jamaica.

This may be regarded as the original type of the characteristic group of Jamaica *Helices*, of which others are represented in the accompanying plate.

Species 244. (Fig. a, b, Mus. Cuming.)

**HELIX STRANGULATA.** *Hel. testâ imperforatâ, globosâ, solidâ, undique minutè granulatâ et punctatâ; apice castaneâ, basi pallidâ, rotundâ, spirâ elevatâ, anfractibus quinque, ultimo anticè depresso, tri-scrobiculato; aperturâ oblongo-lunari, angustè lunari, marginibus approximatis, basali reflexo, appresso, albis truncatis, dentibus compressis intrantibus.*

**THE STRANGLED HELIX.** Shell imperforated, globose, solid, minutely granulated and punctured throughout, reddish-chestnut, pale and greenish at the base; spire obtuse, whorls five, the last deflected anteriorly and

broadly furrowed; aperture oblong-lunar, contracted; lip dilated, margins approximated, basal margin broadly reflected, appressed, three-toothed within, teeth lamellar, entering.

ADAMS, Contributions to Conchology, No. 2. p. 30.

*Hab.* Jamaica.

This species is of a peculiarly globose form, with the aperture contracted and the peristome unusually broadly dilated.

Species 245. (Mus. Cuming.)

HELIX VALIDA. *Hel. testá imperforatá, subglobozá, basi planulatá, ad peripheriam tenuicarinatá, undique minutè granulatá et punctatá, rufo-castaneá, zonulá pallidá cingulatá, basi pallidá, virescente; spirá obtusá; anfractibus quinque ad sex, ultimo anticè deflexo et scrobiculato; aperturá oblongo-lunari, valdè dilatátá, marginibus approximatis, callo tenui junctis, supero dilatato, basali calloso, latè reflexo, intus quadridentato.*

THE STRONG HELIX. Shell imperforated, subglobose, flattened at the base, finely keeled at the periphery, minutely granulated and punctured throughout, reddish-chestnut, encircled with a pale zone, pale and greenish at the base; spire obtuse; whorls five to six, the last deflected anteriorly and furrowed; aperture oblong-lunar, much dilated, margins approximated, joined by a thin callous layer, upper margin dilated, basal margin callous, broadly reflected, four-toothed within.

ADAMS, Contributions to Conchology, No. 5. p. 77.

*Hab.* Jamaica.

A large robust species, chiefly distinguished by the prolonged dilated growth of the aperture.

Species 246. (Fig. a, b, Mus. Adams.)

HELIX ANOMALA. *Hel. testá umbilicatá, orbiculari, undique minutè granulosá et punctatá, purpureo-castaneá, cariná tenui albicante ad peripheriam cingulatá; spirá obtusá; unfractibus quinque, convexis, ultimo basi rotundato, anticè reflexo, quadri-scrobiculato; umbilico profundo, pervio; aperturá horizontali, trigono-oblongá, margine integro, incrussato, calloso, carneo-fusco, pecu-*

*liariter elevato, intus quadridentato, dentibus intrantibus, subocculis.*

THE ANOMALOUS HELIX. Shell umbilicated, orbicular, minutely granulated and punctured throughout, purple-chestnut, encircled at the periphery with a thin whitish keel; spire obtuse; whorls five, convex, the last rounded at the base, deflected in front, four-furrowed; umbilicus deep, open; aperture horizontal, triangularly oblong, margin entire, thickened, callous, flesh-brown, peculiarly raised, four-toothed within, teeth entering, nearly hidden.

ADAMS, Contributions to Conchology, No. 9. p. 171.

*Hab.* Jamaica.

This species belongs to the same natural type as the others of this plate, but is distinguished by a remarkable peculiarity in the aperture. Instead of the margin being divided and spread in a callous layer over the axis of the whorls, it is entire and thickly elevated after the manner of *H. labyrinthus*, leaving an open axial umbilicus.

Species 247. (Mus. Cuming.)

HELIX CONSANGUINEA. *Hel. testá nunc imperforatá, nunc umbilicatá, orbiculari, solidá, subdepressá, undique granulosá et punctatá, ad peripheriam cariná tenui filiformi cinctá; spirá obtusá; anfractibus quinque, convexis, ultimo anticè deflexo, quadri-scrobiculato; aperturá horizontali, subdilatátá, marginibus callo tenui junctis, supero parva reflexo, basali reflexo, oppresso, intus quadridentato, dentibus lamellaribus, erectis.*

THE ALLIED HELIX. Shell sometimes imperforated, sometimes umbilicated, orbicular, solid, somewhat depressed, granulated and punctured throughout, encircled at the periphery with a thin thread-like keel; spire obtuse; whorls five, convex, the last deflected in front, four-furrowed; aperture horizontal, somewhat dilated, margins joined by a thin callous layer, upper margin but little reflected, basal margin reflected, appressed, four-toothed within, teeth lamellar, erect.

ADAMS, Contributions to Conchology, No. 9. p. 170.

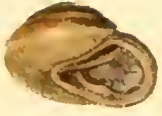
*Hab.* Jamaica.

This is rather a doubtful species, intermediate between *H. valida* and *sinuata*.

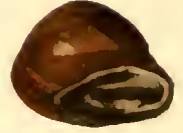




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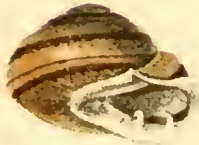
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249.



251



252



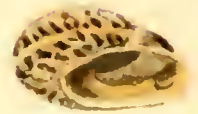
252 b.



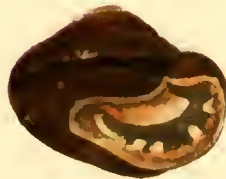
253



254



255



256



# HELIX.

PLATE LII.

Species 248. (Mus. Cuming.)

**HELIX LYNCHNUCHUS.** *Hel. testâ imperforatâ, orbiculato-conoideâ, solidâ, fuscâ, undique granulatâ; spirâ conoideâ, obtusâ; suturâ lineari; anfractibus quinque, subplanulatis, ultimo acutè carinato, anticè subitò deflexo, infra carinam scrobiculato; aperturâ subrhombeâ; peristomate fusco, incrassato, marginibus callo crasso junctis, supero vix expanso, basali dilatato, reflexo. intus bidentato, dentibus intrantibus, antico multo validiore.*

**THE CANDLESTICK HELIX.** Shell imperforated, orbicularly conoid, solid, brown, granulated throughout; spire conoid, obtuse; suture linear; whorls five, rather flattened, the last sharply keeled, suddenly deflected in front, furrowed beneath the keel; aperture subrhomboid; lip brown, thickened, margins joined by a thick callous layer, upper margin expanded, basal dilated, reflected, two-toothed within, teeth entering, front tooth much the stronger.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 51.

*Hab.* Martinique, Guadaloupe.

A compact trochiform shell, sharply keeled at the periphery, beneath which part the shell is concave and then rounded.

Species 249. (Mus. Cuming.)

**HELIX ISABELLA.** *Hel. testâ imperforatâ, orbiculari, subgloboâ, lævigatâ aut minutè obliquè striatâ, suturâ lineari, fusco-olivaceâ, ad peripheriam pallidè fasciatâ; spirâ obtusâ; anfractibus quinque, convexis; aperturâ ovato-lunari, coarctatâ; peristomate incrassato, livido-fusco, marginibus callo junctis, supero introrsum dilatato, basali subobscurè unidentato.*

**THE ISABELLA HELIX.** Shell imperforated, orbicular, subglobose, smooth or minutely obliquely striated, suture linear, brown-olive, faintly banded at the periphery; spire obtuse; whorls five, convex; aperture ovately lunar, contracted; lip thickened, livid-brown, margins joined by a callous layer, upper margin dilated inwardly, basal margin rather obscurely one-toothed.

FERUSSAC, Hist. Moll. pl. 47. f. 2.

*Hab.* Barbadoes.

This is very closely allied to the following species, and should probably be referred to it as a variety.

Species 250. (Mus. Cuming.)

**HELIX DENTIENS.** *Hel. testâ imperforatâ, subgloboâ, solidâ, obliquè striatâ, nigrescente-fuscâ; suturâ lineari, anfractibus quinque, planiusculis, ultimo subangulato, anticè gibbo; aperturâ subhorizontali, coarctatâ, transversè oblongâ; peristomate latè incrassato, marginibus callo junctis, supero introrsum dilatato, basali irregulariter denticulato.*

**THE TEETHING HELIX.** Shell imperforated, subglobose, solid, obliquely striated, blackish-brown. Suture linear; whorls five, rather flattened, the last subangular, gibbous anteriorly; aperture subhorizontal, contracted, transversely oblong; lip broadly thickened, margins joined by a callous layer, upper margin dilated inwardly, basal irregularly toothed.

FERUSSAC, Hist. Moll. pl. 48. f. 2, and pl. 48. f. 1.

*Hab.* Martinique, Guadaloupe.

Of a more solid robust form than the preceding, but participating in the same characters, one of which worth noting is that the upper margin of the aperture is served inwardly.

Species 251. (Mus. Cuming.)

**HELIX ORBICULATA.** *Hel. testâ imperforatâ, subgloboâ, solidâ, striatâ, circumfusâ; spirâ conoideâ, obtusâ; anfractibus quinque, convexis, ultimo obsolete angulato, ad peripheriam circumfusâ nigricante-rufis circumcincto, basi peristomate dilatato, per-obliquâ, lunato-ellipticâ; peristomate incrassato, reflexo, fusco-violaceo, marginibus callo junctis, basali obscure latè transversè denticulato.*

**THE ORBICULAR HELIX.** Shell imperforated, subglobose, solid, striated, greenish-brown, smooth or convex, obtuse; whorls five to six, rather flattened, the last obsolete angled, encircled with two narrow blackish-red zones at the periphery, rather flat at the base; aperture very oblique, laterally contracted, lip thickened, reflected, brownish-violet, margins joined by a callous layer, basal margin obscurely one-toothed transversely toothed.

FERUSSAC, Hist. Moll. pl. 47. f. 4.

*Hab.* Guyana, Cayenne.

The lower of the two characteristic bands which encircle this shell, falls below the suture, so that it is concealed in all but the last whorl.

Species 252. (Fig. a, b, Mus. Cuming.)

**HELIX GRANIFERA.** *Hel. testâ imperforatâ, orbiculari, depresso-conicâ, solidâ, pallidè brunnâ, granis parvis albis asperâ; spirâ convexâ, obtusâ; a fractibus quinque, concinuisculis, ultimo acutè carinato, anticè deflexo, subgibbo, basi planis, rix verruculatis; aperturâ subhorizontali, transverse triangulari-ovali; peristomate albè, incrassato, marginibus callo albo junctis, supro convexo, reflexo, sub, basali latè reflexo, stricto, dente dentibus non intrantibus, antico non intrante.*

**THE GRAINED HELIX.** Shell imperforated, orbicular, depressly conical, solid, pale brown, sprinkled with small white grains; spire convex, obtuse; whorls five, rather convex, the last sharply keeled, deflected in front, rather gibbous, flat at the base, scarcely furrowed; aperture nearly horizontal, transversely triangularly oval; lip white, thickened, margins joined by a callous layer, upper margin expanded, a little reflected, basal margin broadly reflected, furnished with two teeth not entering.

GRAY, Pro. Zool. Soc. 1834, p. 68.

*Hab.* Trinidad, Granada; Beck.

Very closely resembling *H. lima*, from which it differs in being more conspicuously grained, and in having two teeth within the aperture.

Species 253. (Mus. Cuming.)

**HELIX DISCOLOR.** *Hel. testâ imperforatâ, depresso-gibbâ, striatâ, obsolete granulatâ, rufocastaneâ; spirâ semiglobosâ; a fractibus quatuor, superioribus pallidè, ultimo inflato, angulato, supra angulum fasciâ pallidè ornato, subtus saturatiore, anticè gibbo, subitè deflexo; aperturâ irregulariter ovali; peristomate latè incrassato, reflexo, marginibus callo junctis, supro dilatato, basali dente obliquo calloso non intrante.*

**THE DISCOLOURED HELIX.** Shell imperforated, depressly globose, striated, obsolete granulated, reddish-brown; spire semiglobose; whorls four, the uppermost rather flattened, the last inflated, angled, ornamented with a light band above the angle, darker beneath, gibbous in front and suddenly deflected; aperture irregularly oval; lip broadly thickened, reflected, margins joined by a callous layer, upper margin dilated, basal margin furnished with an oblong callous tooth.

FERUSSAC, Hist. Moll. pl. 46, f. 3-6.

*Hab.* Trinidad, Martinique.

This well-known species is found not unfrequently of larger dimensions than the specimen here figured.

Species 254. (Mus. Cuming.)

**HELIX FORMOSA.** *Hel. testâ imperforatâ, semiglobosâ,*

*castaneâ, fasciâ fuscâ et strijs obliquis promiscuis stramineis vel albidis ornatâ; a fractibus quatuor ad quinque, plerumque, ultimo anticè subitè deflexo, basi granuloso; aperturâ subhorizontali, angustâ, ovali, intus fulvâ; peristomate inflexibilissimi, marginibus acutis, calloso, columellari introrsè dilatato, incrassato, latè dentato.*

**THE BEAUTIFUL HELIX.** Shell imperforated, semiglobose, chestnut, ornamented with fulvous bands and oblique promiscuous white and straw-coloured streaks, whorls four to five, rather flattened, the last suddenly deflected anteriorly, granular at the base; aperture nearly horizontal, narrow, oval, fulvous within; lip funnel-like, with the margins sharp and continuous, columellar margin inwardly dilated, thickened, broadly toothed.

*Hab.* West Indies?

Remarkably characterized by its oval continuous aperture, and pretty white streaked pattern.

Species 255. (Mus. Cuming.)

**HELIX PUNCTATA.** *Hel. testâ imperforatâ, conico-globosâ, solidâ, obliquè antrorsè plicatulo-striatâ, castaneâ, zonâ pallidâ circumdatâ; spirâ obtusè conicâ, a fractibus quinque ad sex, ultimo basi inflato, anticè subitè deflexo, supro gibbo et constricto; aperturâ obliquâ, lunari; peristomate fuscocastaneo, crasso, marginibus callo lato, dente obliquo unico obliquo aristo, junctis, supro brevi, stricto, dextro bidentato, basali dente majore et minore non intrante.*

**THE PUNCTURED HELIX.** Shell imperforated, conoidly gibbous, solid, obliquely plicately striated in the anterior direction, dark chestnut, encircled with a faint thin zone; spire obtusely conoid; whorls five to six, the last inflated at the base, suddenly deflected in front, gibbous, and drawn out at the upper part; aperture oblique, lunar; lip brown-orange, thick, margins joined by a broad callous layer with a large oblique oblong tooth, upper margin short, drawn out, right margin two-toothed, basal margin bearing a large tooth and other smaller ones.

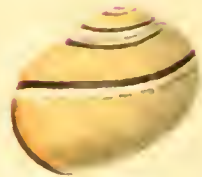
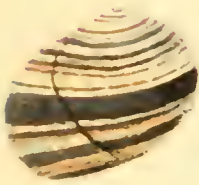
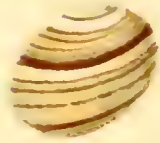
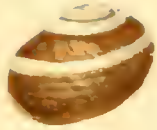
BOHN, Test. Mus. Cas. Vindobonensis, p. 372, pl. 14, f. 17, 18.

*Helix sax dentata*, Chemnitz.*Helix hippocisterna*, Lamarck.*Hab.* Martinique.

The plicated sculpture of this species is peculiar in running in the anterior direction, the reverse of that which marks the growth of a shell. Its great columellar tooth is also remarkable.







*256 A*

*256 I*

*256 F*

*255 I*

*256 I*

## HELIX.

### PLATE LIII.

Species 256. (Fig. *a* to *k*, Mus. Cuming.)

**HELIX PICTA.** *Hel. testā imperforatā, sub-Neriteformi, solidulā, glabrā, variè coloratā, fasciis variis et interdum strigis remotis varicosis ornatā; spirā brevi; anfractibus quatuor, convexis, ultimo inflato; columellā arcuatā, callosā; aperturā subamplā, lunato-orali, fauce lacteā aut violaceā; peristomate simplici, intus subincrassato, purpureo-nigro vel coccineo limbato.*

**THE PAINTED HELIX.** Shell imperforated, somewhat Nerite-shaped, rather solid, smooth, variously coloured, ornamented with variously coloured bands and sometimes with remote varicose stripes; spire short; whorls four, convex, the last inflated; columella arched, callous; aperture rather large, lunar-oval, interior milk-white or violet; lip simple, rather thickened within, and edged with purple-black or scarlet-red.

BORN, Test. Mus. Cæs. Vindobonensis, p. 386. pl. 15. f. 17, 18.

*Helix venusta*, Gmelin.

*Cortex mali citrei*, Chemnitz.

*Hab.* Cuba.

This is, perhaps, the most varicoloured of all the land

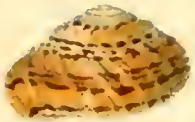
snails. The following varieties, selected from Mr. Cuming's cabinet, represent the principal colours. Fig. 256 *a*, a plain unshelled bright yellow, bordered with a line of deep scarlet-red. Fig. 256 *b*, a bright chestnut, with a sutural and a central white band. Fig. 256 *c*, similar to the preceding, except that the chestnut instead of being uniform is broken up into irregular bands and dotted lines upon a straw-coloured ground. Fig. 256 *d*, a rich orange-vermilion, with a contiguous black and white central band. Fig. 256 *e*, spotted with various irregular blue-black and chestnut bands upon a white ground. Species 256 *f*, dark black-vermilion, with a central white fine thread-like band. Fig. 256 *g*, olive-green with a sutural and a central white band, lip and suture edged with black. Fig. 256 *h*, bright yellow, with a sutural and a central black band, lip edged with black. Fig. 256 *i*, a delicate salmon-colour, with a sutural and a contiguous black and white central band, the latter having a white band beneath it, lip edged with black. Fig. 256 *j*, a bright yellow, with a central white thread-like band, a sutural black band, and a black varicose band, lip edged with black.







256. a



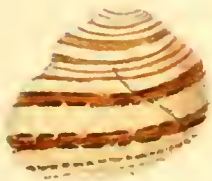
257. b



257. c



257. d



258. a



258. b



259. a



260. a



260. b



260. c



# HELIX.

## PLATE LIV

Species 257. (Fig. a to d, Mus. Cuning.)

**HELIX ALAUDA.** *Hel. testâ imperforatâ, depresso-globosâ, solidiusculâ, nitidâ, albido-griseâ, fulvo-cærulescente et castaneo zonalâ et marmoratâ; anfractibus quinque, convexis, ultimo anticè subitò deflecto, basi circa columellam excavato; aperturâ lunato-subcirculari, intus livido-fulvâ; peristomate simplici, plerumque roseo, margine supero expanso, columellari dilatato, obliquè interdum dentato.*

**THE LARK HELIX.** Shell imperforated, depressly globose, rather solid, shining, light grey, zoned and marbled with fulvous-blue and chestnut; whorls five, convex, the last suddenly deflected in front, excavated at the base around the columella; aperture lunar-subcircular, livid-fulvous within; lip simple, frequently tinged with rose, upper margin expanded, columellar dilated, sometimes obliquely toothed.

FERUSSAC, Hist. Moll. pl. 103. f. 2, 3.

*Helix purpuragula*, Lea.

*Hab.* Cuba.

The four specimens represented in the accompanying plate are selected to show how extremely variable this species is in colouring, yet it is very constant in form and may be readily distinguished with care.

Species 258. (Fig. a, b, Mus. Cuning.)

**HELIX VERSICOLOR.** *Hel. testâ imperforatâ, subglobo-sâ, glabriusculâ, albâ, lineis fuscis citrinis et roseis elegantissimè circumdatâ; spirâ prominente; anfractibus quatuor, convexis, ultimo inflato; columellâ subdilatâ, roseâ; aperturâ lunato-subcirculari, fauce rosâ; peristomate simplici, acuto.*

**THE MANY-COLOURED HELIX.** Shell imperforated, subglobose, rather smooth, white, elegantly encircled with brown, citron, and rose lines; spire prominent; whorls four, convex, the last inflated; columella subdilated, pink; aperture lunately subcircular, pink in the interior; lip simple, sharp.

BORN, Test. Mus. Cæs. Viindobonensis, p. 386. pl. 16. f. 9, 10.

*Hab.* Cuba.

A light subporcelain shell, very prettily painted with dark and coloured lines and bands upon a white ground, the aperture and vicinity of the columella being stained with deep pink.

Species 259. (Mus. Cuning.)

**HELIX BONPLANDII.** *Hel. testâ anguste umbilicata, orbiculato-convexâ, fulvescente-fuscâ, nigro-roseâ et circumdatâ, striis incrementi et spirâbus transversis decussatâ; anfractibus quatuor ad quinque, convexis, intus; aperturâ transversè ovali, intus fusco-violetâ; peristomate simplici, margine dextro dilatato, basi subincrassato, ad columellam reflexo, umbilico legitè.*

**BONPLAND'S HELIX.** Shell narrowly umbilicated, orbicularly convex, fulvous-brown, faintly marked with two blackish bands, decussated with very fine spiral striae and striae of growth; whorls four to five, rather convex; aperture transversely oval, brownish-violet within; lip simple, right margin dilated, slightly thickened at the base, reflected at the columella almost covering the umbilicus.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. vii. p. 40. *Hab.* Cuba.

The margins of the aperture are not united by a callos layer in this species, but they are more than usually approximated.

Species 260. (Fig. a, b, c, Mus. Cuning.)

**HELIX MUSCARUM.** *Hel. testâ imperforatâ, globosâ, solidâ, lævigatâ, nitidâ, luteâ vel albâ, fasciis raris et punctisque griseis irregulariter conspersâ; anfractibus quatuor ad quinque, convexis; columellâ dilatâ, dilatâ, albâ vel rosâ, arcu columellari rosâ; aperturâ subverticali, rotundato-lunari, fusco intus roseâ; peristomate simplici, obtuso, intus subulato; marginibus callo tenui junctis.*

**THE FLY-SPOTTED HELIX.** Shell imperforated, globose, solid, smooth, shining, yellow or white, ornamented with various bands and irregularly sprinkled with grey dots; whorls four to five, convex, columella rather straight, dilated, white or pink, area of the columella pink; aperture subvertical, rotundately lunar, interior sometimes pink; lip simple, obtusely thickened inwardly, margins joined by a thin callos layer.

LEA, Observations, vol. i. p. 163. pl. 19. Fig. 10.

*Helix caraiolor*, D'Orbigny.

*Hab.* Cuba.

This characteristic prominently dotted specimen of the same porcelain-like type as *Helix muscarum*, and is coloured with the same delicate pink about the area of the columella.







261



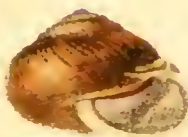
262 a



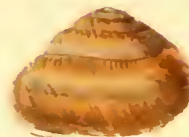
262 b



263



264 a



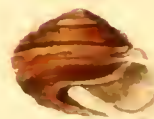
264 b



265



266 a



266 b



267

# HELIX.

PLATE LV.

Species 261. (Mus. Cuming.)

**HELIX AVELLANA.** *Hel. testâ imperforatâ, conoideo-globosâ, crassâ, ponderosâ, sublævigatâ, castaneâ, interdum albo irregulariter radiatâ et variegatâ; spirâ conoideâ, obtusâ; anfractibus quinque, convexis, ad suturam profundam plerumque plicatulis et albo-fasciatis, ultimo ventricoso, anticè viz descendente; aperturâ obliquâ, parvâ, subsemicirculari; peristomate subrecto, intus incrassato, marginibus callo junctis, columellari lato, reflexo, appresso.*

**THE PELBERT HELIX.** Shell imperforated, conoidly globose, thick, ponderous, rather smooth, chestnut, sometimes irregularly rayed and variegated with white; spire conoid, obtuse; whorls five, convex, white-banded and generally finely plaited at the suture, which is deep, last whorl ventricose, scarcely descending in front: aperture oblique, rather small, somewhat semicircular; lip rather straight, thickened within, margins joined by a callosity, columellar margin broad, reflected, appressed.

FERTISSAC, Hist. Moll. pl. 103. f. 4, 5.

*Hab.* — ?

A thin solid shell, marked obliquely with fine chestnut lines.

Fig. 262. (Mus. Cuming.)

The shell here represented proves to be a variety of *H. Gussœi*.

Species 263. (Mus. Cuming.)

**HELIX PARRIANA.** *Hel. testâ imperforatâ, globoso-conicâ, crassâ, spirâlitèr sulcatâ, fulvo-rubrà, zonâ albidâ et fuscâ cinctâ; spirâ elevatâ, conicâ; anfractibus sex ad septem, convexiusculis, ultimo subangulato, anticè gibbo, ad aperturam constricto: aperturâ parvâ, obtusè triangulari: peristomate incrassato, breviter reflexo, margine dextro sinuoso, columellari strictiusculo, callo introrsum caloso.*

**PARRA'S HELIX.** Shell imperforated, globosely conical, thick, spirally grooved, fulvous-red, encircled with a whitish or brown zone: spire raised, conical; whorls six to seven, rather convex, the last slightly angled, gibbous anteriorly, drawn out at the aperture: aperture small, obtusely triangular; lip thickened, shortly

reflected, right margin sinuous, columellar margin rather drawn out, inwardly rolled about the middle.

D'ORBIGNY, Hist. Moll. Cuba, vol. 1, p. 146, pl. 7, f. 7-9.

*Hab.* Cuba.  
This species is chiefly characterized by its spiral grooving.

Species 264. (Mus. Cuming.)

**HELIX SUPERTENTIA.** *Hel. testâ imperforatâ, conoideo-globosâ, subconicâ, sublævigatâ, griseo-fulvâ, intus impressis concentricis sublimatis, reflexo-reflexo, radiis pallidè unijunctis, ex deorsum hydræpennis radiatim indutâ; suturâ profundâ, crassâ; anfractibus quinque, convexis, aperturâ lunari-ovalâ, intus fuscâ; peristomate recto, margine superiore reflexo, intus incrassato, reflexo, ultimo sinuoso, callo introrsum caloso.*

**THE COVERED HELIX.** Shell rather widely conoid, orbicularly conoid, rather solid, slightly depressed with striae of growth and impressed concentric lines reddish-fulvous, with a faint band round the middle, radiately covered with a hydræpennis of dense suture deep, erenulated, whorls five, convex, aperture lunar-oval, drawn within, lip whitish, upper margin expanded, basal thickened, columellar margin covering a narrow umbilicus.

PFEIFFER, Zeitschrift für Malak. 1847, p. 173.

*Hab.* Cuba.

This species approximates in some measure to the form of North American type of *Helix*.

Species 265. (Mus. Cuming.)

**HELIX SAGRATA.** *Hel. testâ imperforatâ, conoideo-globosâ, Trifurcâ, crâssâ, peristomate spirâlitèr sulcatâ, intus interstitiis radiatim radiis, sublimatis, pallidè unijunctis; spirâ conicâ; anfractibus sex ad septem, anticè gibbo, ultimo subangulato, ad aperturam constricto: aperturâ parvâ, obtusè triangulari: peristomate recto, margine superiore reflexo, intus incrassato, reflexo, ultimo sinuoso, callo introrsum caloso.*

**THE SAGRAT HELIX.** Shell rather widely conoid, somewhat Trifurc-shaped, conoidly globose, rather solid, radiately marked with striae, encircled by the umbilicus, rather solid, whitish, spire conoid, whorls six to seven, rather convex, the last slightly knotted, rather convex at the base, slightly compressed around the umbilicus.

licus; aperture oblique, lunar; lip shortly reflected, columellar margin dilated, tubercularly sinuous.

D'ORBIGNY, Hist. Moll. Cuba, vol. i. p. 145. pl. 7. f. 4-6.  
*Hab.* Cuba.

Though very distinct specifically, there is a strong affinity between this species and *H. Parraiana*.

Species 266. (Mus. Adams.)

HELIX MULTISTRIATA. *Hel. testâ umbilicatâ, depresso-globosâ, tenui, fragili, translucidâ, corneâ, lineis regularibus spiralibus creberrimis notatâ; anfractibus quinque ad sex, convexiusculis, ultimo ad peripheriam obsoletè angulato et bincto, cingulis angustis, contiguâ, supero rufo, infero albido; aperturâ lunari; peristomate intus sublabiato, margine supero expanso, basali dilatato, reflexo, umbilicum semitegente, prope columellam subdentato.*

THE MANY-STRIATED HELIX. Shell umbilicated, depressly globose, thin, fragile, transparent, horny, marked with very close regular spiral lines; whorls five to six, rather convex, the last obsoletely angled and two-banded at the periphery, bands narrow, contiguous, upper one red, lower one white; aperture lunar; lip slightly thickened inwardly, upper margin expanded, basal dilated, reflected, half-covering the umbilicus, slightly toothed near the columella.

DESHAYES, Encyclopédie Méthodique, vol. ii. p. 248.

*Helix circumtexta*, Férussac.

*Helix bincta*, Menke.

*Helix vesica*, Lea.

*Hab.* Cuba.

The form and sculpture of this shell are much the same as in *H. Sagraiana*, but the substance is thin and horny.

Species 267. (Mus. Cuming.)

HELIX POEYI. *Hel. testâ umbilicatâ, orbiculato-convexâ, tenui, confertim obliquè costulato-striatâ, hodiâ, epidermide deciduâ, subvelutinâ; anfractibus quinque, planiusculis, ultimo carinato, anticè deflexo; columellâ brevi, verticali; aperturâ subangulato-lunari; peristomate dilatato, purpurascente, margine supero expanso, basali reflexo, columellari caldè dilatato, umbilicum semioccultante.*

POEY'S HELIX. Shell umbilicated, orbicularly convex, thin, closely obliquely rib-like striated, brown, covered with a deciduous slightly velvety epidermis; whorls five, rather flattened, the last keeled, deflected in front; columella short, vertical; aperture subangularly lunar; lip dilated, purplish, upper margin expanded, basal reflected, columellar margin much dilated, half-covering the umbilicus.

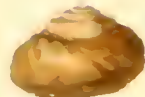
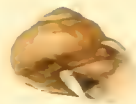
PETIT, Guerin's Mag. de Zool. 1836, pl. 74.

*Hab.* Cuba.

Beautifully sculptured throughout with fine close-set rib-like lines.









*convexâ, subdepressâ, eleganter granuloso-striatâ, virescente-luteâ, fulco-fasciatâ, maculis flavis ornatâ; anfractibus quatuor ul quinque, planiusculis, ultimo anticè subitè deflexo; aperturâ perobliquâ, ellipticâ, peristomate albo, supernè simplici, expanso, marginibus callo tenui junctis, basali reflexo, calloso, inequaliter bidentato, dente majore extus scrobiculum formante.*

JOSEPHINE'S HELIX. Shell imperforated, orbicularly convex, rather depressed, elegantly granularly striated, greenish-yellow, fulvous-banded, and ornamented with yellowish spots; whorls four to five, rather flattened, the last suddenly deflected in front; aperture very oblique, elliptical; lip white, simple and expanded at the upper part, margins joined by a thin callosity, basal margin reflected, callous, unequally two-toothed, the larger tooth forming a furrow outwardly.

FERUSSAC, Hist. Moll. pl. 56. f. 9, 10.

*Carocolla scabrella*, Menke.

*Hab.* Guadaloupe.

The yellowish spots above described are caused by a scattered deposition of a second hydrophanous epidermis.

Species 273. (Mus. Cuming.)

HELIX NEMORALOIDES. *Hel. testâ imperforatâ, depresso-turbinatâ, striatulâ, levigatâ, nitidâ, albidâ vel pallidè stramineâ, fuscis tribus lineâ suturali et arcâ columellari castaneis ornatâ; anfractibus quinque, vix convexiusculis, ultimo anticè vix descendente; columellâ intrante, perobliquâ, supernè dilatatâ, complanatâ; aperturâ obliquè lunari; peristomate simplici, acuto, breviter expanso.*

THE ROUGH-HEWN HELIX. Shell imperforated, depressly turbinated, finely striated, smooth, shining, white or

pale straw-colour, ornamented with three chestnut bands, a sutural band a and band round the area of the columella; whorls five, rather convex, the last but slightly descending in front; columella entering, very oblique, dilated and smooth at the upper part; aperture obliquely lunar; lip simple, sharp, shortly expanded.

ADAMS, Pro. Nat. Hist. Soc. Boston, U.S., 1845, p. 15.

*Hab.* Jamaica.

Quite distinct from the European *H. nemoralis*, although in painting it resembles some varieties of that species.

Species 274. (Mus. Cuming.)

HELIX BADIA. *Hel. testâ imperforatâ, semiglobosâ, fusconigrescente, striatâ, sub lente confertissimè punctatâ, anfractibus quinque, convexiusculis, ultimo subcarinato, basi planiusculo, anticè gibbo, subitè deflexo; aperturâ subhorizontali, transversè oblongâ; peristomate albido vel atro-fusco, subincrassato, basi reflexo, marginibus callo funiculato junctis, basali bidentato; dentibus inequalibus, in ipso margine positis.*

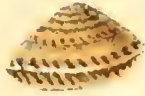
THE BROWN HELIX. Shell imperforated, semiglobose, brownish-black, striated, very closely punctured beneath the lens; whorls five, rather convex, the last slightly keeled, rather flattened at the base, gibbous anteriorly, suddenly deflected; aperture nearly horizontal, transversely oblong; lip whitish or dark brown, somewhat thickened, reflected at the base, margins joined by a ridged callosity, basal margin two-toothed; teeth unequal, placed upon the margin.

FERUSSAC, Hist. Moll. pl. 56. f. 1-4.

*Hab.* Martinique, Guadaloupe, Cayenne.

A dark chestnut solid shell with the surface slightly roughened.

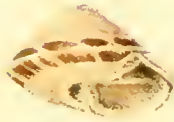




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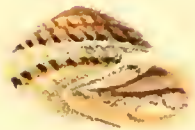
272



273



274



275



276



277



278

# HELIX.

PLATE LVII.

Species 275. (Fig. a, b, c, Mus. Cuming.)

**HELIX BERMUDENSIS.** *Hel. testā umbilicatā, conoideo-lenticulari, tenuiusculā, carinatā, leviter rugoloso-striatā, fuscescente, fulvo-marmoratā, cingulo castaneo supra et latiore infra carinam ornatā; anfractibus septem, planiusculis, lentè accrescentibus; umbilico angusto, perçio; aperturā subtrapeziā; peristomate simplici, recto, intus incrassato, albo, marginibus callo junctis, columellari verticali, brevi, reflexiusculo, cum basali angulum subrectum formante.*

**THE BERMUDA HELIX.** Shell umbilicated, conoidly lens-shaped, rather thin, keeled, slightly rugulosely striated, pale-brown, marbled with fulvous, and ornamented above and below the keel with a chestnut band, of which the lower is the broader; whorls seven, flattened, increasing slowly; umbilicus narrow, open; aperture subtrapeziform; lip simple, straight, thickened inwardly, white, margins joined by a callosity, columellar margin vertical, short, a little reflected, forming nearly a right angle with the basal margin.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 67.

*Hab.* Bermuda.

The form of this species is very much like that of the little marine genus *Rotella*.

Species 276. (Mus. Cuming.)

**HELIX BAHAMENSIS.** *Hel. testā angustè umbilicatā, depressā, tenui, corneā, costulato-striatā; spirā brevi, convexiusculā; anfractibus quatuor ad quinque, vix convexiusculis, ultimo anticè deflexo; aperturā subhorizontali, transversè ovali; peristomate simplici, tenui, marginibus approximatīs, supero breviter expanso, basali reflexo, intus dente triangulari valido munito, columellari dilatato, reflexo, umbilicam angustum peritium senatigente.*

**THE BAHAMA HELIX.** Shell narrowly umbilicated, depressed, thin, horny, rib-like striated; spire short, rather convex; whorls four to five, slightly convex, the last deflected in front; aperture nearly horizontal, transversely oval; lip simple, thin, with the margins approximated, upper margin shortly expanded, basal reflected, furnished with a strong triangular tooth within, columellar margin dilated, reflected, half-covering a narrow open umbilicus.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 66.

*Hab.* Bahama.

A light horny shell, characterized internally by a peculiar oblong tooth.

Species 277. (Mus. Cuming.)

**HELIX NUCLEOLA.** *Hel. testā imperforatā, globosā, solidā, fusco-nigrescente, striatā; spirā semiglobosā; suteri lineari; anfractibus quinque, summis planis, ultimò tereti, anticè deflexo, basi constricto; aperturā perobliquā, latè lunari; peristomate incrassato, marginibus callo crasso, dentem triangularem emittente, junctis, dextro brevi, basali valdè dilatato, denticulato.*

**THE LITTLE NET HELIX.** Shell imperforated, globose, solid, brown-black, striated; spire semiglobose, suture linear; whorls five, the uppermost flat, the last rounded, deflected in front, drawn out at the base; aperture very oblique, broadly lunar; lip thickened, margin joined by a thick callosity, emitting a triangular tooth, right margin short, basal much dilated, toothed.

RANG, *Guerin's Mag. de Zool.* 1834, p. 37.

*Hab.* Martinique.

A smooth round solid shell, distinguished by the same kind of oblong callous tooth on the body-whorl which characterizes *H. punctata*.

Species 278. (Mus. Cuming.)

**HELIX PARILIS.** *Hel. testā imperforatā, depresso-globosā, nitidā, striis minutissimis confertissimis longitudinalibus et obliquis reticulatā, castaneā, maculis et flammis stramineis variè pictā; spirā obtusissimā; anfractibus quatuor, planiusculis, ultimo prope aperturam rursus vix descendente; aperturā perobliquā, angustā; peristomate incrassato, griseo-violacescente, marginibus callo junctis, dextro ad insertionem et in medio tuberculiferis, basali obsolete serrato-denticulato.*

**THE LIKE HELIX.** Shell imperforated, depressly globose, smooth, reticulated with very minute closely-set longitudinal and oblique striae, chestnut, variously painted with straw-coloured flames and blotches; spire very obtuse; whorls four, rather flattened, the last wrinkled near the aperture, descending but slightly; aperture very oblique, narrow; lip thickened, greyish-violet, margins joined by a callosity, right margin tubercled about the middle and at its insertion, basal margin serrately denticulated.

FERUSSAC, *Hist. Moll.* pl. 49. f. 2.

*Hab.* Guadeloupe.

A solid dark chestnut shell, strikingly ornamented with yellow epidermis-like flames.



## Species 279. (Mus. Cuming.)

**HELIX TRIDENTINA.** *Hel. testā umbilicatā, globoso-depressā, solidā, obliquè striatā, albidā, fulco-nebulosā, fasciis fuscis tribus vel quatuor cingulatā; anfractibus quatuor ad quinque, planulatis, lentè accrescentibus, ultimo subangulato, anticè deflexo, basi subplano; aperturā subhorizontali, lunari; peristomate incrassato, reflexo, marginibus junctis, dextro rotundato, columellari umbilicū semitegente, basali tridentato; dente uno solitario, duobus junctis, extus scrobiculum latum formantibus.*

**THE THREE-TOOTHED HELIX.** Shell umbilicated, globosely depressed, solid, obliquely striated, whitish, fulvous-clouded, encircled with three or four brown bands; whorls four to five, flattened, increasing slowly, the last slightly angled, deflected in front, rather flat at the base; aperture nearly horizontal, lunar; lip thickened, reflected, with the margins joined, right margin rounded, columellar margin half-covering the umbilicus, basal margin three-toothed; one tooth solitary, two approximating, forming outwardly a broad furrow.

FÉRUSAC, Hist. Moll. pl. 54 A. f. 4-6.

*Hab.* Jamaica.

In most examples of this species there are two dark bands above the periphery of each whorl and one below it.

## Species 280. (Mus. Cuming.)

**HELIX NIGRESCENS.** *Hel. testā imperforatā, globulosā, obliquè rugosā, saturatè fuscā; anfractibus quatuor ad quinque, convexiusculis, ultimo ventroso, obsolete angustato, prope aperturam scrobiculato; aperturā subverticali, lunari; peristomate subexpanso, incrassato, marginibus callo lato, juxta insertionem dentem validum, compressum, intrantem, emittente junctis, basali inæqualiter bidentato.*

**THE BLACKISH HELIX.** Shell imperforated, globular, obliquely wrinkled, very dark brown; whorls four to five, rather convex, the last ventricose, obsolete angled, furrowed near the aperture; aperture subvertical, lunar; lip slightly expanded, thickened, margins joined by a callosity, which near its insertion emits a strong compressed entering tooth, basal margin unequally two-toothed.

WOOD, Index Test. supp. pl. 7. f. 32.

*Helix fuliginæa*, FÉRUSAC.

*Hab.* Guadaloupe.

This little dark brown species is characterized by a strong oblong tooth upon the body-whorl, after the manner of the well-known *H. punctata*.

## Species 281. (Mus. Cuming.)

**HELIX AURIDENS.** *Hel. testā angustè umbilicatā, depressā, supra planiusculā, basi convexā, nigro-fuscā, striatā, pilis rigidis, brevibus, erectis, distantibus obsitā; anfractibus quatuor ad quinque, convexis, rapidè accrescentibus, ultimo sensim descendente; aperturā obliquā, subangulosā; peristomate fusco-purpureo, reflexo, margine supero arcuato, dextro rectiusculo, intus dente aureo munito, basali subrecto, dente altero minuto, sæpe deficiente, prope umbilicū instructo.*

**THE GOLDEN TOOTH HELIX.** Shell narrowly umbilicated, depressed, rather flattened above, convex at the base, blackish-brown, striated, covered with distant short erect rigid hairs; whorls four to five, convex, rapidly increasing, the last gradually descending; aperture oblique, somewhat angular; lip brown-purple, reflected, upper margin arched, right margin rather straight, furnished with a gold-like tooth within, basal margin nearly straight, furnished near the umbilicus with another tooth which is often wanting.

RANG, Guerin's Magasin de Zoologie, 1834, pl. 49.

*Hab.* Martinique.

A dull dark purple-brown shell of light substance, covered with very short erect distant bristle-like hairs.

## Species 282. (Mus. Cuming.)

**HELIX OBESA.** *Hel. testā imperforatā, depressā, solidā, striatā, supernè saturatè rufā, subtus virente-luteā; anfractibus quinque ad sex, planiusculis, ultimo obsolete angulato; aperturā obliquā, transversè lunari, coarctatā; peristomate latè incrassato, marginibus callo crasso, ad insertionem marginis dextri tuberculum prominens formante, junctis, supero brevissimo, basali subbidentato.*

**THE STOUT HELIX.** Shell imperforated, depressed, solid, striated, dark red above, greenish-yellow beneath; whorls five to six, rather flattened, the last obsolete angled; aperture oblique, transversely lunar, contracted; lip broadly thickened, margin joined by a thick callosity, which at its insertion with the right margin forms a prominent tubercle, upper margin very short, basal margin two-toothed.

BECK, Ind. Moll. p. 35.

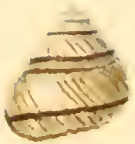
*Helix punctata*, FÉRUSAC (not of Born).

*Hab.* Martinique.

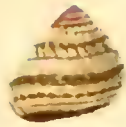
The prominent tubercle on the body-whorl of this species does not take the form of an entering tooth as in *H. punctata* and *nigrescens*, but joins on to the upper margin. The shell is peculiarly flatly depressed at the base.







253. c.



250. a.



253. c.



252.



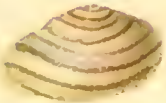
251. a.



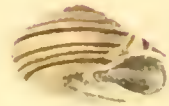
255. b.



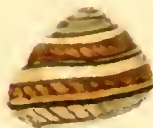
256.



257. a.



247. b.



258.

# HELIX.

PLATE LVIII.

Species 253. (Fig. a, b, c, Mus. Cuming.)

**HELIX CARNICOLOR.** *Hel. testā subumbilicatā, conoideoglobosā, colore variā, nitidulā, striis incrementi distinctis; anfractibus quinque, convexiusculis, ultimo inflato; aperturā lunato-rotundatā, intus roseā; peristomate simplici, intus purpureo-labiato, margine dextro acuto, columellari arcuato, sulcato, subreflexo, perforationem sublegente.*

**THE FLESH-COLOURED HELIX.** Shell slightly umbilicated, conoidly globose, variously coloured, shining, with distinct lines of growth; whorls five, rather convex, the last inflated; aperture lunar-rounded, deep rose within; lip simple, purple-edged internally, right margin sharp, columellar margin arched, grooved, slightly reflected, almost covering the umbilicus.

FERUSSAC, Prodrôme, p. 293.

*Helix varians*, Menke.

*Hab.* Porto Rico.

The brilliant deep rose-colour with which this shell is stained appears most conspicuous on the part of the body-whorl within the aperture.

Species 254. (Mus. Adams.)

**HELIX SUBCONICA.** *Hel. testā tenui, latè subconicā, imperforatā, flavulo-fuscā, atro-fusco variè lineatā; anfractibus quinque, haud multum convexis, exilè striatis, ultimo subangulato, subtus convexo; aperturā subrectangularem, curvè depressā; labro tenuissimo; columellā rectā, acutā.*

**THE SUBCONICAL HELIX.** Shell thin, broadly subconical, imperforated, yellowish-brown, variously lined with blackish-brown; whorls five, not very convex, finely striated, the last slightly angled, convex beneath; aperture subrectangular, curvedly depressed; lip very thin; columella straight, sharp.

ADAMS, Pro. Nat. Hist. Soc. Boston, U.S., 1845, p. 15.

*Hab.* Jamaica.

The lip of this species is peculiarly callously flattened as it approaches the columella.

Species 255. (Fig. a, b, Mus. Adams.)

**HELIX GOSSEL.** *Hel. testā imperforatā, orbiculato-co-*

*noidā, tenui, irregulariter plicatulo-striatā, fulvidā, nigro-castaneo fasciatā; spirā breviter conoidē, obtusā; anfractibus quinque, planiusculis, ultimo anticè vix descendente, basi subplanulato; columellā declivi, angustā, planā, introrsum acutā; aperturā obliquā, elliptico-lunari; peristomate simplici, tenui, recto.*

**GOSSE'S HELIX.** Shell imperforated, orbicularly conoid, thin, irregularly plicately striated, fulvous, banded with blackish-chestnut; spire shortly conoid, obtuse; whorls five, rather flattened, the last scarcely descending in front, rather flat at the base, columella slanting, narrow, flat, sharp inwardly; aperture oblique, elliptically lunar; lip simple, thin, straight.

PFEIFFER, Pro. Zool. Soc. 1846

*Hab.* Jamaica.

Encircled somewhat irregularly with very dark brown bands and lines upon a swarthy fulvous ground. It may prove to be a variety of *H. subconica*.

Species 256. (Mus. Cuming.)

**HELIX GASKOINI.** *Hel. testā umbilicatā, subdepresso-orbiculari, opaco-albā; spirā obtusā; anfractibus sex, convexis, obliquè irregulariter plicato-striatis, ultimo anticè descendente, ad peripheriam acutè angulatè, crenato; umbilico profundo, percio; aperturā ovati subhorizontali; labro eleganter reflexo, marginis callo approximatis.*

**GASKOIN'S HELIX.** Shell umbilicated, rather depressed, orbicular, opake-white; spire obtuse; whorls six, convex, obliquely irregularly plicately striated, the last descending in front, sharply angled at the periphery, keeled; umbilicus deep, open; aperture ovate, nearly horizontal; lip elegantly reflected, margin approximated by a callosity.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* St. Domingo; Sallé.

A shell of rather solid growth, not in very good condition, without any indication of colour or marking.

Species 257. (Fig. a, b, Mus. Cuming.)

**HELIX OVUM-REGULI.** *Hel. testā imperforatā, depressā, levigatā, albā, punctis obscure spirālè et foveo-fasciatā; spirā parvè crenatā, anfractibus quinque, cu-*

*convexiusculis, ultimo anticè subitò deflexo, basi subplanulato; aperturâ subhorizontali, intus nitidâ, rubro-fuscescente vel lividâ, transversè lunato-oblongâ; peristomate albo-labiato, expanso, marginibus subparallelis, callo junctis, basali dilatato, subexcavato.*

THE WREN'S EGG HELIX. Shell imperforated, depressed, smooth, whitish, fulvous-banded and sprinkled with horny dots; spire but little raised; whorls five, scarcely convex, the last suddenly deflected in front, rather flat at the base; aperture subhorizontal, shining within, reddish-brown or livid, transversely lunar-oblong; lip white-edged, expanded, margins sub-

parallel, joined by a callosity, basal margin dilated, subexcavated.

LEA, Observations, vol. i. p. 164. pl. 19. f. 61.

*Hab.* Cuba.

An extremely characteristic species, distinguished by the obliquely prolonged growth of the aperture, and dotted marking.

Fig. 288. (Mus. Adams.)

The shell here represented, received from Professor Adams as a type of his *H. pulchrior*, Ad. Contrib. No. 9 p. 172, appears to me to be a variety of *H. subconica*.





289 a



289 b



289 c



289 d



290 a



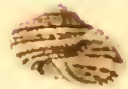
290 b



291



292 a



292 b



292 c



# HELIX.

PLATE LIX.

Species 259. (Fig. *a* to *d*, Mus. Cuming.)

HELIX TROSCHELI. *Hel. testâ umbilicatâ, globoso-depressâ, confertim costulato-striatâ, coloribus pervariabili; spirâ subelevatâ, obtusâ; anfractibus quatuor ad quinque, convexiusculis, ultimo vix descendente; aperturâ obliquâ, lunato-subcirculari; peristomate aculo, intus calloso, expanso, marginibus subconvicentibus, columellari dilatato, reflexo, umbilicum semioccultante.*

TROSCHEL'S HELIX. Shell umbilicated, globosely depressed, closely rib-like striated, extremely variable in colour; spire somewhat raised, obtuse; whorls four to five, rather convex, the last scarcely descending; aperture oblique, lunately subcircular; lip sharp, callous within, expanded, with the margins approximating, columellar margin dilated, reflected, half-covering the umbilicus.

PFEIFFER, *Symbolæ*, vol. iii. p. 76.

*Hab.* Cuba, Bermuda.

Four specimens represented in the accompanying plate illustrate the principal varieties of colour and marking in this species.

Species 290. (Fig. *a*, *b*, Mus. Cuming.)

HELIX PLEOGRAMMA. *Hel. testâ obtectè umbilicatâ, orbiculato-concavâ, glabriusculâ, nitidâ, lineis latè castaneis supernè radialâ, basi castaneo-unifasciatâ; anfractibus quatuor ad quinque, vix convexiusculis, ultimo obsolete angulato, basi planiusculo; aperturâ perobliquâ, rotundato-lunari; peristomate intus castaneolabiato, marginibus convicentibus, supero parum expanso, basali dilatato, reflexo, appresso.*

THE DUSKY-MARKED HELIX. Shell with a covered umbilicus, orbicularly convex, rather smooth, shining, rayed about the upper part with light chestnut lines, encircled with a chestnut band at the base; whorls four to five, slightly convex, the last obsolete angled, rather flat at the base; aperture very oblique, rotundately lunar; lip chestnut-edged within, margins approximating, upper margin but little expanded, basal margin dilated, reflected, appressed.

PFEIFFER, *Symbolæ*, vol. iii. p. 72.

*Hab.* — ?

This approaches very closely to the preceding species, and may prove to be only a variety.

Species 291. (Mus. Cuming.)

HELIX LINDENI. *Hel. testâ imperforatâ, semiglobosâ,*

*tenui, irregulariter striatâ, supernè opacâ, albidâ, punctis castaneis conspersâ et lineâ nigricante-castaneâ ad suturam ornatâ; anfractibus quatuor ad quinque, convexiusculis, ultimo basi planulato, pollicido, convexirente, anticè breviter deflexo; columellâ intrante, declivi, subarcuatâ, dilatatâ, introrsum acutâ; aperturâ lunato-ellipticâ; peristomate simplici, recto.*

LINDEN'S HELIX. Shell imperforated, semiglobose, thin, irregularly finely striated, opaque at the upper part, whitish, sprinkled with chestnut dots and ornamented at the suture with a blackish-chestnut line; whorls four to five, rather convex, the last flat, transparent at the base, horny-greenish, shortly deflected in front; columella entering, slanting, slightly arched, dilated, sharp inwardly; aperture lunar-elliptical, lip simple, straight.

PFEIFFER, *Pro. Zool. Soc.* 1846.

*Hab.* Cuba.

A very characteristic species, partly opaque and partly transparent greenish-white sprinkled with black dots, and with a deep black line in the place of the suture.

Species 292. (Fig. *a*, *b*, *c*, Mus. Cuming.)

HELIX GILVA. *Hel. testâ umbilicatâ, globoso-depressâ, tenui, striis obliquis corrugatâ, carneo-albidâ, fasciis angustis nigricantibus vel fuscis cingulatâ; spirâ parum elevatâ, interdum obtusissimâ; anfractibus quatuor ad quinque, planiusculis, celeriter accrescentibus; operturâ rotundato-lunatâ; peristomate simplici, aculo, margine dextro patulo, columellari latè reflexo, rosco, intus nigro-purpurascete.*

THE FLESH-COLOURED HELIX. Shell umbilicated, globosely depressed, thin, wrinkled with close oblique striae, flesh-white, encircled with narrow brown and blackish bands; spire but little raised, sometimes very obtuse; whorls four to five, rather flat, increasing quickly; aperture rotundately lunar; lip simple, sharp, right edge ellused, columellar edge broadly reflected, pinkish, blackish-purple within.

FERUSSAC, *Hist. Moll.* pl. 21 B. f. 1.

*Helix corrugata*, Pfeiffer.

*Hab.* Cuba.

This species varies in colour and marking after the manner of *H. Troscheli*, from which it differs constantly in form.







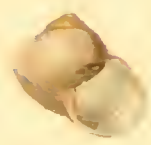
292



294 a



294 b



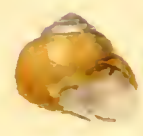
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296



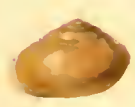
297



298



299 a



300

# HELIX.

PLATE LX.

Species 293. (Mus. Cuming.)

**HELIX NEMORALINA.** *Hel. testâ imperforatâ, depressâ, subdiaphanâ, albido-roseâ, tenuissimè striatâ; spirâ obtusâ; anfractibus quatuor, planulatis, ultimo lineâ fuscâ cincto, anticè deflexo; aperturâ lunato-rotundatâ; peristomate roseo, intus labiato, margine dextro subpalato, columellari strictiusculo, dilatato, plano.*

**THE LITTLE WOOD HELIX.** Shell imperforated, depressed, subdiaphanous, pale rose, very finely striated; spire obtuse; whorls four, rather flattened, last whorl encircled with a brown line, deflected in front; aperture lunar-rounded: lip rose-coloured, thickened inwardly, right edge effused, columellar margin rather drawn out, dilated, flattened.

PETIT, Guerin's Mag. de Zoologie, 1836, pl. 50.

*Hab.* Island of St. Thomas, West Indies.

A pretty delicately rose-tinted species, encircled with a dark line, which in the upper whorls falls in the place of the suture.

Species 294. (Fig. a, b, Mus. Cuming.)

**HELIX MONODONTA.** *Hel. testâ imperforatâ, depressè ovali, opacâ, glabrâ, nitidâ, albidâ, fusco-bifasciatâ vel multilinéatâ; spirâ brevî; anfractibus quatuor, concaviusculis, rapidè accrescentibus, ultimo obsolete angulato, anticè subitò valdè deflexo; aperturâ subhorizontali, transversè lunato-ovali, intus sublabiatâ; peristomate simplici, expanso, margine basali reflexiusculo, columellari dilatato, excavato, introrsum unidentato.*

**THE TOOTHED HELIX.** Shell imperforated, depressly ovate, opaque, smooth, shining, whitish, two-banded or many-lined with brown; spire short; whorls four, rather convex, increasing rapidly, the last obsolete angled, suddenly much deflected in front; aperture subhorizontal, transversely lunar-oval, somewhat thickened inwardly; lip simple, expanded, basal edge slightly reflected, columellar edge dilated, excavated, inwardly one-toothed.

LEA, Observations, vol. i. p. 165. pl. 19. f. 62.

*Hab.* Haiti.

Characterized by a small tooth on a part of the lip nearer to the columella than usual.

Species 295. (Mus. Cuming.)

**HELIX PEMPHIGODES.** *Hel. testâ imperforatâ, subglobosâ, tenui, membranaceâ, obliquè plicatâ, diaphanâ, albescente-cornâ; spirâ brevî, papillatâ; anfractibus quatuor, viz convexis, ultimo magno, carinato, juxta suturam inflat, basi convexo, anticè valdè deflexo, columellâ simplici, acutâ, subverticali; aperturâ simpliciterè circulari; peristomate simplici, acuto, marginibus conniventibus.*

**THE BLADDER-LIKE HELIX.** Shell imperforated, subglobose, thin, membranaceous, obliquely plicated, diaphanous, yellowish-horny; spire short, papillary. whorls four, slightly convex, the last large, keeled, inflated next the suture, convex at the base, scarcely descending in front; columella simple, sharp, subvertical; aperture large, nearly circular; lip simple, sharp, with the margins approximated.

PFEIFFER, Pro. Zool. Soc. 1846, p. 110.

*Hab.* Cuba.

A light inflated shell of delicate vesicular texture.

Species 296. (Mus. Adams.)

**HELIX BUDDIANA.** *Hel. testâ imperforatâ, subglobosâ, tenui, inflatâ, fulvovirente, subdiaphanâ; spirâ brevissimâ; suturâ distinctâ; anfractibus quatuor, anticè creberrimè tenuistriatis; columellâ simplici, carinatâ; aperturâ lunato-circulari, labio simplici.*

**BUDD'S HELIX.** Shell imperforated, subglobose, thin, inflated, light fulvous, subdiaphanous. spire very short. suture distinct; whorls four, somewhat obliquely, very closely finely striated; columella very thin, carinated. aperture lunately circular, lip simple.

ADAMS, Contributions to Conchology, N. S. p. 187.

*Hab.* Jamaica.

A light delicate inflated shell of semitransparent texture covered with a thin fulvous opid muls.

Species 297. (Mus. Cuming.)

**HELIX MUNDA.** *Hel. testâ imperforatâ, depressè ovali, opacâ, glabrâ, nitidâ, albidâ, fusco-bifasciatâ vel multilinéatâ; spirâ brevî; anfractibus quatuor, concaviusculis, rapidè accrescentibus, ultimo obsolete angulato, anticè subitò valdè deflexo; aperturâ subhorizontali, transversè lunato-ovali, intus sublabiatâ; peristomate simplici, expanso, margine basali reflexiusculo, columellari dilatato, excavato, introrsum unidentato.*

THE NEAT HELIX. Shell imperforated, depressly globose, thin, pellucid, slightly inflated, covered with a fulvous epidermis; spire short; suture somewhat impressed; whorls five, convex, somewhat obliquely very closely striated; columella rather callous, appressed; aperture lunar, lip simple.

ADAMS, Contributions to Conchology, No. 2. p. 32.

*Hab.* Jamaica.

Similar in texture and general aspect to the preceding species, but of a more depressly orbicular form.

Species 298. (Mus. Cuming.)

HELIX COLUMELLATA. *Hel. testā imperforatā, convexo-globosā, carulescente-albā, epidermide olivaceo-luteā indulā; spirā brevi, suturā peculiariter impressā; anfractibus quinque, rotundatis, obliquè tenuistriatis; columellā arcuatā, callosā, appressā; aperturā semilunari, labro simplici.*

THE COLUMELLATE HELIX. Shell imperforated, convexly globose, bluish-white, covered with an olive-yellow epidermis; spire short, with the suture peculiarly impressed; whorls five, rounded, obliquely finely striated; columella arched, callous, appressed; aperture semilunar, lip simple.

ADAMS, Contributions to Conchology, No. 5. p. 80.

*Hab.* Jamaica.

This has scarcely the appearance of a mature shell. It is of a semitransparent bluish-white substance, covered with a deciduous olive-yellow epidermis.

Species 299. (Fig. 299 and 300, Mus. Cuming.)

HELIX CUBENSIS. *Hel. testā imperforatā, globulosā, nitidulā, longitudinaliter tenerrimè striatā, basi convexā, albidā, fuscescente fasciatā aut punctatā; spirā brevi, obtusā; anfractibus quatuor, convexiusculis, ultimo*

*ventroso; columellā brevi, subverticali, descendente, supernè vix dilatatā; aperturā magnā, lunato-rotundatā; peristomate simplici, acuto.*

THE CUBA HELIX. Shell imperforated, globular, shining, longitudinally very finely striated, convex at the base, whitish, banded and dotted with light brown; spire short, obtuse; whorls four, rather convex, the last ventricose; columella short, subvertical, descending, a little dilated at the upper part; aperture large, lunar-rounded; lip simple, acute.

PFEIFFER, Wiegman's Archiv. 1840, p. 250.

*Helix Lanieriana*, D'Orbigny.

*Helix penicillata*, Gould.

*Hab.* Cuba.

A very thin subtransparent shell, coloured with bands or pencils of light brown, and sometimes rose-tinted.

Species 300. (Fig. 301, Mus. Cuming.)

HELIX ALBERSI. *Hel. testā umbilicatā, tenui, orbiculari, aperturam versus subproductā, carneo-olivaceā; spirā brevi; anfractibus quatuor, convexis, undique creberrimè nitidè costulato-striatis; aperturā oratā, marginibus subreflexis, conniventibus, margine columellari latè dilatato, deinde dente oblongo munito.*

ALBERS' HELIX. Shell umbilicated, thin, orbicular, somewhat produced towards the aperture, flesh-tinted olive; spire short; whorls four, convex, very closely neatly rib-like striated throughout; aperture ovate, with the margins gently reflected and approximating, columellar margin broadly dilated, then furnished with an oblong tooth.

PFEIFFER, Pro. Zool. Soc. 1850.

*Hab.* Haiti.

Delicately sculptured throughout with neat close-set rib-like striae.







301



302 a



302 b



303



304 a



304 b



305



306 a



306 b



307

# HELIX.

PLATE LXI.

Species 301. (Mus. Cuming.)

**HELIX SUTURALIS.** *Hel. testā latè umbilicatā, depressā, subdiscoideā, tenui, sub lente minutissimè granulosā, pilosā, fusco-corneā; spirā planā, medio subimmersā, suturā profundā; anfractibus quatuor, convexissimis, ultimo anticè descendente; aperturā proobliquā, subcirculārī; peristomate simplici, marginibus convexentibus, dextro recto, superne fornicato, columellari subrecedente, arcuato, basaliq̄ue breviter reflexis.*

**THE SUTURAL HELIX.** Shell broadly umbilicated, depressed, subdiscoid, thin, minutely granulated beneath the lens, brown-horny; spire flat, slightly immersed, with the suture deep; whorls four, very convex, the last descending in front; aperture very oblique, nearly circular; lip simple, with the margins approximating, right margin straight, arched above, columellar margin somewhat receding, arched, and, with the basal margin, shortly reflected.

PREIFFLER, Pro. Zool. Soc. 1846, p. 37.

*Hab.* Honduras.

A rounded horny discoid shell with a broad perspective umbilicus.

Species 302. (Mus. Cuming.)

**HELIX IMMUNDA.** *Hel. testā umbilicatā, discoideā, tenui, corneā, epidermidē tenui indutā; spirā depressā; suturā profundā; anfractibus quinque, rotundatis; umbilico profundo, percio; aperturā semilunari; peristomate simplici.*

**THE UNCLEAN HELIX.** Shell umbilicated, discoid, thin, horny, covered with a thin epidermis; spire depressed; suture deep; whorls five, rounded; umbilicus deep, open; aperture semilunar; lip simple.

ADAMS, Contributions to Conchology, No. 3, p. 36.

*Hab.* Jamaica.

The umbilicus is narrower and deeper in this than in the preceding species, and the aperture consequently less circular.

Species 303. (Mus. Cuming.)

**HELIX BLANDIANA.** *Hel. testā imperforatā, subdepresso-orbiculari, fusciscente-albā, lineā fuscā hic illic pro-*

*miscenè notatā; spirā convexā, apice fuscā; anfractibus quinque, convexis, unigue creberrimè elevato-striatis ultimo subangulato; aperturā lunari, labro simplici, columellā subcallosā, albā.*

**BLAND'S HELIX.** Shell imperforated, somewhat depressly orbicular, brownish-white, promiscuously marked here and there with a brown line; spire convex, brown at the apex; whorls five, convex, very closely elevatedly striated throughout, last whorl slightly angled; aperture lunar, lip simple; columella rather callous, white.

ADAMS, Contributions to Conchology, No. 7, p. 107.

*Hab.* Jamaica.

The entire surface of this species is sculptured with close-set raised lines.

Species 304. (Mus. Cuming.)

**HELIX CONCOLOR.** *Hel. testā umbilicatā, discoideā, levigatā, substriatā, fulvā, castaneo alternatim strigatā, spirā planā; suturā lineari; anfractibus quatuor, celeriter accrescentibus, ultimo superne depresso, basi convexiore; aperturā lunato-subcirculārī; peristomate simplici, acuto, marginibus approximatis.*

**THE UNIFORM HELIX.** Shell umbilicated, discoid, smooth, substriated, fulvous, alternately streaked with chestnut; spire flat; suture linear; whorls four, increasing rapidly, the last depressed at the upper part, convex at the base; aperture lunar-subcircular; lip simple acute, with the margins approximating.

FERUSSAC, Hist. Moll. pl. 82, f. 2.

*Hab.* Porto Rico.

Strongly characterized by its complete discoid *Planorbis*-like form.

Species 305. (Mus. Cuming.)

**HELIX STIGMATICA.** *Hel. testā umbilicatā, orbiculari tenui, luteo-corneā, subdiaphanā, minutissimè granulatā, spirā planā; anfractibus quatuor ad quinque, supremis horizontalibus, ultimo sensim descendente, rotundato; aperturā lunato-subcirculārī, peristomate simplici, recto, margine dextro ex expanso, columellari parum reflexo.*

**THE BRANDED HELIX.** Shell umbilicated, orbicular, thin yellowish-horny, subdiaphanous, minutely granulated

spire flat; whorls four to five, convex, the uppermost horizontal, the last descending gradually and rounded; aperture lunar-subcircular; lip simple, straight, right margin slightly expanded, columellar margin a little reflected.

PFEIFFER, *Symbolæ*, vol. i. p. 40.

*Hab.* Cuba.

The finely granulated surface of this species has a roughness which is very peculiar.

Species 306. (Fig. *a, b*, Mus. Adams.)

HELIX GRAMINICOLA. *Hel. testâ umbilicatâ, subdepresso-globosâ, olivaceo-fuscescente, pellucidâ, zonâ albidâ obscurâ, lineâ intensè fuscâ cingulatâ; spirâ convexâ; anfractibus quinque, minutè striatis, aperturâ lunari; peristomate tenuè reflexo, margine columellari latè dilatato.*

THE GRASS-INHABITING HELIX. Shell umbilicated, somewhat depressly globose, light olive-brown, transparent, encircled with an obscure whitish zone and deep brown line; spire convex; whorls five, minutely striated; aperture lunar; lip thinly reflected, columellar margin broadly dilated.

ADAMS, *Contributions to Conchology*, No. 2. p. 32.

*Hab.* Jamaica.

An extremely characteristic species, encircled by a dark brown line, which falls in the place of the suture and has an obscure whitish zone beneath it.

Species 307. (Mus. Cuming.)

HELIX AMMONIFORMIS. *Hel. testâ latè umbilicatâ, orbiculato-concavâ, depressâ, tenui, diaphanâ, albedo-griseâ, sublævigatâ; spirâ subimpressâ; anfractibus quinque, depressis, ultimo per dilatato; aperturâ obliquè lunato-ovali; peristomate simplici, acuto, marginibus conniventibus, supero antrorsum curvato.*

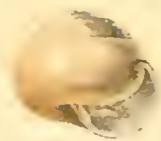
THE RAM'S HORN HELIX. Shell broadly umbilicated, orbicularly concave, depressed, thin, diaphanous, whitish-grey, rather smooth; spire rather impressed; whorls five, depressed, the last much dilated; aperture oblique, lunar-oval; lip simple, acute, margins approximating, upper margin curved in front

D'ORIGNY, *Voy. dans l'Amér. mérid.* pl. 26. f. 10-13.

*Hab.* Province of Yungas, Bolivia.

This species is unknown to me in fine condition. M D'Orbigny has figured a very characteristic specimen with the living animal.





315



369 a



369 b



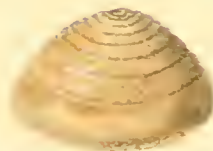
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311



311 b



312



313



314



315

# HELIX.

PLATE LXII.

Species 308. (Mus. Adams.)

**HELIX COOKIANA.** *Hel. testâ imperforatâ, depresso-convexâ, leviter striatâ, lævigatâ, sub epidermide corneâ albâ; spirâ conoidâ, obtusâ; anfractibus octo ad novem, convexis, ultimo circa angulâ, basi profunde excavato; columellâ brevi, perobliquâ; apertura impressâ, lunari, fauce lamellâ basali interruptâ instructâ; peristomate simplici, acuto.*

**COOK'S HELIX.** Shell imperforated, depressly conoid, faintly striated, smooth, whitish beneath a horny epidermis; spire conoid, obtuse: whorls eight to nine, convex, the last scarcely angled, deeply excavated at the base; columella short, very oblique: aperture depressed, lunar, interior furnished with an interrupted lamella; lip simple, acute.

**GMELIN, Syst. Nat. p. 3642.**

*Helix epistylia*, Müller (not of Férussac).

*Epistylia conica*, Swainson.

*Hab.* Jamaica.

The species represented in this plate, peculiar in form and texture, are characterized by a curious opaque-white lamellar ridge within the aperture. They constitute a well-defined natural group, and have been elevated to the rank of a genus by Swainson, with the name *Epistylia*.

Species 309. (Fig. a, b, Mus. Cuming.)

**HELIX TORREFACTA.** *Hel. testâ imperforatâ, conoidâ, sub epidermide testissimâ corneâ pellucidâ-oblâ; spirâ obtusâ; anfractibus octo ad novem, convexis, leviter arcuata striatis, ultimo subangulatâ, basi excavatâ; columellâ brevi, subinterâ; apertura lunari, fauce lamellâ instructâ; peristomate simplici, acuto.*

**THE SCORCHED HELIX.** Shell imperforated, conoid, transparent-white beneath a very thin horny epidermis; spire obtuse; whorls eight to nine, convex, faintly striated in an arched manner, the last slightly angled, excavated at the base; columella callus, rather twisted; aperture lunar, furnished with a lamella in the interior: lip simple, acute.

**ADAMS, Contributions to Conchology, N. 2. p. 31.**

*Hab.* Jamaica.

Of a much more elevated conical form than the preceding species, and uniformly smaller.

Species 310. (Mus. Cuming.)

**HELIX FORMANIANA.** *Hel. testâ imperforatâ, conoidâ, lævigatâ, sub epidermide corneâ pellucidâ-oblâ; spirâ obtusâ; anfractibus octo, convexis, striatis, ultimo subangulatâ, basi excavatâ; apertura lunari, fauce lamellâ instructâ; peristomate simplici, acuto.*

**FORMAN'S HELIX.** Shell imperforated, conoid, rather stout at the base, transparent-white beneath a horny epidermis; spire obtuse, rather high, convex, striated in a twisted manner, last whorl slightly angled, deeply excavated at the base; aperture lunar, furnished with the interior with a lamella which is here and there interrupted, lip simple, acute.

**ADAMS, Contributions to Conchology, N. 3. p. 20.**

*Hab.* Jamaica.

Chiefly distinguished by its more angular form, and its more robust growth.

Species 311. (Mus. Cuming.)

**HELIX ALMANS.** *Hel. testâ imperforatâ, conoidâ, sub epidermide testissimâ corneâ pellucidâ-oblâ; spirâ obtusâ; anfractibus octo ad novem, convexis, leviter arcuata striatis, ultimo subangulatâ, basi excavatâ; apertura lunari, fauce lamellâ instructâ; peristomate simplici, acuto.*

**THE TIED HELIX.** Shell imperforated, conoid, transparent-white beneath a very thin horny epidermis; spire obtuse, depressed, rather high, convex, striated, the last scarcely angled, deeply excavated at the base; aperture lunar, furnished with a lamella in the interior with a small beak-like apophysis.

**ADAMS, Contributions to Conchology, N. 7. p. 101.**

*Hab.* Jamaica.

Chiefly distinguished by its more angular form, and its more robust growth.

Species 312. (Mus. Adams.)

**HELIX CONJECTA.** *Hel. testâ imperforatâ, conoidâ, lævigatâ, sub epidermide corneâ pellucidâ-oblâ; spirâ obtusâ; anfractibus octo ad novem, convexis, striatis, ultimo subangulatâ, basi excavatâ; apertura lunari, fauce lamellâ instructâ; peristomate simplici, acuto.*

December, 1871.



*concauo; aperturá lunari, subhorizontali, fauce lamellá tenui instructá; peristomate simplici, acuto.*

THE CONNECTING HELIX. Shell imperforated, broadly conoid, much depressed, whitish beneath a horny epidermis; spire obtuse; whorls eight to nine, flatly convex, arcuately striated, last whorl slightly angled, depressly concave at the base; aperture lunar, rather horizontal, furnished with a thin lamella in the interior; lip simple, acute.

ADAMS, Contributions to Conchology, No. 7. p. 105.

*Hab.* Jamaica.

This species is distinguished from all others of the group by its broad depressed plan of convolution.

Species 313. (Mus. Cuming.)

HELIX EPISTYLOIDES. *Hel. testá imperforatá, solidá, globoso-conicá, obliquè costulato-striatá, sub epidermide corneo-lutescente albá; spirá elatá, semiglobosá; anfractibus novem, convexiusculis, ultimo obsolete angulato, reliquis vix latiore, basi impresso; columellá brevi, perobliquá, basi dilatata; aperturá valdè depressá, obliquè lunari, lamellá intus munitá; peristomate simplici, acuto.*

THE CHAPTER-LIKE HELIX. Shell imperforated, solid, globosely conical, obliquely rib-like striated, white beneath a yellowish-horny epidermis; spire raised, semiglobose; whorls nine, rather convex, the last obsoletely angled, scarcely broader than the rest, impressed at the base; columella short, very oblique, dilated at the base; aperture very depressed, ob-

liquely lunar, furnished within with a lamella; lip simple, acute.

FERUSSAC, Hist. Moll. pl. 51 B. f. 2.

*Hab.* Jamaica.

This species differs from *H. alligans* only in being crectly convoluted.

Species 314. (Mus. Cuming.)

HELIX EPISTYLIUM. *Hel. testá imperforatá, solidá, semigloboso-conoidéa, regulariter costulato-striatá, sub epidermide fulvescente deciduá albá; spirá elevatá, obtusè conicá; anfractibus septem ad octo, lentè accrescentibus, convexiusculis, ultimo dilatato, basi subplanulato, substriato; columellá brevi, obliquá, basi dilatata, aperturá depressá, lunari, intus lamellá solidá acutá munitá; peristomate simplici, acuto.*

THE CHAPTER HELIX. Shell imperforated, solid, semiglobosely conoid, regularly rib-like striated, white beneath a light fulvous deciduous epidermis; spire raised, obtusely conical; whorls seven to eight, increasing slowly, rather convex, the last dilated, rather flattened and finely striated at the base; columella short, oblique, dilated at the base; aperture depressed, lunar, furnished within with a strong, sharp lamella; lip simple, acute.

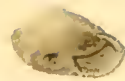
MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 57.

*Hab.* Jamaica.

Rather broader and more inflated at the base than the preceding species, with a lighter-coloured epidermis.







315



316 a



317



318 a



319



320



321



322

# HELIX.

PLATE LXIII.

Species 315. (Mus. Cuming.)

**HELIX OSCULANS.** *Hel. testâ imperforatâ, tenui, vitreo-albidâ, depresso-orbiculari; spirâ obtusâ; anfractibus quinque, obliquè tenuissimè et creberrimè costulato-striatis, ultimo carinato, basi excavato; aperturâ depresso-lunari, fauce lamellâ tenui opaco-albâ munitâ.*

**THE INTERMEDIATE HELIX.** Shell imperforated, thin, glassy white, depressly orbicular; spire obtuse; whorls five, obliquely very finely and closely rib-like striated, last whorl keeled, excavated at the base; aperture depressly lunar, furnished in the interior with a thin opaque-white lamella.

ADAMS, Contributions to Conchology, No. 7. p. 107.

*Hab.* Jamaica.

This little glassy shell belongs to the same type as the group represented in the preceding plate. The whorls are convoluted nearly in a discoid plane, and the internal lamella shows distinctly through the base.

Species 316. (Fig. a, b, Mus. Cuming.)

**HELIX ANTHONIANA.** *Hel. testâ umbilicatâ, orbiculari, pellucido-albâ; spirâ subelevatâ, suturâ distinctâ; anfractibus quinque, rotundatis, obliquè tenuissimè striatis; columellâ brevi, basi dilatatâ; aperturâ depressâ, lunari; peristomate tenui, aculo.*

**ANTHONY'S HELIX.** Shell umbilicated, orbicular, transparent white; spire slightly raised, suture distinct; whorls five, rounded, obliquely very finely striated; columella short, dilated at the base; aperture depressed, lunar; lip thin, sharp.

ADAMS, Contributions to Conchology, No. 3. p. 35.

*Hab.* Jamaica.

A small glassy species, of a distinct type from the preceding which has an internal lamella.

Species 317. (Mus. Cuming.)

**HELIX SIMILIS.** *Hel. testâ umbilicatâ, orbiculari, subdiscoidèâ, pellucido-cornèâ; spirâ depressâ; anfractibus sex, rotundatis, obliquè striatis; umbilico profundo; aperturâ semilunari; peristomate simplici, aculo.*

**THE SIMILAR HELIX.** Shell umbilicated, orbicular, subdiscoid, transparent horny; spire depressed; whorls six, rounded, obliquely striated; umbilicus deep; aperture semilunar; lip simple, acute.

ADAMS, Contributions to Conchology, No. 3. p. 54

*Hab.* Jamaica.

A transparent horny subdiscoid shell closely allied to *H. arboreoides*.

Species 318. (Fig. a, b, Mus. Cuming.)

**HELIX LAMELLIFERA.** *Hel. testâ imperforatâ orbiculari subglobosâ, cornèâ, granulis minutis elevatis sculptâ, spirâ convexâ, suturâ distinctâ; anfractibus quinque convexis; aperturâ semilunari, fauce lamellâ tenuissimâ instructâ; peristomate simplici, aculo.*

**THE LAMELLIFEROUS HELIX.** Shell imperforated, orbicular, subglobose, horny, sculptured with minute raised granules; spire convex, suture distinct; whorls five, convex; aperture semilunar, furnished in the interior with a very thin lamella, lip simple, acute.

ADAMS, Contributions to Conchology, No. 2. p. 31

*Hab.* Jamaica.

The granular sculpture which characterizes this species is very unusual in a shell of horny substance

Species 319. (Mus. Adams.)

**HELIX ARBOREOIDES.** *Hel. testâ imperforatâ, depressâ striatulâ, tenui, nitidâ, hyalinâ. spirâ vix elevatâ, rotundissimâ, suturâ marginatâ; anfractibus septem, vix convexiusculis, ultimo anticè non descendente, basi mediè profundè excavato; aperturâ subverticali, obliquè lunari; peristomate simplici, aculo, margine columellari perobliquo, supernè brevissimè reflexo.*

**THE TREE HELIX.** Shell imperforated, depressed, finely striated, thin, shining, hyaline; spire but little raised, very obtuse, suture margined, whorls seven, slightly convex, the last not descending in front, deeply excavated in the middle at the base, aperture somewhat vertical, obliquely lunar, lip simple, acute, columellar margin very oblique, very shortly reflected above.

ADAMS, Pro. Nat. Hist. Soc. Boston, U.S., 1845

*Hab.* Jamaica.

A light hyaline horny shell, convoluted in a manner nearly discoid.

## Species 320. (Mus. Adams.)

HELIX AMBIGUA. *Hel. testá vir umbilicatá, depresso-orbiculari, corneá; spirá convexá, suturá impressá; anfractibus sex, convexis, ultimo rotundato; aperturá lunari; peristomate tenui, acuto.*

THE DOUBTFUL HELIX. Shell scarcely umbilicated, depressly orbicular, horny; spire convex, suture impressed; whorls six, convex, the last rounded; aperture lunar: lip thin, acute.

ADAMS, Contributions to Conchology, No. 3. p. 35.

*Hab.* Jamaica.

This species appears to be of firmer growth than the preceding, while it is smaller, and has a more confined umbilicus.

## Species 321. (Mus. Adams.)

HELIX HOLLANDI. *Hel. testá umbilicatá, subdiscoideá, corneá; spirá convexá, suturá impressá; anfractibus sex, convexis, striatis, ultimo depresso-excavato; aperturá lunari; peristomate simplici, acuto.*

HOLLAND'S HELIX. Shell umbilicated, subdiscoid, horny; spire convex, suture impressed; whorls six, convex, striated, the last depressly excavated; aperture lunar: lip simple, sharp.

ADAMS, Contributions to Conchology, No. 3. p. 34.

*Hab.* Jamaica.

Chiefly distinguished from the species nearest allied to it by the depressly excavated form of the base of the last whorl.

## Species 322. (Mus. Cuming.)

HELIX PILA. *Hel. testá obtectè perforatá, valdè globosá, pellucido-abbá, vitreá, nitente; spirá elatá, apice obtusá; anfractibus sex ad septem, rotundatis, obliquè subtilissimè striatis; columellá tenui, dilatato-reflexá; aperturá lunari, fauce lamellá erectá prominente opaco-abbá instructá; peristomate tenui, acuto.*

THE BALL HELIX. Shell with a small covered umbilicus, very globose, transparent white, glassy, shining; spire raised, obtuse at the apex; whorls six to seven, rounded, obliquely very finely striated; columella thin, dilately reflected; aperture lunar, furnished in the interior with an erect prominent opaque-white lamella; lip thin, sharp.

ADAMS, Contributions to Conchology, No. 2. p. 31.

*Hab.* Jamaica.

An extremely interesting variety of the form represented by the species in the preceding plate,—very globular and of a thin glassy substance.





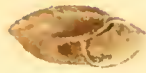
323



324



325



326.



327. a.



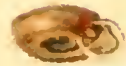
327 b.



328



329. a.



329 b



330

# HELIX.

PLATE LXIV.

Species 323. (Mus. Cuming.)

**HELIX TURBINIFORMIS.** *Hel. testá vix umbilicatá, pyramidal-conicá, obliquè rugoso-striatulá; spirá elevatá, suturá impressá; anfractibus septem, convexis, ultimo basi angulato, infra subplanato; aperturá ovali, subhorizontali, labro simplici, margine columellari reflexo, umbilicum fere tegente.*

**THE TOP-SHAPED HELIX.** Shell scarcely umbilicated, pyramidally conical, obliquely roughly striated; spire raised, suture impressed; whorls seven in number, convex, last whorl angled at the base, rather flattened beneath; aperture oval, nearly horizontal, lip simple, columellar edge reflected, almost covering the umbilicus.

PFEIFFER, in Wiegman's Archives, 1839, p. 350.

*Helix pyramidaloides*, D'Orbigny.

*Helix pyramidalis*, Adams.

Var. perdepressa. *Helix depressa*, Adams.

*Hab.* Cuba.

A white semitransparent glassy shell, of a true pyramidal Trochus-like growth, more or less depressed in its manner of convolution.

Species 324. (Mus. Cuming.)

**HELIX FRAGILIS.** *Hel. testá subprofundè umbilicatá, depresso-globosá, obliquè corrugato-costatá, nitidè corneá; spirá obtusá; anfractibus quatuor, convexis, ultimo rotundato; aperturá amplá, subcirculari, labro tenui, margine columellari subreflexo.*

**THE FRAGILE HELIX.** Shell deeply umbilicated, depressly globose, obliquely ribbed in a wrinkled manner, shining horny; spire obtuse; whorls four, convex, the last rounded; aperture large, nearly circular, lip thin, columellar edge a little reflected.

PFEIFFER, in Wiegman's Archives, 1839, p. 350.

*Hab.* Cuba.

A dark bright brown pea-shaped shell, obliquely ribbed throughout in a peculiarly wrinkled manner.

Species 325. (Mus. Cuming.)

**HELIX PERAFFINIS.** *Hel. testá umbilicatá, depressá,*

*striatulá, hyaliná; spirá brevissimá, obtusá, anfractibus sex, convexis, ultimo rotundato, basi planiuscula-umbilico mediocri; aperturá subverticali, triangulato-lunari; peristomate simplici, acuto, margine dextro subverticali, columellari brevissimè reflexo, basali striatulo.*

**THE CLOSELY ALLIED HELIX.** Shell umbilicated, depressed, finely striated, hyaline; spire very short, obtuse; whorls six, convex, the last rounded, rather flat at the base; umbilicus middling; aperture nearly vertical, triangularly lunar; lip simple, acute, right margin subvertical, columellar margin very shortly reflected, basal margin rather drawn out.

ADAMS, Pro. Nat. Hist. Soc. Boston, U.S., 1845, p. 16

*Hab.* Jamaica.

A species of simple form without any particularly characteristic feature.

Species 326. (Mus. Cuming.)

**HELIX PTYCHODES.** *Hel. testá umbilicatá, depressissimá discoideá, tenuissimá, arcuato-plicatá, subepidermide tenui, fuscá, deciduá hyaliná; spirá planiusculá; anfractibus quatuor ad quinque, planulatis, ultimo basi vix convexo; umbilico mediocri; aperturá perobliqui amplá, angulato-lunari; peristomate simplici, acuto.*

**THE FOLD-LIKE HELIX.** Shell umbilicated, very depressed, discoid, very thin, arcuately plicated, hyaline beneath a thin brown deciduous epidermis; spire rather flattened; whorls four to five, flattened, the last but little convex at the base, umbilicus middling; aperture very oblique, large, angularly lunar. Lip simple, acute.

PFEIFFER, Pro. Zool. Soc. 1845, p. 137

*Hab.* Jamaica; Gosse.

A thin transparent horny Carocolla form, with the spire perfectly depressed on a broad plane, and plicately wrinkled.

Species 327. (Fig. a, b, Mus. Cuming.)

**HELIX GRISEOLA.** *Hel. testá umbilicatá, depresso-globosá, obliquè striatulá, nitidulá, griseá, cingulis lincisque opaco-albis circumdatá; spirá brevi; anfractibus quatuor ad quinque, vix convexiusculis, umbilico angustissimo,*



*aperturá lunari; peristomate simplici, albo, reflexiusculo, margine columellari subexpanso.*

THE GREYISH HELIX. Shell umbilicated, depressly globose, obliquely finely striated, shining, greyish, encircled with opaque-white zones and lines; spire short; whorls four to five, slightly convex; umbilicus very narrow; aperture lunar; lip simple, white, a little reflected, columellar edge slightly expanded.

PFEIFFER, *Symbote*, vol. i. p. 41.

*Hab.* Vera Cruz, Mexico.

A pretty white-zoned shell, with very much the form and general aspect of a *Helicina*.

Species 328. (Mus. Cuming.)

HELIX PUBESCENS. *Hel. testá umbilicatá, orbiculari, subdiscoideá, tenui, semipellucidá, punctis numerosis setosis undique sculptá; spirá planulatá, suturá impressá; anfractibus quinque, rotundatis; umbilico angusto, profundo; aperturá semilunari; peristomate simplici, acuto.*

THE PUBESCENT HELIX. Shell umbilicated, orbicular, nearly discoid, thin, semitransparent, sculptured throughout with numerous bristly dots; spire flattened, suture impressed; whorls five, rounded; umbilicus narrow, deep; aperture semilunar; lip simple, acute.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* —?

A light semitransparent straw-coloured shell, covered with small bristly dots.

Species 329. (Fig. a, b, Mus. Cuming.)

HELIX PALUDOSA. *Hel. testá umbilicatá, orbiculato-con-*

*veriusculá, corneo-fuscá, tenui, nitulá, supernè obliquè rugosá, subtilus substriatá; anfractibus quinque, supra planulatis, basi convexis, ultimo subangulato; umbilico infundibuliformi; aperturá obliquá, lunari; peristomate simplici, reflexo, intus sublabiato; pariete aperturali dente parvulo munito.*

THE MARSHY HELIX. Shell umbilicated, orbicularly slightly convex, horny brown, thin, shining, obliquely wrinkled above, finely striated beneath; whorls five, flattened above, convex at the base, last whorl slightly angular; umbilicus funnel-shaped; aperture oblique, lunar; lip simple, reflected, slightly thickened inwardly; wall of the aperture furnished with a small tooth.

PFEIFFER, in *Wiegman's Archives*, 1839, p. 350.

*Helix lingulata*, Deshayes.

*Helix Ramonis*, D'Orbigny.

*Hab.* Cuba.

A horny species of Planorbis-like form, with a small white callous tooth upon the body-whorl.

Species 330. (Mus. Cuming.)

HELIX LEUCORAPHIE. *Hel. testá umbilicatá, orbiculari, pellucido-corneá, suturis peculiariter opaco-albo zonatis; spirá convexá; anfractibus quinque, ultimo rotundato; aperturá lunari, labro simplici.*

THE WHITE-SUTURED HELIX. Shell umbilicated, orbicular, transparent horny, with the sutures peculiarly zoned with opaque-white; spire convex; whorls five, the last rounded; aperture lunar, lip simple.

PFEIFFER, *Pro. Zool. Soc.* 1850.

*Hab.* —?

Distinguished by a characteristic white zone at the suture.





331



332. a



332. b



333



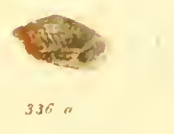
334. a



334. b



335



336. a



336. b



337

# HELIX.

PLATE LXV.

Species 331. (Mus. Cuming.)

**HELIX TICHOSTOMA.** *Hel. testâ umbilicatâ, orbiculari, subdiscoideâ, albidâ, nitente; spirâ depressâ; anfractibus quinque, striatis, ultimo rotundato, lamellâ acutâ intrante in aperturam instructo; umbilico amplo, latissimo, perspectivo; aperturâ subcirculari, labro simplici.*

**THE LAMELLATED MOUTH HELIX.** Shell umbilicated, orbicular, somewhat discoid, whitish, shining: spire depressed; whorls five, striated, last whorl rounded, furnished with a sharp entering lamella; umbilicus large, very broad, perspective; aperture nearly circular, lip simple.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* — ?

In this little spirally umbilicated species the inner wall of the aperture is furnished with a sharp ridge similar to that which in several other species appears within the outer.

Species 332. (Mus. Adams.)

**HELIX SPRETA.** *Hel. testâ minutè umbilicatâ, tenui, globosâ, supra depressâ, pallidè stramineâ; spirâ planatâ; anfractibus tribus lævigatis, ultimo peculiariter tumido; aperturâ amplâ, sublunari.*

**THE DESPISED HELIX.** Shell minutely umbilicated, thin, globose, depressed at the upper part, light straw-colour; spire flattened; whorls three, smooth, the last peculiarly swollen: aperture large, sublunar.

ADAMS, Catalogue, p. 7.

*Hab.* Jamaica.

This singular little pea-like species has very much the appearance of an immature shell.

Species 333. (Mus. Adams.)

**HELIX BOOTHIANA.** *Hel. testâ angustè umbilicatâ, conoido-globosâ, hyalinâ, minutissimè striatâ; anfractibus quinque, convexis; aperturâ lunato-orali; peristomate simplici, acuto, subpatulo, ad umbilicum subreflexo.*

**BOOTH'S HELIX.** Shell narrowly umbilicated, conoidly globose, hyaline, very minutely striated; whorls five, convex; aperture lunar-oval; lip simple, acute, subpatulate, slightly reflected at the umbilicus.

PFEIFFER, in Wiegman's Archives 1839, p. 351

*Hab.* Cuba.

An extremely delicate white hyaline shell somewhat globose in general form.

Species 334. (Mus. Cuming.)

**HELIX CASSIQUIENSIS.** *Hel. testâ minutè umbilicatâ, conoideâ, rufo-corneâ; spirâ elevatiusculâ; anfractibus quinque, tenuistriatis, ultimo subobsoleto angulato, aperturâ lunari; peristomate simplici, margine cœlumellari reflexo.*

**THE CASSIQUI HELIX.** Shell minutely umbilicated conoid, red-horny; spire rather elevated; whorls five, finely striated, the last somewhat obsoletely angled; aperture lunar; lip simple, cœlumellar edge reflected.

NEWCOMBE, MSS. (Mus. Cuming.)

*Hab.* Cassiqui, Cuba.

A little shining red-horny species, very minutely umbilicated.

Species 335. (Mus. Cuming.)

**HELIX ALBICANS.** *Hel. testâ vix umbilicatâ, depresso-orbiculari, albicante-corneâ, nitente; spirâ planato-convexâ, suturâ subimpressâ, anfractibus quinque, ultimo subrotundatis; aperturâ lunari, labro simplici.*

**THE WHITISH HELIX.** Shell scarcely umbilicated, depressly orbicular, whitish-horny, shining, spire flatly convex, with the suture rather impressed, whorls five to six, somewhat rounded; aperture lunar, lip simple.

*Hab.* — ?

Of a stout horny substance, but transparent and shining.

Species 336. (Mus. Cuming.)

**HELIX CLATHRATUA.** *Hel. testâ latè umbilicatâ, orbiculatâ, albi, opidè ruidè, dolièi rotundâ, supra depressâ, spirâ litér rotatâ, interstitiis tenui clathratis, anfractibus latè striatâ, anfractibus sex, ultimo angulato; umbilico amplo, perspectivo; aperturâ parvâ, simplici, superne convexâ.*

**THE LATTICED HELIX.** Shell broadly umbilicated dirty

white, covered with a deciduous epidermis, depressed and spirally ridged above, interstices finely latticed, rounded and striated beneath; whorls six, the last angled; umbilicus large, perspective; aperture small, lunar, sinuated at the upper part.

*Hab.* — ?

Singularly characterized by its strongly-marked latticed sculpture.

Species 337. (Mus. Cuming.)

HELIX VORTEX. *Hel. testā angustè umbilicatā, convexo-discoidēā, hyalinā; anfractibus quinque ad sex, convexiusculis, angustis, obsoletè striatis, ultimo subangulato,*

*plerumque deorsum deviato; aperturā latā, lunari, peristomate simplici, acuto, margine columellari reflexiusculo.*

THE VORTEX HELIX. Shell narrowly umbilicated, convexly discoid, hyaline; whorls five to six, rather convex, narrow, obsoletely striated, last whorl slightly angled, generally deviating downwards; aperture broad, lunar; lip simple, acute, columellar margin somewhat reflected.

PFEIFFER, in Wiegman's Archives, 1839, p. 351.

*Hab.* Cuba.

A flatly convoluted shell, with a somewhat narrow and deep umbilicus.





339.



339 a



339 b



340.



341 a



341 b



342.



343 a



343 b



344





# HELIX.

PLATE LXVI.

Species 338. (Mus. Cuming.)

**HELIX BREVIOR.** *Hel. testá umbilicatá, depresso-orbiculari, corneá, suturis impressis; anfractibus quinque, rotundatis, levibus; umbilico subamplo, perspectivo; aperturá lunato-circulari, labro simplici.*

**THE SHORTER HELIX.** Shell umbilicated, depressly orbicular, horny, sutures impressed; whorls five, rounded, smooth; umbilicus rather large, perspective; aperture lunar-circular, lip simple.

ADAMS, Catalogue, p. 7.

*Hab.* Jamaica.

A small flat horny species, with the whorls so rounded as to give an impressed suture to the spire; originally named *H. depressa* by Professor Adams.

Species 339. (Mus. Adams.)

**HELIX APEX.** *Hel. testá umbilicatá, depresso-orbiculari, subdiscoideá, pallidè corneá, suturis impressis; anfractibus quatuor ad quinque, rotundatis, obliquè creberrimè subtilissimè costulato-striatis; umbilico subamplo, perspectivo; aperturá subcirculari, labro simplici.*

**THE APEX HELIX.** Shell umbilicated, depressly orbicular, subdiscoïd, pale horny, sutures impressed; whorls four to five, rounded, obliquely very finely and closely rib-like striated; umbilicus rather large, perspective; aperture nearly circular, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 36.

*Hab.* Jamaica.

Beautifully sculptured throughout with a number of very delicate striae, which encircle the whorls like so many fine rings.

Species 340. (Mus. Cuming.)

**HELIX SINCERA.** *Hel. testá umbilicatá, depressá, tenui, confertim costulata, ceræo-albidá; spirá planá; anfractibus quatuor, convexiusculis; umbilico lato, perspectivo; aperturá subverticali, lunato-circulari; peristomate simplicissimo.*

**THE TRUE HELIX.** Shell umbilicated, depressed, thin, closely finely ribbed, waxen-white; spire flat; whorls four, rather convex; umbilicus broad, perspective; aperture nearly vertical, lunar-circular; lip very simple.

ADAMS, Pro. Hist. Soc. Boston, U.S., 1845, p. 16.

*Hab.* Jamaica.

This little horny species approximates very closely *H. brevior* figured above it.

Species 341. (Mus. Cuming.)

**HELIX BREVIS.** *Hel. testá umbilicatá, depresso-orbiculari, albidá, nitente; spirá obtusá; anfractibus quatuor ad quinque, convexis, ultimo infra planuato; umbilico angusto; aperturá lunari.*

**THE SHORT HELIX.** Shell umbilicated, depressly orbicular, whitish, shining; spire obtuse; whorls four to five, convex, the last flattened beneath; umbilicus narrow; aperture lunar.

ADAMS, Contributions to Conchology, No. 3. p. 35

*Hab.* Jamaica.

Chiefly distinguished by a peculiar flattening of the base, and by its shining surface.

Species 342. (Mus. Cuming.)

**HELIX EPISTYLIUM.** *Hel. testá umbilicatá, concolori, albá, tenuissimè striatá; spirá convexi, tumidiusculá, suturá impressá; anfractibus sex ad septem, ultimo subangulato; umbilico angusto, profundo, aperturá lunari, labro simplici.*

**THE LITTLE CAPITAL HELIX.** Shell umbilicated, concolor white, very finely striated; spire convex, rather swollen, with the suture impressed, whorls six to seven, the last rather angular; umbilicus narrow deep; aperture lunar, lip simple.

ADAMS, Contributions to Conchology, No. 2. p. 31

*Hab.* Jamaica.

This little species has some resemblance with the group represented in Plate 62, but no direct affinity. The internal lamella, which is the typical characteristic of *H. epistylium* and all its congeners, is wanting.

Species 343. (Mus. Cuming.)

**HELIX ANGSTISPIRA.** *Hel. testá umbilicatá, subdepressoglobosá, pallidè corneá, tenuissimè striatá; spirá convexá; anfractibus quinque ad sex, subrotundatis, angustis, ultimo tumidiusculo; umbilico subamplo; aperturá transversè lunari, labro simplici.*

THE NARROW SPIRE HELIX. Shell umbilicated, somewhat depressly globose, pale horny, very finely striated; spire convex; whorls five to six, somewhat rounded, narrow, last whorl rather swollen; umbilicus rather deep; aperture transversely lunar, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 36.

*Hab.* Jamaica.

Chiefly distinguished from its congeners by the more rapid enlargement of the whorls, which gives the shell a more globose form.

Species 344. (Mus. Adams.)

HELIX PERDEPRESSA. *Hel. testâ umbilicatâ, orbiculari,*

*discoideâ, albido-corneâ; spirâ peculiariter concavo-depressâ; unfractibus quinque, supernè obtusè angulatis, infra rotundatis; umbilico latissimo, amplo, perspectivo; aperturâ elliptico-lunari, labro simplici.*

THE VERY DEPRESSED HELIX. Shell umbilicated, orbicular, discoid, whitish-horny; spire peculiarly concavely depressed; whorls five, obtusely angled at the upper part, round beneath; umbilicus very broad and large, perspective; aperture elliptically lunar, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 36.

*Hab.* Jamaica.

Well characterized by its broad open umbilicus, and by the spire being pushed in, as it were, into a hollow plane.





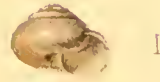
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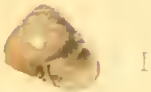
349 a



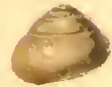
349 b



350



351 a



351 b



352

# HELIX.

PLATE LXVII.

Species 345. (Mus. Cuming.)

HELIX GUNDLACHI. *Hel. testá umbilicatá, depresso-turbinatá, nitidá, fulvá; anfractibus quinque, convexiusculis, lentè accrescentibus, ultimo basi subplanulato, lineis subtilibus sub lente sculpto, circa umbilicum excavato; aperturá depressá, lunari; peristomate simplici, recto, acuto.*

GUNDLACH'S HELIX. Shell slightly umbilicated, depressly turbinated, shining, fulvous; whorls five, rather convex, enlarging slowly, the last rather flattened at the base, sculptured, beneath the lens, with fine lines, hollow around the umbilicus; aperture depressed, lunar; lip simple, straight, sharp.

PFEIFFER, in Wiegman's Archives, 1840, p. 250.

*Helix pusilla*, Pfeiffer (not of Lowe).

Hab. Cuba.

A very small fulvous-horny species, somewhat depressly hollowed around the umbilicus.

Species 346. (Mus. Adams.)

HELIX DIMINUTA. *Hel. testá umbilicatá, discoideá, pallidè corneá; spirá vix elevatá, suturis impressis; anfractibus quatuor ad quinque, subrotundatis; umbilico amplo; aperturá lunari, labro simplici.*

THE DIMINISHED HELIX. Shell umbilicated, discoid, pale horny; spire but little raised, sutures impressed; whorls four to five, somewhat rounded; umbilicus large; aperture lunar, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 36.

Hab. Jamaica.

An extremely minute discoidal horny species, with a large umbilicus and small aperture.

Species 347. (Mus. Cuming.)

HELIX DIOSCORICOLA. *Hel. testá subumbilicatá, globoso-turbinatá, tenui, subtilissimè striatá, corneá; spirá elevatá, obtusá; anfractibus tribus ad quatuor, convexis, ultimo medio subimpresso; aperturá lunari-rotundatá; peristomate simplici, acuto, margine columellari subverticaliter descendente, brevissimè reflexo.*

THE STAKE-INHABITING HELIX. Shell slightly umbilicated, globosely turbinated, thin, very finely striated, horny; spire raised, obtuse; whorls three to four,

convex, the last slightly impressed in the middle, aperture lunar-rounded; lip simple, acute, columellar margin descending somewhat vertically, very shortly reflected.

ADAMS, Pro. Nat. Hist. Soc. Boston, U.S., 1845, p. 16

Hab. Jamaica.

A minute species, convoluted into a more oblong spiral than usual.

Species 348. (Mus. Cuming.)

HELIX FUSCULA. *Hel. testá umbilicatá, subconicá, fuscúlá; spirá elevatiusculá, apice subacutá; anfractibus quatuor, rotundatis; aperturá sublunari; peristomate tenui, acuto.*

THE BROWNISH HELIX. Shell umbilicated, subconical, brownish; spire rather elevated, rather sharp at the apex; whorls four, rounded; aperture sublunar; lip thin, sharp.

ADAMS, Contributions to Conchology, No. 3. p. 35.

Hab. Jamaica.

A conical species, characterized by a somewhat inflated growth.

Species 349. (Mus. Cuming.)

HELIX MINUSCULA. *Hel. testá umbilicatá, depressá, tenui, pellucidá, nitente, sub lente ruguloso-striatá; spirá vix elevatá; anfractibus quatuor, planiusculis, ultimo tereti, reliquis vix latiore; umbilico lato, percio, aperturá subcirculari; peristomate simplici, acuto.*

THE LITTLE HELIX. Shell umbilicated, depressed, thin, transparent, shining, rugosely striated beneath the lens; spire scarcely raised; whorls four, rather flat, last whorl drawn out, but little broader than the rest; umbilicus broad, open; aperture nearly circular; lip simple, acute.

BINNEY, Journ. Nat. Hist. Soc. Boston, U.S., vol. iii. p. 435. pl. 22. f. 4

Hab. Vermont, Ohio, North America.

A minute discoidal shell, minutely striated throughout in a wrinkled manner.

Species 350. (Mus. Cuming.)

HELIX INCONSPICUA. *Hel. testá umbilicatá, subdiscoideá, pallidè corneá, tenuissimè striatá; spirá vix elevatá, apice obtusá; anfractibus quatuor ad quinque, convexis, ultimo supernè subangulato; aperturá angustá, lunari, labro simplici.*

THE INCONSPICUOUS HELIX. Shell umbilicated, sub-diseoid, pale horny, very finely striated; spire but little raised, obtuse at the apex; whorls four to five, convex, the last slightly angled at the upper part; aperture narrow, lunar, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 37.

*Hab.* Jamaica.

Chiefly distinguished by the angular structure of the upper part of the whorls, which gives a broad flattened appearance to the spire.

Species 351. (Mus. Cuming.)

HELIX SIMULANS. *Hel. testá vix umbilicatá, ovatá, fulvo-corneá, nitente; spirá elevatiusculá; anfractibus quatuor, plano-convexis, lineis obliquis incrementi subtilissimè sculptis; aperturá lunari-rotundatá, labro simplici.*

THE RESEMBLING HELIX. Shell scarcely umbilicated, ovate, fulvous-horny, shining; spire rather elevated; whorls four, flatly convex, very finely sculptured with

oblique lines of growth; aperture lunar-rounded, lip simple.

ADAMS, Contributions to Conchology, No. 3. p. 35.

*Hab.* Jamaica.

Professor Adams seems rightly to have distinguished this species from *H. fusca* of Müller, more especially as there is so little in common between the faunas of Europe and the West Indies.

Species 352. (Mus. Adams.)

HELIX SAXICOLA. *Hel. testá subprofundè umbilicatá, orbiculato-convexá, tenui, nitidá, minutissimè striatá, corneo-fuscá; anfractibus quatuor ad quinque, convexiusculis, sensim accrescentibus; aperturá subcirculari; peristomate simplici, acuto, marginibus conniventibus.*

THE STONE-INHABITING HELIX. Shell somewhat deeply umbilicated, orbicularly convex, thin, shining, very minutely striated, horny-brown; whorls four to five, rather convex, increasing gradually; aperture nearly circular; lip simple, sharp, with the margins approximating.

PFEIFFER, in Wiegman's Archives, 1840, p. 251.

*Hab.* Cuba.

Resembling the preceding species, except that the whorls are more depressly and widely convoluted, giving a larger umbilicus.







353



354. a.



354. b.



355.



356. a.



356. b.



356. c.

# HELIX.

PLATE LXVIII.

Species 353. (Mus. Cuming.)

**HELIX PRUNUM.** *Hel. testā umbilicatā, subdepresso-globosā, fulvā, nitidā, obliquè striatā, obsolete granulatā; spirā brevi; anfractibus sex, planulatis, ultimo ventroso, basi inflato, anticè parum descendente; aperturā lunato-subcirculari, intus nitidā, rubescente; peristomate breviter expanso, margine columellari superne dilatato, umbilicum angustum semioccultante.*

**THE PLUM HELIX.** Shell umbilicated, somewhat depressly globose, fulvous, shining, obliquely striated, obsolete granulated; spire short; whorls six, flat-tish, the last ventriose, inflated at the base, but little descending anteriorly; aperture lunar-subcircular, shining and reddish within; lip slightly expanded, columellar margin dilated above, half-covering the umbilicus, which is narrow.

FERUSSAC, Hist. Moll. pl. 26. f. 7, 8.

*Helix argillacea*, Gray.

*Hab.* Australia.

A semitransparent shell of a dull fawn-colour, distinguished by a blush of purple-red about the expanded margin of the aperture.

Species 354. (Fig. a, b, Mus. Cuming.)

**HELIX DUPUYANA.** *Hel. testā imperforatā, subdepresso-conicā, undique minutissimè granuloso-reticulatā, olivaceo-fulvā, zonis duabus castaneis remotis cingulatā; spirā subobtusā; anfractibus quinque, plano-convexis, ultimo ad peripheriam angulato, subtus depresso, medio leviter excavato; aperturā subhorizontali, trigono-ovalā; peristomate reflexo, calloso, castaneo, intense nigricante-castaneo, nitente.*

**DUPUY'S HELIX.** Shell imperforated, somewhat depressly conical, very minutely granularly reticulated throughout, olive-fulvous, encircled with two distant chestnut zones; spire rather obtuse; whorls five, flatly convex, the last angled at the periphery, depressed beneath, slightly excavated in the middle; aperture rather horizontal, triangularly ovate; lip reflected, callous, very dark shining blackish-chestnut.

PFEIFFER, Chemnitz, 2nd edit. pl. 124. f. 15, 16.

*Hab.* Bellingen River, Australia (in the brushes): Macgillivray.

An extremely characteristic species of a depressed conical form, encircled by two distant chestnut zones upon an olive-fulvous ground, and having a very dark shining chestnut-black lip.

Species 355. (Mus. Cuming.)

**HELIX FALCONARI.** *Hel. testā profundè umbilicatā, ovata, tenui, vesiculari, pallidè brunneā, fasciis interruptis maculisque prope suturam nigris ornatā; spirā parvulā, obtusiusculā; anfractibus quatuor, convexo, rapidly accrescentibus, ultimo valdè inflato, minutissime granulato, anticè declivi, circa umbilicum magnum infundibuliformem subcompresso; aperturā lunato-oblongā, intus subvirid-scente; peristomate recto, marginibus callo tenuissimo junctis, columellari valdè dilatato, reflexo.*

**FALCONAR'S HELIX.** Shell deeply umbilicated, ovate, thin, veiny, pale brown, ornamented with black interrupted bands and blotches near the suture; spire small, rather obtuse; whorls four, convex, rapidly increasing, the last much inflated, very minutely granulated, slanting in front, rather compressed around the umbilicus, which is large and funnel-shaped; aperture lunar-oblong, slightly iridescent within; lip straight, margins joined by a very thin callosity; columellar margin much dilated and reflected.

REEVE, Pro. Zool. Soc. 1834, p. 63.

*Hab.* Bellingen River, New Holland (in the brushes): Macgillivray.

The brown colouring of this fine species is curiously mottled throughout, and the bands are composed of blotches. The blotches next the suture are large and flame-like.

Species 356. (Fig. a, b, c, Mus. Cuming.)

**HELIX INCEI.** *Hel. testā umbilicatā, depresso-globosā solidatā, striatā, sub epidermide pallidè fulvā, alba, fasciis angustis castaneis cingulatā; spirā erectā acutiusculā; anfractibus septem, convexiusculis, ultimo circa umbilicum mediocrem, periculi, subcompresso; columellā arcuatā, aperturā perobliquā, lunato-ovalī; peristomate albo, tenui, intus sublabiat, margine dextro rix expanso, basali reflexo, columellari in laminam triangularem dilatato, umbilicum semiocculgente.*

INCE'S HELIX. Shell umbilicated, depressly globose, rather solid, striated, white, beneath a light fulvous epidermis, encircled with narrow chestnut bands; spire raised, rather sharp; whorls seven, rather convex, the last rather compressed round the umbilicus, which is middling and open; columella arched; aperture very oblique, lunar-oval; lip white, thin, slightly thickened inwardly, right margin but little expanded, basal margin reflected, columellar margin dilated

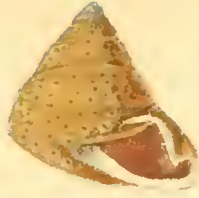
into a triangular lamina which half conceals the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 126.

*Hab.* North Australia; Ince, Macgillivray

Of the two varieties of this species here figured one is of an uniform fulvous-brown, while in the other the brown is in bands and lines. The lip and sutures are white in both.





357.



358 a



358 b



359 a



360 a



360 b



360 c



# HELIX.

PLATE LXIX.

Species 357. (Mus. Cuming.)

**HELIX MACGILLIVRAYI.** *Hel. testâ imperforatâ, subpyramidaliter conicâ, lavigatâ, lineis subundatis undique spiritaliter incisâ, purpurascens flavâ, punctis cinereis albo-ocellatis irregulariter sparsâ; spirâ acuminatâ, apice acuto, nigricante-cinereo; anfractibus sex, plano-concavis, ultimo acutè angulato, obliquè producto, anticè subdescendente, basi convexo-planato; columellâ arcuatâ, castaneo-tinctâ; aperturâ subhorizontali, trigono-ovata, fauce purpureâ, nitente; peristomate albo, infernè expanso, supernè introrsum tortili-bisinuato.*

**MACGILLIVRAY'S HELIX.** Shell imperforated, somewhat pyramidally conical, smooth, spirally engraved throughout with slightly waved impressed lines, purplish-yellow, irregularly sprinkled with white-eyed ash dots; spire acuminated, apex sharp, dark ash; whorls six, flatly convex, last whorl sharply angled, obliquely produced and a little descending in front, convexly flattened at the base; columella arched, stained with chestnut; aperture nearly horizontal, triangularly ovate, interior purple, shining; lip white, below expanded, above twisted and bisinuated inwards.

FORBES, Appendix, p. 377, Voy. Rattlesnake, pl. 3. f. 1.

*Hab.* Frankland Island, North Australia (on trunks and branches of trees); Macgillivray.

This new and interesting species is chiefly distinguished by the curious crumpling inwards of the upper margin of the aperture. The ocellated marking of the shell is also peculiar.

Species 358. (Fig. a, b, Mus. Cuming.)

**HELIX GRANULATA.** *Hel. testâ imperforatâ, globosâ, tenuiter granulatâ, subaureâ vel rufescente, fasciâ fuscâ cinetâ; spirâ brevi; anfractibus quinque ad sex, planiusculis, ultimo magno, inflato; aperturâ amplâ, lunato-ellipticâ; peristomate porum reflexo, albo, margine columellari emarginato, valdè dilatato.*

**THE GRANULATED HELIX.** Shell imperforated, globose, finely granulated, somewhat golden or reddish, encircled with a faint brown band; spire short; whorls five to six, rather flat, the last large and inflated; aperture large, lunar-elliptical; lip but little re-

flected, white, columellar margin emarginated, very much dilated.

QUOY and GAIMARD, Voyage de l'ASTROLABE, vol. ii. p. 95 pl. 7. f. 6-9.

*Hab.* Port Dorey, New Guinea.

A light inflated shell of a uniform warm golden-red hue, curiously granulated throughout.

Species 359. (Fig. a, b, Mus. Cuming.)

**HELIX BIPARTITA.** *Hel. testâ umbilicatâ, globosâ, subinflatâ, sub lente minutissimè granulatâ, fulvescente, infernè sapissimè intensè castaneâ; spirâ obtusâ, anfractibus septem, plano-concavis, ad suturas plus minus plicato-rugulosis, ultimo anticè descendente; aperturâ subcirculari; peristomate effuso, reflexo, marginibus cœniventibus, columellari umbilicum subanplum profundum semitergente.*

**THE BIPARTITE HELIX.** Shell umbilicated, globose, somewhat inflated, minutely granulated beneath the lens, light fulvous, lower part mostly dark chestnut; spire obtuse; whorls seven, flatly convex, more or less plicately wrinkled at the sutures, last whorl descending in front; aperture nearly circular; lip effuse, reflected, margins approximating, columellar margin half-covering the umbilicus, which is rather large and deep.

FERUSSAC, Hist. Moll. pl. 75. f. 1.

*Hab.* Percy Island, North Australia; Macgillivray.

This fine species, collected by Mr. Macgillivray during the voyage of the Rattlesnake, presents a striking contrast of colour on that portion of the whorls, which being covered in the order of convolution, only, therefore, shows it on the last whorl.

Species 360. (Fig. a, b, Mus. Cuming.)

**HELIX FRASERI.** *Hel. testâ imperforatâ, globosâ, turbinatâ, solidiusculâ, leciter striatâ, fulcâ, fuscâ cinis nigricante-brunneis ornatâ; spirâ latè conoidi anfractibus sex ad septem, convexiusculis, ultimo anticè paululum deflexo; aperturâ lunato-orali, intus nitidè licidâ; peristomate latè expanso, reflexo, marginibus callo tenui junctis, dextro arcuato, columellari superne valdè dilatato.*

FRASER'S HELIX. Shell imperforated, globosely turbinated, rather solid, slightly striated, fulvous, ornamented with various dark brown bands; spire broadly conoid; whorls six to seven, rather convex, the last a little deflected in front; aperture lunar-oval, shining livid within; lip broadly expanded, reflected, margins joined by a thin callosity, right margin arched, columellar margin much dilated at the upper part.

GRAY, Pro. Zool. Soc. 1836, p. 63

*Hab.* Wide Bay, Clarence River, &c., Australia Macgillivray.

There is a strong resemblance between this species and *H. Pan* of the Philippine Islands, but little or no affinity, as they present characters illustrative of two different typical provinces of the genus. Among the characters chiefly noticeable in *H. Fraseri*, is the peculiar livid hue of the enamel which lines the shell and is deposited on the place of the umbilicus.







361.



362 a



362 b



363



364 a



364 b



365

# HELIX.

PLATE LXX

Species 361. (Mus. Cuming.)

**HELIX BOTABILIS.** *Hel. testâ rotundâ umbilicatâ, impresso-discoidâ, spirâli ter ruguloso-striatâ, intus nigricante-castaneâ. Anure, foveatâ; spirâ intus perforatâ, intus impressâ, a fractione penultimâ ad extremum, ultimo obliquè producta, intus è medio spiræ ad peripheriam carinatâ; umbilico peripheriam perit. perspectiva: apertura subhorizontali, ovata, intus coralluxente; peristomate reflexo, marginibus convergentibus.*

**THE ROLLING HELIX.** Shell very broadly umbilicated, depressly discoid, spirally ruguloso-striated, dark blackish-chestnut, obscurely lanced; spire obtusely flattened, sutures impressile; whorls five to six, convex, last whorl obliquely produced, suddenly deflected in front, keeled at the periphery; umbilicus very largely open, perspective: aperture nearly horizontal, ovate, bluish within; lip reflected, margins approximating.

*Hab.* Australia.

This species is very closely allied to the singularly formed *H. Cunninghami*. It is of smaller size and of a duller darker colour. Dr. Pfeiffer had named it in manuscript in Mr. Cuming's cabinet, *H. Multiformis*, but that name is already occupied by Zierler.

Species 362. (Fig. a. f. Mus. Cuming.)

**HELIX POMUM.** *Hel. testâ umbilicatâ, gibbâ, striâ circumscissâ rugatâ, limboque truncato striatâ rugatâ, intus epidermide tenui olivaceo-roseâ albidâ, superâ rugulose, basi pilosâ, suturâ irregulariter crenulatâ, spirâ intus, intus, a fractione quarter ad quinque, rorculariâ, ultimo subâ deflexâ, juva ætate immixta angustam foveam rorculariâ; apertura immixta tendatâ; peristomate albo, marginibus convergentibus, orbiculari intus latè dentato, rotas orbis, umbilico marginate.*

**THE APPLE HELIX.** Shell umbilicated, gibbous, wrinkled with striae of growth and completely sculptured with transverse lines, whitish beneath a thin rose epidermis, reddish at the upper part, pale at the base, suture irregularly crenulated; spire short, convex, whorls four to five, rather convex, the last suddenly deflected, channelled next the umbilicus, which is narrow and open; aperture linear-oval, by white, right margin thickened, a little reflected, ob-

lusive margin, rounded within, reflected, rorculari, half-covered by the umbilicus.

(EISTON, N. Z. Journal, vol. 2, p. 17)

*H. pomum* Le Fraiss.

*Hab.* Port Essington, New Holland (east part of Torres Strait).

Of a particularly globose form, with the surface more or less granular, striated, and with the umbilicus marginally strongly fully reflected over the umbilicus.

Species 363. (Mus. Cuming.)

**HELIX CUNNINGHAMI.** *Hel. testâ rotundâ umbilicatâ, spirâ depressâ, intus, ruguloso-striatâ, intus peripheriam ter ruguloso-striatâ, intus nigricante-castaneâ, foveatâ intus, intus, a fractione penultimâ ad extremum, ultimo obliquè producta, intus è medio spiræ ad peripheriam carinatâ; umbilico peripheriam perit. perspectiva: apertura subhorizontali, ovata, intus coralluxente; peristomate reflexo, marginibus convergentibus, orbiculari intus latè dentato, rotas orbis, umbilico marginate.*

**CUNNINGHAM'S HELIX.** Shell very broadly umbilicated, very depressed, with margin strongly striated with purple-black and yellow; spire rather short, whorls six, slightly convex, last whorl strongly produced, strongly linear-oval, suddenly deflected in front, keeled at the periphery; umbilicus very largely open, perspective: aperture nearly horizontal, ovate, bluish within; lip reflected, margins approximating, joined by a tendency, right margin thickened, a little reflected, orbicular, intus, very whitish at the base of aperture.

GEAY, Tra. Voy. Nov. 1844, p. 64. (EISTON, N. Z. Journal, p. 17.)

*Hab.* Thuring House, Australia; Macquarie.

This fine species is nearly distinguished by its convexity with plain of ornamentation and which covers the umbilicus, and length of spire, as in the form & size particularly seen.

Species 364. (Fig. a. f. Mus. Cuming.)

**HELIX PAVONINA.** *Hel. testâ rotundâ, gibbâ, striâ circumscissâ rugatâ, limboque truncato striatâ rugatâ, intus epidermide tenui olivaceo-roseâ albidâ, superâ rugulose, basi pilosâ, suturâ irregulariter crenulatâ, spirâ intus, intus, a fractione quarter ad quinque, rorculariâ, ultimo subâ deflexâ, juva ætate immixta angustam foveam rorculariâ; apertura immixta tendatâ; peristomate albo, marginibus convergentibus, orbiculari intus latè dentato, rotas orbis, umbilico marginate.*

*ultimo anticè descendente; columellâ peculiariter latè excavato-planatâ, albâ, margine acutâ; aperturâ ovatâ, albâ, subcontractâ; peristomate subreflexo.*

THE THICK-PILLAR HELIX. Shell imperforated, globose, rather swollen, yellowish, obliquely marked here and there with brownish streaks, rugulosely deussated throughout with spiral and oblique striae; spire obtuse; whorls five, convex, last whorl descending in front; columella peculiarly broadly excavately flattened, sharp at the edge, white; aperture ovate, white, somewhat contracted; lip a little reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 71.

*Hab.* Facing Island, Port Curtis; Dunk Island; Cape Upstart, Australia (at roots of bushes); Macgillivray.

Distinguished by a peculiarly globose form, and a characteristic broad flatness of the columella.

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Species 365. (Mus. Cuming.)

HELIX RICHMONDIANA. *Hel. testâ imperforatâ, acutè*

*pyramidali, latiusculâ, lævigatâ vel obliquè subtilissimè striatâ, intensè fuscâ, apice rufescente; spirâ obtusâ; anfractibus sex, planatis, ultimo concavo, ad peripheriam acutè carinato, sublus plano; aperturâ horizontali, trigono-ovatâ, intus livido-cærulescente; peristomate incrassato, reflexo, livido-fusco, marginibus callo junctis.*

THE RICHMOND HELIX. Shell imperforated, sharply pyramidal, rather broad at the base, smooth or obliquely very finely striated, dark brown, reddish at the apex; spire obtuse; whorls six, flattened, last whorl concave, sharply keeled at the periphery, flat beneath; aperture horizontal, triangularly ovate, livid blue within; lip thickened, reflected, livid brown, margins joined by a callosity.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* Australia.

A dark chestnut-brown *Trochus*-shaped species, remarkable for its broad flattened base.







366. a



366. b



366. c



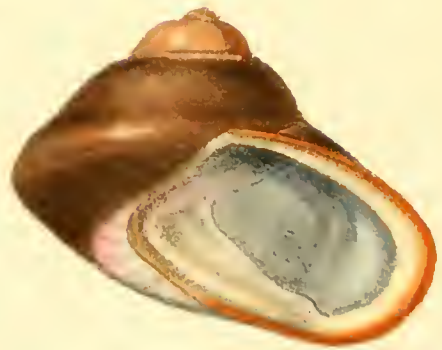
367. a



368. a



367. b



368. b

# HELIX.

PLATE LXXI.

Species 366. (Fig. *a, b, c*, Mus. Cuming.)

**HELIX HÆMASTOMA.** *Hel. testā imperforatā, globoso-conoideā, minutissimè granoso-punctatā, castaneā, infra peripheriam zonā latā albā ornatā, apice roseā; spirā conoideā, obtusā; suturā mediocri, albo marginatā; anfractibus quatuor, convexiusculis, rapidè accrescentibus, ultimo basi subcompresso; aperturā perobliquā, oblongā, intus albā; peristomate latè reflexo, purpureo-roseo aut nigro, marginibus callo lato junctis, columellari valdè dilatato, subexcavato.*

**THE PINK-MOUTH HELIX.** Shell imperforated, globosely conoid, very minutely granosely punctured, chestnut, ornamented with a broad wide zone beneath the periphery, apex pink; spire conoid, obtuse; suture middling, white-edged; whorls four, rather convex, increasing rapidly, last whorl rather compressed at the base; aperture very oblique, oblong, white within; lip broadly reflected, purple-rose or black, joined by a broad callosity, columellar margin much dilated, slightly excavated.

LINNÆUS, Syst. Nat. (12th edit.) p. 1247.

*Helix hæmatragus*, Born.

*Hab.* Ceylon.

Although this well-known species is named from its pink lip, the lip is as frequently jet-black. The white-lip variety represented at Fig. 366 *a*, is of much rarer occurrence.

Species 367. (Fig. *a, b*, Mus. Cuming.)

**HELIX MELANOTRAGUS.** *Hel. testā imperforatā, subgloboso-conoideā, tumidā, obliquè productā, minutissimè granoso-punctatā, fulvescente et roseā, fusco tinctā, nunquam zonatā; anfractibus quatuor, plano-convexis, subrudè convolutis, rapidè accrescentibus, lineis incrementi conspicuè notatis; aperturā valdè obliquā, subquadratā, labro reflexo, purpureo-nigro aut roseo, marginibus callositate, eodem colore, junctis, columellari latissimè dilatatā.*

**THE BLACK-LIP HELIX.** Shell imperforated, somewhat globosely conoid, swollen, obliquely produced, very

minutely granosely punctured, fulvous or rose, stained with brown, never zoned; whorls four, flatly convex, rather rudely convoluted, rapidly increasing, lines of increase conspicuously marked; aperture very oblique, somewhat square, lip reflected, purple-black or rose, margins joined by a callosity of the same colour, columellar margin very broadly dilated.

BORN, Mus. Vindobonensis, p. 388.

*Helix hæmastoma var.*, Pfeiffer.

*Hab.* Ceylon.

This is constantly distinguished from the preceding species by its larger, lighter, ruder, and more swollen growth, and the style of painting is also distinct, being devoid of light or dark bands.

Species 368. (Fig. *a, b*, Mus. Cuming.)

**HELIX SUPERBA.** *Hel. testā imperforatā, subdepresso-conicā, tumidā, obliquè productā, minutissimè granoso-punctatā, ustulato-castaneo, pone labrum et circa columellam lacteā; anfractibus quatuor, plano-convexis, ultimo peculiariter declivi et obtusè angulato, subtus planato, superficie undique malleato; aperturā valdè obliquā, subquadratā, fauce cærulescente, labro reflexo, albo carneolo-marginato, marginibus callo junctis, margine columellari latissimè dilatatā et excavatā.*

**THE SUPERB HELIX.** Shell imperforated, somewhat depressly conical, swollen, produced obliquely, very minutely granosely punctured, burnt-chestnut, milk-white behind the lip and around the columella; whorls four, flatly convex, the last peculiarly slanting and obtusely angled, flattened beneath, the surface indented throughout; aperture very oblique, somewhat square, interior bluish, lip reflected, white, edged with carnelion, margins joined by a callosity, columellar margin very broadly dilated and excavated.

PFEIFFER, Pro. Zool. Soc. 1851.

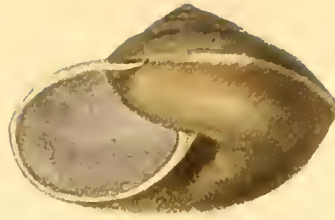
*Hab.* Ceylon.

This fine species is well distinguished from the foregoing by its hard depressly angular growth and indented surface, and by the peculiar carnelion enamel edging of the lip, of which the under surface is milk-white.





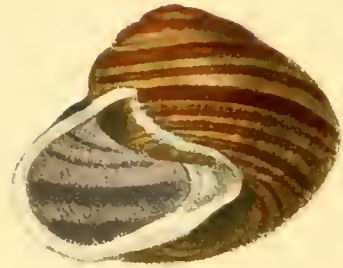




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370.



371.



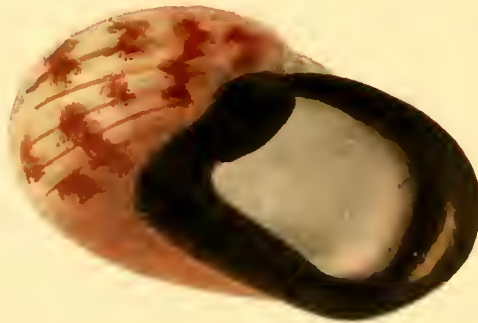
372 a



373 a



373 b.



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# HELIX.

PLATE LXXII.

Species 369. (Mus. Cuming.)

**HELIX RETRORSA.** *Hel. testâ umbilicatâ, globoso-depressâ, sinistrali, tenuiculâ, subtilissimè striatâ, striis subcorrugatis malleato-decussatâ, corneo-olivaceâ; anfractibus quatuor ad quinque, plano-convexis, ultimo acutè carinato; umbilico angusto, profundo; aperturâ lunari-ovali; peristomate simplici, margine columellari recurvato.*

**THE REVERSED HELIX.** Shell umbilicated, globosely depressed, sinistral, rather thin, very finely striated, indentedly decussated with fine corrugate striae, horny-olive; whorls four to five, flatly convex, last whorl sharply keeled; umbilicus narrow, deep; aperture lunar-oval; lip simple, columellar margin recurved.

GOULD, Boston, Journ. Nat. Hist. vol. iv. p. 455. pl. 24. f. 4.

*Hab.* Tavoy, Burmah.

A sharply keeled sinistral species of a dull horny-olive colour.

Species 370. (Mus. Cuming.)

**HELIX CHENUI.** *Hel. testâ subumbilicatâ, depressâ, tenuiusculâ, striis subtilibus et lineis impressis spirâlibus malleato-subdecussatâ, castaneo-fulvâ; spirâ vix elevatâ, obtusâ; anfractibus quatuor ad quinque, planiusculis, ad suturam vix impressam breviter rugoso-striatis, ultimo angulato, non descendente, fasciâ periphericâ pallidâ et adjacente castaneâ, deorsum dilutâ, ornato; aperturâ parum obliquâ, truncato-ovali, intus opalinâ; peristomate recto, simplici, margine columellari subincrassato, ad umbilicum clausum breviter dilatato-reflexo.*

**CHENU'S HELIX.** Shell slightly umbilicated, depressed, rather thin, indentedly decussated with fine striae and spiral impressed lines, chestnut-fulvous; spine scarcely raised, obtuse; whorls four to five, rather flat, shortly rugosely striated at the slightly impressed suture, last whorl angled, not descending, ornamented with a pale band at the periphery, then chestnut, turning pale beneath; aperture but little oblique, truncate oval, opaline within; lip straight, simple, columellar margin rather thickened, shortly dilately reflected over the closed umbilicus.

PREIFFER, in Zeitschrift für Malac. 1847, p. 145

*Hab.* Ceylon?

Of a dark livid fulvous colour, darker immediately below the periphery; and of a lighter olive around the umbilicus.

Species 371. (Mus. Cuming.)

**HELIX CICATRICOSA.** *Hel. testâ sinistrorsâ, umbilicatâ depresso-globosâ, irregulariter rugosâ et cicatricose fulvicante-fuscâ, lineis et fasciis rufis variè ornatâ anfractibus quinque ad sex, rotundatis, ultimis duobus inflatis, ultimo ad peripheriam angulato, ad umbilicum mediocrem, perivium, compresso; aperturâ lunari, peristomate expanso, subincrassato, marginibus callo tenui junctis, columellari breviter arcuato, latè expanso, umbilicum semitegente.*

**THE SCARRED HELIX.** Shell sinistral, umbilicated, depressly globose, irregularly wrinkled and scarred, fulvous-brown, variously ornamented with red bands and lines; whorls five to six, rounded, the last two inflated, the last angled, compressed around the open middle of umbilicus; aperture lunar; lip expanded, rather thickened, margins joined by a thin callosity, columellar margin shortly arched, broadly expanded, half-covering the umbilicus.

MULLER, Verm. Hist. terr. et fluv. vol. ii. p. 12.

*Helix Senegalensis*, Chemnitz.

*Helix Chinensis*, Wight.

*Hab.* China.

This well-known species, which is found abundantly in China, is always convoluted sinistrally.

Species 372. (Mus. Cuming.)

**HELIX WALTONI.** *Hel. testâ imperfuratâ, depressâ, pyriformi, solidâ, longitudinaliter et concentricè striatâ, fuscâ, rubicundo-fasciatâ, maculis triangulatis flavidis epidermidis hydrophane ornatâ; spirâ vix elevatâ, obtusâ; anfractibus tribus ad quatuor, raris, vix incrementibus, ultimo ventroso, depressâ, mucis concentricis signato; aperturâ peribipolâ, truncato-ovali intus nitidè roseâ; peristomate latè expanso, reflexo nigro, marginibus callo nigro introrsum diffuso fusco columellari distincti, striatissimè, superius enlatis excavato.*

WALTON'S HELIX. Shell imperforated, depressed, pear-shaped, solid, longitudinally and concentrically striated, brown, red-banded, ornamented with yellowish triangular blotches of hydrophanous epidermis; spire very small, obtuse; whorls three to four, increasing very rapidly, last whorl ventricose, depressed, marked with a few concentric grooves; aperture very oblique, lunar-oval, shining rose within; lip broadly expanded, reflected, black, margins joined by a black callosity which is diffused inwardly, columellar margin slanting, rather drawn out, very much dilated and excavated above.

REEVE, Pro. Zool. Soc. 1842, p. 49; Conch. Syst. vol. ii. pl. 166. f. 23.

*Hab.* Ceylon.

This fine species may be readily distinguished by its depressly oblique growth, coppery-rose hue covered with a profusely speckled hydrophanous epidermis, and shining jet-black lip. The egg of this species is about the same size as, and very similar to, that of a sparrow.

Species 373. (Fig. *a, b*, Mus. Cuming.)

HELIX JULIANA. *Hel. testâ vix umbilicatâ, depresso-tur-*

*binatâ, apice obtusâ, ad suturam plicato-striatâ, fulvescente aut rosâ; anfractibus quinque, convexiusculis, ultimo infra rosco, ad suturam lineâ castaneâ cincto, ad peripheriam et circa umbilicum fasciâ castaneâ ornato, basi planiusculo, medio impresso; aperturâ obliquè lunari; peristomate simplici, obtuso, margine basali subincrassato.*

JULIA'S HELIX. Shell slightly umbilicated, depressly turbinated, obtuse at the apex, plicately striated at the suture, fulvous or rose; whorls five, rather convex, the last rose beneath, encircled with a chestnut line at the suture, ornamented at the periphery and around the umbilicus with a chestnut-black band, base rather flat, impressed in the middle; aperture obliquely lunar; lip simple, obtuse, basal margin rather thickened.

*Nanina Juliana*, Gray, Pro. Zool. Soc. 1834, p. 58.

*Helix rosacea*, Sowerby.

*Helix Dufourii* and *citrinoides*, Grateloup.

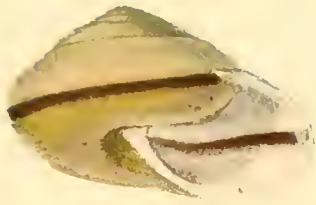
*Hab.* Ceylon.

For the very richly coloured and beautiful specimen here figured of this species, I am indebted to Sir J. Emerson Tennent, who collected it at Suffragam, Ceylon.

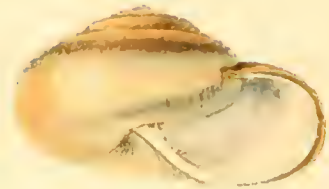




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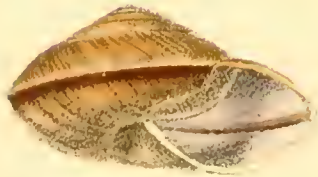
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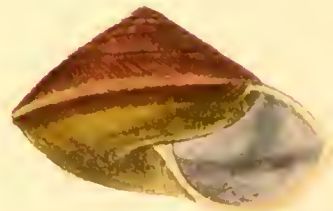
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# HELIX.

PLATE LXXIII.

Species 374. (Mus. Cuming.)

HELIX GEMINA. *Hel. testâ angustè umbilicatâ, depresso-turbinatâ, obsolete angulatâ, striis concentricis et obliquis irregulariter malleato-decussatâ, lutescente-albâ, rufescente-brunneo latè bifasciatâ; anfractibus sex, vix converiusculis; aperturâ lunato-ovali; peristomate simplici, supernè inflexo.*

THE TWIN HELIX. Shell narrowly umbilicated, depressly-turbinated, obsoletely angled, irregularly faintly malleately decussated with concentric and oblique striae, yellowish-white, broadly two-banded with reddish-brown; whorls six, slightly convex; aperture lunar-oval; lip simple, inflected at the upper part.

BUSCH, Philippi, Abbild. and Besch. Conch. vol. i. p. 9. pl. 1. f. 1.

Hab. Java?

Of the two bands with which this shell is encircled, one is above the periphery, and the other is below it.

Species 375. (Mus. Cuming.)

HELIX Densa. *Hel. testâ umbilicatâ, subdiscoideâ, densâ, obtusè carinatâ, supernè depressiusculâ, obliquè plicato-striatâ, undique eximie malleato-decussatâ; fulvescente, infra carinam fasciâ latâ castaneâ circumdatâ; anfractibus quinque; aperturâ transversè lunatâ, intus albâ; peristomate simplici, intus subincrassato.*

THE THICK HELIX. Shell umbilicated, subdiscoid, thick, obtusely keeled, rather depressed at the upper part, obliquely plicately striated, delicately indentedly decussated throughout; fulvous, encircled with a broad chestnut band beneath the keel; whorls five; aperture transversely lunar, white within; lip simple, slightly thickened inwardly.

ADAMS and REEVE, Zool. Voy. Samarang, Mollusca, p. 62. pl. 16. f. 8.

Hab. Philippine Islands; Belcher.

Allied to *H. citrina*, but of stouter growth, with the surface indentedly decussated.

Species 376. (Mus. Cuming.)

HELIX LABIATA. *Hel. testâ perangustè umbilicatâ, depressâ, tenui, striatulâ, supernè lineis concentricis obsolete decussatâ, basi lævigatâ, nitidâ, fulvâ; spirâ*

*planiusculâ; anfractibus sex, converiusculis, ultimo dilatato, depresso; aperturâ latâ, lunari; peristomate acuto, plerumque rufescente, intus callosolabiato, margine supero antrorsum rotundato, basali planè subarcuato, columellari vix reflexiusculo.*

THE LIPPED HELIX. Shell very narrowly umbilicated, depressed, thin, finely striated, obsoletely decussated above with concentric lines, smooth at the base, shining, fulvous; spire rather flat; whorls six, rather convex, the last dilated, depressed; aperture broad, lunar; lip sharp, generally stained with red, callously lipped within, upper margin rounded in front, basal flatly subarched, columellar margin but little reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 65.

Hab. Landour, Hindoostan; Hutton.

The surface of this species is not characterized by the indented net-work of the preceding, but is smooth and shining.

Species 377. (Mus. Cuming.)

HELIX BROOKLY. *Hel. testâ sinistrali, imperforatâ, subdiscoideâ, obesâ, carinatâ, supra carinam albidâ, castaneo tinctâ et strigillatâ, infra intensè castaneâ; anfractibus quatuor ad quinque, plano-converis, ultimo basi rotundato, radiatim striato, medio impresso; aperturâ obliquè ovalatâ, intus cœrulescente; peristomate incrassato, marginibus calla junctis.*

BROOKE'S HELIX. Shell sinistral, imperforated, subdiscoid, stout, keeled, above the keel whitish, stained and streaked with chestnut, below it very dark chestnut; whorls four to five, flatly convex, the last rounded and radiately striated at the base, impressed in the middle; aperture obliquely ovate, bluish within; lip thickened, margins joined by a callous layer.

ADAMS and REEVE, Zool. Voy. Samarang, Mollusca, p. 60. pl. 15. f. 4 a, b.

Hab. Mountains of Borneo.

This fine species is named in honour of the illustrious British rajah, Sir James Brooke, whose zealous labours to establish a civilized colony in Borneo, and to exterminate piracy from the seas of the eastern Archipelago, deserve the thanks of all oriental merchant-traders, and the honest approval of every right-minded Englishman.

Species 378. (Mus. Cuming.)

HELIX SOULEYETIANA. *Hel. testâ angustè umbilicatâ, orbiculari-depressâ, fulvescente, zonâ castaneâ angustâ infra carinam, supernè confertim costulato-striatâ, lineis spiralibus obsolete decussatâ; spirâ obtusâ; anfractibus sex, viz convexiusculis, ultimo acutè angulato, basi glabro, nitido; aperturâ truncato-ovalî; peristomate albo, breviter expanso, marginibus conniventibus.*

SOULEYET'S HELIX. Shell narrowly umbilicated, orbicularly depressed, fulvous, with a narrow chestnut zone beneath the keel, closely rib-like striated at the upper part, obsoletely decussated with spiral lines; spire obtuse; whorls six, rather convex, the last sharply angled, smooth and shining at the base; aperture truncately oval; lip white, shortly expanded, margins approximating.

PETIT, Revue Zool. Soc. Cuv. 1841. p. 99.

*Hab.* Seychelle Islands.

Of a silken aspect above, arising from its minute decussated sculpture, and shining beneath, with a very small umbilicus.

Species 379. (Mus. Cuming.)

HELIX SCHUMACHERIANA. *Hel. testâ umbilicatâ, orbiculari-depressâ, ustulato-olivaceâ, undique subtiliter corrugato-decussatâ; spirâ brevissimâ, obtusâ; anfractibus quinque ad sex, plano-convexis, ad suturas tenui-marginatis, ultimo acutè carinato; umbilico subangusto, pervio, profundo; aperturâ lunari-ovalâ, peristomate simplici.*

SCHUMACHER'S HELIX. Shell umbilicated, orbicularly

depressed, burnt-olive, finely corrugately decussated throughout; spire very short, obtuse; whorls five to six, flatly convex, finely margined at the sutures, last whorl sharply keeled; umbilicus rather narrow, open, deep; aperture lunar-oval, lip simple.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* Borneo.

A new species of the *Nanina* form lately received from Borneo.

Species 380. (Mus. Cuming.)

HELIX BUSBYI. *Hel. testâ latè umbilicatâ, depressâ, subdiscoideâ, opaco-albâ, epidermide crassâ, glabrâ, nitidâ, saturatè viridi, peristoma superante, indutâ; spirâ planâ, subrugosâ; anfractibus quatuor ad quinque, convexiusculis, ultimo glabro, anticè deflexo et depresso; umbilico lato, perspectivo; aperturâ obliquè lunato-ovalî, intus carulescente; peristomate simplici, undique inflexo.*

BUSBY'S HELIX. Shell broadly umbilicated, depressed, subdiscoid, opaque-white, covered with a thick, smooth, shining, dark green epidermis, which curls over the lip; spire flat, subrugose; whorls four to five, rather convex, the last smooth, deflected and depressed in front; umbilicus broad, perspective; aperture obliquely lunar-oval, bluish within; lip simple, turned inwards.

GRAY, Ann. and Mag. Nat. Hist. vol. vi. p. 317.

*Hab.* New Zealand; Dieffenbach.

This species may be readily distinguished by its very peculiar thick horny epidermis eurling over the margin of the aperture.





381.



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387.



# HELIX.

PLATE LXXIV.

Species 331. (Mus. Cuming.)

**HELIX NOBILIS.** *Hel. testâ angustè umbilicatâ, orbiculari, striis undique minutè malleato-decussatâ, ustulato-fulvâ, subtus albidâ; anfractibus sex ad septem, convexis, ultimo rotundato, fasciâ intensè castaneâ ad peripheriam cingulato; aperturâ obliquè lunari; peristomate simplici.*

**THE NOBLE HELIX.** Shell narrowly umbilicated, orbicular, minutely indentedly decussated throughout with striæ, burnt-fulvous, whitish beneath; whorls six to seven, convex, the last rounded, encircled at the periphery with a very dark chestnut band; aperture obliquely lunar; lip simple.

PFEIFFER, Pro. Zool. Soc. 1849. p. 127.

*Hab.* Borneo and the Philippine Islands.

Distinguished from the two species figured beneath it in the accompanying plate, by the more rounded form of the whorls and of the shell.

Species 332. (Mus. Cuming.)

**HELIX LUHUANA.** *Hel. testâ latè umbilicatâ, suborbiculari, depressiusculâ, lineis incrementi irregulariter rugulosâ, brunneo-olivaceâ; anfractibus sex, convexis, ultimo rotundato, supra medium fasciâ angustâ nigricante cincto, anticè vix descendente, circa umbilicum infundibuliformem subcompresso; aperturâ latâ, rotundato-lunari; peristomate intus subincrassato, marginibus conniventibus, supero arcuato, expanso, basali breviter reflexo, columellari vix dilatato.*

**THE LOO-CHOO HELIX.** Shell broadly umbilicated, nearly orbicular, rather depressed, irregularly wrinkled with lines of growth, brown-olive; whorls six, convex, the last rounded, encircled above the middle with a narrow blackish band, slightly descending in front, rather compressed and funnel-shaped around the umbilicus; aperture broad, rotundately lunar; lip slightly thickened within, margins approximating, upper margin arched, expanded, basal margin shortly reflected, columellar margin but little dilated.

SOWERBY, Zool. Beechey's Voyage, p. 140. pl. 35. f. 4.

*Hab.* Loo-Choo Islands.

Characterized by a rather depressed spire and by an open perspective umbilicus.

Species 333. (Mus. Cuming.)

**HELIX MERCATORIA.** *Hel. testâ umbilicatâ, turbinato-depressâ, costulato-striatâ, olivaceo-brunneâ, zonâ unicâ nigricante, utrinque pallidè marginatâ, circumdatâ, spirâ elevatâ, obtusiusculâ; anfractibus sex ad septem, convexiusculis, ultimo obsolete angulato, basi inflato, umbilico angustissimo, vix percio; aperturâ lunari, peristomate incrassato, breviter reflexo.*

**THE MERCHANT HELIX.** Shell umbilicated, turbinate depressed, rib-like striated, olive-brown, encircled with a single blackish band pale-edged on either side; spire raised, rather obtuse; whorls six to seven, rather convex, the last obsoletely angled, inflated at the base; umbilicus very narrow, but little open; aperture lunar; lip thickened, shortly reflected.

GRAY, Pfeiffer, Zeitschrift für Malac. 1845, p. 154.

*Hab.* China.

Closely allied to the preceding, but less depressed and with a narrower umbilicus. The striæ of growth obtain almost the character of fine ribs.

Species 334. (Mus. Cuming.)

**HELIX OBLIQUATA.** *Hel. testâ angustè umbilicatâ, suborbiculari, depressâ, striis undique minutè malleato-decussatâ, fulvescente, subtus albidâ; anfractibus quinque ad sex, convexis, ultimo rotundato, prominente, fasciâ castaneâ, supernè pallidè marginatâ, cingulato, aperturâ obliquè lunari; peristomate simplici.*

**THE OBLIQUELY-TURNED HELIX.** Shell narrowly umbilicated, nearly orbicular, depressed, minutely indentedly decussated throughout with striæ, fulvous, whitish beneath; whorls five to six, convex, the last rounded, prominent, encircled by a chestnut band pale-edged along the upper side; aperture obliquely lunar; lip simple.

*Hab.* Borneo.

This species is certainly distinguished from those figured above and below it in the accompanying plate, by a smaller and more depressed spire and by the more swollen and prominent growth of the last whorl, which imparts an obliquely lunar form to the aperture.

## Species 385. (Mus. Cuming.)

HELIX GERMANUS. *Hel. testâ umbilicatâ, depresso-subgloboseâ, striis incrementi subconspicuis, fusco-aurantiâ, fasciis duabus nigricantibus cingulatâ; anfractibus quinque, rotundatis; umbilico pervio, perspectivo; aperturâ subcirculari; peristomate reflexo, violaceo, marginibus fere junctis.*

THE ALLIED HELIX. Shell umbilicated, depressly subglobose, with the striae of growth rather conspicuous, brownish-orange, encircled with two blackish bands; whorls five, rounded; umbilicus open, perspective; aperture nearly circular; lip reflected, violet, with the margins almost joined.

*Helix orientalis*, Adams and Reeve (not of Gray), Zool. Voy. Samarang, Mollusca, p. 61. pl. 16. f. 4.

*Hab.* Borneo.

The aperture of this species obtains a more circular form than is usual in this group, the margins almost meeting on the body-whorl.

## Species 386. (Mus. Cuming.)

HELIX SOWERBYANA. *Hel. testâ subumbilicatâ, depressâ, solidiusculâ, striis concentricis confertis et striis incrementi prominentibus decussatâ, olivaceo-castaneâ; spirâ depressâ; anfractibus quatuor ad quinque, planiusculis, rapidè accrescentibus, ultimo depresso, anticè dilatato, basi circa umbilicum profundè excavato; aperturâ perobliquâ, lunato-ovali, intus lacteâ; peristomate incrassato, marginibus callo tenuissimo junctis, supero antrorsum arcuato, columellari reflexiusculo.*

SOWERBY'S HELIX. Shell slightly umbilicated, depressed, rather solid, decussated with close-set concentric striae and prominent striae of growth, olive-chestnut; spire depressed; whorls four to five, rather flat, increasing rapidly, the last rather depressed, dilated in

front, deeply excavated around the umbilicus; aperture very oblique, lunar-oval, milk-white within; lip thickened, margins joined by a very thin callosity, upper margin arched forwards, columellar margin somewhat reflected.

PFEIFFER, Symbolæ, vol. i. p. 36.

*Helix pachystoma*, Hombron and Jacquinot.

*Hab.* Carolina Islands.

Characterized by a peculiar depression of the under part of the shell, hollowed around the umbilicus, with a thickened inflected lip. In general aspect the shell reminds one of the marine *Trochiscus Norrisii*.

## Species 387. (Mus. Cuming.)

HELIX HUMPHREYSIANA. *Hel. testâ subangustè umbilicatâ, orbiculato-conoideâ, subtus convexâ, malleato-decussatâ et striatâ, luteo-fulvâ, ad peripheriam castaneo-fasciatâ; spirâ elatâ, acutiusculâ; anfractibus sex ad septem, convexiusculis, ultimo circa umbilicum compresso; aperturâ obliquâ, lunari; peristomate simplici, acuto, margine columellari vix reflexo.*

HUMPHREYS' HELIX. Shell rather narrowly umbilicated, orbicularly conoid, convex beneath, indentedly decussated and striated, yellowish-fulvous, encircled with a chestnut band at the periphery; spire raised, rather sharp; whorls six to seven, rather convex, the last compressed around the umbilicus; aperture oblique, lunar; lip simple, sharp, columellar margin but little reflected.

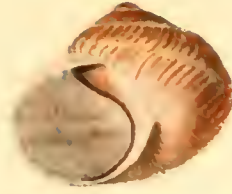
LEA, Trans. American Phil. Soc. vol. vii. p. 463. pl. 12. f. 16.

*Hab.* Mount Ophir, Malacca.

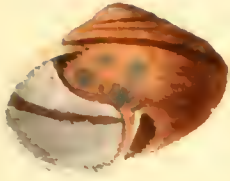
The spire is more elevated in this species than in the two nearest allied represented above, and the last whorl fuller and rounded.



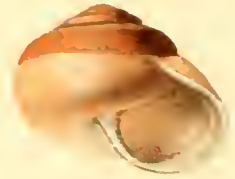




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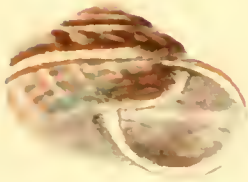
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# HELIX.

PLATE LXXV.

Species 388. (Mus. Cuming.)

**HELIX BAJADERA.** *Hel. testâ umbilicatâ, sinistrali, subgloboseâ, tenui, tumidiusculâ, conspicuè creberrimè plicato-corrugatâ, rugis subtus ecanidis, sulcâ, apicem versus rufescente, subtus albidâ; anfractibus quatuor ad quinque, plano-convexis, ultimo medio angulato, subcarinato; umbilico angusto, profundo; aperturâ subcirculari; peristomate simplici, margine columellari circa umbilicum valdè dilatato.*

**THE BAJADERE HELIX.** Shell umbilicated, sinistral, subglobose, thin, rather swollen, conspicuously very closely plicately wrinkled, wrinkles fading away on the under part of the shell, fulvous, light red towards the apex, whitish underneath; whorls four to five, flatly convex, last whorl angled in the middle, slightly keeled; umbilicus narrow, deep; aperture nearly circular; lip simple, columellar margin much dilated around the umbilicus.

PREIFFER, Pro. Zool. Soc. 1850.

*Hab.* Bengal.

A delicate slightly swollen reversed shell, thickly wrinkled throughout the upper surface, of a light fulvous colour, tinged with red towards the apex.

Species 389. (Mus. Cuming.)

**HELIX HIMALAYANA.** *Hel. testâ angustè umbilicatâ, sinistrali, depressâ, tenui, pellucidâ, superuè costulato-striatâ, sulco-olivaceâ; spirâ parvè elevatâ; anfractibus quatuor ad quinque, planiusculis, ultimo subcarinato, carinâ fusco-fasciatâ, basi tumido; aperturâ rotundato-lunari; peristomate simplici, acuto, margine columellari circa umbilicum latè dilatatâ.*

**THE HIMALAYA HELIX.** Shell narrowly umbilicated, sinistral, depressed, thin, pellucid, finely rib-like striated, fulvous-olive; spire but little raised; whorls four to five, rather flattened, last whorl slightly keeled, keel brown-banded, base swollen; aperture rotundately lunar; lip simple, acute, columellar margin broadly dilated around the umbilicus.

LEA, Observations, vol. i. p. 167. pl. 19. f. 66.

*Helix Himalayana*, Benson.

*Hab.* Himalaya mountains.

Of the same typical form and sculpture as the preceding species, from which it mainly differs in being much less

prominently wrinkled, of a uniform fulvous-olive colour, encircled at the periphery with a narrow chestnut band.

Species 390. (Mus. Cuming.)

**HELIX VITELLINA.** *Hel. testâ angustè umbilicatâ, subgloboseâ, striis subtilibus spiralibus et obliquis supra peripheriam cancellatim decussatâ, vitellinâ; spirâ brevi, obtusâ; anfractibus quinque, rotundatis; aperturâ subcirculari; peristomate simplici, marginibus conniventibus, columellari incrassato, reflexo.*

**THE YOLK HELIX.** Shell narrowly umbilicated, subglobose, cancellately decussated above the periphery with fine spiral and oblique striae, yolk-coloured, spire short, obtuse; whorls five, rounded; aperture nearly circular; lip simple, margins approximating, columellar margin thickened and reflected.

PFLIFFER, Pro. Zool. Soc. 1848, p. 109.

*Hab.* — ?

A subglobose shell, very finely cancellated throughout, and tinged with a delicate egg-yolk colour. Probably a variety of *H. Tranquebaria*.

Species 391. (Mus. Cuming.)

**HELIX SEMIRUGATA.** *Hel. testâ umbilicatâ, globosâ, tenuiusculâ, pallidè fulvescente, striis incrementi hincque impressis concentricis superne usque ad peripheriam anfractibus ultimi subcussatâ; anfractibus quinque, convexiusculis, ultimo magno, inflexo; aperturâ lunato-subovali; peristomate simplici, obtuso, margine columellari dilatato, umbilicum ferè tegente.*

**THE HALF-WRINKLED HELIX.** Shell umbilicated, globose, rather thin, light fulvous, subdepressed as far as the periphery of the last whorl with impressed lines and striae of growth; whorls five, rather convex, the last large, inflated; aperture lunato-oval. Lip simple, obtuse, columellar margin dilated, almost covering the umbilicus.

*Galaxias semirugata*, Beck, Index, p. 42.

*Helix globosa*, Cuvier (not of Mulsant).

*Hab.* Carnatic, Hindoostan.

Very closely allied to the preceding species, from which it differs chiefly in being of a more swollen globose form and of lighter growth.

## Species 392. (Mus. Cuming.)

HELIX MADERASPATANA. *Hel. testâ angustissimè umbilicatâ, depresso-globosâ, striato-rugosâ, pallidè rufâ, albo cinctâ et lentiginosâ; anfractibus quinque ad sex, vix convexiusculis, ultimo subinflato; aperturâ obliquâ, lunato-ovali; peristomate simplici, ad umbilicum subincrassato, reflexo.*

THE MADERASPATAN HELIX. Shell very narrowly umbilicated, depressly globose, striately wrinkled, pale red, banded and freckled with white; whorls five to six, slightly convex, the last a little inflated; aperture oblique, lunar-oval; lip simple, rather thickened and reflected at the umbilicus.

GRAY, Pro. Zool. Soc. 1834, p. 67.

*Helix Pondicherriensis*, Pfeiffer.

*Hab.* Maderaspatan, Neilgherries, India.

Characterized by a pale rust-red tinge of colouring, sprinkled irregularly with white freckles, and encircled by a narrow white band at the periphery.

## Species 393. (Mus. Cuming.)

HELIX SAULLE. *Hel. testâ umbilicatâ, globoso-depressâ, solidiusculâ, obliquè striatâ, fulvidâ, medio fasciâ angustâ unicâ, suturis rufo-marginatis ornatâ; spirâ brevi, obtusâ; anfractibus quatuor, vix convexiusculis, ultimo basi subplanato, anticè subitò deflexo, circa umbilicum angustum peritium rufo; aperturâ perobliquâ, lunato-ovali; peristomate breviter reflexo, incrassato, purpureo-castaneo, marginibus conniventibus, callo tenui junctis, columellari purpureo-castaneo, valdè dilatato, umbilicum fere occultante.*

SAUL'S HELIX. Shell umbilicated, globosely depressed, rather solid, obliquely striated, fulvous, with a single narrow band round the middle, sutures red-edged;

spire short, obtuse; whorls four, slightly convex, last whorl rather flat at the base, suddenly deflected in front, reddish around the umbilicus which is narrow and open; aperture very oblique, lunar-oval; lip thickened, shortly reflected, purple-chestnut, margins approximating, joined by a thin callosity, columellar margin purple-chestnut, much dilated, almost covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 72.

*Hab.* —?

A very characteristic species, but not yet known in sufficiently good condition, to describe the colouring accurately.

## Species 394. (Mus. Cuming.)

HELIX TRANQUEBARICA. *Hel. testâ angustè umbilicatâ, globosâ, crassâ, distinctè striatâ, lineis obsolete supernè decussatâ, albidâ; spirâ parum elevatâ; anfractibus quinque ad sex, convexiusculis, ultimo anticè descendente; aperturâ lunato-ovali; peristomate subincrassato, marginibus convergentibus, columellari calloso, reflexo.*

THE TRANQUEBAR HELIX. Shell narrowly umbilicated, globose, thick, distinctly striated, decussated round the upper part with obsolete lines, whitish; spire but little raised; whorls five to six, rather convex, the last descending in front; aperture lunar-oval; lip rather thickened, margins approximating, columellar margin callous, reflected.

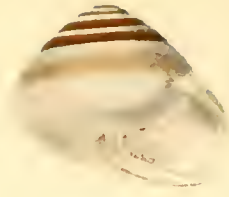
FABRICIUS, Pfeiffer, Monog. Helic. viv. vol. i. p. 41.

*Galaxias Tranquebarica*, Beek.

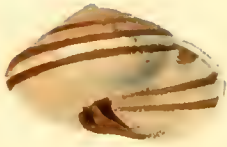
*Hab.* Tranquebar.

It is extremely doubtful whether this and *H. citellina* are not different states of the same species.





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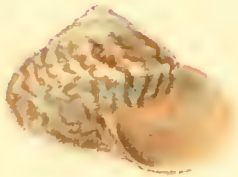
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# HELIX.

PLATE LXXVI.

Species 395. (Mus. Cuming.)

**HELIX LIGULATA.** *Hel. testā augustè umbilicatā, depresso-globosā, superne longitudinaliter striatā, minutè decussatā, sublus glabrā, albā, fasciā unicā, latiusculā, luteā, supra peripheriam cingulatā; anfractibus quinque, planulis, ultimo basi convexo; aperturā irregulariter lunato-ellipticā; peristomate simplici, margine dextro recto, columellari reflexiusculo, cum basali angulum obsoletum formante.*

**THE TIED HELIX.** Shell narrowly umbilicated, depressly globose, longitudinally striated at the upper part, minutely decussated, smooth beneath, white, encircled by a single rather broad yellowish band above the periphery; whorls five, rather flattened, last whorl convex at the base; aperture irregularly lunar-elliptical; lip simple, right margin straight, columellar margin somewhat reflected, forming an obsolete angle with the basal margin.

FERUSSAC, Hist. Moll. pl. 31. f. 2.

*Hab.* Bengal.

The broad yellowish band, which is a characteristic feature of this species, rests, so to speak, upon the suture, and is darker in colour as it approaches the apex.

Species 396. (Mus. Cuming.)

**HELIX JAVANICA.** *Hel. testā umbilicatā, orbiculato-convexā, superne confertim costulato-striatā, basi sublævigatā, lutescente-corneā, fasciis angustis rufis zonatā, duabus ad peripheriam approximatis, tertiā ad suturam; spirā brevi; anfractibus sex, planiusculis, ultimo subcarinato, carinā anticè evanescente; areā umbilicali rufā; aperturā subangulato-lunari; peristomate simplici, recto, margine columellari ad umbilicum pericium breviter dilatato, reflexiusculo.*

**THE JAVA HELIX.** Shell umbilicated, orbicularly convex, closely rib-like striated at the upper part, rather smooth at the base, yellowish-horny, zoned with three narrow red bands, two near the periphery and the third at the suture; spire short; whorls six, rather flat, the last slightly keeled, keel vanishing in front; umbilical area red; aperture rather angularly lunar; lip simple, straight, columellar margin shortly dilated and somewhat reflected at the umbilicus, which is open.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. viii. p. 45

*Helix Javanensis*, Férussac.

*Hab.* Java.

Of the two central bands which characterize this species, one is immediately above the keel and one below it. The area of the umbilicus is particularly dark-coloured.

Species 397. (Mus. Cuming.)

**HELIX LEVIPES.** *Hel. testā umbilicatā, sinistrati, orbiculatā, depressiusculā, tenuiusculā, subcarinatā, stris incrementi distinctis linearibusque spiralibus nonnullis obsolete decussatā, albidā, fasciis tribus rufi-fuscis cingulatā; anfractibus quatuor ad quinque, subplanulatis, aperturā parvulā, subobliquā, lunari; peristomate simplici, acuto, margine columellari reflexiusculo.*

**THE LEFT-BANDED HELIX.** Shell umbilicated, sinistral nearly orbicular, somewhat depressed, rather thin, slightly keeled, decussated beneath the lips with distinct striae of growth and a few spiral lines, whitish, encircled with three red-brown bands; whorls four to five, rather flattish; aperture somewhat small, rather oblique, lunar; lip simple, acute, columellar margin a little reflected.

MULLER, Hist. verm. terr. et fluv. vol. ii. p. 22.

*Helix trifasciata*, Chemnitz.

*Helix spadicea*, Gmelin.

*Hab.* Malabar. Tranquebar.

The two central bands of this species, which is always reversed, are broader and wider apart than in the preceding.

Species 398. (Mus. Cuming.)

**HELIX RAVIDA.** *Hel. testā umbilicatā, globosā, tenuiusculā, corneā, pellucidā, stris longitudinalibus et transversis obsolete decussatā; spirā brevis et conicali, icone corneā; anfractibus sex, convexiusculis, ultimo carinatis; aperturā lunato-circuari; peristomate simplici, acuto, margine columellari arcuato, dilatato, reflexiusculo; umbilicum sine occultate.*

**THE TAWNY HELIX.** Shell umbilicated, globose, thin, horny, transparent, obsoletely decussated with longitudinal and transverse striae, spire shortly conical, rather sharp; whorls from five to six, rather convex



the last ventricose; aperture lunar-circular; lip simple, acute, columellar margin arched, dilated, reflected in a vaulted manner, half-covering the umbilicus.

BENSON, Annals and Mag. Nat. Hist. vol. xi. 1842, p. 486.

*Hab.* Chusan, China.

A light inflated shell, distinguished by a tawny silken aspect, arising from the decussated striae.

Species 399. (Mus. Cuming.)

HELIX INQUINATA. *Hel. testâ vix umbilicatâ, depresso-conoideâ, tenui, nitidulâ, minutè granulatâ, pellucido-roseâ, opaco-albo lentiginosâ, apicem versus immaculatâ; anfractibus quinque ad sex, planiusculis, ultimo rotundato, obsolete carinato; aperturâ elliptico-lunari, labro simplici, acuto.*

THE STAINED HELIX. Shell scarcely umbilicated, depressly conoid, thin, shining, minutely granuled, transparent rose, freckled with opaque white, unspotted towards the apex; whorls five to six, rather flat, last whorl rounded, obsolete keeled; aperture elliptically lunar, lip simple, acute.

BUSCH, Philippi, Abbild. und Besch. Conch. vol. i. p. 10. pl. 1. f. 4.

*Hab.* Java.

A depressly conoid form of a delicate transparent rose substance freckled with opaque white.

Species 400. (Mus. Cuming.)

HELIX ZONULATA. *Hel. testâ imperforatâ, depresso-globosâ, tenui, lineis minutissimis decussantibus scabriusculâ, nitidulâ, fulvescente-carneâ, ad peripheriam fasciâ dilutâ albidâ, superne zonulâ unicâ rufâ angustâ marginatâ, circumdatâ; anfractibus quinque, convexiusculis, ultimo ventroso; columellâ tenui, rubicundâ, callosâ; aperturâ rotundato-lunari; peristomate simplici, reflexo, margine columellari dilatato, umbilici locum*

*prorsus legente, cum basali angulum subdenticulatum formante.*

THE ZONED HELIX. Shell imperforated, depressly globose, thin, rather roughened with very minute decussating lines, shining, fulvous flesh-colour, encircled with a dilute white band, margined above with a narrow red zone; whorls five, rather convex, the last ventricose; columella thin, ruddy, callous; aperture rotundately lunar; lip simple, reflected, columellar margin dilated, covering the place of the umbilicus, and forming a slightly denticulated angle with the basal margin.

FERUSSAC, Prodrome, p. 67.

*Helix Listeri*, Férussac.

*Helix lemniscata*, Lesson.

*Hab.* New Guinea.

Very closely allied to *H. intorta* of the Philippine Islands.

Species 401. (Mus. Cuming.)

HELIX MANDARINA. *Hel. testâ imperforatâ, turbinato-globosâ, solidâ, striatâ, castaneâ; spirâ elatâ, conoideâ, apice obtusâ; anfractibus quinque ad sex, convexis, ultimo pallidè cingulato, interdum medio subangulato; suturâ profundâ; aperturâ latè rotundato-lunari; peristomate subincrassato, margine supero vix expanso, basali et columellari dilatato, arcuato, corneo.*

THE MANDARIN HELIX. Shell imperforated, turbinately globose, solid, striated, chestnut: spire raised, conoid, obtuse at the apex; whorls five to six, convex, the last palely banded, sometimes slightly angled round the middle; suture deep; aperture broadly rotundately lunar; lip rather thickened, upper margin slightly expanded, basal and columellar margins dilated, arched, flesh-coloured.

GRAY, Zool. Beechey's Voyage, p. 143. pl. 35. f. 3.

*Hab.* Loo-Choo Islands.

It is a characteristic feature in this, being a dark chestnut shell, that the lip and apex are of a delicate flesh tint.

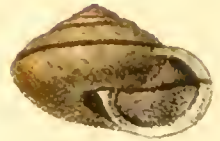




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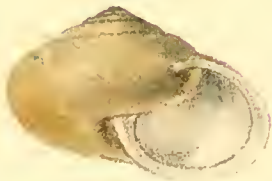
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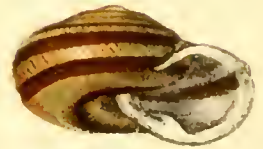
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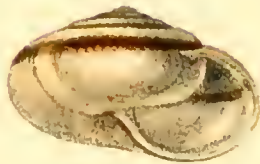
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407.



408.

# HELIX.

PLATE LXXVII.

Species 402. (Mus. Cuming.)

**HELIX ANTIQUA.** *Hel. testā vir umbilicatā, globoso-acuminatā, lævigatā, albā; spirā elatā; anfractibus quatuor ad quinque, convexis, obliquè tenuistriatis, ultimo rotundato; aperturā obliquè orbiculari; peristomato lato, effuso-reflexo, marginibus conniventibus, columellari dilatato, latè appresso, umbilicum occultante.*

**THE ANTIQUE HELIX.** Shell scarcely umbilicated, globosely acuminate, smooth, white; spire raised; whorls four to five, convex, obliquely finely striated, the last rounded; aperture obliquely orbicular; lip broad, effused, reflected, with the margins approximated, columellar margin dilated, broadly appressed, concealing the umbilicus.

ADAMS and REEVE, Zool. Voy. Samarang, Mollusca, p. 61. pl. 16. f. 1.

*Hab.* Unsang, Borneo.

An elegantly convoluted uncoloured species, found by Capt. Sir Edward Belcher at the above-named locality among loose stones.

Species 403. (Mus. Cuming.)

**HELIX KNYSNAENSIS.** *Hel. testā umbilicatā, globosā, solidiusculā, costulato-striatā, sericinā, corneo-olivaceā; spirā brevi, obtusā; anfractibus quatuor, convexiusculis, ultimo inflato, basi nitidissimo; umbilico angusto, pervio; aperturā rotundato-lunari; peristomate simplici, margine columellari dilatato.*

**THE KNYSNA HELIX.** Shell umbilicated, globose, rather solid, rib-like striated, silken, horny-olive; spire short, obtuse; whorls four, rather convex, the last inflated, very shining at the base; umbilicus narrow, open; aperture rotundately lunar; lip simple, columellar margin dilated.

PFEIFFER, Pro. Zool. Soc. 1845, p. 131.

*Hab.* Knysna, Cape of Good Hope.

The rib-like striæ of this species are developed with remarkable neatness and regularity near the apex.

Species 404. (Mus. Cuming.)

**HELIX CONNIVENS.** *Hel. testā umbilicatā, depresso-orbiculari, obliquè creberrimè tenuistriatā, corneo-stramineā, fasciā rufo-fuscescente ad peripheriam cingulatā,*

*spirā suturis impressis, anfractibus sex, plano-convexis, ultimo obsolete carinato; umbilico subperspectivo; aperturā circulari; peristomate intus incrassato, parum reflexo, marginibus conniventibus.*

**THE CONNIVING HELIX.** Shell umbilicated, depressly orbicular, obliquely very closely finely striated, horny-straw colour, encircled round the periphery with a light red-brown band, sutures of the spire impressed, whorls six, flatly convex, the last obsolete keeled, umbilicus subperspective; aperture circular, lip thickened inwardly, but little reflected, margins approximating.

PFEIFFER, Pro. Zool. Soc. 1849, p. 130.

*Hab.* Loo-Choo Islands.

The sutures of the spire are sufficiently impressed to show the peripheric band throughout.

Species 405. (Mus. Cuming.)

**HELIX NOULETI.** *Hel. testā vir umbilicatā, conico-depressā, purpureo-castaneā, lucidā, longitudinaliter et obliquè striatā, striis obliquis subplicatis, subtus depressā, nitidore; anfractibus quinque ad sex, depresso-convexis; spirā exertiusculā, obtusā; aperturā obliquā, labio acuto, margine columellari subincrassato, carneo, umbilicum minimum occultante aut subocculante.*

**NOULET'S HELIX.** Shell scarcely umbilicated, conically depressed, purple-chestnut, lucid, longitudinally and obliquely striated, oblique striae subplicate, depressed and more shining beneath; whorls five to six, depressly convex; spire but little exerted, obtuse, aperture oblique, lip sharp, columellar margin somewhat thickened, flesh-coloured, concealing or nearly concealing the very small umbilicus.

LE GUILLON, Revue zool. Soc. Cuv. 1842, p. 137.

*Hab.* Feejee Islands.

A dark purple-chestnut shell, covered towards the base with a peculiar livid greenish porcellanous coating.

Fig. 406. (Mus. Cuming.)

The shell here figured from Mr. Cuming's collection, when it has the names *H. Koreana*, Pfr. and *H. Hermannseni* attached to it, proves to be a variety of *H. coreana*, represented at Fig. 101.

## Species 407. (Mus. Cuming.)

HELIX LEUCOSTOMA. *Hel. testā umbilicatā, depresso-orbiculari, subobliquè productā, subconspicue striatā, pallidè stramineā, aurantio-castaneo latifasciatā, juxta suturas peculiariter lacteā; spirā obtusā; anfractibus quinque, planulatis, ultimo anticè descendente; umbilico subamplo, pervio; aperturā transversè lunari; peristomate latè reflexo, albo, marginibus conniventibus, basali obscurè dentato.*

THE WHITE-MOUTH HELIX. Shell umbilicated, depressly orbicular, rather obliquely produced, somewhat conspicuously striated, pale straw-colour, broadly banded with orange-chestnut, peculiarly milk-white next the sutures; spire obtuse; whorls five, flattened, the last descending in front; umbilicus rather large, open; aperture transversely lunar; lip reflected, white, marginus approximating, basal margin obscurely toothed.

ADAMS and REEVE, Zool. Voy. Samarang, Mollusca, p. 16. pl. 16. f. 3.

*Hab.* Philippine Islands; Beleher.

Intermediate in its characters between *H. zonalis* and *sepulchralis*. Peculiarly milk-white next the sutures.

## Species 408. (Mus. Cuming.)

HELIX SPIRALIS. *Hel. testā umbilicatā, depresso-orbiculari, pallidè stramineā, nitente, striis radiantibus crebris, interdum obsolete, sculptā; spirā obtusā; anfractibus quinque, depresso-convexiusculis, supernè infimo medio fasciā castaneā ornato; umbilico angustissimo, profundo; aperturā semiocata, labro acuto, ad umbilicum vix reflexo.*

THE SPIRAL HELIX. Shell umbilicated, depressly orbicular, pale straw-colour, shining, sculptured with close-set radiating striae, which are sometimes obsolete; spire obtuse; whorls five, depressly convex, the lowest encircled round the middle with a chestnut band; umbilicus very narrow, deep; aperture semi-ovate, lip acute, scarcely reflected at the umbilicus.

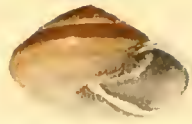
LE GUILLON, Revue zool. Soc. Cuv. 1845, p. 188.

*Hab.* Arrow Island.

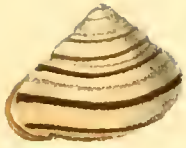
This species approximates also to *H. connivens*, but may be readily distinguished by its less thickened lip and smaller umbilicus.







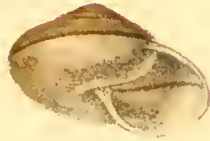
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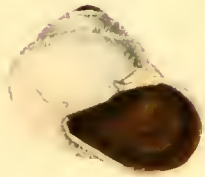
410 a



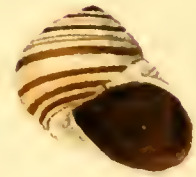
410 b



411.



412



412 b



413

# HELIX.

PLATE LXXXVIII

Species 409. (Mus. Cuming.)

**HELIX ORIENTALIS.** *Hel. testâ minutè umbilicatâ, orbiculari, utrinque convexâ, supra spadiceâ, creberrimè striatâ, infra corneâ, levigatâ, politâ, vix pellucidâ; anfractibus septem, convexis, ultimo obtusè carinato; aperturâ transversè lunari, labro simplici, introrsum subincrassato.*

**THE ORIENTAL HELIX.** Shell minutely umbilicated, orbicular, convex on both sides, fawn-colour and very closely striated above, horny, smooth, and polished beneath, scarcely transparent; whorls seven, convex, the last obtusely keeled; aperture transversely lunar, lip simple, rather thickened inwardly.

GRAY, Annals of Philosophy, 1825, vol. ix. p. 412.

*Hab.* East Indies?

There is a characteristic contrast of colour in this species, the upper surface being of a bright reddish-fawn tint, densely striated, and the lower of a subtransparent polished olive.

Species 410. (Fig. a, b, Mus. Cuming.)

**HELIX BOIVINI.** *Hel. testâ imperforatâ, subtrochiformi, obliquè minutissimè striatâ, nitidâ, albidâ, fasciis nigro-fuscis variè cinctâ; spirâ conicâ, aculiusculâ; anfractibus quinque, convexiusculis, ultimo anticè descendente, basi subplanato, dilutè rufescente; aperturâ perobliquâ, lunato-orali; columellâ perobliquâ, latâ, strictâ, albâ, supra depresso-plumulatâ; peristomate subincrassato, brevissimè reflexo, albo, aurantio-marginato.*

**BOVIN'S HELIX.** Shell imperforated, somewhat Trochus-shaped, obliquely very minutely striated, shining, whitish, variously encircled with black-brown bands; spire conical, rather sharp; whorls five, rather convex, last whorl descending in front, rather flattened at the base, tinged with red; aperture very oblique, lunar-oval; columella very oblique, broad, drawn out, white, depressly flattened above; lip rather thickened, very shortly reflected, white, edged with orange.

PETIT, Revue zool. Soc. Cuv. 1841, p. 184.

*Hab.* Solomon's Islands.

An exquisitely painted porcelain-like shell, very distinct from any other species.

Fig. 411 (Mus. Cuming.)

For description of this species, *Helix bistriata*, see Pl. LXXXVI. The shell here figured has but one coloured stria, and is Pfeiffer's var.  $\beta$ . Subsequently he described it as a distinct species with the name *H. Ceylanica*.

Species 412. (Fig. a, b, Mus. Cuming.)

**HELIX VITTATA.** *Hel. testâ umbilicatâ, depresso-globosâ, striatâ, albidâ, fusco et luteo variè fasciatâ; spirâ brevi, apice sæpe nigricante; anfractibus quinque, planulatis, ultimo basi convexo, anticè descendente, aperturâ lunato-orali, intus cum fauce fusco-nigricante, peristomate labiato, expanso, marginibus conniventibus callo junctis, columellari dilatato, umbilicum semitegente.*

**THE FILLETED HELIX.** Shell umbilicated, depressly globose, striated, whitish, variously banded with brown and yellow; spire short, often blackish at the apex. whorls five, flattened, the last convex at the base, descending in front; aperture lunar-oval, brown-black; lip thickened, expanded, margins approximating, joined by a callosity, columellar margin dilated, half-covering the umbilicus.

MULLER, Hist. verm. terr. et fluv. vol. u. p. 76

*Helix Spinola*, Villa.

*Helix zonula*, Wood.

*Hab.* Ceylon, Malabar, &c.

Whatever may be the absence or variety of painting on the outer surface of this species, the inner is always characterized by a very rich dark chocolate-brown colouring.

Species 413. (Mus. Cuming.)

**HELIX RIVOLII.** *Hel. testâ latissimè umbilicatâ, oblongo-discoidâ, peculiariter compressâ, superne plani-concavâ, costato-striatâ, rufi-olivaceâ, subtus levigatâ, nitidâ; anfractibus quinque, rotundatis, ultimo paululum descendente; spirâ conica, perspectiva, aperturâ perobliquâ, subquadrata, subtrifurcâ, peristomate incrassato, reflexo, marginibus callo albedo, lamellâ quadricostata cinctis, junctis.*

RIVOLI'S HELIX. Shell very broadly umbilicated, oblong-discoid, peculiarly compressed, flatly concave at the upper part, rib-like striated, reddish-olive, smooth and shining beneath; whorls five, rounded, the last a little descending; umbilicus very large, perspective; aperture very oblique, somewhat square, rather trumpet-shaped; lip thickened, reflected, margins joined

by a whitish callosity emitting a strong entering lamella.

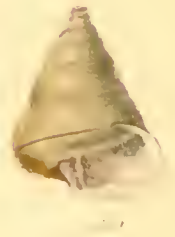
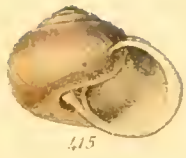
DESHAYES, Encyclopédie Méthodique, vol. ii. p. 208.

*Helix carabinata*, Férussac.

*Hab.* Ceylon.

Of a peculiar discoid growth, concave on both sides and singularly distortedly compressed.





# HELIX.

PLATE LXXIX.

Species 414. (Mus. Cuming.)

**HELIX SQUALUS.** *Hel. testâ ampliter umbilicatâ, globosâ, tenui, corneâ, unlique minutissimè scabrâ; anfractibus quinque, ultimo magno, ventricoso; aperturâ magnâ, lunari; peristomate tenui, acuto, reflexo, columellam fere tegente.*

**THE DIRTY HELIX.** Shell largely umbilicated, globose, thin, horny, very minutely scabrous throughout; whorls five, last whorl large, ventricose; aperture large, lunar; lip thin, acute, reflected, almost covering the columella.

**HINDS,** Voyage of the Sulphur, Moll. p. 55. pl. 19. f. 12.

*Hab.* Port Carteret, New Ireland.

Characterized throughout by a minute scabrous granular sculpture, a prominently effused lip, and an open perspective umbilicus.

Species 415. (Mus. Cuming.)

**HELIX ARGILLACEA.** *Hel. testâ angustè umbilicatâ, subglobosâ, diaphanâ, corneo-rufescente; anfractibus quatuor ad quinque, convexiusculis, ultimo inflato, anticè subitò deflexo; aperturâ perobliquâ, lunato-ovali; peristomate latè expanso, breviter reflexo, marginibus approximatis, columellari dilatato, umbilicem semitegente.*

**THE CLAY HELIX.** Shell narrowly umbilicated, somewhat globose, diaphanous, horny-red; whorls four to five, rather convex, the last inflated, suddenly deflected in front; aperture very oblique, lunar-oval; lip broadly expanded, shortly reflected, margins approximated, columellar margin dilated, half-covering the umbilicus.

**FERUSSAC,** Hist. Moll. pl. 26. f. 1, 2.

*Hab.* Island of Timor.

This species, though diaphanous, is rather of firm structure. It is of an uniform reddish-clay colour.

Species 416. (Mus. Cuming.)

**HELIX STRANGEL.** *Hel. testâ latè umbilicatâ, depressâ, tenui, nitente, supernè confertim tenuissimè costulato-striatâ, olivaceo-corneâ, lineis subtilibus decussatâ, infernè levigatâ; spirâ parum elevatâ, obtusâ; anfractibus quinque, convexiusculis, ultimo declivi, basi rotundato; aperturâ subobliquâ, lunari-orali; peristomate simplici, tenui, marginibus conspicuè conniventibus.*

**STRANGE'S HELIX.** Shell broadly umbilicated, depressed, thin, shining, closely very finely rib-like striated at the upper part, and decussated with fine lines, smooth at the lower; spire but little raised, obtuse, whorls five, rather convex, the last slanting, rounded at the base; aperture very oblique, lunar-oval; lip simple, thin, margins conspicuously approximating.

**PFEIFFER,** Pro. Zool. Soc. 1848. p. 109.

*Hab.* Brisbane Water, New South Wales; Strange.

A thin shining olive-horny species, finely sculptured above and smooth beneath, with a deep open umbilicus.

Species 417. (Mus. Cuming.)

**HELIX CORIARIA.** *Hel. testâ suboblectè umbilicatâ, expresso-globosâ, solidâ, ruditer rugosâ et subtilissime granulatâ, latè castaneâ; spirâ latè conoidâ, apice obtusâ; anfractibus quinque, convexiusculis, antice anticè subdeflexo; aperturâ rotundato-lunari, peristomate recto, obtuso, marginibus distantibus, columellari declivi, incrassato-reflexo, supernè in lamina triangulari, umbilicem fere occultantem dilatato.*

**THE TANNED HELIX.** Shell with a nearly covered umbilicus, depressly globose, solid, rudely rough and very finely granulated, light chestnut; spire broadly conoid, obtuse at the apex; whorls five, rather convex, the last slightly deflected in front; aperture rotundately lunar; lip straight, obtuse, margins distant, columellar margin slanting, thickly reflected, dilated into a triangular lamina, almost covering the umbilicus.

**PFEIFFER,** Zeitschrift für Malac. 1847. p. 145

*Hab.* Ceylon?

A somewhat rough light chestnut species, resembling *H. argillacea* in form.

Species 418. (Mus. Cuming.)

**HELIX POIRETIANA.** *Hel. testâ ex umbilicatâ, confertim, obliquè tenuistriatâ, albidâ, fuscosecitate pallidè tinctâ, spirâ elevatâ, apice subpapillari; anfractibus septem, plano-convexis, ultimo ad peripheriam obtusè angulatâ, fasciâ fuscâ interruptâ clivari conjunctâ, apertura parviusculâ, subquadratâ; peristomate simplici, intus paululum incrassato, marginibus simpliciter conniventibus, columellari latè tenuè reflexo et dilatato, umbilicem omnino tegente.*



POIRET'S HELIX. Shell scarcely umbilicated, cone-shaped, obliquely finely striated, whitish, faintly tinged with light brown; spire raised, somewhat papillary at the apex; whorls seven, flatly convex, last whorl obtusely angled at the periphery, and obscurely encircled with an interrupted brown band; aperture rather small, somewhat square; lip simple, a little thickened within, margins rather approximating, columellar margin broadly thinly reflected and dilated, entirely covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1851.

Hab. Port Essington, Australia.

An elevated cone-shaped species, not distinguished by any peculiarity of marking.

Species 419. (Mus. Cuming.)

HELIX GAERTNERIANA. *Hel. testá umbilicatá, coniformi, solidiusculá, obliquè confertim plicato-striatá, sordidè albidá aut fulvescente; spirá elevatá, apice subpapillari; anfractibus septem, subangustis, plano-convexis, ultimo ad peripheriam obtusè angulato, lineá tenui rufá conspicuè cingulato, basi planulato; umbilico angusto, subprofundo; aperturá transversè quadratá; peristomate albo, calloso, reflexo, margine columellari dilatato, purpureo-violaceo.*

GAERTNER'S HELIX. Shell umbilicated, cone-shaped, rather solid, obliquely closely plicately striated, dirty white or pale fulvous; spire elevated, somewhat papillary at the apex; whorls seven, rather narrow, flatly convex, last whorl obtusely angled at the peri-

phery, conspicuously encircled with a fine red line, rather flat at the base; aperture transversely square; lip white, callous, reflected, columellar margin dilated, purple-violet.

PFEIFFER, Pro. Zool. Soc. 1851.

Hab. Night Island, North Australia (on trunks and branches of a *Bombax*); Macgillivray.

Another elevated cone-shaped species, in which the last whorl is encircled with a strongly painted red thread-like line, while the columellar margin, which is reflected over the umbilicus, is stained with a characteristic purple-violet blotch.

Species 420. (Mus. Cuming.)

HELIX IMMACULATA. *Hel. testá angustè umbilicatá, tenui, globosá, obliquè tenuistriatá, albidá, semipellucidá, epidermide tenui corneá partim indutá; spirá subconoideá; anfractibus quinque ul sex, plano-convexis, ultimo obtusè carinato; aperturá lunato-orbiculari; peristomate tenui, parum reflexo.*

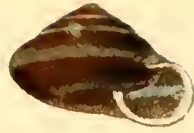
THE UNSPOTTED HELIX. Shell narrowly umbilicated, thin, globose, obliquely finely striated, whitish, semitransparent, partially covered with a thin horny epidermis; spire subconoid; whorls five to six, flatly convex, last whorl obtusely keeled; aperture lunately orbicular; lip thin, but little reflected.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 62. pl. 16. f. 5.

Hab. Philippine Islands.

A semitransparent white, horn-clad shell, with an obscure ring-like keel round the periphery of the last whorl.

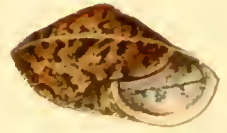




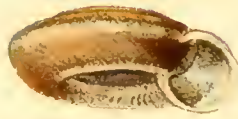
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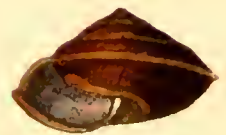
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427.

# HELIX.

PLATE LXXX.

Species 421. (Mus. Cuming.)

**HELIX TYPINSANA.** *Hel. testâ latè umbilicatâ, depresso-orbiculari, subdiscoideâ, obliquè plicato-striatâ, fusco-olivaceâ; spirâ obtusâ; anfractibus sex ad septem, angustis, plano-convexis, ultimo rotundato, fasciâ albidâ cingulato; umbilico percio, perspectivo; aperturâ parviusculâ, subcirculari; peristomate reflexo, carneo, marginibus valdè conniventibus.*

**THE TYPINSAN HELIX.** Shell broadly umbilicated, depressly orbicular, subdiscoid, obliquely plicately striated, brownish-olive; spire obtuse; whorls six to seven, narrow, flatly convex, last whorl rounded, encircled with a whitish band; umbilicus open, perspective; aperture rather small, nearly circular; lip reflected, flesh-coloured, margins nearly approximating.

ADAMS and REEVE, *Zool. Voy. Samarang*, Moll. p. 60. pl. 14. f. 3 a, b.

*Hab.* Island of Ty-pin-san, Meiacoshima Group (under decayed leaves in the pine-woods); Adams.

Of this *Solarium*-like form there are three distinct species in the centre column of the present plate.

Species 422. (Mus. Cuming.)

**HELIX GRATA.** *Hel. testâ angustè umbilicatâ, trochiformi, tenui, striatâ, citrinâ, epidermide fulvâ fasciatim obductâ; spirâ conicâ, acutâ; anfractibus quinque, planiusculis, ultimo acutè carinato, basi convexiusculo; columellâ obliquè descendente, dilatâtâ; aperturâ subrhombicâ; peristomate simplici, latè expanso, margine columellari dilatato, arcuatim reflexo, umbilicum occultante, nec obtegente.*

**THE WELCOME HELIX.** Shell narrowly umbilicated, trochus-shaped, thin, striated, lemon-coloured, covered with a fulvous-banded epidermis; spire conical, sharp; whorls five, rather flat, the last sharply keeled, rather convex at the base; columella descending obliquely, dilated; aperture sub-rhomboid; lip simple, broadly expanded, columellar margin dilated, arcuately reflected, concealing but not covering the umbilicus.

*Carocolla grata*, Michelin, *Mag. de Zool.* 1831. Moll. pl. 9.

*Helix acuta*, Quoy and Gaimard.

*Hab.* Port Dorey, New Guinea; Quoy.

The sharp keel of this interesting and rare species is edged with opake white, which on the spire is faintly seen in the place of the suture.

Species 423. (Mus. Cuming.)

**HELIX DICTYOIDES.** *Hel. testâ umbilicatâ, depressâ, sublenticulari, obliquè plicato-striatâ, tenuiculâ, diaphanâ, pallidè corneâ, fusco subtiliter reticulatâ, maculis castaneis juxta suturam et carinam ornâtâ; spirâ latè conoidè; anfractibus septem, eix convexiusculis, ultimo acutè carinato, anticè non descendente; aperturâ subverticali, depressâ, lunari; peristomate simplici, margine columellari breviter dilatato, basali sinuoso, reflexiusculo.*

**THE NET-LIKE HELIX.** Shell umbilicated, depressed, somewhat lens-shaped, obliquely plicately striated, very thin, diaphanous, pale horny, finely reticulated with brown and ornamented next the suture and keel with chestnut blotches; spire broadly conoid; whorls seven, rather convex, the last sharply keeled, not descending in front; aperture subvertical, depressed, lunar; lip simple, columellar margin shortly dilated, basal margin sinuous and slightly reflected.

PFLEIFFER, *Pro. Zool. Soc.* 1846. p. 111.

*Hab.* New Guinea; Ince.

Curious, blotched throughout with irregular straggling chestnut spots next the keel and suture.

Species 424. (Mus. Cuming.)

**HELIX VERMIS.** *Hel. testâ latissime et profundè umbilicatâ, discoideâ, plano-depressâ, pallidè fulvescente; spirâ convexo-planâ; anfractibus septem ad octo, angustis, ultimo obtusè carinato, basi rotundato; aperturâ circulari, marginibus conniventibus, peristomate tenui, breviter reflexo.*

**THE WORM HELIX.** Shell very broadly and deeply umbilicated, discoid, depressed, pale fulvous; spire convexly flattened; whorls seven to eight, narrow last whorl obtusely keeled, rounded at the base; aperture circular, margins approximating; lip thin, slightly reflected.

*Hab.* Meiacoshima Group

This species which is certainly distinct from *H. Typin-*

*sana*, being very much broader and more depressly convoluted, was collected in the Samarang, but not described in the Zoology of that voyage.

## Species 425. (Mus. Cuming.)

HELIX DUNNÆ. *Hel. testâ umbilicatâ, depressâ, fuscâ, carinatâ, irregulariter granulato-striatâ; spirâ parum elevatâ, obtusâ; anfractibus quatuor, planulatis, ultimo anticè paululum descendente, basi convexo, circa umbilicum infundibuliformem compresso; aperturâ perobliquâ, irregulari, transversè oblongâ, latere effusâ; peristomate simplici, margine supero depresso, antrorsum dilatato, columellari breviter reflexo.*

DUNN'S HELIX. Shell umbilicated, depressed, brown, keeled, irregularly granularly striated; spire but little raised, obtuse; whorls four, rather flattened, last whorl descending a little in front, convex at the base, compressed around the umbilicus, which is funnel-shaped; aperture very oblique, irregular, transversely oblong, effused at the side; lip simple, upper margin depressed, dilated towards the front, columellar margin shortly reflected.

GRAY, Ann. and Mag. Nat. Hist. 1841, p. 317.  
*Hab.* New Zealand.

The surface of this shell is peculiarly minutely cross-grained, and the suture is curiously impressed.

## Species 426. (Mus. Cuming.)

For description of this species, *H. regalis*, see Plate XCVI., this specimen being an abnormal variety of the typical example there figured.

## Species 427. (Mus. Cuming.)

HELIX CHINENSIS. *Hel. testâ latissimè et profundè umbilicatâ, striatâ, nitidâ, subpellucidâ, supernè pallidè fulvescente, basi albidâ; spirâ vix elevatâ, apice non obtusatâ; anfractibus octo, convexis, lentè accrescentibus, ultimo priores paulo superante, basi vix latiore; aperturâ parvâ, obliquâ, lunato-circulari; peristomate albo, reflexo, marginibus approximatis.*

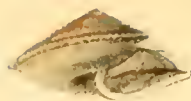
THE CHINA HELIX. Shell very broadly and deeply umbilicated, striated, shining, subpellucid, pale fulvous at the upper part, whitish at the base; spire scarcely raised, not obtuse at the apex; whorls eight, convex, increasing slowly, the last but little larger than the preceding, scarcely broader at the base; aperture rather small, oblique, lunar-circular; lip white, reflected, margins approximating.

PHILIPPI, Abbild. und Besch. Conch. vol. ii. p. 9. pl. 6. f. 1.  
*Hab.* China.

Of the same peculiar discoid and largely umbilicated type as *H. vernis* and *Typinsana*, between which species it is about intermediate in its characters.







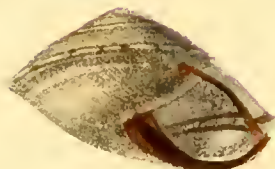
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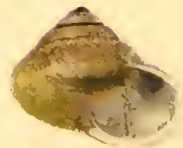
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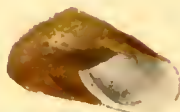
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434

# HELIX.

PLATE LXXXI.

Species 428. (Mus. Cuming.)

**HELIX ELEGANTISSIMA.** *Hel. testá subampliter umbilicatá, plano-orbiculari, valdè depressá, subpellucidá, pallidè stramineá, obliquè subtilissimè plicato-striatá; anfractibus septem, planatis, ultimo acutissimè carinato, cariná albá, peculiariter serrulato; umbilico pervio, perspectivo; aperturá trigono-ovatá; peristomate subincrassato, reflexo, albo, marginibus conniventibus.*

**THE VERY ELEGANT HELIX.** Shell rather largely umbilicated, flatly orbicular, very depressed, rather transparent, pale straw-colour, obliquely very finely plicately striated; whorls seven, flattened, last whorl very sharply keeled, keel white, peculiarly finely serrated; umbilicus open, perspective; aperture triangularly ovate; lip rather thickened, reflected, white, margins approximating.

**PFEIFFER,** Mus. Cuming.

*Hab.* — ?

This very delicate species is characterized in a manner extremely curious. The finely plicated striae become developed at their extremity on the keel into a fine serrated fringe, which is seen in the place of the suture throughout the spire.

Species 429. (Mus. Cuming.)

**HELIX NOVE-HIBERNÆ.** *Hel. testá umbilicatá, globoso-depressá, carinatá, obliquè ruguloso-striatá, tenui, fulvescente, ad carinam lineá rufá cinctá; anfractibus sex, vix convexiusculis, ultimo basi convexiore, sublævigato, lineis concentricis obsolete decussato; aperturá lunari, intus nitidá; peristomate recto, obtuso, margine columellari subincrassato.*

**THE NEW IRELAND HELIX.** Shell umbilicated, globosely depressed, keeled, obliquely striated in a wrinkled manner, thin, fulvous, encircled with a red line at the keel; whorls six, rather convex, the last more convex and smoother at the base, obsolete decussated with concentric lines; aperture lunar, shining within; lip straight, obtuse, columellar margin rather thickened.

**QUOY and GAIMARD,** Voy. de l'Astrolabe, Zool. vol. ii. p. 124. pl. 10. f. 14-17.

*Hab.* Port Carteret, New Ireland.

The red-brown line which encircles this species at the periphery, is faintly seen in the sutures of the spire.

Species 430. (Mus. Cuming.)

**HELIX RESPLENDENS.** *Hel. testá subumbilicatá, depressá, glaberrimá, lucidá, tenui, pellucidá, lutescente-cornea. spirá vix prominulá; anfractibus sex ad septem, convexiusculis, lentè accrescentibus, ultimo regulariter aucto, basi convexo, medio profundè impresso, aperturá fere verticali, depressá, latá, lunari; peristomate simplici, acuto, margine columellari perobliquè descendente.*

**THE RESPLENDENT HELIX.** Shell slightly umbilicated, depressed, very smooth, shining, thin, pellucid, yellowish-horny; spire but little prominent; whorls six to seven, rather convex, increasing slowly, the last regularly enlarged, convex at the base, deeply impressed in the middle; aperture almost vertical, depressed, broad, lunar; lip simple, acute, columellar margin descending very obliquely.

**PHILIPPI,** Zeitschrift für Malac. 1846, p. 192.

*Hab.* Burmah; Philippi.

This transparent horny shell has very much the appearance of a *Vitrina*. The upper part of the whorls is faintly plicately striated next the suture.

Species 431. (Mus. Cuming.)

**HELIX TRICOLOR.** *Hel. testá lenticulari-conoidá, tenui, carinatá, unlique confertim concentricè striatá, hyaliná, supernè lineis albis et ad suturam fasciá rubá castaneo-punctatá ornatá; spirá brevi, conoidá, apice obtusá; anfractibus quatuor, planiusculis, ultimo cariná albá lineis castaneis marginali et articulata munito, supernè et ad carinam subitò deflexo, basi juxta columellam subgibbo; aperturá angustá, perobliqua, subtriangulari; peristomate simplici, castaneo-limbato margine dextro recto, basali breviter reflexo, columellari perdeclivi, introrsum dilatato, excavato, saturatè castaneo.*

**THE TRICOLOURED HELIX.** Shell lenticularly conoid, thin, keeled, closely concentrically striated throughout, hyaline, ornamented at the upper part with white lines, and at the suture with a white chestnut-dotted band; spire short, conoid, obtuse at the apex, whorls four, rather flat, the last furnished with a

white keel, edged and reticulated with chestnut lines, suddenly deflected at the upper part and at the keel, slightly gibbous at the base near the columella; aperture narrow, very oblique, somewhat triangular; lip simple, chestnut-edged, right margin straight, basal margin shortly reflected, columellar margin very slanting, dilated inwardly, excavated, dark chestnut.

PFEIFFER, Pro. Zool. Soc. 1849, p. 129.

Hab. St. Christoval Island, Salomon's Group.

A rather solid pale straw-coloured hyaline shell, encircled with delicate opaque-white hair lines, with an opaque-white keel at the periphery, marked with chestnut lines and dots. The lip and columella are conspicuously stained with chestnut.

Species 432. (Mus. Cuming.)

HELIX KURRI. *Hel. testâ umbilicatâ, depressâ, tenui, punctis distantibus sub lente scabriusculâ, diaphanâ, corneo-albidâ, fasciâ angustâ rufâ ornatâ; spirâ planâ; anfractibus quatuor ad quinque, primis convexiusculis, ultimo sensim descendente, utrinque subplano, anticè subconstricto; aperturâ obliquâ, subtriangulari-lunari; peristomate simplici, tenui, marginibus conniventibus, supero latè expanso, basali reflexo, columellari brevi, triangulatum dilatato.*

KURRI'S HELIX. Shell umbilicated, depressed, thin, slightly roughened beneath the lens with distant punctures, diaphanous, horny-white, ornamented with a narrow red band; spire flat; whorls four to five, the first rather convex, the last gradually descending, slightly flattened on both sides, rather drawn out in front; aperture oblique, somewhat triangularly lunar; lip simple, thin, margins approximating, upper margin broadly expanded, basal margin reflected, columellar margin short, triangularly dilated.

PFEIFFER, Pro. Zool. Soc. 1847, p. 228.

Hab. — ?

In some examples of this species, there is a second faint band a little below the first.

Species 433. (Mus. Cuming.)

HELIX CONSPERSULA. *Hel. testâ umbilicatâ, turbinatâ, striatâ, opacâ, tenuiusculâ, stramineâ vel cinnamomeâ, punctis albis confertissimè conspersâ; spirâ co-*

*noidêâ, apice obtusiusculâ, nigricante; suturâ mediocri, castaneo-marginatâ; anfractibus sex, convexiusculis, ultimo subangulato, basi planiusculo; columellâ obliquâ, subarcuatâ, subexcavatâ, albâ, castaneo-marginatâ; aperturâ amplâ, lunato-ovali; peristomate simplici, breviter expanso.*

THE FINELY SPRINKLED HELIX. Shell umbilicated, turbinated, finely striated, opaque, rather thin, pale straw or cinnamon-coloured, very closely sprinkled with white dots; spire conoid, rather obtuse and blackish at the apex; suture middling, edged with chestnut; whorls six, rather convex, the last slightly angled, rather flat at the base; columella oblique, slightly arched, rather hollow, white, chestnut-edged; aperture large, lunar-oval; lip simple, shortly expanded.

PFEIFFER, Pro. Zool. Soc. 1845, p. 124.

Hab. — ?

The delicate white dots which characterize this shell are quite superficial, composed of hydrophanous epidermis. Unlikely as it may appear, this species runs very closely into varieties of *H. fusco-cincta*, from Jamaica.

Species 434. (Mus. Cuming.)

HELIX GREENWOODII. *Hel. testâ subampliter umbilicatâ, orbiculari-depressâ, aperturam versus obliquè productâ, obliquè confertissimè corrugato-striatâ, olivaceâ; spirâ obtusè depressâ; anfractibus quatuor, plano-convexis, ultimo medio peculiariter diagonaliter plicato, circa umbilicem angulato; aperturâ lunari-ovali; peristomate simplici, marginibus conniventibus.*

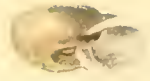
GREENWOOD'S HELIX. Shell rather largely umbilicated, orbicularly depressed, obliquely produced towards the aperture, obliquely very closely striated in a wrinkled manner, olive; spire obtusely depressed; whorls four, flatly convex, the last peculiarly diagonally plicated in the middle, angled around the umbilicus; aperture lunar-oval; lip simple, margins approximating.

GRAY, Pro. Zool. Soc. 1849, p. 165.

Hab. New Zealand.

An interesting species, of the same peculiar typical character as *H. Dunnia*, Sp. 425, from which it differs mainly in having a larger umbilicus, though the shell is smaller, and in having several folds ranging diagonally about the periphery of the last whorl.





+35



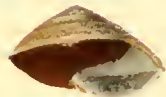
+36 a



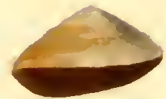
+36 b



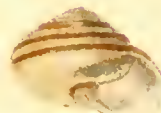
+37



+38 a



+38 b



+39



+40 a



+40 b



+41



# HELIX.

PLATE LXXXII.

Species 435. (Mus. Cuming.)

**HELIX PROCUMBENS.** *Hel. testâ latè umbilicatâ, depressâ, discoideâ, tenui, subtiliter striatâ, pallidè corneâ; spirâ planâ; anfractibus quatuor, subplanulatis, ultimo anticè deflexo, basi inflato, circa umbilicum latum perspectivum subcompresso; aperturâ perobliquâ, subcirculari; peristomate effuso, marginibus subcontiguis, supero latè expanso, basali reflexo.*

**THE BENDING HELIX.** Shell broadly umbilicated, depressed, thin, finely striated, pale horny; spire flat; whorls four, rather flattened, last whorl deflected in front, inflated at the base, rather compressed around the perspective umbilicus; aperture very oblique, nearly circular; lip effused, margins almost contiguous, upper margin broadly expanded, basal margin reflected.

GOULD, Journ. Nat. Hist. Soc. Boston, U.S. vol. iv. p. 453. pl. 2 f. f. 1.

*Hab.* Tavoy, Burmah.

A horny, discoid species, largely umbilicated, with a round effused trumpet-shaped aperture.

Species 436. (Fig. a, b, Mus. Cuming.)

**HELIX REFUGA.** *Hel. testâ sinistrorsâ, latissimè umbilicatâ, subdiscoideâ, supernè planâ, basi concavâ, solidulâ, obliquè minutè rugatâ et supernè concentricè striatâ, albâ, epidermide deciduâ flavescente-corneâ indutâ; anfractibus sex ad septem, angustis, ultimo anticè perdeflexo, basi subangulato; aperturâ perobliquâ, lunari; peristomate breviter et abruptè reflexo, albo-callosa, marginibus laminâ medio elevatâ lamellam transversam intrantem emittente.*

**THE FLYING BACK HELIX.** Shell sinistral, very broadly umbilicated, discoid, flat at the upper part, concave beneath, rather solid, obliquely finely wrinkled and concentrically striated, white, covered with a deciduous yellowish-horny epidermis; whorls six to seven, narrow, last whorl considerably deflected in front, slightly angled at the base; aperture very oblique, lunar; lip shortly and abruptly reflected, white, callous, margins joined by a lamina, raised in the middle, and emitting a transverse lamina which enters the aperture.

GOULD, Philippi, Abbild. und Besch. Conch. vol. iii. p. 2 pl. 10. f. 4.

*Hab.* Burmah.

Of a more discoid form than the preceding species, very widely umbilicated, with a characteristic transverse lamina on the body-whorl within the aperture.

Species 437. (Mus. Cuming.)

**HELIX LEPTOGRAMMA.** *Hel. testâ angustè umbilicatâ, globosâ, tenui, striatâ, lineis impressis, concentricis, confertis sculptâ, carneo-albidâ, fasciis angustis rufis ornata; anfractibus tribus ad quatuor, convexiusculis, ultimo inflato, anticè breviter descendente; aperturâ eix obliquâ rotundato-lunari; peristomate albo, breviter expanso, marginibus callo tenuissimo diffuso junctis, columellari valdè dilatato, albo, nitido, reflexo, umbilicis semiculantè.*

**THE DELICATELY PAINTED HELIX.** Shell narrowly umbilicated, globose, thin, striated, sculptured with close-set concentric impressed lines, flesh-white, ornamented with three to four narrow red bands, whorls four to five, rather convex, last whorl inflated, slightly descending in front; aperture a little oblique, rotundately lunar; lip white, shortly expanded, margins joined by a very thin diffused callosity, columellar margin much dilated, white, shining, reflected, half-covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 127.

*Hab.* South Australia.

A light globose shell, encircled round the middle and upper part with three to four delicately painted brown-red bands.

Species 438. (Fig. a, b, Mus. Cuming.)

**HELIX CAMPBELLI.** *Hel. testâ imperforatâ, orbiculatâ, utrinque convexâ, supernè confertè rugoso-striatâ, striis spiralibus leviter decussatâ, pallidè brunnâ, fasciâ unicâ palidâ supra peripheriam ornatâ, spira conoidâ, obtusâ; anfractibus quatuor ad quinque, planiusculis, ultimo medio angulatè, basi truncatè, nitidâ, columellâ brevi, obliquâ, subcirculari; aperturâ angulato-lunari; peristomate tenui, albo.*

**CAMPBELL'S HELIX.** Shell imperforated, orbicular, con-



vex on both sides, closely striated in a wrinkled manner on the upper part, faintly decussated with spiral striae, pale brown, with a single pale band above the periphery; spire conoid, obtuse; whorls four to five, rather flat, last whorl angled in the middle, smoother and shining beneath; columella short, oblique, rather thickened; aperture angularly lunar; lip thin, sharp.

GRAY, Pro. Zool. Soc. 1834, p. 65.

*Hab.* Phillip Island, Pacific Ocean.

This species is mostly of a dull olive-colour above, and shining chestnut below, the contrast being very significantly marked at the periphery.

Species 439. (Mus. Cuming.)

HELIX FORSTERIANA. *Hel. testā umbilicatā, orbiculari, tenui, undique peculiariter granulata, fulvescente, fasciis duabus pallidè rufo-fuscis cingulatā; spirā subdepressā, suturis impressis et subrudè plicatis; umbilico profundo; aperturā lunari; peristomate simplici, margine columellari breviter dilatato et reflexo, rufo-fusco.*

FORSTER'S HELIX. Shell umbilicated, orbicular, thin, peculiarly granulated throughout, fulvous, encircled by two rather faint red-brown bands; spire somewhat depressed, sutures impressed and rather rudely plicated; umbilicus deep; aperture lunar; lip simple, columellar margin shortly dilated and reflected, red-brown.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Australia.

Characterized by a peculiarly granulated surface, and by the sutures of the spire being finely rudely plicated.

Species 440. (Fig. a, b, Mus. Cuming.)

HELIX CIRCULUS. *Hel. testā umbilicatā, depressā, solidā, ruguloso-striatā, nitidulā, albā; spirā vix elevatā; anfractibus quinque ad sex, convexis, ultimo subangulato,*

*non descendente; umbilico mediocri, pervio; aperturā obliquā, parculā, lunato-circulari, intus callo circulari coarctatā; peristomate breviter expanso, marginibus concentricis.*

THE ORB HELIX. Shell umbilicated, depressed, solid, roughly striated, shining, white; spire but little raised; whorls five to six, convex, the last slightly angled, not descending; umbilicus middling, open; aperture oblique, rather small, lunar-circular, thickened by a circular callosity within; lip shortly expanded, margins approximating.

PFEIFFER, Symbolæ, vol. iii. p. 76.

*Hab.* — ?

The aperture of this species is perfectly round, much after the manner of a *Cyclostoma*.

Species 441. (Mus. Cuming.)

HELIX PAPILLATA. *Hel. testā umbilicatā, depressā, subdiscoidā, solidiusculā, irregulariter striatā, opacā, albidā, spadiceo-nebulosā saturatiusque strigatā et maculatā; spirā planā, apice papillatā; anfractibus quinque, planiusculis, ultimo descendente, depresso-rotundato; umbilico angusto, pervio; aperturā obliquā, lunato-subcirculari; peristomate simplici, acuto, margine columellari vix dilatato.*

THE PAPILLATED HELIX. Shell umbilicated, depressed, subdiscoid, rather solid, irregularly striated, opaque-whitish, clouded with fawn-colour, and streaked and spotted of a darker colour; spire flat, papillated at the apex; whorls five, rather flat, the last descending, depressly rounded; umbilicus narrow, open; aperture oblique, lunar-subcircular; lip simple, acute, columellar margin a little dilated.

PFEIFFER, Pro. Zool. Soc. 1845, p. 129.

*Hab.* — ?

The darker band derives a purplish hue from an overcoating of opaque white.





442.



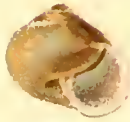
443 a



443 b



444.



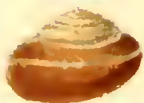
445 a



445 b



446.



447 a



447 b



448

# HELIX.

PLATE LXXXIII.

Species 442. (Mus. Cuming.)

**HELIX CINNAMOMEA.** *Hel. testá viz umbilicatá, depressá, tenui, nitidá, diaphaná, minutissimè et irregulariter striatá, cinnamomeá; suturá mediocri; anfractibus septem, angustis, viz convexiusculis; umbilico parco, semitecto; aperturá subobliquá, semilunari; peristomate simplici, tenui, acuto.*

**THE CINNAMON HELIX.** Shell scarcely umbilicated, depressed, thin, shining, diaphanous, very minutely and irregularly striated, cinnamon-coloured; suture middling; whorls seven, narrow, slightly convex; umbilicus small, half-covered; aperture rather oblique, semilunar; lip simple, thin, sharp.

VALENCIENNES, Eydoux, Mag. de Zool. 1838, pl. 116. f. 1.  
*Hab.* Natunas Archipelago, China Sea.

A smooth shining horny species, of a peculiar cinnamon-colour.

Species 443. (Fig. a, b, Mus. Cuming.)

**HELIX TARANAKI.** *Hel. testá umbilicatá, depressá, solidiusculá, pallidè corneá, nitidulá, supernè confertim costulato-striatá, basi leviore; spirá parum elevatá; anfractibus quinque, convexiusculis, ultimo latiore, anticè viz descendente; umbilico mediocri, pervio; aperturá transversè lunato-ovali; peristomate tenui, expanso, intus nitidè albo, margine basali strictiusculo, reflexo, columellari dilatato, patente.*

**THE TARANAKI HELIX.** Shell umbilicated, depressed, rather solid, pale horny, shining, closely rib-like striated at the upper part, smoother at the base; spire but little raised; whorls five, rather convex, the last broader, scarcely descending in front; umbilicus middling, open; aperture transversely lunar-oval; lip thin, expanded, shining white within, basal margin rather drawn out, reflected, columellar margin dilated, open.

GRAY, New Zealand, App. pl. 1. f. 6, 7.

*Hab.* New Zealand. Possession Island, Torres Straits; Ince.

Of a transparent horny texture, sculptured on the upper part with very fine rib-like striæ, which at the base become obsolete.

Species 444. (Mus. Cuming.)

**HELIX OBLITA.** *Hel. testá angustè umbilicatá, depressá,*

*corneá, tenui, pellucidá, supernè conspicuè confertim costulato-striatá, basi latiore; anfractibus sex, planoconvexis, ultimo carinato; aperturá transversè lunari, peristomate simplici, tenui, margine columellari viz dilatato.*

**THE DEFILED HELIX.** Shell narrowly umbilicated, depressed, horny, thin, transparent, conspicuously closely rib-like striated at the upper part, smoother at the base; whorls six, flatly convex, the last keeled, aperture transversely lunar; lip simple, thin, columellar margin scarcely dilated.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* — ?

In this species, which is of a very thin pellucid texture, the striæ are very prominently developed on the upper surface, and, extending over the keel, give it a finely serrated character.

Species 445. (Fig. a, b, Mus. Cuming.)

**HELIX TOURANNENSIS.** *Hel. testá umbilicatá, subglobosá, corneá, pellucidá, supernè irregulariter subtiliter costulato-striatá, suturá tenuimarginatá; anfractibus quinque ad sex, rotundatis; aperturá circulari; peristomate simplici, intus incrassato, carneo, marginibus columellari, columellari subdilatato.*

**THE TOURANN HELIX.** Shell umbilicated, somewhat globose, horny, transparent, irregularly finely rib-like striated, suture thinly margined; whorls five to six, rounded; aperture circular; lip simple, thickened within and flesh-tinted, margins approximating, columellar margin rather dilated.

SOULEYET, Revue Zool. Soc. Cuv. 1842, p. 101.

*Hab.* Cochin-China, Canton.

The lip of this transparent horny species has a callous ring developed inwardly of a delicate flesh-tint.

Species 446. (Mus. Cuming.)

**HELIX GARDNERI.** *Hel. testá subumbilicatá, turbinatá, solidá, striis longitudinalibus et spiralibus distantibus decussatá, nitidá, castineá; spirá elevatá, acutiusculá, anfractibus sex a l septem, convexiusculis, ultimo majore, subtrigato, ad peripheriam cingulo albo ornato; aperturá obliquè lunari, intus albá; peristomate simplici,*

*recto, margine columellari subincrassato, supernè subdilatato, perforationem fere claudente.*

**GARDNER'S HELIX.** Shell slightly umbilicated, turbinate, solid, decussated with distant longitudinal and spiral striae, chestnut; spire raised, rather sharp; whorls six to seven, rather convex, the last larger and rather smooth, ornamented with a white band at the periphery; aperture obliquely lunar, white within; lip simple, straight, columellar margin rather thickened, slightly dilated at the upper part, almost closing the umbilicus.

**PFEIFFER**, in Second Edition of *Chennitz Conch. Cab.* pl. 112. f. 12, 13.

*Hab.* Ceylon (in the woods, at 8,000 feet elevation); Gardner.

A dark shining chestnut shell, encircled with a single narrow white band, and beautifully decussately sculptured towards the apex.

Species 447. (Fig. a, b, Mus. Cuming.)

**HELIX COREANICA.** *Hel. testá umbilicatá, depresso-globosá, subtiliter rugulosá et malleatá, juxta suturas albá, infra pallidè spadiceo-rufá, albido plus minus obscure cingulatá; aperturá lunato-circulari; peristomate simplici, marginibus coniventibus, columellari breviter dilatato.*

**THE COREA HELIX.** Shell umbilicated, depressly globose, finely wrinkled and indented, white next the sutures, light fawn-red beneath, more or less obscurely banded with white; aperture lunately circular; lip simple,

margins approximating, columellar margin shortly dilated.

**ADAMS and REEVE**, *Zool. Voy. Samarang, Moll.* p. 61. pl. 16. f. 2.

*Hab.* Corean Archipelago.

The common snail of the islands of the Corean Archipelago, where it is eaten by the natives as an ordinary article of food.

Species 448. (Mus. Cuming.)

**HELIX INDICA.** *Hel. testá umbilicatá, orbiculato-convexá, solidiusculá, supernè costulato-striatá, lineis impressis confertim granulato-decussatá, fulvâ; anfractibus quinque ad sex, planiusculis, ultimo basi convexiore, laccigato, infra carinam lineis nonnullis impressis concentricis notato; aperturá angulato-lunari; peristomate recto, albo, margine columellari subincrassato, breviter reflexo.*

**THE INDIAN HELIX.** Shell umbilicated, orbicularly convex, rather solid, rib-like striated on the upper part, and closely granulated decussated with impressed lines, fulvous; whorls five to six, rather flat, the last more convex at the base, smooth, marked with a few impressed concentric lines below the keel; aperture angularly lunar; lip straight, white, columellar margin rather thickened, shortly reflected.

**PFEIFFER**, *Symbolæ*, vol. iii. p. 66.

*Hab.* Neilgherries, Hindoostan.

The upper surface of this species is very elaborately sculptured with fine rib-like striae, which are granulated.







449.



450 a



450 b



451.



452. a.



452 b



453



454 a



454 b



455.

# HELIX.

PLATE LXXXIV.

Species 449. (Mus. Cuming.)

**HELIX CONICOIDES.** *Hel. testâ imperforatâ, depresso-conicâ, tenui, fuscescente, vitreâ, subtilissimè striatâ, nitidâ; spirâ pyramidalis-elatâ, suturis tenuimarginalis; anfractibus septem, ultimo acutissimè carinato; aperturâ transversè rhomboideâ; peristomate simplici, aculo.*

**THE CONOID HELIX.** Shell imperforated, depressly conic, thin, light brown, glassy, very finely striated, shining; spire pyramidally elevated, sutures finely margined; whorls seven, the last very sharply keeled; aperture transversely rhomboid; lip simple, sharp.

METCALFE, Pro. Zool. Soc. 1851.

*Hab.* Borneo.

A light brown glassy shell, with a peculiarly elevated spire.

Species 450. (Fig. a, b, Mus. Cuming.)

**HELIX NILAGIRICA.** *Hel. testâ latissimè umbilicatâ, depressâ, discoideâ, striatâ, corneo-albidâ, lineâ unicâ rufâ supra peripheriam cinctâ; spirâ planiusculâ; anfractibus quinque, rotundatis, lentè accrescentibus, ultimo anticè abruptè deflexo; umbilico anfractum penultimum latè monstrante, medio angusto, perrio; aperturâ parvâ, horizontali, rotundato-ovali; peristomate continuo, albo, effuso, reflexo, marginibus fere junctis.*

**THE NEILGHERRY HELIX.** Shell very broadly umbilicated, depressed, discoid, striated, horny-white, encircled with a single red line at the periphery; spire rather flat; whorls five, rounded, increasing slowly, the last abruptly deflected in front; umbilicus broadly showing the penultimate whorl, narrow and open in the middle; aperture small, horizontal, rotundately oval; lip continuous, white, effused, reflected, margins almost joined.

PFEIFFER, Pro. Zool. Soc. 1845, p. 130.

*Hab.* Neilgherry Hills, Hindoostan.

A species in which the whorls are so widely convoluted, that the shell looks like that of a *Serpula*.

Species 451. (Mus. Cuming.)

**HELIX ADUSTA.** *Hel. testâ umbilicatâ, globoso-discoideâ, sub lente minutè punctulatâ; spirâ concavo-planatâ,*

*suturis impressis; anfractibus quinque, ultimo superne declivi, anticè descendente; umbilico amplo, perrio. aperturâ subtrigono-quadratâ; peristomate reflexo, marginibus conniventibus.*

**THE ADUST HELIX.** Shell umbilicated, globosely discoid, minutely punctured beneath the lens; spire concavely flattened, sutures impressed; whorls five, the last slanting round the upper part, descending in front umbilicus large, open; aperture somewhat triangularly square; lip reflected, margins approximating.

*HINDS*, Moll. Voy. Sulphur, p. 55, pl. 19, f. 11.

*Hab.* Port Carteret, New Ireland (among the fallen decaying leaves on the shore): *Hinds*.

The spire of this shell has the appearance of being pressed almost concavely inwards.

Species 452. (Fig. a, b, Mus. Cuming.)

**HELIX HONESTA.** *Hel. testâ eix umbilicatâ, orbiculatâ convexatâ, subvitreâ, nitidè castaneâ, suturis pauliordibus; anfractibus sex, plano-convexis, ultimo obsolete carinato; aperturâ lunari; peristomate simplici, aculo.*

**THE NEAT HELIX.** Shell scarcely umbilicated, orbicular smooth, somewhat glassy, shining chestnut, sutures rather paler; whorls six, flatly convex, last whorl obsolete obtusely keeled; aperture lunar; lip simple, sharp.

GOULD (Mus. Cuming).

*Hab.* Burmah.

A shining, dark chestnut, glassy shell.

Species 453. (Mus. Cuming.)

**HELIX TROILUS.** *Hel. testâ uniuersâ, oblique striatâ, oblique tenuistriatâ, intense castaneâ, lineâ peripheriâ duplici, unâ infra unâ supra peripheriam circulatâ, aperturâ obtusâ; anfractibus quinque ad sex, convexis, ultimo rotundato vel obtusè carinato; aperturâ lunari orbiculari; peristomate simplici, subincrassato, marginibus conniventibus.*

**THE TROILUS HELIX.** Shell umbilicated, somewhat depressed, obliquely finely striated, dark chestnut, encircled with two pale lines, one above the periphery and one below it, obtuse at the apex, whorls five to six, the last rounded or obtusely keeled, aperture

lunar, subcircular; lip simple, rather thickened, margins approximating.

GOULD, Expedition Shells, 1846, p. 23.

*Hab.* Island of Samoa.

A very dark chestnut species, encircled with two characteristic pale lines, one above and the other below the periphery.

Species 454. (Mus. Cuming.)

HELIX EPIXANTHA. *Hel. testá umbilicatá, subglobosá, tenui, corneá, sub lente minutissimè granulatá; spirá planá; anfractibus quatuor ad quinque, ultimo subinflato; aperturá lunari; peristomate tenui, simplici.*

THE YELLOWISH HELIX. Shell umbilicated, somewhat globose, thin, horny, beneath the lens very minutely granulated; spire flat; whorls four to five, the last rather inflated; aperture lunar; lip thin, simple.

PFEIFFER (Mus. Cuming).

*Hab.* China.

A simple horny shell, somewhat remarkable for its very minutely granulated surface.

Species 455. (Mus. Cuming.)

HELIX PYRRHOZONA. *Hel. testá umbilicatá, depressá, tenui, subdiaphaná, corneo-albúá, supernè confertim costulato-striatá, basi tenuiter striatá; spirá parum elevatá; anfractibus quinque ad sex, convexiusculis, ultimo ad peripheriam rufo-unizonato, anticè rix descendente; umbilico mediocri, percio; aperturá subverticali, lunari; peristomate rix expansiusculo, intus incrassato, albo, ad basin tuberculum indistinctum formante.*

THE RED-BANDED HELIX. Shell umbilicated, depressed, thin, subdiaphanous, horny-white, closely rib-like striated at the upper part, finely striated at the base; spire but little elevated; whorls five to six, rather convex, the last red-banded at the periphery, scarcely descending in front; umbilicus middling, open; aperture subvertical, lunar; lip slightly expanded, inwardly thickened, white, forming an indistinct tubercle at the base.

PHILIPPI, *Abbild. und Besch. Conch.* vol. ii. p. 9. pl. 6. f. 4.

*Hab.* China.

The rib-like striæ which characterize this species are very strongly developed.





456.



457. a



457 b



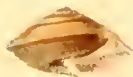
458.



459 a



459 b



460. a



461 a



461 b



460 b

# HELIX.

PLATE LXXXV.

Species 456. (Mus. Cuming.)

**HELIX CANDAHARICA.** *Hel. testâ umbilicatâ, orbiculato-convexiusculâ, obliquè striatulâ, fuscescente-albidâ, fasciis angustis, maculosè interruptis, nigricantibus et rufis ornatâ; spirâ vix elevatâ, apice nitidâ, corneâ; anfractibus quinque, convexiusculis; umbilico infundibuliformi; aperturâ obliquâ, lunato-ovali; peristomate simplici, acuto, marginibus conniventibus.*

**THE CANDAHAR HELIX.** Shell umbilicated, orbicularly convex, obliquely finely striated, brownish-white, ornamented with spot-interrupted blackish and red narrow bands; spire scarcely raised, apex shining, horny; whorls five, slightly convex; umbilicus funnel-shaped; aperture oblique, lunar-oval; lip simple, sharp, margins approximating.

PFEIFFER, *Pro. Zool. Soc.* 1846. p. 37.

*Hab.* Candahar.

A small stone-white shell, variegated with interrupted brown-black bands.

Species 457. (Fig. *u, b*, Mus. Cuming.)

**HELIX GUERINI.** *Hel. testâ umbilicatâ, trochiformi, epidermide fuscescente indutâ; anfractibus septem ad octo, vix convexiusculis, basi carinatis, carinis pilis confertis densè ciliatis; basi convexiusculâ; umbilico angustissimo, pervio; aperturâ latâ, lunari; peristomate simplici, marginibus callo tenuissimo nitido junctis.*

**GUERIN'S HELIX.** Shell umbilicated, trochus-shaped, covered with a light brown epidermis; whorls seven to eight, scarcely convex, keeled at the base, keels densely ciliated with close-set hairs; base slightly convex; umbilicus very narrow, open; aperture broad, lunar; lip simple, margins joined by a thin shining callosity.

PFEIFFER, *Revue zool. Soc. Cuv.* 1842. p. 304.

*Hab.* Neilgherry Hills.

A pyramidally conical shell of very compact regular growth, with the whorls very slowly enlarging.

Species 458. (Mus. Cuming.)

**HELIX FORTUNEI.** *Hel. testâ subprofundè umbilicatâ, sinistrali, virescente-corneâ, pellucidâ, solidiusculâ, fasciâ*

*unicâ intensè castaneâ medio cingulatâ, oblique confertim tenuissimè striatâ; anfractibus quinque, pianoconvexis, ultimo rotundato; aperturâ lunato-circulari, peristomate expanso, marginibus conniventibus.*

**FORTUNE'S HELIX.** Shell rather deeply umbilicated sinistral, greenish-horny, transparent, rather solid encircled round the middle with a dark chestnut band, obliquely very closely finely striated; whorls five, flatly convex, the last rounded; aperture lunar-circular; lip expanded, margins approximating.

PFEIFFER, *Pro. Zool. Soc.* 1851 (?).

*Hab.* Shanghai, China; Fortune.

A clear greenish-horny shell, very transparent, but yet rather solid, encircled by a central dark chestnut band, of which the upper edge is seen in the sutures of the spire.

Species 459. (Mus. Cuming.)

**HELIX FALLACIOSA.** *Hel. testâ umbilicatâ, depressâ, zonis fuscis variis plerumque ornatâ; spirâ breviter anfractibus quatuor ad quinque planiusculis, ultimo subitò descendente, umbilico infundibuliformi, aperturâ subhorizontali, ellipticâ; peristomate simplici, marginibus junctis, supere breviter expanso, basali angulatum reflexo.*

**THE FALLACIOUS HELIX.** Shell umbilicated, depressed white, generally ornamented with various brown zones; spire very short, whorls four to five, rather flat, the last suddenly descending, umbilicus funnel-shaped; aperture somewhat horizontal, elliptical; lip simple, margins almost joined, upper margin shortly expanded, basal margin angularly reflected.

FERUSSAC, *Hist. Moll.* pl. 71. f. 1.

*Hab.* Ceylon and Hindoostan.

The bands are somewhat variable in this species. In the specimen here figured there is one strong central band with a delicate line, at some distance, above and below it.

Species 460. (Fig. *r, l*, Mus. Cuming.)

**HELIX TRICHOPTOPIS.** *Hel. testâ latè umbilicatâ, subdepressâ, conici, subrectè aperturâ lunato-ovali, confertim striatâ, spirâ pianoconvexâ, anfractibus sex, planulatis ultimo acutiusculis, corneâ subrotundatâ, aperturâ transversâ ovali; peristomate tenui expanso.*



THE HAIR-KEEL HELIX. Shell broadly umbilicated, very depressed, horny, beneath the lens spirally very minutely closely striated; spire flatly convex; whorls six, flattened, the last very sharply keeled, keel somewhat produced; aperture transversely ovate; lip thin, expanded.

PFEIFFER, Pro. Zool. Soc. 1851 (?).

*Hab.* China.

A depressed sharply keeled horny species, spirally engraved with numerous very close-set striæ, and the keel in fine specimens is set with hairs.

Species 461. (Fig. *a, b*, Mus. Cuning.)

HELIX SERRULA. *Hel. testã subprofundè umbilicatã,*

*valdè depressã, striis costulatis subcorrugatis confertim sculptã, sordidè albã, carinatã, carinã striis serrulatã; anfractibus sex, convexiusculis; aperturã transverse ovalã; peristomate simplici, aculo.*

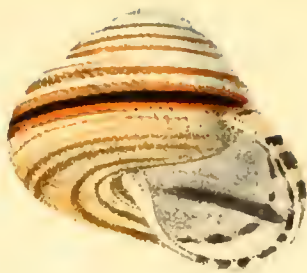
THE LITTLE SAW HELIX. Shell somewhat deeply umbilicated, very depressed, closely sculptured with rib-like slightly wrinkled striæ, dirty white, keeled, keel serrated with the striæ; whorls six, slightly convex; aperture transversely ovate; lip simple, sharp.

BENSON (Mus. Cuning.)

*Hab.* Himalaya.

The keel obtains its saw-like edge from the overrunning of the raised striæ.





462.



463



464.



465.



466. a



466. b.



467

# HELIX.

PLATE LXXXVI.

Species 462. (Mus. Cuming.)

**HELIX STUARTIÆ.** *Hel. testâ obsolete umbilicatâ, depresso-turbinatâ, striatâ, albâ, fasciis fuscis et nigricantibus variè ornatâ; spirâ lalè conoideâ; anfractibus sex, vix convexiusculis, ultimo basi subplanulato; aperturâ perobliquâ, lunari; peristomate simplici, margine supero antrorsum arcuato, columellari breviter reflexo, umbilicum fere legente.*

**STUART'S HELIX.** Shell obsolete unilobed, depressly turbinated, striated, white, variously ornamented with brown and blackish bands; spire broadly conoid; whorls six, but little convex, last whorl rather flattened at the base; aperture very oblique, lunar; lip simple, upper margin arched forward, columellar margin shortly reflected, almost covering the umbilicus.

SOWERBY, Pfeiffer, Zeitschrift für Malac. 1845, p. 154.

*Hab.* Island of Celebes.

*Helix Stuartiæ* somewhat resembles *Helix Pan* of the Philippine Islands in general aspect. In that species the marking is produced by the varied pattern of the epidermis; in this it is produced by colour stained in the shell.

Species 463. (Mus. Cuming.)

**HELIX BATAVIANA.** *Hel. testâ umbilicatâ, depresso-globosâ, tenui, obtusè carinatâ, supernè cinnamomeâ, obliquè confertim costulatâ, subtus castaneâ, striatâ, versum umbilicum pallidâ, areâ umbilicali castaneâ; anfractibus sex ad septem, vix convexiusculis; aperturâ angulato-lunari; peristomate simplici, ad umbilicum arcuatum reflexo.*

**THE BATAVIA HELIX.** Shell umbilicated, depressly globose, thin, obtusely keeled, cinnamon at the upper part, obliquely closely ribbed, chestnut beneath, striated, pale towards the umbilicus, umbilical area chestnut; whorls six to seven, but little convex; aperture angularly lunar; lip simple, reflected in an arched manner at the umbilicus.

BUSCH, Philippi, Abbild. und Besch. Conch. pl. 1. f. 3.

*Hab.* Java.

The colouring of this species, as above described, is extremely characteristic.

Species 464. (Mus. Cuming.)

**HELIX CIDARIS.** *Hel. testâ subumbilicatâ, orbiculato-conoideâ, obliquè costulato-striatâ, subobscurè corrugatâ et malleatâ, flavescente-albâ, fasciâ fusco-rubrâ infra peripheriam cingulatâ; spirâ turgidâ, apice obtusâ anfractibus sex, vix convexiusculis; aperturâ rotundato-lunari; peristomate simplici, acuto, margine columellari breviter dilatato, reflexo.*

**THE TURBAN HELIX.** Shell slightly umbilicated orbicularly conoid, obliquely rib-like striated, somewhat obscurely wrinkled and indented, yellowish-white encircled below the periphery with a red-brown band; spire swollen, obtuse at the apex; whorls six, slightly convex; aperture rotundately lunar; lip simple, sharp; columellar margin shortly dilated and reflected.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. viii. p. 45.

*Hab.* Island of Timor.

The rib-like striae are very regular and well-formed on the first five whorls; in the last whorl they begin to fade, and as they become more indistinct, so is the surface more indented and wrinkled.

Species 465. (Mus. Cuming.)

**HELIX DISTINCTA.** *Hel. testâ umbilicatâ, subglobosâ, turgidâ, subtiliter corrugatâ et malleatâ, rufescente-spicicâ, fasciâ albâ ad peripheriam, infra subrotundare, deinde albâ; spirâ brevi; anfractibus quinque ad sex convexis, ultimo subrotundato; umbilico molliori, profundo; aperturâ lunari; peristomate simplici.*

**THE DISTINCT HELIX.** Shell umbilicated, somewhat globose, swollen, finely wrinkled and indented, reddish-fawn, with a whitish band at the periphery, darker below the periphery, then white; spire short; whorls five to six, convex, last whorl somewhat rounded; umbilicus middling, deep; aperture lunar; lip simple.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* ———?

Distinguished from *H. mouzoniis*, to which it is allied, by its more swollen spiral form, fine indented wrinkled sculpture, and light reddish-fawn colouring.

Species 466. (Fig. a, b, Mus. Cuming.)

HELIX CONCISA. *Hel. testā umbilicatā, depressā, subdiscoideā, solidā, aurantio-rufā, striatā, sulcis obliquis, subcorrugatis, punctatis, nunc interruptis nunc divaricatis, incisā; spirā planiusculā, suturis impressis; anfractibus sex, convexis, ultimo rotundato, anticè vix deflexo; umbilico infundibuliformi, profundo; aperturā obliquā, lunato-ovali; peristomate subincrassato, expanso, albo, marginibus callo albo arcuato conniventibus.*

THE CUT HELIX. Shell umbilicated, depressed, subdiscoid, solid, orange-red, striated, engraved with oblique grooves which are somewhat wrinkled and punctured, now interrupted, now divaricate; spire rather flat, with the sutures impressed; whorls six, convex, the last rounded, slightly deflected in front; umbilicus funnel-shaped, deep; aperture oblique, lunar-oval; lip rather thickened, expanded, white, margins approximating, with an arched callous layer between them.

FERUSSAC, Hist. Moll. pl. 78. f. 3, 4.

*Hab.* Island of Aroa.

This very scarce species is remarkably characterized by the vein-like grooves which cross the shell in an oblique direction.

Species 467. (Mus. Cuming.)

HELIX MONOZONALIS. *Hel. testā umbilicatā, orbiculato-convexā, ventricosā, nitidā, supernè lineis confertis longitudinalibus et transversis subtilissimè decussatā. castaneā, supra peripheriam albo-zonatā, infra saturatiore castaneā, deinde albā; spirā brevi; anfractibus quinque, convexis; umbilico parvo; aperturā lunari. peristomate simplici, margine columellari breviter reflexo.*

THE ONE-ZONED HELIX. Shell umbilicated, orbicularly convex, ventricose, shining, very finely decussated at the upper part with close-set longitudinal and transverse lines, chestnut, with a white zone above the periphery, darker chestnut below, then white; spire short; whorls five, convex; umbilicus small; aperture lunar; lip simple, columellar margin shortly reflected.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. viii. p. 29.

*Hab.* Amboyua.

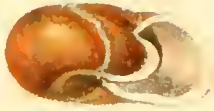
Very finely granulately decussated from the sutures down to the white band, and smooth and shining below.



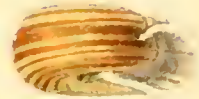




468



469



470



471



472 a



472 b



473

# HELIX.

PLATE LXXXVII.

Species 468. (Mus. Cuming.)

**HELIX UNGUICULA.** *Hel. testá umbilicatá, discoidéa, leviter striatá, aurantiá, albido aliquando fasciatá, superne planá; suturá distinctá; anfractibus quinque ad sex, planulatis, ultimo tereti, anticè vix descendente; umbilico infundibuliformi; aperturá lunari; peristomate reflexo, marginibus callo tenuissimo junctis.*

**THE LITTLE NAIL HELIX.** Shell umbilicated, discoid, faintly striated, orange, sometimes encircled by a white band, flat at the upper part; suture distinct; whorls five to six, rather flattened, the last lengthened, slightly descending in front; umbilicus funnel-shaped; aperture lunar; lip reflected, margins joined by a very thin callosity.

FERUSSAC, Hist. Moll. pl. 76. f. 3, 4.

*Hab.* Java.

This species differs from *H. unguina* in its more discoid growth, and broader flatter spire.

Species 469. (Mus. Cuming.)

**HELIX GRUNERI.** *Hel. testá umbilicatá, depressá, superne planiusculá, minutissimè punctato-striatá, aurantio-rufá; anfractibus quinque ad sex, sensim accrescentibus, planiusculis, ultimo rotundato, reflexo, anticè vix deflexo; umbilico angusto, pervio; aperturá subverticali, depressá, latè lunari; peristomate incrassato, reflexo, marginibus callo tenui, superne dentem arcuatum validum formante, junctis.*

**GRUNER'S HELIX.** Shell umbilicated, depressed, rather flat at the upper part, very minutely puncture-striated, orange-red; whorls five to six, increasing slowly, rather flattened, the last rounded, a little deflected in front; umbilicus narrow, open; aperture subvertical, depressed, broadly lunar; lip thickened, reflected, margins joined by a thin callosity, forming at the upper part a strong arched tooth.

PFEIFFER, Pro. Zool. Soc. 1845. p. 63.

*Hab.* —?

An interesting species, allied to the preceding, but uniformly of smaller size, distinguished by having the callosity which joins the margins thickened and raised into a strong edge. In other words, the reflected lip is carried across the body-whorl

Species 470. (Mus. Cuming.)

**HELIX CIRCUMDATA.** *Hel. testá umbilicatá, subdiscoidéa, superne concavá, lævigatá, albida, lineis aurantio-rufis numerosis angustis regularibus ornatá; spirá concavá, granulatá; anfractibus quinque ad sex, concavis, primis paucis angustissimis, ultimo basi subpunctato, medio excavato; umbilico modico; aperturá subverticali, angustá, lunari; peristomate subreflexo.*

**THE SURROUNDED HELIX.** Shell umbilicated, subdiscoid, concave above, smooth, whitish, regularly ornamented with numerous narrow orange-red lines; spire concave, granuled; whorls five to six, rather convex, the first few whorls very narrow, the last rather flat at the base, hollowed in the middle; umbilicus middling; aperture subvertical, narrow, lunar, lip thinly reflected.

FERUSSAC, Hist. Moll. pl. 77. f. 1.

*Hab.* Moluccas.

Of the same peculiar type as the two preceding species, pencilled with numerous orange-brown lines, sometimes conglomerated in parts into a band.

Species 471. (Mus. Cuming.)

**HELIX MAMILLA.** *Hel. testá subangustè umbilicatá, globosá, valdè rugosá et obliquè corrugatá, fulveo-fusca bifasciatá; spirá semiglobosá; anfractibus concavis, sensim accrescentibus; aperturá subverticali, irregulariter lunato-ovali; peristomate latè expanso, dense reflexo, albido, marginibus callo junctis, basi dilatato, umbilicum semicoperente.*

**THE NIPPLE HELIX.** Shell rather narrowly umbilicated, globose, very rough and obliquely wrinkled, fulvous, two-banded with brown; spire semiglobose; whorls six, increasing slowly; aperture very oblique, irregularly lunar-oval; lip broadly expanded, thickly reflected, whitish, margins joined by a callosity, basal margin dilated, half-covering the umbilicus.

FERUSSAC, Hist. Moll. pl. 25. f. 1, 2.

*Hab.* Island of Celebes.

A broad globose shell, with the surface peculiarly rough and wrinkled.

Species 472. (Fig. *a, b*, Mus. Cuming.)

HELIX ZODIACA. *Hel. testā umbilicatā, depressā, minutè granulatā, rufo-aurantiā, subtus pallidiorè, medio albozonatā; spirā planiusculā; anfractibus quatuor, vix concavisculis, ultimo anticè vix descendente; umbilica mediocri; aperturā subverticali, transversè ovali; peristomate latè expanso, incrassato, ad columellam dilatato.*

THE BELTED HELIX. Shell umbilicated, depressed, minutely granulated, reddish-orange, paler underneath, white-zoned round the middle; spire rather flat; whorls four, but little convex, the last scarcely descending in front; umbilicus middling; aperture subvertical, transversely oval; lip broadly expanded and thickened, dilated at the columella.

FERUSSAC, Hist. Moll. pl. 75. f. 2.

*Hab.* Island of Celebes.

A fine species, closely minutely granulated throughout, partaking somewhat of the generic form of *Cyclostoma*.

## Species 473. (Mus. Cuming.)

HELIX UNGULINA. *Hel. testā umbilicatā, depresso-globosā, utrinque concavā, tenuiculā, striatā, rufā; spirā profundè immersā; anfractibus quinque ad sex, concavis, angustis, ultimo magno, inflato, anticè descendente, basi circa umbilicum infundibuliformem excavato; aperturā subverticali, lunari; peristomate simplici, margine dextro expanso, basali reflexo, columellari dilatato.*

THE GREAT NAIL HELIX. Shell umbilicated, depressly globose, concave on both sides, rather thin, striated, red; spire deeply immersed; whorls five to six, convex, narrow, the last large, inflated, descending in front, excavated at the base around the funnel-shaped umbilicus; aperture subvertical, lunar; lip simple, right margin expanded, basal reflected, columellar dilated.

LINNÆUS, Syst. Nat. (12th edit.) p. 1245.

*Helix badia*, Gmelin.

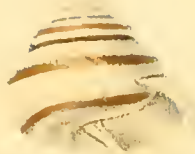
*Hab.* Java.

Remarkable for its peculiarly swollen discoid growth, which renders the spire deeply immersed.

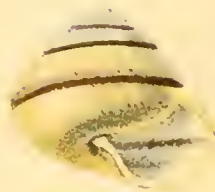




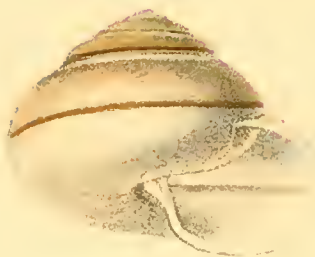
474.



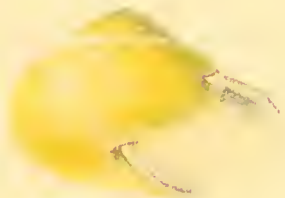
475.



476.



477.



478.



479.



480.

# HELIX.

PLATE LXXXVIII

Species 474. (Mus. Cuming.)

**HELIX NEMORENSIS.** *Hel. testá vir umbilicatá, orbiculato-conicá, solidá, nitidá, albá aut flavescente, fuscis cinereo-fusciscentibus circumdatá; anfractibus sex, vir convexiusculis; aperturá lunato-rotundatá; peristomate simplici, acuto, margine basali introrsum incrassato, ad columellam reflexiusculo.*

**THE GROVE HELIX.** Shell scarcely umbilicated, orbicularly conic, solid, shining, white or yellowish, surrounded with ash-brown bands; whorls six, but little convex; aperture lunar-rounded; lip simple, acute, basal margin thickened inwardly, slightly reflected at the columella.

MULLER, Verm. Hist. terr. et fluv. in ind.

*Nanina nemorensis*, Gray.

*Hab.* Molucca Islands and New Ireland; Hinds.

The bands have a rusty-brown character towards the apex; towards the last whorl they are ash-tinted, and more or less obsolete, from being overlaid with a warm yellowish coating.

Species 475. (Mus. Cuming.)

**HELIX TROCHUS.** *Hel. testá vir umbilicatá, orbiculato-conicá, solidá, obliquè subirregulariter plicato-striatá, albá, fuscá ferrugineo-fuscá interruptá cingulatá; anfractibus quinque ad sex, convexiusculis; aperturá lunato-rotundatá, labro simplici, introrsum subincrassato, juxta columellam dilatato, reflexo.*

**THE TOP HELIX.** Shell scarcely umbilicated, orbicularly conic, solid, obliquely rather irregularly plicately striated, white, encircled with an interrupted rust-brown band; whorls five to six, rather convex; aperture lunar, rounded, lip simple, slightly thickened inwardly, dilated and reflected next the columella.

MULLER, Verm. Hist. terr. et fluv. vol. ii. p. 79.

*Hab.* Java.

This is closely allied to the foregoing, and may prove to be a variety of it.

Species 476. (Mus. Cuming.)

**HELIX SULPHUREA.** *Hel. testá vir umbilicatá, abbreviato-conicá, obliquè subirregulariter striatá, cærulescente-*

*albá, basin versus sulphureá, lineá cinereo-fuscá conspicuá medio cingulatá, apice obtusá; anfractibus quinque ad sex, convexiusculis; aperturá lunari-rotundatá; peristomate simplici, introrsum subincrassato, juxta columellam dilatatá et reflexá.*

**THE BRIMSTONE HELIX.** Shell scarcely umbilicated, shortly conic, obliquely somewhat irregularly striated, bluish-white, brimstone-coloured towards the base, encircled round the middle with a conspicuous ash-brown line, obtuse at the apex; whorls five to six slightly convex; aperture lunar-rounded; lip simple a little thickened inwardly, dilated and reflected near the columella.

*Hab.* Java.

There is a peculiarity in the more depressed form, and in the band painting of this species, which distinguishes it constantly from its near ally *H. nemorensis*.

Species 477. (Mus. Cuming.)

**HELIX TUMENS.** *Hel. testá vir umbilicatá, subdepresso-orbiculari, striis obliquis, ad suturas plicatis, lineisque incisís spiralibus minutis decussatá, carneo-albidá, lineá rufá medio cingulatá, apice depresso-obtusá; anfractibus quinque ad sex, convexiusculis; aperturá lunari-rotundatá; peristomate simplici, introrsum subincrassato, juxta columellam paululum reflexo.*

**THE SWOLLEN HELIX.** Shell scarcely umbilicated, rather depressly orbicular, decussated with minute spiral impressed lines and oblique striae, which are pucker'd at the sutures, flesh-white, encircled round the middle with a red line, depressly obtuse at the apex; whorls five to six, rather convex; aperture lunar-rounded, lip simple, slightly thickened inwardly, a little reflected next the columella.

DESHAYES, Férussac, Hist. Moll. pl. 108 C. f. 11-13

*Hab.* Moluccas.

Of a peculiar livid flesh-tinge towards the apex, encircled round the middle with a red line, which appears above the suture of the spire throughout

Fig. 478. (Mus. Cuming.)

The shell here figured represents a variety of *H. tumens* (for which see next Plate), proposed by Mr. Shuttleworth



to be distinguished as a species, with the name *H. vitellus*. It only differs in being rather more than usually globular.

Species 479. (Mus. Cuming.)

HELIX MOUSSONI. *Hel. testā angustè umbilicatā, turbinatā, tenui, carinatā, striis incrementi et lineis confertissimis impressis, obliquè antrorsum descendentibus, subtilissimè decussatā, diaphanā, albidā, lineā rufā medio cingulatā; spirā conoideā, apice obtusiusculā, suturā submarginatā; anfractibus sex, subplanulatis, ultimo magno, infra lineā rufā carinato, basi convexiusculo; aperturā obliquā, subangulato-lunari; peristomate simplici, margine columellari juxta columellam breviter reflexo.*

MOUSSON'S HELIX. Shell narrowly umbilicated, turbinated, thin, keeled, very finely decussated with striae of growth, and very close-set impressed lines, descending obliquely anteriorly, diaphanous, whitish, encircled round the middle with a red line; spire conoid, rather obtuse at the apex, suture slightly margined; whorls six, rather flattened, the last large, keeled below the red line, rather convex at the base; aperture oblique, somewhat angularly lunar; lip simple, columellar margin shortly reflected next the columella.

PFEIFFER, Pro. Zool. Soc. 1849. p. 126.

*Hab.* Java.

A light diaphanous shell of a peculiar pagoda-like form, very minutely engraved with close-set wrinkles running in an opposite direction to the striae of growth.

Species 480. (Mus. Cuming.)

HELIX RUMPHII. *Hel. testā eix umbilicatā, sinistrata, tenuiculā, carinatā, saturatè cinnamomeā, ad carinam fasciā angustā castaneā albimarginatā pictā, supernè planiusculā, striatā et malleatā, basi subrotundatā, striis incrementi lineis spiralibus impressis sub lente minutissimè decussatis; anfractibus quinque ad sex; aperturā subrhombeā, intus livido-fuscescente; peristomate simplici, columellam versus subreflexo.*

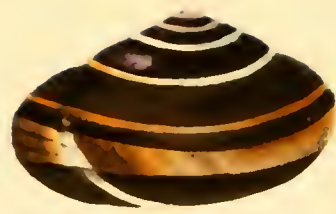
RUMPHIUS' HELIX. Shell scarcely umbilicated, sinistral, rather thin, keeled, dark cinnamon, painted at the keel with a narrow white-edged chestnut band, rather flattened at the upper part, striated and indented, somewhat rounded at the base, very minutely decussated beneath the lens with spiral impressed lines; whorls five to six; aperture subrhomboid, livid-brown within; lip simple, slightly reflected towards the columella.

BUSCH, Philippi, Abbild. und Besch. Conch. pl. 1. f. 2.

*Hab.* Java.

A very characteristic, light, reversed species, of a peculiar livid cinnamon-colour.

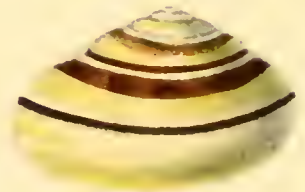




451 a



482 a



482 b



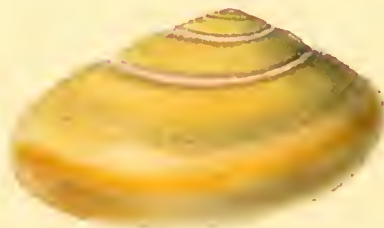
482 c



482 d



482 e



482 f

# HELIX.

PLATE LXXXIX.

Species 481. (Fig. *a, b, c*, Mus. Cuming.)

**HELIX AULICA.** *Hel. testā vix umbilicatā, depresso-orbiculari, tenuiculā, inflatā, lævigatā, variè coloratā et fasciatā, coloribus vividis, suturā interdum opaco-albā; spirā depressā, apice plus minus obtusā; anfractibus quinque, supernè plano-declivibus, anfractu ultimo supernè concavo, lineis perpaucis irregularibus peculiariter inciso, medio obtusè carinato; aperturā amplā, lunari; peristomate simplici, juxta columellam breviter reflexo.*

**THE COURT HELIX.** Shell scarcely umbilicated, depressly orbicular, rather thin, inflated, smooth, variously coloured and banded, colours bright, suture sometimes opaque white; spire depressed, more or less obtuse at the apex; whorls five, flatly slanting at the upper part, last whorl concave at the upper part, and peculiarly engraved with a few irregular lines, obtusely keeled in the middle; aperture large, lunar; lip simple, shortly reflected next the columella.

**PFEIFFER** (Mus. Cuming).

*Hab.* Moluccas.

Distinguished from *H. citrina* by its larger size, more depressed spire, and by the slanting concavity of the last whorl, which is further characterized by a few obliquely straggling impressed lines.

Species 482. (Fig. *a to d*, Mus. Cuming.)

**HELIX CITRINA.** *Hel. vix umbilicatā, convexo-orbiculari, lævigatā, nitidā, variè coloratā et fasciatā, coloribus vividis, suturā plerumque opaco-albā; spirā obtusā anfractibus quinque, convexis, ultimo basi convexo aperturā subamplā, lunari; peristomate simplici, juxta columellam breviter reflexo.*

**THE LEMON-COLOURED HELIX.** Shell umbilicated, convexly orbicular, smooth, shining, variously coloured and banded, colours bright, suture generally opaque white; spire obtuse; whorls five, convex, aperture rather large, lunar; lip simple, shortly reflected next the columella.

**LINNEUS**, Syst. Nat. (12th edit.) p. 1245.

*Nanina citrina*, Gray.

*Vitrina citrina*, Quoy and Gaimard.

*Zonites citrina*, Swainson.

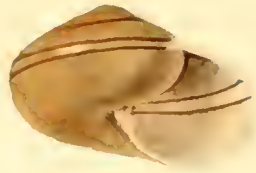
*Hab.* Molucca Islands.

The colouring of this well-known species is extremely variable. In addition to the four varieties here selected for illustration, there are many more, differing more or less in tint and in the bands. It is constantly distinguished from the preceding species, not having any indication of the slanting concavity, nor of the impressed lines.

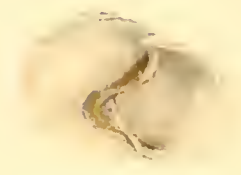








483



484. b



484. a



485. a



486. b



486. a



485. b



487. b



487. a



488

# HELIX.

PLATE XC.

Species 483. (Mus. Cuming.)

**HELIX BISTRIALIS.** *Hel. testā subumbilicatā, globoso-depressā, tenui, fragili, subtilissimè striatā, striis confertis obsolete sub lente decussatā, stramineo-corneā, lineis rufis approximatis medio cinctā; spirā vix convexā; anfractibus quatuor, planiusculis, rapidè accrescentibus; aperturā amplā, lunari-ovali; peristomate simplici, margine columellari recurvato.*

**THE TWO-STRIATED HELIX.** Shell slightly umbilicated, globosely depressed, thin, fragile, very finely striated, decussated beneath the lens with obsolete close-set striæ, straw-horny, encircled round the middle with two approximating red lines; spire but little convex; whorls four, rather flat, increasing rapidly; aperture large, lunar-oval; lip simple, columellar edge recurved.

*Nanina bistrialis*, Beek. Ind. p. 2.

*Helix exilis*, Chemnitz (not of Müller).

*Helix diaphana*, Lea.

*Hab.* Pondicherry, Tranquebar.

Of the two characteristic red lines which encircle this shell, the upper one appears in the place of the suture. The lines which are engraved on the upper part of the whorls in a spiral direction are rather distant, and look like faint grooves.

Species 484. (Mus. Cuming.)

**HELIX NAJAS.** *Hel. testā imperforatā, depresso-globosā, tenui, subtilissimè striatā, sub epidermide deciduā lutescente hyalinā, albā; spirā brevi; anfractibus quatuor, convexiusculis, ultimo valdè inflato; columellā leviter arcuatā; aperturā parum obliquā, lunato-ovali; peristomate simplici, undique breviter expanso.*

**THE NAJAS HELIX.** Shell imperforated, depressly globose, thin, very finely striated, hyaline, beneath a deciduous yellowish epidermis; spire short; whorls four, rather convex, the last much inflated; columella arched; aperture but little oblique, lunar-oval; lip simple, shortly expanded throughout.

PFEIFFER, *Symböke*, vol. iii. p. 71.

*Hab.* Java.

A very delicate swollen hyaline shell, partially covered with a thin yellowish-horny epidermis.

Fig. 483 a, b. (Mus. Cuming.)

These are two varieties of *H. citrina*, which have very much the appearance of being a distinct species. They are more globose in form; and there is a peculiarity in the bright carnelion-red colouring of the apex.

Species 486. (Mus. Cuming.)

**HELIX HALATA.** *Hel. testā vix umbilicatā, subglobosā, subhyalinā, solidā, lævigatā, vividè corulescente-viridi, basi et apice albicanlibus; spirā obtusā; anfractibus quinque ad sex, convexis; aperturā subquadrato-lunari peristomate simplici, juxta columellam breviter reflexe.*

**THE BLUE-GREEN HELIX.** Shell scarcely umbilicated, somewhat globose, subhyaline, solid, smooth, bright blue-green, whitish at the base and apex; spire obtuse; whorls five to six, convex; aperture somewhat squarely lunar; lip simple, shortly reflected next the columella.

MOUSSON, *Land. und Süss. Moll. Java*, p. 112. pl. 21 t. 2

*Hab.* Java.

A shell of simple structure, distinguished by a peculiarly delicate verdigris-colour.

Species 487. (Mus. Cuming.)

**HELIX PLATYSTYLA.** *Hel. testā imperforatā, conicā, solidā, costulato-striatā, albidā, lineā rufā ad suturam ornata; spirā conicā, acutiusculā; anfractibus sex, convexiusculis, sensim accrescentibus, ultimo obsolete angulate basi subplano; aperturā obliquā, latè lunari; peristomate simplici, marginibus subremotis, dextro breviter expanso, columellari perdilato, calloso.*

**THE THICK-PILLAR HELIX.** Shell imperforated, conic, solid, rib-like striated, whitish, ornamented at the suture with a red line; spire conic, rather sharp; whorls six, rather convex, increasing gradually, the last obsolete angled, rather flat at the base; aperture oblique, broadly-lunar; lip simple, margin rather distant, right margin shortly expanded, columellar margin very much dilated and callous.

PFEIFFER, *Pro. Zool. Soc.* 1849. p. 130.

*Hab.* Molucca Islands?

The shell here figured, the specimen described by Dr Pfeiffer, is not in good condition. In a finer state it

doubtless presents colours of which there is here little or no indication.

Species 488. (Mus. Cuming.)

HELIX PAPILLA. *Hel. testâ oblectè umbilicatâ, ovato-globosâ, solidâ, validè undulato-costatâ, supernè cærulescente et rufo variegatâ, costis albis, basi albidâ; spirâ elatâ, apice obtusâ; anfractibus quinque ad sex, convexiusculis, ultimo obtusè angulato, anticè deflexo; aperturâ perobliquâ, transversè oblongâ, intus lividâ; peristomate incrassato, latè reflexo, marginibus callo continuo, prominente, umbilicum plus minus tegente, junctis, supero sinuoso, basali obsoletè dentato.*

THE PAP HELIX. Shell with a covered umbilicus, ovately

globose, solid, strongly wave-ribbed, bluish and red-variegated above, ribs white, and whitish below; spire raised, obtuse at the apex; whorls five to six, rather convex, the last obtusely angled, deflected in front; aperture very oblique, transversely oblong, livid; lip thickened, broadly reflected, margins joined by a prominent continuous callosity, more or less covering the umbilicus, upper margin sinuous, basal margin obsoletely toothed.

MULLER, Verm. Hist. terr. et fluv. vol. ii. p. 100.

*Trochus papilla*, Chemnitz.

*Hab.* Islands of the Australian Archipelago; Beck.

This fine species is well characterized by the undulating character of the ribs, with which the aperture is conformable.





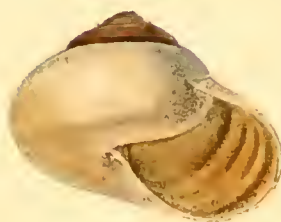
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490.



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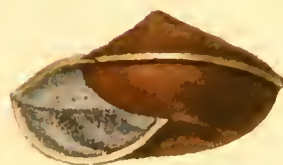
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493 a



493 b.



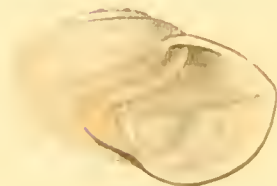
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497

# HELIX.

PLATE XCI.

Species 489. (Mus. Cuming.)

**HELIX HARTMANNI.** *Hel. testâ umbilicatâ, depressâ, subdiscoideâ, acutè carinatâ, arcuatim distinctè striatâ, fuscâ; spirâ vix elatâ; suturâ lineari; anfractibus sex, planulatis, ultimo non descendente, basi convexis; umbilico magno, perspectivo; aperturâ depressâ, securiformi; peristomate recto, margine supero simplici, antrosum arcuato, basali subincrassato.*

**HARTMANN'S HELIX.** Shell umbilicated, depressed, somewhat discoid, sharply keeled, distinctly arcuately striated, brown; spire scarcely raised; suture linear; whorls six, rather flattened, the last not descending, convex at the base; umbilicus large, perspective; aperture depressed, wedge-shaped; lip straight, upper margin simple, arched in front, basal margin somewhat thickened.

PFEIFFER, Pro. Zool. Soc. 1845, p. 125.

*Hab.* Java.

Extremely flatly depressed, with a very sharp keel and broad open perspective umbilicus.

Species 490. (Mus. Cuming.)

**HELIX CONUS.** *Hel. testâ imperforatâ, conicâ, trochiformi, basi acutè carinatâ, levi, fulvâ, carinâ albidâ, utrinque cingulo angusto rufo-marginatâ; spirâ elatâ, apice acutâ; anfractibus octo, planis, ultimo basi planiusculo, medio impresso; aperturâ depressâ, obliquè quadrangulâri; peristomate simplici, aculo, margine columellari perobliquo, subincrassato.*

**THE CONE HELIX.** Shell imperforated, conic, trochus-shaped, sharply keeled at the base, smooth, fulvous, keel white, margined on either side with a narrow red band; spire raised, sharp at the apex; whorls eight, flat, the last rather flat at the base, impressed in the middle; aperture depressed, obliquely quadrangular; lip simple, sharp, columellar edge very oblique, rather thickened.

PHILIPPI, Abbild. und Besch. Conch. pl. 1. f. 6.

*Hab.* Java.

A very characteristic trochus-shaped shell, curiously marked with a dark red-brown band above and below the keel, which is white, the rest of the shell being of a warm orange-red colour.

Species 491. (Mus. Cuming.)

**HELIX WINTERIANA.** *Hel. testâ umbilicatâ, depressâ,*

*superne convexiusculâ, pallidè corneâ, nitidulâ, obsolete carinatâ; anfractibus quinque ad sex, planiusculis, ultimo descendente; umbilico lato, perisio; aperturâ subcirculari; peristomate tenui, simplici, margine basali subreflexo.*

**WINTER'S HELIX.** Shell umbilicated, depressed, rather convex at the upper part, pale horny, shining, obsolete keeled; whorls five to six, rather flat, the last descending; umbilicus broad, open; aperture nearly circular; lip thin, simple, basal margin a little reflected.

PFEIFFER, Symbolæ, vol. ii. p. 41.

*Hab.* Java.

A small horny species of the same peculiar widely convoluted type as *H. Chinensis*.

Species 492. (Mus. Cuming.)

**HELIX RARIGUTTATA.** *Hel. testâ vix umbilicatâ, turbinatâ, tenui, inflatâ, cinerâ, apicem versus purpurascente, obliquè arcuatim striatâ, striis ad suturas tenuiplicatis; spirâ brevi, apice subobtusâ; anfractibus quinque, convexiusculis; aperturâ lunato-circulari; peristomate simplici, acuto.*

**THE RARE-SPOTTED HELIX.** Shell scarcely umbilicated, turbinated, thin, inflated, pale ash, purplish towards the apex, obliquely arcuately striated, striae finely plicated at the sutures; spire short, rather obtuse at the apex; whorls five, rather convex; aperture lunar-circular; lip simple, acute.

MOUSSON, Land. und Süss. Moll. Java, p. 112. pl. 21 f. 3.

*Hab.* Java.

A light inflated species, so tinged with purple on the interior towards the apex as to show through the shell in faint promiscuous blotches.

Species 493. (Fig. a, b, Mus. Cuming.)

**HELIX PILEUS.** *Hel. testâ oblectè umbilicatâ, coniformi, lævigatâ, albâ, rufo-castaneo carinè fasciatâ, spirâ elongatâ, acutiusculâ; anfractibus sex, peristomate, ultimo obsolete angulato, basi planulato, castaneo columellâ brevi, obliquâ; aperturâ lunato-ovata; peristomate simplici, latè expanso, albo, margine supero antrosum subarcuato, basali reflexo, columellari dilatato, reflexo, umbilicum fere occultantè.*

**THE CAP HELIX.** Shell with a covered umbilicus, coniform, smooth, white, variously banded with reddish-



chestnut; spire elongated, rather sharp; whorls six, rather flattened, the last obsoletely angled, flat at the base, chestnut; columella short, oblique; aperture lunar-oval; lip simple, broadly expanded, white, upper margin slightly arched in front, basal reflected, columellar margin dilated and reflected, almost concealing the umbilicus.

MÜLLER, Verm. Hist. terr. et fluv. vol. ii. p. 80.

*Helix pileata*, Gmelin.

*Trochus pileus*, Chemnitz.

*Geotrochus pileus*, Swainson.

*Hab.* Amboyna; Hinds.

This well-known erectly-conical species varies more or less in the chestnut-banded painting, but is constant in form.

Species 494. (Mus. Cuming.)

HELIX JANUS. *Hel. testâ umbilicatâ, sinistrâli, orbiculari, tenui, diaphanâ, obliquè regulariter et confertim costulato-striatâ, supernè fuscâ, basi convexâ, rufo-castaneâ, nitidiusculâ; spirâ latè conoideo-depressâ; anfractibus septem, planulatis, ultimo carinato; aperturâ lunari; peristomate tenui, acuto, margine columellari reflexiusculo.*

THE JANUS HELIX. Shell umbilicated, sinistral, orbicular, thin, diaphanous, obliquely regularly and closely finely rib-like striated, brown at the upper part, base convex, reddish-chestnut, shining; spire broadly conoidly depressed; whorls seven, rather flattened, the last keeled; aperture lunar; lip thin, sharp, columellar margin slightly reflected.

*Helix Janus bifrons*, Chemnitz, Conch. Cab. vol. xi. p. 307. pl. 213. f. 3016-17.

*Helix Mackensiana*, Souleyet.

*Helix Balesteriana*, Lea.

*Hab.* Mount Ophir, Malacca.

A sinistral shell, of a warm reddish-chestnut colour, with the upper surface beautifully finely rib-like striated.

Species 495. (Mus. Cuming.)

HELIX SIEBOLDIANA. *Hel. testâ vix umbilicatâ, turbinatâ, tenui, semipellucidâ, inflatâ, obliquè rudè striatâ, corneo-albâ; anfractibus quinque ad sex, rotundatis; aperturâ circulari; peristomate tenui, acuto, juxta columellam breviter dilatato et reflexo, umbilicium occultante.*

SIEBOLD'S HELIX. Shell scarcely umbilicated, turbinated, thin, semitransparent, obliquely rudely striated, horny-white; whorls five to six, rounded; aperture circular; lip thin, sharp, shortly dilated and reflected next the columella, concealing the umbilicus.

PFEIFFER, Zeitschrift für Malac. 1850. p. 87

*Hab.* Japan.

A thin inflated roughly striated shell, partaking of the typical form of *Paludina*.

Species 496. (Mus. Cuming.)

HELIX JAPONICA. *Hel. testâ umbilicatâ, trochiformi, tenui, plicato-striatâ, interstitiis minutè impresso-linealis, epidermide cornea-stramineâ indutâ; spirâ convexo-conoideâ, apice obtusiusculâ; anfractibus quinque ad sex, subplanis, ultimo carinato, anticè vix descendente, basi vix convexo, juxta umbilicium angustum percium compresso; aperturâ obliquâ, sinuato-lunari; peristomate tenui, breviter expanso, margine dextro arcuato, basali strictiusculo.*

THE JAPAN HELIX. Shell umbilicated, trochus-shaped, thin, plicately striated, the interstices being minutely impressly lined, covered with a horny-straw epidermis; spire convexly conoid, rather obtuse at the apex; whorls five to six, rather flat, the last keeled, descending in front, slightly convex at the base, compressed next the umbilicus, which is narrow and open; aperture oblique, sinuately lunar; lip thin, shortly expanded, right margin arched, basal margin rather drawn out.

PFEIFFER, Zeitschrift für Malac. 1847. p. 146.

*Hab.* Japan.

A light horny trochus-shaped shell, covered with a delicate deciduous epidermis, beneath which the interstices between the plicated striæ of the shell are spirally minutely impressly lined.

Species 497. (Mus. Cuming.)

HELIX CONFORMIS. *Hel. testâ imperforatâ, compressâ, carinatâ, minutè striatâ, albâ, diaphanâ, epidermide tenui corneâ stramineâ indutâ; anfractibus tribus ad quatuor, ultimo magno, dilatato; aperturâ magnâ; peristomate reflexo, angusto, latere columellari depresso, recto.*

THE CONFORMABLE HELIX. Shell imperforated, compressed, keeled, minutely striated, white, diaphanous, covered with a thin horny straw-coloured epidermis. whorls three to four, the last large, dilated; aperture large; lip reflected, narrow, columellar side depressed, straight.

FERRASSAC, Hist. Moll. pl. 25 A. f. 10.

*Hab.* Timor.

Very thin and of very transparent substance, but firm, covered with an extremely delicate shining horny epidermis.





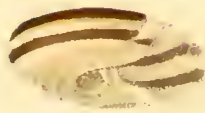
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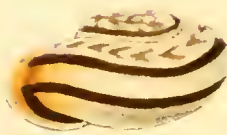
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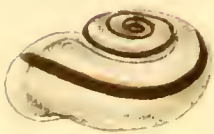
500 a



501 b



501 a



502 a



502 b



503

# HELIX.

PLATE XCII.

Species 498. (Mus. Cuming.)

**HELIX TORTILABIA.** *Hel. testâ umbilicatâ, suborbiculari, discoideâ, flavido-albâ, unicolore vel fulvo-fasciatâ, apice et peristomale interdum rosaceis; spirâ planâ; anfractibus quatuor ad quinque, convexiusculis, ultimo subdepresso, anticè parum deflexo, supernè gibboso-cristato, infernè constricto; umbilico mediocri; aperturâ perobliquâ, rotundato-lunari; peristomate reflexo, marginibus conniventibus.*

**THE TWISTED LIP HELIX.** Shell umbilicated, suborbicular, discoid, yellowish-white or fulvous-banded, lip and apex sometimes pink; spire flat; whorls four to five, rather convex, the last somewhat depressed, but little deflected in front, gibbously crested at the upper part, drawn in at the lower; umbilicus middling; aperture very oblique, rotundately lunar; lip reflected, margins approximating.

LESSON, Zool. Voy. de la Coquille, p. 311. pl. 13. f. 1.

Eadem var. *Helix torticollis*, Le Guillou.

*Hab.* New Guinea; Lesson. Amboyna; Cuming.

Curiously distinguished by a constriction of the lip, which throws up a swollen gibbous crest behind it.

Species 499. (Mus. Cuming.)

**HELIX ZEBRA.** *Hel. testâ umbilicatâ, suborbiculari, discoideâ, albidâ, aurantio-fusco undato-striatâ, circa umbilicum immaculatâ; spirâ concavo-impressâ; anfractibus quatuor ad quinque, convexiusculis, ultimo gibboso, basi subcompresso; aperturâ rotundato-lunari; peristomate latè reflexo, marginibus conniventibus.*

**THE ZEBRA HELIX.** Shell umbilicated, nearly orbicular, discoid, whitish, wave-streaked with orange-brown, unspotted around the umbilicus; spire concavely impressed; whorls four to five, rather convex, the last gibbous, rather compressed at the base; aperture rotundately lunar; lip broadly reflected, margins approximating.

PFEIFFER, Zeitschrift für Malac. 1850. p. 83.

*Hab.* Moluccas.

Of a contracted, gibbous growth, painted throughout, except round the umbilicus, with close orange-brown waved streaks.

Species 500. (Fig. a, b, Mus. Cuming.)

**HELIX COLUBER.** *Hel. testâ umbilicatâ, orbiculato-depressâ, glabrâ, albidâ, maculis corneis serialis ornata; spirâ planâ, medio subimmersâ; anfractibus quatuor ad quinque, planiusculis, rapidè accrescentibus, ultimo lato, depresso, costulato-striato, ad peripheriam et subtus rufo-zonato; areâ columellari dilatatâ, pallidè corneo-zonatâ, ad aperturam supernè sulcato, basi constricto, anticè deflexo; aperturâ perobliquâ, lunari-ellipticâ; peristomate acuto, latè expanso, reflexo, margine basali obsolete unidentato.*

**THE SNAKE HELIX.** Shell umbilicated, orbicularly depressed, smooth, whitish, ornamented with rows of horny spots; spire flat, slightly immersed in the middle; whorls four to five, rather flat, increasing rapidly, the last broad, depressed, rib-like striated, red-zoned at and beneath the periphery; columellar area dilated, faintly horny-zoned, grooved at the upper part next the aperture, constricted at the base, deflected in front; aperture very oblique, lunar-elliptic, lip acute, broadly expanded and reflected, basal margin obsolete one-toothed.

*Planispira coluber*, Beck, Index, p. 30.

*Helix zonaria*, var., Chemnitz.

*Hab.* Java.

Distinguished by its broad flattened dilated growth, and faint semi-transparent horny zones round the umbilicus. The upper part of the shell is encircled by simple bands, with, in some varieties, a row of arrow-headed spots next the suture.

Species 501. (Mus. Cuming.)

**HELIX EXCEPTIUNCULA.** *Hel. testâ obtusè perforatâ, depresso-globosâ, glabrâ, albâ, fasciis rufis et nigricantibus variè cingulatâ; spirâ subelevatâ, apice depressâ, planâ; anfractibus quinque, convexis, ultimo brevè inflato, ad aperturam perobliquam lunari-rotundatè subconstricto; peristomate albo, tenui, latè reflexo, marginibus conniventibus, columellari intus dente prominente instructo.*

**THE LITTLE EXCEPTION HELIX.** Shell with a covered umbilicus, depressly globose, smooth, white, variously encircled with red and blackish bands, rather elevated, depressed and flat at the apex. Whorls five, convex, the last inflated in front, rather constricted

at the aperture, which is very oblique and lunar-rounded; lip white, thin, broadly reflected, margins approximating, columellar margin furnished with a prominent tooth.

FERUSSAC, Hist. Moll. pl. 70. f. 1, and pl. 73 A. f. 1.

Eadem var. *Helix Thetis*, Pfeiffer.

*Hab.* — ?

A solid ivory-white shell, eneiroleled with black-brown bands or lines, and an upper light reddish band. Dr. Pfeiffer's *H. Thetis* is a specimen with the umbilicus rather less covered over.

Species 502. (Mus. Cuming.)

HELIX CORNICULUM. *Hel. testâ umbilicatâ, depresso-orbiculari, pellucido-albâ, zonâ intensè fuscâ, apicem versus purpurascente tinctâ, cingulatâ; spirâ convexâ, apice subimpressâ; anfractibus quatuor ad quinque, plano-convexis, ultimo basi pone labrum constricto; aperturâ subcirculari; peristomate tenui, expanso, parum reflexo.*

THE LITTLE HORN HELIX. Shell umbilicated, depressly orbicular, transparent white, eneiroleled with a dark brown zone, which is stained towards the apex with light purple; spire convex, rather impressed at the apex; whorls four to five, flatly convex, the last constricted at the base behind the lip; aperture nearly circular; lip thin, expanded, but little reflected.

PFEIFFER (Mus. Cuming).

*Hab.* — ?

This species is about intermediate in its characters between *H. coluber* and *tortilabia*.

Species 503. (Mus. Cuming.)

HELIX ZONARIA. *Hel. testâ umbilicatâ, orbiculato-depressâ, glabrâ, tenuissimè striatâ, albidâ, fusco, rufo et livido variè zonatâ et umbeculatâ; spirâ plana, medio paululum immersâ; anfractibus quinque, supernè planiusculis, rapidè accrescentibus, ultimo descendente, depresso, basi subplanulato, juxta umbilicum angustum cylindricum scrobiculato; aperturâ perobliquâ, ovati; peristomate acuto, margine supero expanso, in medio impresso, basi reflexo, juxta columellam obtusè dentato.*

THE GIRDLED HELIX. Shell umbilicated, orbicularly depressed, smooth, very finely striated, whitish, variously zoned or clouded with brown-red and livid bands, spire flat, a little immersed in the middle; whorls five, rather flat at the upper part, increasing rapidly, the last descending, depressed, rather flat at the base, scooped out next the narrow cylindrical umbilicus; aperture very oblique, ovoid; lip acute, upper margin expanded, impressed in the middle, reflected at the base, obtusely toothed next the columella.

LINNÆUS, Syst. Nat. (12th edit.) p. 1245.

*Hab.* Molucca Islands.

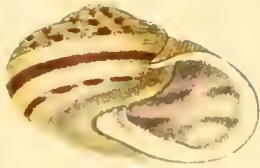
This shell, which is regarded as the Linnæan type of the group, is of rather a solid contracted growth, variously marked with livid bands and lines.



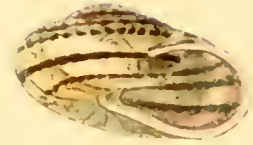




504.a



505



506



504.b



507



508



509

# HELIX.

PLATE XXIII

Species 504. (Fig. a, b, Mus. Cuming.)

**HELIX CODRINGTONI.** *Hel. testá oblectè umbilicatá, subdepressá, solidá, striatá, fusco-corneo et albido irregulariter strigatá et marmoratá; spirá depresso-conoideá; anfractibus quinque, convexiusculis, ultimo lineá obsoletá albá cingulato; aperturá perobliquá, semiovali, intus nitidissimá; peristomate acuto, intus albo-labiato, margine columellari breviter arcuato, basali dilatato, prope columellam incrassato.*

**CODRINGTON'S HELIX.** Shell with a covered umbilicus, rather depressed, solid, striated, irregularly streaked and marbled with brown-horn and white; spire depressly conoid; whorls five, rather convex, the last encircled with an obsolete white line; aperture very oblique, semioval, very shining within; lip sharp, white-edged within, columellar margin shortly arched, basal margin broadly dilated, thickened near the columella.

GRAY, *Pro. Zool. Soc.* 1834, p. 67.

*Helix Ferussaci*, Christofori and Jan.

*Helix spiriplana*, Deshayes.

*Helix vermiculata*, var., Cantraine.

*Hab.* Greece.

The umbilicus of this species is usually covered over by a broad callous enlargement of the columellar edge of the lip, which below this is prolonged into an oblong tooth.

Species 505. (Mus. Cuming.)

**HELIX ALONENSIS.** *Hel. testá oblectè umbilicatá, depresso-globosá, solidiusculá, albidá, variè fusco fasciatá vel marmoratá, striis irregularibus lineisque spiralibus subtiliter decussatá; anfractibus quatuor ad quinque, convexiusculis, ultimo magno, tumido, anticè breviter deflexo; aperturá amplá, rotundato-lunari; peristomate simplici, intus albo-sublabiato, marginibus subconviventibus, supero et basali vix expansis, columellari latè reflexo, appresso.*

**THE ALON HELIX.** Shell with a covered umbilicus, depressly globose, rather solid, white, variously banded and marbled with brown, finely decussated with irregular striæ and spiral lines; whorls four to five, rather convex, the last large, swollen, shortly deflected in front; aperture large, rotundately lunar; lip simple, white-edged within, margins rather ap-

proximating, upper and basal margins but little expanded, columellar margin broadly reflected, appressed.

FERUSSAC, *Hist. Moll.* pl. 39. f. 1-9 pl. 39 B. f. 8.

*Hab.* Spain.

In the variety of this species selected for illustration the bands are somewhat obscured on a cream-coloured ground, and there are a few black dots sprinkled over the base of the shell.

Species 506. (Mus. Cuming.)

**HELIX HISPANICA.** *Hel. testá imperforatá, globosopressá, fusculo-albidá, fusculo variegatá vidualis, punctatá, castaneo quinque-fasciatá; anfractibus quatuor, celeriter accrescentibus, planulatis; aperturá perobliquá, latè rotundato-lunari; peristomate hepatico, sublabiato, margine exteriorè reflexiusculo, interiorè calloso.*

**THE SPANISH HELIX.** Shell imperforated, globosely depressed, brownish-white, variegated with light brown and white-spotted, encircled with five chestnut bands; whorls five, increasing rapidly, rather flat; aperture very oblique, broadly rotundately lunar; lip liver-coloured, outer margin slightly reflected, callous within.

PARTSCH, *Mus. Cæsar. Vindobonensis*: Rossmaler, *Hist. Moll.* p. 15. f. 460.

*Hab.* Spain.

Of a greyish speckled ground, prettily painted with interrupted chestnut bands.

Species 507. (Mus. Cuming.)

**HELIX POTZOLZI.** *Hel. testá apertè umbilicatá, orbiculato-convexiusculá, striatá, supernè spiriter lineatá saturatè olivaceá, obscurè fusco-trizaná; anfractibus sex, rotundatis, ultimo anticè deflexo; aperturá latè lunari; peristomate reflexo, incrassatá, alba et carnosa.*

**POTZOLZ' HELIX.** Shell openly umbilicated, orbicularly rather convex, striated, spirally lineated at the upper part, dark olive, faintly three-banded with brown; whorls six, rounded, the last deflected in front, aperture broadly lunar, lip reflected, thickened, whitish or dark flesh-tinged.

DESHAYES, Guerin's Mag. de Zool. 1831. Moll. pl. 30.

*Helix Farronis*, Cantraine.

*Hab.* Corsica; Pouzolz. Albania aud Montenegro.

Sometimes the bands are almost obsolete in this species.

Species 508. (Mus. Cuming.)

HELIX TRIZONA. *Hel. testá apertè umbilicatá, orbiculato-converiusculá, lutescente-albidá, castaneo-trizonatá, epidermide olivaceá indutá; anfractibus quinque ad sex, subplanulatis, ultimo anticè deflexo; aperturá perobliquá, rotundato-ovalí; peristomate subsimplici, marginibus conniventibus, supero expanso, basali reflexo, columellari dilatato.*

THE THREE-ZONED HELIX. Shell openly umbilicated, orbicularly rather convex, yellowish-white, three-banded with chestnut, covered with an olive epidermis; whorls five to six, rather flat, the last deflected in front; aperture very oblique, rotundately oval; lip nearly simple, margins approximating, upper margin expanded, basal reflected, columellar dilated.

ZIEGLER, Rossmasler, Hist. Moll. vol. ii. p. 1. f. 87.

*Helix zonata, var.*, Férussac.

Testa minor, *Helix Rumelica*, Ziegler.

*Hab.* Mehadia; Turkey.

This differs little from the preceding species, except in having a more perspective umbilicus.

Species 509. (Mus. Cuming.)

HELIX GRISEA. *Hel. testá oblectè perforatá, subglobosa, solidiusculá, striis incrementi rugosis lineisque impressis confertissimis subdecussatá, fusco-griseá, fasciá latissimá castaneá vel sordidè fuscá supra peripheriam et duabus pallidioribus ad basin cinctá; spirá brevi, conicá; anfractibus quinque, ultimo magno, ventroso; aperturá ovato-lunari; peristomate simplici, intus livido-purpurascente, margine columellari obliquo, dilatato, subincrassato, castaneo tincto.*

THE GREY HELIX. Shell with a covered umbilicus, subglobose, rather solid, very closely decussated with rough lines of growth and very close-set impressed lines, brown-grey, encircled with a very broad chestnut or dark brown band above the periphery, and two paler bands below it; spire short, conical; whorls five, the last large, ventricose; aperture ovately lunar; lip simple, livid purplish within, columellar margin oblique, dilated, rather thickened, stained with dark chestnut.

LINNÆUS, Syst. Nat. (12th edit.) p. 693.

*Helix cincta*, Müller.

*Helix lemniscata*, Brumati.

*Helix obtusata*, Ziegler.

*Helix Philibinensis*, Frivaldsky.

*Helix vulgaris*, Parreyss.

*Hab.* South of France, Italy, etc.

Allied in form, and somewhat in marking, to our well-known *H. pomatia*.





511 a



510.



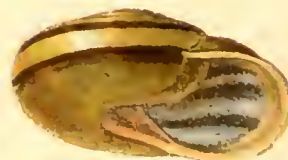
511 b



512.



513.



514



515.



# HELIX.

PLATE XCIV.

Species 510. (Mus. Cuming.)

**HELIX GUSSONIANA.** *Hel. testâ umbilicatâ, conico-globosâ, solidâ, distinctè minutissimè reticulatâ, fulvescente-albidâ, fasciis castaneo-rufis ornatâ; spirâ elevatâ, conoideâ; anfractibus quinque, convexis, ultimo vix descendente; colamellâ arcuatâ; aperturâ rotundato-lunari, intus nitidâ; peristomate subsimplici, margine dextro vix expansiusculo, columellari dilatato, reflexo, umbilicum fere tegente.*

**GUSSON'S HELIX.** Shell umbilicated, conically globose, solid, distinctly very minutely reticulated, fulvous white, ornamented with five chestnut-red bands; spire raised, conoid; whorls five, convex, the last scarcely descending; columella arched; aperture rotundately lunar, shining within; lip rather simple, right margin but little expanded, columellar margin dilated, reflected, almost covering the umbilicus.

SHUTTLEWORTH, Pfeiffer, Symbola, vol. iii. p. 71.

*Hab.* Vicinity of Naples.

The bands of this species are of irregular width, irregularly spaced, and sometimes partially interrupted.

Species 511. (Fig. a, b, Mus. Cuming.)

**HELIX MAZZULLI.** *Hel. obtectè umbilicatâ, globoso-conicâ, tenui, costulato-rugosâ, pallidè fulvescente, nigricante-fusco interdum quinquefasciatâ; spirâ conicâ, acutiusculâ; anfractibus quatuor, convexiusculis, rapidè accrescentibus, ultimo magno, inflato; aperturâ amplâ, fere circulari; peristomate simplici, marginibus callo tenui nitido junctis, supero patulo, basali reflexo.*

**MAZZULLI'S HELIX.** Shell with a covered umbilicus, globosely conic, thin, finely rib-like wrinkled, light fulvous, sometimes encircled with five blackish-brown bands; spire conic, rather sharp; whorls four, slightly convex, increasing rapidly, the last large, inflated; aperture large, almost circular; lip simple, margins joined by a thin shining callosity, upper margin spreading, basal reflected.

JAN, Mantissa, p. 1; Philippi, Enum. Moll. p. 126. pl. 8. f. 8.

*Helix crispata*, Costa.

*Helix ritirugis*, Cantraine.

*Hab.* Sicily, on the mountains round Palermo.

This species is closely allied, in respect both of form and

painting, to our common *H. aspersa*, but differs in being of lighter structure, and in having the surface covered with fine close-set rib-like striae.

Species 512. (Mus. Cuming.)

**HELIX LUCORUM.** *Hel. testâ subobtectè umbilicatâ, globosâ, substriatâ, lineis minutissimis subdecussatâ, castaneo latè fasciatâ et remotè strigatâ; anfractibus quinque, convexiusculis, ultimo inflato, anticè breviter descendente; aperturâ lunato-rotundatâ, intus nitidâ, peristomate obtusato, simplici, fusco, marginibus callo tenuissimo junctis, columellari dilatato, lato reflexo, umbilicum fere tegente, basali strictiusculo, subobtectè.*

**THE HELIX OF THE WOODS.** Shell with a nearly covered umbilicus, globose, finely striated, slightly decussated with minute lines, broadly banded and remotely streaked with chestnut; whorls five, rather convex, the last inflated, shortly descending in front; aperture lunar-rounded, shining within; lip obtuse simple, brown, margins joined by a very thin callosity, columellar margin dilated, broadly reflected, almost covering the umbilicus, basal margin rather drawn out and somewhat callous.

LINNÆUS, Syst. Nat. (12th edit.) p. 1247.

*Helix mutata*, Lamarek.

*Hab.* Italy, Turkey, Syria.

This is the largest species inhabiting Europe. It is mostly of a dark mottled chestnut within and without, encircled by a narrow light band.

Species 513. (Mus. Cuming.)

**HELIX ASPERSA.** *Hel. testâ imperforatâ, conoide-globosâ, ruguloso-malleatâ, tenui, griseo-lutescente, foveis variis castaneis flammulisque flavidis ornatâ; spirâ brevi, conoideâ; anfractibus quatuor, convexiusculis, ultimo ventroso, anticè subitè deflexo; colamellâ simplici breviter arcuatâ, albâ; aperturâ lunato-ovata, peristomate acuto, expanso, breviter reflexo, marginibus conniventibus, columellari dilatato.*

**THE SPRINKLED HELIX.** Shell imperforated, conically globose, finely roughly indented, thin, greyish-yellow, ornamented with various chestnut bands and yellow flames; spire short, conoid; whorls four, slightly convex, the last ventricose, suddenly deflected in



front; columella oblique, slightly arched, white; aperture lunar-oval; lip sharp, expanded, shortly reflected, margins approximating, columellar margin dilated.

MULLER, Verm. Hist. terr. et fluv. vol. ii. p. 59.

*Helix grisea*, Linnæus.

*Helix variegata*, Gmelin.

*Helix hortensis*, Pennant.

*Hab.* Britain, Southern Europe, the Azores, &c.

The common snail of our gardens, distributed over the whole of Southern Europe, and into some of the islands and countries beyond, is characterized by a peculiar finely wrinkled indented surface, encircled with flame-mark bands.

Species 514. (Mus. Cuming.)

HELIX RASPAILLII. *Hel. testâ obtectè perforatâ, orbiculato-depressâ, fusco-luteâ, rufo-trizonâ, striatâ, solidiusculâ; anfractibus quatuor ad quinque, planulatis, ultimo anticè subdepresso; aperturâ perobliquâ, lunato-ovali; peristomate fusco, margine supero expanso, basali reflexo, columellari valdè dilatato.*

RASPAILLI'S HELIX. Shell with a covered umbilicus, orbicularly depressed, brownish-yellow, encircled with three red bands, striated, rather solid; whorls four to five, rather flat, the last slightly deflected in front; aperture very oblique, lunar-oval; lip brown, upper margin expanded, basal reflected, columellar much dilated.

PAYRAUDEAU, Cat. Moll. de Corse, p. 102. pl. 5. f. 7, 8.  
*Hab.* Corsica.

Of a more depressly orbicular solid structure than the general European form of *Helix*.

Species 515. (Mus. Cuming.)

HELIX LIGATA. *Hel. testâ imperforatâ, turbinato-globosâ, striatâ, lineis spiralibus interdum obsolete decussatâ, fusco-albidâ, fasciis angustis, subæqualibus, interdum confluentibus, spadiceis ornatâ; spirâ elevatâ; anfractibus quatuor, convexiusculis, ultimo inflato, vix descendente; columellâ obliquâ, strictiusculâ, carneâ; aperturâ lunato-rotundatâ; peristomate breviter expanso, margine columellari dilatato, diffuso-caloso.*

THE BOUND HELIX. Shell imperforated, turbinately globose, striated, sometimes obsolete decussated with spiral lines, brownish-white, ornamented with five narrow nearly equal fawn bands, sometimes flowing together; spire raised; whorls four, rather convex, the last inflated, scarcely descending; columella oblique, rather drawn out, flesh-tinged; aperture lunar-rounded; lip shortly expanded, columellar margin dilated, diffusely callous.

MULLER, Verm. Hist. terr. et fluv. vol. ii. p. 58.

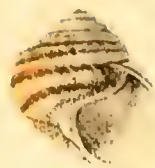
*Helix cincta*, Kuster.

*Helix albescens*, Jan.

*Hab.* Italy, Sicily, Turkey, &c.

A large inflated species, with the bands somewhat interrupted.





516.



517.



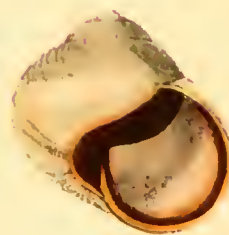
518.



519.



520.



521.



522.

# HELIX.

PLATE XCV.

Species 516. (Mus. Cuming.)

**HELIX FIGULINA.** *Hel. testâ subobtectè umbilicatâ, conico-globosâ, tenui, ventricosâ, rugulosâ, sordidè albidâ, fasciis fuscis interruptis quinque cingulatâ; anfractibus quatuor, vix convexiusculis; aperturâ acutè ovato-lunari; peristomate recto, subincrassato, albido, margine columellari arcuato, dilatato, subappresso, reflexo.*

**THE POTTER'S HELIX.** Shell with a nearly covered umbilicus, conically globose, thin, ventricose, rugulose, dull white, encircled with five interrupted light brown bands; whorls four, rather convex; aperture sharply ovately lunar; lip straight, slightly thickened, whitish, columellar margin arched, dilated, rather appressly reflected.

PARREYSS, Rossmasler, Hist. Moll. terr. et fluv. vol. ix. p. 9. f. 580.

*Helix ligata, var.*, Férussac.

*Hab.* Dalmatia, Greece, etc.

The rugulose striae are finely plicately puckered next the sutures.

Species 517. (Mus. Cuming.)

**HELIX NICIENSIS.** *Hel. testâ subobtectè umbilicatâ, globoso-depressâ, striatâ, albidâ, nigro-fusco maculosè fasciatâ; unfractibus quinque, planiusculis, ultimo anticè deflexo; aperturâ transversè lunato-ovali, intus lilacinâ; peristomate intus lilacino-labiato, margine supereo patulo, basali appressè dilatato.*

**THE NICE HELIX.** Shell with a nearly covered umbilicus, globosely depressed, striated, whitish, encircled with five black-brown spotted bands; whorls five, rather flat, the last deflected in front; aperture transversely lunar-oval, lilac within; lip lilac-edged, upper margin effuse, basal margin appressly dilated.

FERUSSAC, Hist. Moll. pl. 39 A. f. 1. and pl. 40. f. 9.

*Hab.* Nice.

A pretty depressly globose species, encircled with five interrupted black-brown blotchy bands, tinged with lilac at the aperture.

Fig. 518. (Mus. Cuming.)

The shell here figured is the variety of Sp. 506, *H. Hispanica*, named by Ziegler *H. Balearica*.

Species 519. (Mus. Cuming.)

**HELIX TAURICA.** *Hel. testâ obtectè umbilicatâ, globosâ, ventrosâ, obliquè striatâ, lineis impressis concentricis obsoletè decussatâ, lutescente-albidâ, strigis ustulato-fuscis irregulariter radiatâ; spirâ conoidâ; anfractibus quinque, convexiusculis, medio subfasciatis, ultimo magno; aperturâ amplâ, rotundato-lunatâ; peristomate subsimplici, hepatico, margine columellari perditulato, forniculim reflexo.*

**THE DALMATIAN HELIX.** Shell with a covered umbilicus, globose, ventricose, obliquely striated, obsoletely decussated with concentric impressed lines, yellowish-white, irregularly rayed with burnt-brown streaks, spire conoid; whorls five, rather convex, faintly banded round the middle, last whorl large; aperture large, rotundately lunar; lip nearly simple, liver-coloured, columellar margin much dilated, reflected in an arched manner.

KRYNICKI, Bull. Nat. Hist. Soc. Moscow, vol. vi. p. 423 pl. 9.

*Helix radiosa*, Ziegler.

*Hab.* Dalmatia, Georgia.

A large light inflated species, closely allied to *H. lucorum*.

Species 520. (Mus. Cuming.)

**HELIX LUTESCENS.** *Hel. testâ obtectè umbilicatâ, turbinato-globosâ, striatâ, albo-lutescente, raro dilutè fusco-fasciatâ; spirâ brevi, conoidâ, apice obtusi, anfractibus quatuor, convexiusculis, ultimo inflato, descendente, columellâ subverticali, leviter arcuatâ, albâ; aperturâ lunato-rotundatâ, intus albâ, peristomate breviter expanso, margine columellari superius dilatato, forniculim reflexo.*

**THE YELLOWISH HELIX.** Shell with a covered umbilicus, turbinately globose, finely striated, whitish-yellow sometimes faintly banded with pale brown, spire short, conoid, obtuse at the apex, whorls four, rather convex, the last inflated, descending, columella nearly vertical, slightly arched, white, aperture lunately rounded, white within; lip shortly expanded, columellar margin dilated at the upper part, reflected in an arched manner.

ZIEGLER, Rossmasler, Hist. Moll. terr. et fluv. vol. v. p. 4 f. 292.

*Hab.* Gallicia.

Intermediate in its general aspect between *H. pomatia* and *figulina*, but of more solid growth than either.

Species 521. (Mus. Cuming.)

HELIX MELANOSTOMA. *Hel. testā oblectè umbilicatā, globosā, ventrosā, cinereo-carneā, subfasciatū, plicato-striatā; anfractibus quatuor, convexis, ultimo inflato, anticè deflexo; columellā obliquā, strictiusculā; aperturā amplā, lunato-rotundatā, intus carneā, nitidā; fauce nigricante-castaneā; peristomate intus nigricante-castaneo, recto, subincrassato, margine dextro rotundato, columellari dilatato, diffuso, basali subreflexo.*

THE BLACK-MOUTH HELIX. Shell with a covered umbilicus, globose, ventricose, ashy flesh-colour, obscurely banded, plicately striated; whorls four, convex, the last inflated, deflected in front; columella oblique, rather drawn out; aperture large, lunar-oval, flesh-tinted and shining within; body-whorl blackish-chestnut; lip blackish-chestnut within, straight, thickened, right margin rounded, columellar margin dilated, diffused, a little reflected at the base.

DRAPARNAUD, Hist. Moll. p. 91. pl. 5. f. 25.

*Hab.* Southern Europe. Nubia; Ehrenberg.

A light, globosely inflated, flesh-tinged or greyish species, distinguished by a layer of dark blackish-chestnut colouring on the body-whorl and within the lip. It is probably only a variety of the Linnæan *H. grisea*.

Species 522. (Mus. Cuming.)

HELIX POMATIA. *Hel. testā semioblectè umbilicatā, globosā, rugoso-striatā, lineis confertis concentricis magis minusve decussatā, rufescente vel flavescente, fasciis fuscis obsoletis notatū; anfractibus quinque, convexiusculis, ultimo magno, subcompresso; columellā arcuatā, aperturā amplā, lunato-ovali, intus nitidā; peristomate patulo, subincrassato, margine columellari dilatato, reflexo, carneo vel fusciscente.*

THE APPLE HELIX. Shell with a half-covered umbilicus, globose, rugosely striated, decussated with close-set lines, which are more or less concentric, reddish or yellowish, marked with obsolete brown bands; whorls five, rather convex, the last large, somewhat compressed; columella arched. aperture large, lunar-oval, shining within; lip patulate, rather thickened, columellar margin dilated, reflected, flesh-tinged or brownish.

LINNÆUS, Syst. Nat. (12th edit.) p. 1244.

*Pomaria antiquorum*, Leach

Varietates.

*Helix pomaria* and *scalaris*, Muller

*Hab.* Europe and the British Isles

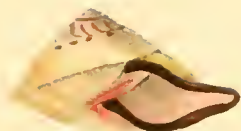
In this well-known species there is little variation in form, colour, or marking, notwithstanding its wide area of distribution.







523.



524.<sup>a</sup>



524.<sup>b</sup>



525.



526.



527.



528.

# HELIX.

PLATE XCVI

Species 523. (Mus. Belcher.)

**HELIX CONOIDALIS.** *Hel. testâ subobtectè umbilicatâ, orbiculato-conoideâ, supernè elevatâ, basi convexâ, radiatim striatâ, pallidè rufescente; anfractibus quinque, supernè marginalis, reticulato-striatis aut corrugatis, rufo-violascentibus, ultimo fasciâ angustâ castaneâ circumdatâ; aperturâ obliquè lunari; peristomate simplici, vix incrassato.*

**THE CONOIDAL HELIX.** Shell with a nearly covered umbilicus, orbicularly conoid, raised at the upper part, convex at the base, radiately striated, pale reddish; whorls five, margined at the upper edge, reticulately striated or wrinkled, reddish-violet, the last encircled by a narrow chestnut band; aperture obliquely lunar; lip simple, scarcely thickened.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 63, pl. 16. f. 11.

*Hab.* Island of Mindoro, Philippines; Belcher.

A light purplish-red shell, with a central band, the lip simple, and umbilicus nearly covered.

Species 524. (Fig. a, b, Mus. Taylor.)

**HELIX TAYLORIANA.** *Hel. testâ imperforatâ, conicâ, Trochiformi, lævi, subpellucidâ, basi acutè carinatâ, fulvâ, ad apicem carneolâ et reticulatâ, maculis pellucidis fuscis sparsâ, obliquè striatâ et transversim subtilissimè rugulosâ; spirâ acutâ; anfractibus quinque ad sex, ultimo basi convexiusculo, fulvo, circa regionem columellarem carneo; aperturâ triangulari, anticè valdè productâ et coarctatâ; peristomate atropurpureo, incrassato, reflexo.*

**TAYLOR'S HELIX.** Shell imperforated, conic, Trochus-shaped, smooth, rather transparent, sharply keeled at the base, fulvous, flesh-tinged and reticulated at the apex, sprinkled with pellucid brown spots, obliquely striated and transversely very finely wrinkled; spire sharp; whorls five to six, the last rather convex at the base, fulvous, flesh-tinged about the region of the columella; aperture triangular, very much produced and contracted in front; lip black-purple, thickened, reflected.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 59, pl. 15. f. 2.

*Hab.* —?

A very characteristic species, with a peculiar spouted angular lip, collected by Captain Sir Edward Belcher in one of the Eastern Islands, during the surveying expedition of the Samarang, unique in the collection of Thomas Lombe Taylor, Esq., in honour of whom it is named.

Species 525. (Mus. Belcher.)

**HELIX CALIGINOSA.** *Hel. testâ umbilicatâ, subglobosâ strigis obliquis elevatiusculis concentricè notatâ, superne lutescente-albâ; anfractibus sex, ultimo spudiceo-fuscâ fasciâ angustâ rufâ circumdatâ. aperturâ depresso-lunatâ; peristomate reflexo.*

**THE DIM HELIX.** Shell umbilicate-l, somewhat globose, marked concentrically with slightly raised oblique streaks, yellowish-white at the upper part, whorls six, the last fawn-brown, surrounded by a narrow red band; aperture depressly lunar; lip reflected.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 62, pl. 16. f. 6.

A characteristic new species, belonging to the group of which *H. unguina* is the type.

Species 526. (Mus. Dennison.)

**HELIX REGALIS.** *Hel. testâ umbilicatâ, sinistrali, subtrochoidè, acutè carinatâ, supernè depressâ, suturâ indistinctâ, anfractuum marginibus interdum obsolete plicato-nodulosis, carneolâ, fasciis quatuor ad quinque fulvicantibus cingulatâ, interdum omnia brunneo-striis undulatis granulosis obliquis et lineis concentricis decussatâ; anfractibus sex, planatis, ultimo basi convexo, fasciis duabus fulvicantibus circumdatâ carinâ et regione umbilicali opaco-albâ, aperturâ depressâ, angulatâ, obliquâ; peristomate simplici, acuto.*

**THE ROYAL HELIX.** Shell umbilicate, sinistral, subdiscoid, sharply keeled, depressed at the upper part, suture indistinct, edges of the whorls sometimes absolutely plicately noduled, flesh-colour, encircled with four to five fulvous bands, sometimes altogether brown, decussated with oblique waved granular striae and concentric lines, whorls six, rather flat, the last convex at the base, encircled with two fulvous bands; keel and region of the umbilicus opaque white; aperture depressed, angled, oblique; lip simple, sharp.

May, 1852.

BENSON, Ann. and Mag. Nat. Hist. 1850. vol. v. p. 215.

*Helix vittata*, Adams and Reeve (not of Müller).

*Hab.* Borneo.

Of this fine species, collected in the Samarang, and figured with the animal in the Zoology of the voyage, specimens have since been received of a dark uniform brown colour. For a figure of this variety see Plate LXXX. Fig. 426.

Species 527. (Mus. Dennison.)

HELIX MACKENSII. *Hel. testū latè umbilicatū, orbiculari-depressā, olivaceo-castaneā; spirā convexā; anfractibus sex ad septem, planiusculis, ultimo ad peripheriam acutè carinato et setoso, infra rotundato; umbilico amplo, perspectivo; aperturā parvā, lunato-circulari; peristomate subincrassato, paululum reflexo, carneo, marginibus callo carneo junctis.*

MACKENSIE'S HELIX. Shell broadly umbilicated, orbicularly depressed, olive-chestnut; spire convex; whorls six to seven, rather flat, the last sharply keeled and bristled at the periphery, rounded beneath; umbilicus large, perspective; aperture small, lunar-circular; lip rather thickened, a little reflected, flesh-coloured, margins joined by a flesh-coloured callosity.

VALENCIENNES, Voy. de la Bonite, pl. 25. f. 14.

*Hab.* Island of Ty-pin-san, Meiacoshima Group; Beleher

The bristly hairs with which this shell is furnished at the periphery, are the most fully developed in immature specimens.

Species 528. (Mus. Beleher.)

HELIX PLURIZONATA. *Hel. testū obtectè umbilicatū, subgloboasă, albā, maculis pallidè fuscis nebulatū, striatorugosā, fuscis plurimis spadiceis et purpurascensibus cinctū; anfractibus quatuor, convexis, ultimo rotundato; aperturā lunato-circulari, intus fuscā; peristomate latè reflexo, albo, margine inferiore subcalloso.*

THE MANY-ZONED HELIX. Shell with a partially covered umbilicus, somewhat globose, white, clouded with light brown spots, striately rugose, encircled with numerous fawn and purplish bands; whorls four, convex, the last rounded; aperture lunar-circular, brown within; lip broadly reflected, white, lower margin rather callous.

ADAMS and REEVE, Zool. Voy. Samarang, p. 62. pl. 16 f. 9.

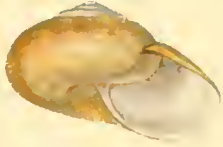
*Hab.* Island of Mindanao, Philippines; Beleher.

The alternate purple and fawn bands are doubtless peculiar to the species, and among its chief characteristics.





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530.



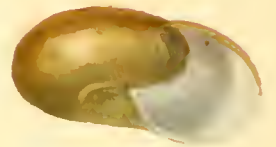
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# HELIX.

PLATE XCVII.

Species 529. (Mus. Cuming.)

HELIX EXIMIA. *Hel. testá umbilicatá, depresso-globosá, obliquè rugosá et confertissimè granulosá, olivaceo-corneá, fasciis fusco-viridibus ornatá; anfractibus quatuor ad quinque, convexiusculis, rapidè accrescentibus, ultimo permagno, circa aream umbilicalem compresso-inflato; aperturá lunato-ovali, intus pallidè lilaciná; peristomate simplici, angustè reflexo, umbilicum angustum semilegente.*

THE CHOICE HELIX. Shell umbilicated, depressly globose, obliquely wrinkled and very closely finely granulated, olive-horny, ornamented with five brown-green bands; whorls four to five, rather convex, increasing rapidly, the last very large, compressly inflated around the umbilical area; aperture lunar-oval, faintly tinged within with lilae; lip simple, narrowly reflected, half-covering the narrow umbilicus.

PFEIFFER, Philippi, *Abbild. und Besch.* vol. i. p. 153. pl. 5. f. 6.

*Hab.* Central America.

A very characteristic species, encircled with conspicuous green bands upon a light olive-horny ground, while the lip is delicately tinged with lilae.

Species 530. (Mus. Cuming.)

HELIX CADUCA. *Hel. testá sublatè umbilicatá, depressá, fragili, leviter striatulá, albidá, epidermide fulvo-corneá indutá; spirá parum elevatá, vertice subtili; anfractibus quinque ad sex, convexiusculis, ultimo multo latiore, basi subplanulato, circa umbilicum angustum externè subinfundibuliformem excavato; aperturá majusculá, obliquè truncato-ovali; peristomate simplici, tenui, marginibus subconniventibus, columellari vix expansiusculo.*

THE BRITTLE HELIX. Shell rather broadly umbilicated, depressed, fragile, finely striated, whitish, covered with a fulvous-horny epidermis; spire but little raised, fine to the apex; whorls five to six, rather convex, the last much broader and rather flat at the base, excavated round the umbilicus, which is narrow, and externally funnel-shaped; aperture rather large, obliquely truncate oval; lip simple, thin, with the margins approximating, columellar margin but little expanded.

PFEIFFER, *Zeitschrift für Malac.* 1846. p. 153.

A thin shell, but of solid substance, chiefly distinguished from its congeners by the compressly flattened convexity of the base around the edge of the umbilicus.

Species 531. (Mus. Cuming.)

HELIX CINCINNUS. *Hel. testá latè et ampliter umbilicatá, orbiculato-depressá, tenui, confertissimè ruguloso-striatá, basi leviore, nitente, vix olivaceá, spirá salutate re. anfractibus quatuor ad quinque, lentè accrescentibus, supernè subplanulatis, infra rotundatis, ultimo antice deflexo; aperturá horizontali-lunari, intus caeruleo-lacteá; peristomate simplici, marginibus subconniventibus, columellari leviter reflexo.*

THE CURL HELIX. Shell broadly and largely umbilicated, orbicularly depressed, thin, very closely rugulose-striated, smoother and shining at the base, bright olive, darker about the spire; whorls four to five, increasing slowly, rather flattened above, rounded beneath, last whorl deflected in front; aperture horizontally lunar, blue-white within; lip simple, margin approximating, columellar margin slightly reflected.

*Hab.* Maule, Chili (under decayed leaves); Cuming.

This is Dr. Pfeiffer's *H. laxata*, variety  $\gamma$ , which he quotes as being probably the *H. umbilicata* of Anton, a name pre-occupied by Montagu in reference to another species; it is evidently distinct. Mr. Cuming found it in great abundance at the above-named locality, within fifty miles of *H. laxata*, but not with it. The form of the shell is rounder, and the last whorl is less enlarged towards the aperture. No specimens of intermediate form were collected, and it was mostly of adult growth.

Species 532. (Mus. Cuming.)

HELIX LAXATA. *Hel. testá latè et perampliter umbilicatá, orbiculato-depressá, aperturam versus obliquè productá, tenui, confertissimè ruguloso-striatá, supernè fulvo-rufescente, basi nitidè fulvo-olivaceá, lineis concentricis confertissimis minutè decussatá; spirá vix elevatá, anfractibus quatuor ad quinque, convexiusculis, rapidè accrescentibus, ultimo lato, depresso, antice descendente, aperturá subhorizontali, amplá, transversè ovali, intus caeruleo-albá; peristomate simplici, marginibus fere junctis, supero tenui, expanso, basali subcalloso, reflexo.*



THE LOOSELY CONVOLUTED HELIX. Shell broadly and very largely umbilicated, orbicularly depressed, obliquely produced towards the aperture, thin, very closely rugosely striated, fulvous-red about the upper part, fulvous-olive and shining at the base, minutely decussated with very close-set concentric lines; spire but little raised; whorls four to five, rather convex, increasing rapidly, last whorl broad, depressed, descending in front; aperture somewhat horizontal, large, transversely oval, blue-white within; lip rather simple, margins almost joined, upper margin thin, expanded, basal margin rather callous and reflected.

FERUSSAC, Hist. Moll. pl. 74. f. 3.

*Helix Peruviana*, Lamarek.

*Helix Deshayesii*, Anton.

*Hab.* Chili; Cuming.

This fine and well-known species does not inhabit Peru, as indicated by the name given to it by Lamarek. It has been for a long time known to collectors by the unpublished name of *H. Banksii*.

Species 533. (Mus. Cuming.)

HELIX EURYOMPHALA. *Hel. testâ latè umbilicatâ, orbiculato-convexâ, tenui, pellucidâ, virente-corneâ, supernè regulariter costulato-striatâ, lineis concentricis obsolete decussatâ, basi distantius striatâ, nitidissimâ; spirâ parum elevatâ, obtusâ; anfractibus sex, convexiusculis, ultimo dilatato, subdepresso, anticè non descendente; umbilico magno, pervio; aperturâ obliquè lunato-ovali; peristomate recto, simplici, marginibus conniventibus.*

THE BROADLY UMBILICATED HELIX. Shell broadly umbilicated, orbicularly convex, thin, pellucid, greenish-horny, regularly finely ribbed about the upper part, obsoletely decussated with concentric lines, more distantly striated and shining at the base; spire but little raised, obtuse; whorls six, rather convex, the last dilated, somewhat depressed, not descending in front; umbilicus large, open; aperture obliquely lunar-oval; lip straight, simple, margins approximating.

PFLIFFER, Pro. Zool. Soc. 1845. p. 71.

*Hab.* Cuba?

If the above locality, quoted on the authority of Dr. Pfeiffer, be correct, it is somewhat curious to find in the North Antilles a shell belonging so minutely in all its de-

tails to the Chilian type *H. laxata*. It differs little from that species, except in being of a rounder form.

Species 534. (Mus. Cuming.)

HELIX FLORA. *Hel. testâ sublatè umbilicatâ, tenui, durâ, pellucido-albâ, epidermide virescente-olivaceâ corneâ indulâ, viz striatâ, nitente; spirâ plano-depressâ; anfractibus quatuor ad quinque, supernè planatis, infra rotundatis; aperturâ lunato-circulari; peristomate tenui, marginibus conniventibus.*

THE FLORA HELIX. Shell rather broadly umbilicated, thin, hard, transparent white, covered with a greenish-olive horny epidermis, but little striated, shining; spire flatly depressed; whorls four to five, flat at the upper part, rounded beneath; aperture lunar-circular; lip thin, margins approximating.

PFEIFFER, MSS. (Mus. Cuming.)

*Hab.* Andes of Columbia.

This species differs from its congeners collected in this Plate, in not having the close-set rib-like striæ, with which the upper portion of the whorls is sculptured. Here it is smooth and horny.

Species 535. (Mus. Cuming.)

HELIX GHIESBREGHTI. *Hel. testâ subampliter umbilicatâ, orbiculato-globosâ, striatâ et subtilissimè granulatâ, epidermide brevipilosâ indulâ, brunneâ, zonis nigricantibus et luteis ornatâ; anfractibus quinque ad sex, convexiusculis, ultimo magno, rotundato, circa umbilicum subcompresso; aperturâ lunato-rotundatâ; peristomate expanso, albo, breviter reflexo, marginibus conniventibus, columellari dilatato.*

GHIESBREGHT'S HELIX. Shell rather largely umbilicated, orbicularly globose, striated and very finely granulated, covered with a short hairy epidermis, brown, ornamented with blackish and yellowish zones; whorls five to six, rather convex, the last large, rounded, slightly compressed around the umbilicus; aperture lunar-rounded; lip expanded, white, shortly reflected, margins approximating, columellar margin dilated.

NYST, Bull. Nat. Hist. Soc. Brussels, 1841. vol. viii. p. 343. f. 2.

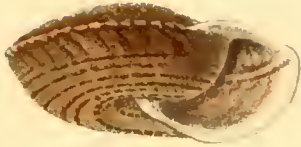
*Hab.* Chiapa, Mexico; Nyst.

The epidermis of this fine species is covered with numerous short silken golden hairs.

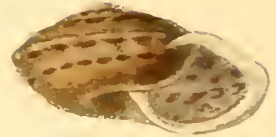




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# HELIX.

PLATE XCVIII.

Species 536. (Mus. Cuming.)

**HELIX BRASILIANA.** *Hel. testā umbilicatā, orbiculato-depressiusculā, undique aequaliter granulosa, supernè castaneā, laniis albedo-flammulatis, subtus convexiore, pallidiore, seriebus pluribus punctorum rufescentium ornatā; spirā subplanulatā; anfractibus quinque ad sex, viz convexiusculis, ultimo obsoletè subangulato; columellā brevi, dilatatā; aperturā latā, transversè lunari; peristomate tenui, breviter reflexo.*

**THE BRAZILIAN HELIX.** Shell umbilicated, orbicularly rather depressed, equally granulated throughout, chestnut-tinged about the upper part, with white-flamed fillets, more convex beneath and paler, ornamented with many rows of reddish dots; spire rather flattened; whorls five to six, rather convex, the last obsoletely angled; columella short, dilated; aperture broad, transversely lunar; lip thin, shortly reflected.

DESHAYES, *Encyclopédie Méthodique*, vol. ii. p. 211.

*Helix pellis-serpentis, var.*, Férussac.

*Hab.* Brazil.

Scarcely keeled and very elaborately painted.

Species 537. (Mus. Cuming.)

**HELIX SERPENS.** *Hel. testā umbilicatā, lenticulari, utrinque convexā, confertim undulato-striatā, tenui, corneostraminivā, fasciā interruptū rufā ad suturam ornatā; anfractibus quinque, planis, ultimo acutè carinato, infra carinam fasciā rufā lineisque permultis rufis signalā; aperturā angulato-lunari; peristomate tenui, breviter reflexo.*

**THE SERPENT HELIX.** Shell umbilicated, lens-shaped, convex on both sides, closely undulately striated, thin, horny straw-colour, ornamented with an interrupted red band at the suture; whorls five, flat, the last sharply keeled, marked below the keel with a red band and numerous red lines; aperture angularly lunar; lip thin, shortly reflected.

*Solarium serpens*, Spix, *Test. Brasil.* pl. 17. f. 2.

*Helix serpens*, Pfeiffer.

*Helix punctata*, Wagner.

*Hab.* Brazil (in the woods of Piahy and Pernambuco); Spix.

A lighter shell than the preceding, characterized by a different style of painting, prominently keeled.

Species 538. (Mus. Cuming.)

**HELIX HELIACA.** *Hel. testā umbilicatā, orbiculatā, depressā, carinatā, rugulosā, granulata, subtilis lacigatā, flavidā, fasciis rubris interruptis ornatā; spirā obtusā; anfractibus sex, convexiusculis, ultimo depresso, aperturā depressā, lunato-subtriangulari; peristomate nitidè albo, margine utroque sinuoso, supero latè expanso, breviter reflexo, columellari brevi, subdilatato, basali planè arcuato, breviter reflexo.*

**THE SUN HELIX.** Shell umbilicated, orbicular, depressed, keeled, rugulose, granulated, smooth underneath, yellowish, ornamented with five interrupted red bands, whorls six, rather convex, the last depressed; aperture depressed, lunar-subtriangular; lip shining-white, margin on both sides sinuous, upper margin broadly expanded, shortly reflected, columellar margin short, slightly dilated, basal flatly arched, shortly reflected.

D'ORBIGNY, *Voyage dans l'Amérique Méridionale*, p. 244 pl. 26. f. 1-5.

*Helix cicatrice*, Anton.

*Hab.* Bolivia; D'Orbigny.

There is a general peculiarity in the form and painting of this species different from either of the preceding.

Species 539. (Mus. Cuming.)

**HELIX GIBBONI.** *Hel. testā umbilicatā, depressā, sublenticulari, supernè longitudinaliter et regulariter striatā, fasciis flammeis rubris albisque pictā, subtilis rufis pluribus punctorum rufescentium ornatā; anfractibus quinque, planiusculis, ultimo subcarinato, basi convexo, umbilico mediocri, pereio; aperturā late lunari, peristomate subincrassato, sinuoso, reflexo, basali et umbilico breviter dilatato.*

**GIBBON'S HELIX.** Shell umbilicated, depressed, somewhat lens-shaped, longitudinally regularly striated at the upper part, painted with bands of red and white flames and ornamented underneath with numerous rows of red dots, whorls five, rather flattened, the last slightly keeled, convex at the base, umbilicus middling, open; aperture broadly lunar, lip rather thickened, sinuous, reflected, basal margin shortly dilated at the umbilicus.

PFEIFFER, *Synbologie*, vol. iii. p. 37



*Helix magnifica*, Lea.

*Hab.* New Granada; Gibbon.

This species is always larger in size than any other of the group collected in this Plate.

Species 540. (Mus. Cuming.)

HELIX ARDOUINI. *Hel. testā profundè umbilicatā, orbiculato-depressā, subobscurè ruguloso-plicatā et malleatā, flavo-olivaceā, zonis angustis tribus nigricantibus cingulatā; spirū plano-convezā, apice obtusū; anfractibus quinque, planulatis, ultimo ad peripheriam obtusissimè curvatū; aperturā transversè ovali; peristomate reflexo, calloso, albo, marginibus conniventibus, callo lacteo junctis.*

ARDOUIN'S HELIX. Shell deeply umbilicated, orbicularly depressed, somewhat obscurely rugulose plicated and indented, yellowish-olive, encircled with three blackish zones; spire flatly convex, obtuse at the apex; whorls five, rather flattened, the last very obtusely keeled; aperture transversely oval; lip reflected, callous, white, margins approximating, joined by a milk-white callous layer.

D'ORBIGNY, Voyage dans l'Amér. Mérid. Moll. p. 239. pl. 24. f. 4-6.

Eadem var. *Helix orexigena*, D'Orbigny.

*Hab.* Province of Yungas, Bolivia; D'Orbigny.

This fine species is of the same peculiar typical form as the European *H. trizona* and *Pouzolzi*. The lip is more callous and reflected than in either.

Species 541. (Mus. Cuming.)

HELIX POLYGYRATA. *Hel. testā latissimè umbilicatā, discoideā, supernè planissimā, subtus excavatā, solidā, striatā, lineis minutis concentricis subdeussatā, olivaceā, zonis latissimis nigricante-rufis supernè circumdatā; anfractibus novem, convexis, perangustis, ultimo anticè descendente; aperturā perobliquā, lunato-rotundatā; peristomate albo, breviter reflexo, marginibus callo junctis.*

THE MANY-WHORLED HELIX. Shell very broadly um-

bilicated, discoid, very flat at the upper part, hollowed beneath, solid, striated, faintly deussated with minute concentric lines, olive, encircled at the upper part with very broad black-red zones; whorls nine, convex, very narrow, the last descending in front; aperture very oblique, lunar-rounded; lip white, shortly reflected, margins joined by a callous layer.

BORN, Test. Mus. Vindobonensis, p. 373. pl. 14. f. 19, 20.

*Hab.* Brazil.

This well-known species is remarkably characterized by its peculiarly discoid *Planorbis*-like form.

Species 542. (Mus. Cuming.)

HELIX PELLIS-SERPENTIS. *Hel. testā angustè umbilicata, tumido-globosā, supernè confertissimè granulosā, basi striatā, griseo-flavicante, fasciis latis albo- et rufo-flammulatis, subtus cingulis angustis interruptis rufis ornatā; anfractibus sex, convexiusculis, ultimo obsolete angulato, latere aperturae opposito impressionibus profundis indentato; aperturā latè lunari; peristomate intus albo, calloso, marginibus callo junctis, supero expanso, columellari et basali reflexis.*

THE SERPENT'S SKIN HELIX. Shell umbilicated, swollen globose, very closely granulated about the upper part, striated at the base, greyish-yellow, ornamented with broad white-and-red-flamed bands, beneath with narrow interrupted bands; whorls six, rather convex, the last obsoletely angled, indented with two deep impressions in the side opposite to the aperture; aperture broadly lunar; lip white within, callous, margins joined by a callous layer, upper margin expanded, columellar and basal margins reflected.

CHEMNITZ, Conch. Cab. vol. ix. part 2. p. 79. pl. 125. f. 1095-6, and vol. xi. p. 268. pl. 208. f. 2046-7.

*Hab.* Guyana.

This is regarded by Dr. Pfeiffer as the typical *H. pellis-serpentis*, but there is no indication in either of Chemnitz's figures of the curious indentations which appear to be constant and so eminently characteristic in the species under consideration.



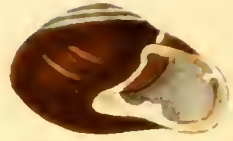




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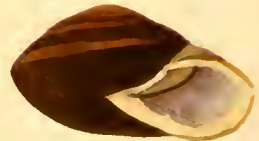
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# HELIX.

PLATE XCIX.

Species 543. (Mus. Cuming.)

**HELIX SUBCASTANEA.** *Hel. testâ umbilicatâ, orbiculato-concavâ, subcastaneâ, minutissimè granulatâ; spirâ subelevatâ; anfractibus quinque ad sex, vix convexiusculis, ultimo angulato, anticè subitò deflexo, basi inflato, ad aperturam constricta et scrobiculato; umbilica mediocri; aperturâ perobliquâ, auriculari; peristomate albo, incrassato, marginibus callo tenui junctis, dextra arcuato, basali strictiusculo, denticulato, ambobus dente magno intrante separatis.*

**THE CHESTNUT-TINGED HELIX.** Shell umbilicated, orbicularly convex, chestnut-tinged, very minutely granulated; spire slightly raised; whorls five to six, rather convex, the last angled, suddenly deflected in front, inflated at the base, drawn in and furrowed at the aperture; umbilicus middling; aperture very oblique, ear-shaped; lip white, thickened, joined by a thin callous layer, right margin arched, basal rather drawn out, toothed, both separated by a large entering tooth.

*Caracolla globosa*, Broderip (not *H. globosa*, Sowerby), Pro. Zool. Soc. 1832, p. 30.

*Helix subcastanea*, Pfeiffer.

*Hab.* Tumaco, West Columbia; Cuming.

Distinguished by an obscure oblong protuberance on the columellar margin, and a single prominent narrow raised tooth at the base.

Species 544. (Mus. Cuming.)

**HELIX BITUBERCOLATA.** *Hel. testâ imperforatâ, orbiculari-conicâ, basi plano-concavâ, intensè nigricante-castaneâ, epidermide luteâ undato-lentiginosâ; anfractibus quinque, convexis, ultimo obtusè carinato; aperturâ horizontali, suboblongo-quadratâ; peristomate albo, reflexo, marginibus callo junctis, columellari dentibus parvis duobus, basali dentibus parvis duobus subdistantibus prominentibus acutis.*

**THE TWO-TUBERCLED HELIX.** Shell imperforated, orbicularly conical, flatly concave at the base, very dark blackish-chestnut, zigzag-freckled with a yellowish epidermis; whorls five, convex, the last obtusely keeled; aperture horizontal, somewhat oblong-square; lip white, reflected, margins joined by a callosity, columellar margin with two small teeth, basal mar-

gin with two small rather distant prominent sharp teeth.

PFEIFFER, Pro. Zool. Soc. 1846.

*Hab.* Tungaragua, Ecuador; Bourcier.

This little species is well distinguished from the rest of its congeners collected in this Plate, by its pretty wave-freckled epidermis.

Species 545. (Mus. Cuming.)

**HELIX BOURCIERI.** *Hel. testâ imperforatâ, globosâ, subinflatâ, plicato-striatâ, intensè castaneâ, apice rufescente; spirâ obtusè depressâ; anfractibus quatuor, convexis, ultimo vix carinato, rotundato, basi medio impressâ; aperturâ horizontali, suboblongo-quadratâ; peristomate incrassato, breviter reflexo, albido et purpureo, margine columellari dentibus parvis duobus contiguus obtusis, basali dente parvo unico subbasali.*

**BOURCIER'S HELIX.** Shell imperforated, globose, somewhat inflated, plicately striated, dark chestnut, reddish at the apex; spire obtusely depressed; whorls four, convex, the last scarcely keeled, rounded, unpressed in the middle at the base; aperture horizontal, somewhat oblong-square; lip thickened, shortly reflected, whitish and purplish, columellar margin with two small contiguous blunt teeth, basal margin with a single small nearly obsolete tooth.

PFEIFFER, Pro. Zool. Soc. 1850.

*Hab.* Otoralo, Ecuador; Bourcier.

Collected by, and named in memory of, M. Bourcier, late Consul-General of Ecuador.

Species 546. (Mus. Cuming.)

**HELIX OREAS.** *Hel. testâ umbilicatâ, depressâ, angulatâ, striatâ et minutissimè granulatâ, livido-istratâ, ad apicem rufescente; spirâ vix elevatâ; anfractibus quinque, planiusculis, ultimo anticè rotundato, ad aperturam constricto, basi inflato; aperturâ perobliquâ, scrobiculata, bidentatâ; peristomate albo, reflexo, marginibus callo albo funiculato junctis, supere arcuato, basali strictiusculo, ambobus dente acuto separatis, dente altero in pariete illi opposito.*

**THE OREAS HELIX.** Shell umbilicated, depressed, angled, striated and very minutely granulated, livid-chest-

nut: reddish at the apex; spire but little raised; whorls five, rather flat, the last rounded in front, constricted at the aperture, inflated at the base; aperture very oblique, semi-oval, two-toothed; lip white, reflected, margins joined by a white ridged callosity, upper margin arched, basal rather drawn out, both separated by a sharp tooth, the other tooth being opposite to it on the body-whorl.

KOCH. Philippi, Abbild. und Besch. Conch. vol. i. p. 151. pl. 5. f. 2.

*Hab.* Quenden and other mountains of New Granada.

The teeth are rather small and peculiarly sharp, one of them being situated on the body-whorl.

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Species 547. (Mus. Cuming.)

HELIX JUNO. *Hel. testā imperforatā, depresso-globosā, solidiusculā, plicato-striatā, sordidē castaneā; spirā obtusā; anfractibus quinque, convexā, ultimo carinato; aperturā horizontali, subauriculari; peristomate incrassato, livido-albā, marginibus callo junctis, columellari latē appresso, rudē calloso, obscurē denticulato, basali calloso, vix obscurē denticulato.*

THE JUNO HELIX. Shell imperforated, depressly globose, rather solid, plicately striated, dull chestnut; spire obtuse; whorls five, convex, the last keeled; aperture horizontal, somewhat ear-shaped; lip thickened, livid-white, margins joined by a callosity, columellar margin broadly appressed, rudely callous, obscurely toothed, basal margin callous, faintly obscurely toothed.

PFEIFFER, Zeitschrift für Malac. 1850, p. 66.

*Hab.* Andes of Columbia.

A solid, depressly globose species, with the lip rudely callous, presenting only very faint indications of teeth.

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Species 548. (Mus. Cuming.)

HELIX NEOGRANADENSIS. *Hel. testā imperforatā, depressā, carinatā, tenui, undique minutē granulatā, saturatē rufā; spirā vix elevatā; anfractibus quatuor ad quinque, planiusculis, ultimo carinato, basi convexo, anticē dextero, constricto; aperturā perobliquā, lunato-rotun-*

*dato; peristomate lutescente, expanso, reflexiuscula, marginibus callo tenui junctis, basali obsoletissimē unidentato, columellari brevi, dilatato, appresso.*

THE NEW GRANADA HELIX. Shell imperforated, depressed, keeled, thin, minutely granulated throughout, dark red; spire scarcely raised; whorls four to five, rather flat, the last keeled, convex at the base, deflected and constricted in front; aperture very oblique, lunar-rounded; lip yellowish, expanded, slightly reflected, margins joined by a thin callosity, basal margin very obsolete toothed, columellar margin short, dilated, appressed.

PFEIFFER, Pro. Zool. Soc. 1845, p. 64.

*Hab.* Mountain of Quenden, New Granada.

A bright chestnut finely granulated shell of light structure, with the faintest possible indication of a small tooth.

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Species 549. (Mus. Cuming.)

HELIX ATRATA. *Hel. testā angustē umbilicatā, globoso-depressā, solidiusculā, minutissimē granulatā, obscurē plicato-striatā et malleatā, atro-castaneā; spirā obtusā; anfractibus quinque ad sex, plano-convexis, ultimo subacutē carinato, anticē dextero et constricto, basi plano-impresso; aperturā subquadrato-auriculari; peristomate incrassato, calloso, livido-carneo, marginibus callo junctis, margine basali dentibus parvis duobus, plus minus obsoletis.*

THE JET-BLACK HELIX. Shell narrowly umbilicated, globosely depressed, rather solid, very minutely granulated, obscurely plicately striated and indented, jet-black chestnut; spire obtuse; whorls five to six, flatly convex, the last rather sharply keeled, deflected and constricted in front, flatly impressed at the base; aperture somewhat squarely ear-shaped; lip thickened, callous, livid flesh-colour, margins joined by a callosity, basal margin with two small teeth, more or less obsolete.

PFEIFFER, Pro. Zool. Soc. 1850.

*Hab.* Puntophaya, Ecuador: Bourcier.

A large stout shell of a much blacker chestnut-colour than any of the preceding species, and equally distinct in all particulars.





550.



551.



552.



553.



554.



555.



556.



# HELIX.

PLATE C.

Species 550. (Mus. Cuming.)

**HELIX LABYRINTHUS.** *Hel. testá umbilicatá, lenticulari, minutè granulatá, rufo-castaneá; anfractibus quinque, convexiusculis, ultimo basi constricto, bisrobulato; aperturá horizontali, auriformi, coarctatá; peristomate subincrassato, breviter reflexo, sinuoso, ad carinam canaliculato, marginibus callo altè prominente, laminam erectam latam intrantem emittente junctis, supero arcuato, basali flexuoso, juxta canallem laminá latissimá, triangularem, oppositam fere attingente, et dente valido in medio instructo, laminá tertiá parvulá in fundo.*

**THE LABYRINTH HELIX.** Shell umbilicated, lenticular, minutely granulated, reddish-chestnut; whorls five, rather convex, the last constricted and two-furrowed at the base; aperture horizontal, ear-shaped, contracted; lip rather thickened, broadly reflected, sinuous, channelled at the keel, margins joined by a high callosity, emitting a broad creet entering lamella, upper margin arched, basal flexuous, furnished with a very broad triangular lamina next the canal, nearly touching the opposite one, with a strong tooth in the middle, and a third small lamina at the bottom.

CHEMNITZ, Conch. Cab. vol. xi. p. 271. pl. 208. f. 2048.

*Helix Otis*, Solander.

Eadem var. *Caracolla subplanata*, Petit.

*Hab.* Central America.

Of the forms here collected together, this is considered to be the type of the old *H. labyrinthus*.

Species 551. (Mus. Cuming.)

**HELIX STOSTOMA.** *Hel. testá umbilicatá, lenticulari, subobesá, rufo-castaneá; anfractibus quinque, plano-convexis, ultimo constricto et profundè scrobiculato; aperturá horizontali, auriformi, coarctatá; peristomate subincrassato, elevato, marginibus integris, lamellam prominentem in pariete formantibus, margine columellari dente unico valido, basali dentibus duobus lamelliformibus, ad basin coadunatis et callosis.*

**THE PLAINT-MOUTH HELIX.** Shell umbilicated, lenticular, rather stout, reddish-chestnut; whorls five, flatly convex, the last constricted and deeply furrowed; aperture horizontal, ear-shaped, contracted; lip rather thickened, raised, with the margins entire, forming a prominent lamella on the inner wall of the body-

whorl, columellar margin with a single strong tooth, basal margin with two lamelliform teeth, united together and callous at the base.

PREIFTER, Pro. Zool. Soc. 1851-2?

*Hab.* Andes of New Granada.

Smaller and stouter than the preceding species. The aperture is not channelled at the keel, and in the place of the triangular basal lamina are two lamelliform teeth, callous and united at the base.

Species 552. (Mus. Cuming.)

**HELIX UNCIGERA.** *Hel. testá umbilicatá, orbiculari, subdiscoideá, acutissimè carinatá, minutè granulatá, albá, fasciis nigro-fuscis cinctá; spirá rix elevatá; anfractibus quinque, planis, ultimo basi planiusculo, antice subito deflexo, subtilè scrobiculato; aperturá horizontali, rhombeá, lamellá validá albá pariete coarctatá; peristomate subincrassato, marginibus callo funiculato junctis, supero expanso, basali reflexo, juxta carinam lamellá tenui intrante, retrorsum uncinatá, et prope columellam dente obtuso armato.*

**THE HOOK-BEARING HELIX.** Shell umbilicated, orbicular, somewhat discoid, very sharply keeled, minutely granulated, white, encircled with two black-brown bands; spire but little raised; whorls five, flat, the last rather flat at the base, suddenly deflected in front, furrowed beneath; aperture horizontal, rhomboid, contracted, with a strong white lamella on the wall of the body-whorl; lip slightly thickened, margins joined by a corded callosity, upper margin expanded, basal reflected, with a thin entering lamella next the keel turning back into a fine hook, a blunt tooth next the columella.

*Carocolla uncigera*, Petit, Guerin's Mag. de Zool. 1838. Moll. pl. 113.

*Hab.* Panama.

This extremely interesting species is characterized by the presence of a fine gracefully curved hook within the aperture.

Species 553. (Fig. a, b, Mus. Cuming.)

**HELIX Plicata.** *Hel. testá umbilicatá, orbiculari, convexè carinatá, utrinque convexá, subdiscoideá, castaneá et*



*fuscā, striatā, lineis concentricis confertissimis subtilissimè granulato-decussatā; anfractibus quinque, ultimo anticè convexo, ad aperturam extus scrobiculato; aperturā horizontali, auriformi; peristomate reflexo, ad carinam subcanaliculato, marginibus laminā elevatā, lamellam elongatam intrantem emittente, junctis, columellari breviter arcuato, basali bidentato, dente altero lato, brevi, obtuso, altero majore, sulcato.*

THE Plicated HELIX. Shell umbilicated, orbicular, sharply keeled, convex on both sides, rather solid, chestnut or brown, striated, very finely granulately decussated with close-set concentric lines; whorls five, the last convex in front, furrowed without the aperture; aperture horizontal, ear-shaped; lip reflected, slightly channelled at the keel, margins joined by a raised lamella, emitting an entering elongate lamella, columellar margin shortly arched, basal margin two-toothed, one tooth broad and short, the other larger and grooved.

BORN, Test. Mus. Vindobonensis, p. 368.

*Carocolla Hyadina*, Lea.

*Hab.* Central America.

This differs little from *II. labyrinthus*, except in being of larger and more solid growth, and more callous about the aperture.

Species 554. (Mus. Cuming.)

HELIX BIFURCATA. *Hel. testā umbilicatā, depressā, orbiculari, leviter striatā, fulvā, sublus pallidā, vel medio tantum pallidè cingulatā; anfractibus quinque, pluvulatis, ultimo obsolete carinato, anticè subitè deflexo; aperturā depressā, transversè pyriformi, laminā elongatā, compressā, erectā, intrante coarctatā; peristomate albido, reflexo, marginibus callo prominente junctis, basali dentibus duobus, altero depressè triangulari, altero bifurcato, instructo.*

THE BIFURCATE HELIX. Shell umbilicated, depressed, orbicular, slightly striated, fulvous, pale beneath, or encircled with a pale band only round the middle; whorls five, rather flat, the last obsolete keeled,

suddenly deflected in front; aperture depressed, transversely pear-shaped, contracted by an elongate, compressed, erect, entering lamella; lip white, reflected, margins joined by a prominent callosity, basal margin furnished with two teeth, one of which is depressly triangular, the other bifurcate.

DESHAYES, Guerin's Mag. de Zool. pl. 111. f. 2.

*Hab.* Guyana.

The bifurcate tooth is very solid and callous at the base and most conspicuously developed.

Species 555. (Mus. Cuming.)

HELIX ANNULIFERA. *Hel. testā umbilicatā, depressā, lenticulari, minutè granulatā, rufo-castaneā, ad peripheriam albā; anfractibus quinque, plano-convexis, ultimo ad aperturam bisrobiculato, anticè deflexo; aperturā horizontali, auriformi; peristomate incrassato, albo, elevato, ad carinam peculiariter retrorsum sinuato, marginibus integris, lamellam intrantem pariete emittentibus, basali dentato, deinde excavato, dente triangulari lamelliformi instructo, dentibus lamellisque albis.*

THE RINGED HELIX. Shell umbilicated, depressed, lens-shaped, minutely granulated, reddish-chestnut, white at the periphery; whorls five, flatly convex, the last two-furrowed at the aperture, deflected anteriorly; aperture horizontal, ear-shaped; lip thickened, white, raised, peculiarly sinuated backwards at the keel, margins entire, emitting an entering lamella on the wall of the body-whorl, basal margin toothed, then excavated, and furnished with a triangular lamelliform tooth, teeth and lamella white.

PEEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Central America.

The aperture of this species is characterized in a manner (not sufficiently shown in the accompanying figure) which is quite peculiar, being sinuated at the keel so as to form a spouted channel on the upper surface of the shell.





556



557<sup>a</sup>



557<sup>b</sup>



558



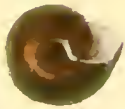
559<sup>a</sup>



559<sup>b</sup>



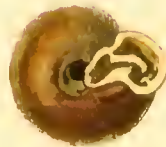
560



561<sup>a</sup>



561<sup>b</sup>



562

# HELIIX.

PLATE CI.

Species 556. (Mus. Cuming.)

**HELIIX TAMSIANA.** *Hel. testá umbilicatá, depressè conicá, granulatá, fuscá, aculé carinatá; spirá conoideá, vertice obtusiusculo; anfractibus quinque, subplanis, ultimo basi vix converiusculo, anticè angulatim deflexo, ad aperturam constricto; aperturá subhorizontali, auriformi, quadridentatá; peristomate tenui, marginibus laminá callosá, umbilici partem tegente et medio dentem linguiformem emittente junctis, supéro expanso, unidentato, basali reflexo, dentibus fere æqualibus munito.*

**TAMS' HELIX.** Shell umbilicated, depressly conical, granulated, brown, sharply keeled; spire conoid, rather obtuse at the apex; whorls five, somewhat flattened, the last rather convex at the base, angularly deflected in front, constricted at the aperture; aperture nearly horizontal, ear-shaped, four-toothed; lip thin, margins joined by a callous layer, partly covering the umbilicus, and emitting on the body-whorl a tongue-shaped tooth, upper margin expanded, one-toothed, basal margin reflected, furnished with two nearly equal teeth.

DUNKER, Zeitschrift für Malac. 1847. p. 81.

*Hab.* Venezuela; Dr. Tams.

A small conical transparent horny shell, with the teeth of the aperture delicately formed.

Species 557. (Mus. Cuming.)

**HELIIX QUADRIDENTATA.** *Hel. testá umbilicatá, orbiculatá, tenuiusculá, striatá, granulatá, fuscá; spirá depresso-conoideá; unfractibus quinque ad sex, vix converiusculis, ultimo carinato, basi convexo, anticè subilò deflexo, scrobiculato; aperturá auriformi, fuscá, dente lamelliformi pariete coarctatá; peristomate simplici, marginibus callo funiculato junctis, supéro latè expanso, basali sinuoso, infra carinam dente acuto prominente et prope umbilicum mediocrem duobus minoribus instructo.*

**THE FOUR-TOOTHED HELIX.** Shell umbilicated, orbicular, rather thin, striated, granulated, brown; spire depressly conoid; whorls five to six, rather convex, the last keeled, convex at the base, suddenly deflected in front, furrowed; aperture ear-shaped, brown, contracted by a lamelliform tooth on the wall of the body-whorl; lip simple, margins joined

by a corded callosity, upper margin broadly expanded, basal sinuous, furnished with a prominent sharp tooth beneath the keel, and two smaller teeth near the umbilicus.

*Carocolla quadridentata*, Brodericp, Pro. Zool. Soc. 1832 p. 30.

*Hab.* Central America (in the woods); Cuming.

Similar in form to the preceding species, but of much more solid structure, with the teeth and lip more strongly developed.

Species 558. (Mus. Cuming.)

**HELIIX LEUCODON.** *Hel. testá umbilicatá, depressá, sublenticulari, undique subtiliter granulatá, saturatè castaneá; spirá planè elevatá, vertice obtuso; anfractibus quinque, subplanulatis, ultimo carinato, anticè gillè ad aperturam subilò deflexo, constricto, subtus scrobiculato; aperturá perobliquá, irregulariter pyriformi, peristomate tenui, albo, expanso, reflexiusculo, marginibus laminá elevatá, flexuosá, medio lamellam erectam linguiformem emittente junctis, supéro dente parvo, basali dentibus parvulis duobus munito.*

**THE WHITE-TOOTHED HELIX.** Shell umbilicated, depressed, sublenticular, finely granulated throughout, dark chestnut; spire flatly raised, obtuse at the apex, whorls five, rather flat, the last keeled, gibbous in front, suddenly deflected and constricted at the aperture, furrowed beneath; aperture very oblique, irregularly pear-shaped; lip thin, white, expanded, slightly reflected, margins joined by a raised flexuous lamina, emitting in the middle a raised tongue-shaped lamella, upper margin furnished with one small tooth, basal with two to three small teeth.

PFEIFFER, Zeitschrift für Malac. 1847. p. 81.

*Hab.* Tovah, Venezuela; Dyson.

A dark solid species of robust form, in which the basal margin is thickly reflected, while the teeth are small.

Species 559. (Mus. Cuming.)

**HELIIX DUNKERI.** *Hel. testá subampiter orbiculatá, orbiculari, valdè depressá, granulatá, acutissime carinatá, luteo-fulvè-cornéá, nigricante-castano-juncta pariete rufo-fusciatá, cariná subtilissime albo-marginatá, anfractibus*

*bus quinque, planatis, subtus rotundatis, ultimo anticè conspicuè deflexo et constricto, subtus scrobiculato; aperturâ horizontali, transversè ovali, marginibus integris, lamellâ pariete formatâ, margine columellari nitidè quadridentato.*

DUNKER'S HELIX. Shell rather largely umbilicated, orbicular, very depressed, granulated, very sharply keeled, yellowish-horny, banded next the periphery with blackish-chestnut, keel very finely edged with white; whorls five, flattened, rounded beneath, the last conspicuously deflected and constricted in front, furrowed beneath; aperture horizontal, transversely oval, margins entire, a lamella formed on the wall of the body-whorl, columellar margin neatly four-toothed.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Andes of New Granada.

A pretty bright horny species encircled with a dark band next the periphery, the sharp edge of which is conspicuously white.

Species 560. (Mus. Cuming.)

HELIX LEPRIEURII. *Hel. testâ umbilicatâ, orbiculatâ, conoideo-depressâ, fulvâ, subcarinatâ; carinâ albicante; anfractibus quinque, vix convexiusculis, ultimo anticè subito deflexo, basi scrobiculato; umbilico mediocri; aperturâ angustissimâ, horizontali, subauriformi; peristomate subincrassato, albo, marginibus lamellâ erectâ, umbilicum semiocculante, aliamque angulatim longè intrantem emittente junctis, supero expanso, basali sinuoso, reflexo, tuberculo dentiformi et juxta carinam dente valido geminato instructo.*

LEPRIEURE'S HELIX. Shell umbilicated, orbicular, conoidly depressed, fulvous, obtusely keeled, white at the keel; whorls five, slightly convex, the last suddenly deflected in front, furrowed at the base; umbilicus middling; aperture very narrow, horizontal, somewhat ear-shaped; lip rather thickened, white, margins joined by an erect lamella, half-covering the umbilicus, emitting another angulately and prominently entering the aperture, upper margin expanded, basal sinuous and reflected, furnished with a tooth-shaped tubercle, and next the keel a strong double tooth.

PETIT, Revue Zoologique Soc. Cuv. 1840, p. 74. Guerin's Mag. de Zool. 1841, Moll. pl. 32.

*Hab.* Guyana.

The flexuous lip and teeth of this species are remarkably strongly developed.

Species 561. (Mus. Cuming.)

HELIX NIGRITELLA. *Hel. testâ umbilicatâ, conoideo-depressâ, solidiusculâ, fuscâ, epidermide nigricante-olivaceâ indutâ; anfractibus quinque ad sex, vix convexiusculis, lentè accrescentibus, ultimo basi convexo, medio acutè carinato; umbilico mediocri, percio; aperturâ securiformi; peristomate simplici, margine supero antrosum arcuato, acuto, basali reflexo.*

THE SWARTHY HELIX. Shell umbilicated, conoidly depressed, rather solid, brown, covered with a blackish-olive epidermis; whorls five to six, slightly convex, increasing slowly, the last convex at the base, sharply keeled in the middle; umbilicus middling, open; aperture hatchet-shaped; lip simple, upper margin curved towards the front, sharp, basal margin reflected.

PHILIPPI, Abbild. und Besch. Conch. vol. ii. p. 4. pl. 6. f. 8. *Hab.* Pacific Islands; Cuming.

A dark little Trochiform shell, tinged with red at the apex, and having a simple toothless aperture.

Species 562. (Mus. Cuming.)

HELIX AURICULINA. *Hel. testâ umbilicatâ, orbiculatâ, carinatâ, utrinque convexâ, granulato-striatâ, fulvâ, ad carinam lulescente; anfractibus quinque, planulatis, ultimo subito deflexo, basi scrobiculato; aperturâ horizontali, auriformi, plicis coarctatâ, unâ lamelliformi, ad parietem profundè intrante, secundâ dentiformi, et tertiâ furculâ in margine basali; peristomate albo, reflexo, marginibus ad umbilicum mediocrem percium junctis.*

THE LITTLE EAR HELIX. Shell umbilicated, orbicular, keeled, convex on both sides, granularly striated, fulvous, yellowish at the keel; whorls five, rather flattened, the last suddenly deflected, furrowed at the base; aperture horizontal, ear-shaped, contracted with three plaits, one of which is lamelliform, deeply entering upon the wall of the body-whorl, the second tooth-shaped, and the third bifurcate upon the basal margin; lip white, reflected, margins joined at the umbilicus, which is middling and open.

PETIT, Revue Zoologique Soc. Cuv. 1840, p. 74. Guerin's Mag. de Zool. 1841, pl. 33.

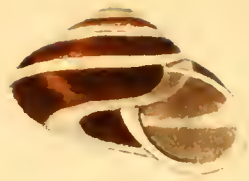
*Hab.* Guyana.

The development of the aperture is nearly the same as in *H. Leprieurii*, figured above it; the shell is smaller, and the whorls are rounder.









563.



564.<sup>a</sup>



564.<sup>b</sup>



565.



566.<sup>a</sup>



566.<sup>b</sup>



567.

# HELIX.

## PLATE CH.

Species 563. (Mus. Cuming.)

**HELIX CHLOROZONA.** *Hel. testâ subampliter umbilicatâ, orbiculari, subdepressâ, subtus convexâ, albâ, castaneo latè trifusciatâ; spirâ obtusâ; anfractibus quatuor ad quinque, planulatis, obliquè striatis, ultimo ad peripheriam obtusè carinato; aperturâ lunato-circulari; peristomate tenui, paululum reflexo, marginibus approximatis.*

**THE PALE-BANDED HELIX.** Shell rather largely umbilicated, orbicular, somewhat depressed, convex beneath, white, encircled with three broad chestnut bands; spire obtuse; whorls four to five, rather flattened, obliquely striated, last whorl obtusely keeled at the periphery; aperture lunar-circular; lip thin, a little reflected, margins approximating.

**GRATELOUP,** Act. Soc. Linn. de Bordeaux, vol. xi. p. 409. pl. 1. f. 4.

*Hab.* Madagascar.

The chestnut bands being very broad and occupying more of the shell than the white ground upon which they are painted, make it appear as if the shell were white-banded upon a chestnut ground.

Species 564. (Fig. a, b, Mus. Cuming.)

**HELIX SALLEANA.** *Hel. testâ imperforatâ, conicâ, tenuiculâ, striatulâ et subtiliter malleatâ, nitidiusculâ, cinereo-lutescente, ad peripheriam fasciis duabus fusco-viridibus punctisque castaneis ornatâ; spirâ conicâ, acutiensculâ; anfractibus quinque, convexiusculis, ultimo lineis concentricis impressis sculpto, subangulato, basi parum convexo; aperturâ subobliquâ, lunari-ovali, fasciis intus notulâ; peristomate tenui, expanso, paululum reflexo, albo, margine columellari calloso, latè dilatato, appresso.*

**SALLE'S HELIX.** Shell imperforated, conical, rather thin, finely striated and indented, rather shining, ash-yellow, marked with chestnut dots and two brown-green bands at the periphery; spire conical, rather sharp; whorls five, rather convex, last whorl sculptured with impressed concentric lines, slightly angled, but little convex at the base; aperture rather oblique, lunar-oval, marked interiorly with the bands; lip thin, expanded, a little reflected, white, columellar margin callous, broadly dilated, appressed.

**PFEIFFER,** Pro. Zool. Soc. 1849, p. 129.

*Hab.* Guatemala (on the banks of St. John's River), Sallé.

The marking and general aspect of this shell reminds one in some measure of the rare and curious *H. Margillivrayi* of New Holland; from which it is nevertheless far removed and not of the same typical form.

Species 565. (Mus. Cuming.)

**HELIX BUFFONIANA.** *Hel. testâ perangustè umbilicatâ, subgloboseâ, distinctè granulatâ, tenui, inflatâ, plicis validis obliquis exasperatâ, castaneâ, albo irregulariter strigatâ, fasciis nigricantibus obsolete ornatâ; spirâ parvâ, conoideâ, obtusâ; anfractibus quatuor, convexis, ultimo permagno, vesiculari; aperturâ lunato-ovali, intus lividâ, subiridescente; peristomate obtuso, marginibus conniventibus, columellari arcuato, foveolam reflexo, umbilicum fere tegente, basali incrassato, breviter reflexo.*

**BUFFON'S HELIX.** Shell narrowly umbilicated, subglobose, distinctly granulated, thin, inflated, roughened with strong oblique folds, chestnut, streaked irregularly with white, ornamented with three rather obsolete blackish bands; spire rather small, conoid, obtuse; whorls four, convex, the last very large, vesicular; aperture lunar-oval, livid and slightly iridescent within; lip obtuse, with the margins approximating, columellar margin arched, reflected in a vaulted manner over the umbilicus, basal margin thickened, shortly reflected.

**PFEIFFER,** Zeitschrift für Malac. 1845, p. 152.

*Hab.* Interior of Mexico.

This and the following characteristic Mexican species are quite of the European type, related in form and general aspect to the common *H. aspersa* of our gardens.

Species 566. (Fig. a, b, Mus. Cuming.)

**HELIX HUMBOLDTIANA.** *Hel. testâ angustè umbilicatâ, subgloboseâ, obliquè rugosâ, granulosâ, fasciis badis cinclâ, epidermide fasciâ strigatim edutâ; anfractibus quatuor, convexiusculis, ultimo convexo, aperturâ magnâ, lunato-circulari, intus nitidè albâ, trifusciatâ; peristomate simplici, marginibus conniventibus, columellari latè expanso, patente, basali subreflexo.*

**HUMBOLDT'S HELIX.** Shell umbilicated, somewhat glo-

bose, obliquely wrinkled, granulated, encircled with three brown bands, covered with a brown-streaked epidermis; whorls four, rather convex, the last ventricose; aperture large, lunar-rounded, shining white and marked with the three bands within; lip simple, margins approximating, columellar margin broadly expanded, open, basal a little reflected.

VALENCIENNES, Pfeiffer, Symbolæ, vol. i. p. 37.

*Hab.* Interior of Mexico.

It is extremely doubtful whether this is really distinct from the preceding species. It may prove to be merely a different state of it.

Species 567. (Mus. Cuming.)

HELIX SEMIDECUSSATA. *Hel. testâ vix umbilicatâ, tenui, subtrochiformi, tumidiusculâ, undique subtiliter gra-*

*nato-decussatâ, fulco-brunnâ, basi læviore; anfractibus sex, plano-convexis, ad suturas tenuicarinalis, ultimo ad peripheriam carinato; aperturâ lunari; peristomate simplici, puululum incrassato.*

THE SEMIDECUSSATED HELIX. Shell scarcely umbilicated, thin, somewhat Trochus-shaped, rather swollen, finely granularly decussated throughout, fulvous-brown, smoother at the base; whorls six, flatly convex, finely keeled at the sutures, last whorl keeled at the periphery; aperture lunar; lip simple, slightly thickened.

PFEIFFER, Pro. Zool. Soc. 1850.

*Hab.* Mauritius.

A delicate bright fulvous-brown shell, with the surface granularly decussated, the granules at the base being almost obsolete.





569<sup>a</sup>



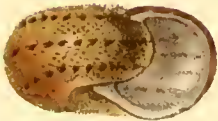
568.



569<sup>b</sup>



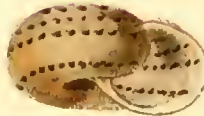
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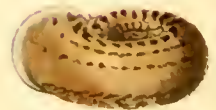
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572<sup>b</sup>



573.



# HELIX.

PLATE CIII.

Species 568. (Mus. Cuming.)

**HELIX ANDICOLA.** *Hel. testā umbilicatā, depressā, tenui, undique granulatā, opacā, corneo-albidā, fasciis pluribus rufis, interruptis, denticulatis vel maculoso-tessellatis læniatā, interstitiis rufo-flammulatis; spirā planā; anfractibus quatuor, convexis, ultimo dilatato, rotundato; aperturā rotundato-lunari; peristomate tenui, marginibus callo tenui junctis, supero breviter expanso, basali reflexiusculo, columellari dilatato, reflexo, umbilicum angustum semilegente.*

**THE ANDES-INHABITING HELIX.** Shell umbilicated, depressed, thin, granulated throughout, opaque, horny-white, filleted with numerous red, interrupted, denticulated or spot-tessellated bands, the interstices between them being red-flamed; spire flat; whorls four, convex, the last dilated, rounded; aperture rotundately lunar; lip thin, margins joined by a thin callosity, upper margin shortly expanded, basal a little reflected, columellar margin dilated and reflected, half-covering a narrow umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 129.

*Hab.* Eastern Cordilleras, Columbia.

The bands are very irregular, and in one or two instances are little more than lines.

Species 569. (Fig. a, b, Mus. Cuming.)

**HELIX ROSARIUM.** *Hel. testā umbilicatā, depressā, tenui, supernè subtilissimè granulatā, deinde obliquè corrugatā, diaphanā, pallidè fulvā, flammis a suturā exentibus, cingulisque tribus moniliformibus rufis ornatā; spirā planā; anfractibus quatuor ad quinque, convexis, ultimo subdepresso, sublus lineis perpaucis spiralibus inciso, circa umbilicum infundibuliformem subcompresso; umbilico subobliquo, trigono-lunari; peristomate subcalloso, reflexo.*

**THE ROSARY HELIX.** Shell umbilicated, depressed, thin, very finely granulated at the upper part, then obliquely wrinkled, diaphanous, pale fulvous, ornamented with three necklace-like bands, and with red flames coming out of the suture; spire flat; whorls four to five, convex, the last rather depressed, engraved with a few spiral lines, slightly compressed around the funnel-shaped umbilicus; umbilicus rather oblique, triangularly lunar; lip rather callous, reflected.

PFEIFFER, Pro. Zool. Soc. 1849, p. 131.

*Hab.* Banks of the Amazon, Brazil.

A subtransparent horny shell, delicately pencilled with red-dot bands and flames.

Species 570. (Fig. a, b, Mus. Cuming.)

**HELIX CATENIFERA.** *Hel. testā umbilicatā, depressā, subinflatā, undique distinctè granulatā, tenui, subpellucidā, corneo-albidā, cingulis rufo-maculatis maculisque irregularibus juxta suturam ornatā; anfractibus quinque ad sex, convexis; umbilico subamplo, aperturā lunari; peristomate tenui, subreflexo.*

**THE CHAIN-BEARING HELIX.** Shell umbilicated, depressed, somewhat inflated, distinctly granulated throughout, thin, rather transparent, horny-white, ornamented with red-dotted bands, with irregular blotches next the suture; whorls five to six, convex; umbilicus rather large; aperture lunar; lip thin, somewhat reflected.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Andes of New Granada.

The painting of this species is very similar to that of the last, except that instead of being in regular flames next the suture, it is in irregular blotches. There are no oblique wrinkles on the surface, which is distinctly granulated throughout.

Species 571. (Mus. Cuming.)

**HELIX SCLEEROSTOMA.** *Hel. testā latè umbilicatā, tenui, subdiscoideā, squamato-granosā, setis brevibus instructā, pellucido-sportheā, maculis punctisque rufis subregulariter tinctā et fasciatā; spirā depresso-nervā; anfractibus quatuor ad quinque, convexis; aperturā lunato-circulari; peristomate expanso, subreflexo, purpurascente.*

**THE POLLUTED-MOUTH HELIX.** Shell broadly umbilicated, thin, somewhat discoid, squamately granose, furnished with short bristles, transparent fawn-colour, somewhat irregularly stained and banded with red spots and dots; spire depressly concave; whorls four to five, convex; aperture lunar-circular, lip expanded, a little reflected, stained with purple.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Gualea, Ecuador: Boureuet



The granules are in this species developed into scales, as on the surface of a coarse file, from which short bristles are emitted.

Species 572. (Mus. Cuming.)

HELIX MONILE. *Hel. testā latissimè umbilicatā, subdiscoideā, supernè impressā, tenui, minutissimè granulatā, translucidā, pallidè corneā, supernè maculis strigisæ rufis angulatis moniliformibus ornatā; anfractibus quatuor ad quinque, convexis, ultimo inflato; aperturā verticali, lunato-circulari; peristomate simplici, supernè breviter expanso, basi reflexo.*

THE NECKLACE HELIX. Shell very broadly umbilicated, somewhat discoid, impressed at the upper part, thin, very minutely granulated, transparent, pale horny, ornamented with angular necklace-like red spots and streaks; whorls four to five, convex, the last inflated; aperture vertical, lunar-circular; lip simple, shortly expanded at the upper part, reflected at the base.

BRODERIP, Pro. Zool. Soc. 1832, p. 29.

*Helix planorbis*, Jay.

*Hab.* Salango, Columbia; Cuming.

Of more solid structure and of a more discoid growth than the preceding species.

Species 573. (Mus. Cuming.)

HELIX HIANS. *Hel. testā subobtectè umbilicatā, depressā, tenui, pellucidā, nitidiusculā, undique regulariter et confertim granulatā, pallidè corneā, strigis angustis, rufis, approximatis, undulatis, interdum ramosis et ad suturam fasciā pallidā, maculis irregularibus rufis tessellatā, ornatā; spirā planā; anfractibus quatuor ad quinque, convexis, ultimo inflato, subcompresso, anticè vix descendente; aperturā subobliquā, amplā, lunato-rotundatā; peristomate tenui, expanso.*

THE GAPIING HELIX. Shell with n nearly covered umbilicus, depressed, thin, transparent, rather shining, regularly and closely granuled throughout, pale horny, ornamented with close-set, waved, narrow, red streaks, sometimes branching, and with a pale band next the suture tessellated with irregular red blotches; spire flat; whorls four to five, convex, the last inflated, somewhat compressed, but little descending in front; aperture rather oblique, large, lunar-rounded; lip thin, expanded.

PFEIFFER, Pro. Zool. Soc. 1845, p. 130.

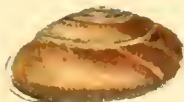
*Hab.* — ?

This belongs to the same type, and is doubtless from the same locality, as the preceding species of this Plate, but the umbilicus is small and nearly covered over by the reflected expansion of the columellar margin of the lip.





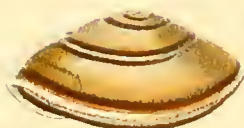
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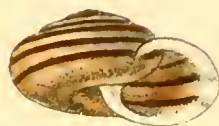
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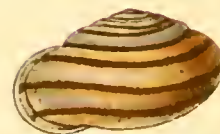
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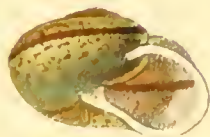
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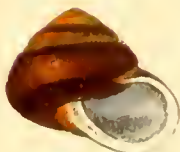
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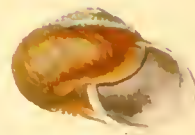
576.<sup>b</sup>



578.



580.



579

# HELIX.

PLATE CIV.

Species 574. (Mus. Cuming.)

**HELIX BIFASCIATA.** *Hel. testá imperforatá, acutè conicá, Trochiformi, tenui, subdiaphaná, albidá vel roseá, nigricante-rufo variè cingulatá; anfractibus septem, supernè convexis deinde concavis, ultimo acutè carinato, anticè non descendente, basi vix convexo; aperturá perobliquá, triangulári; peristomate simplici, albo vel roseo, margine supero expanso, basali reflexo.*

**THE TWO-BANDED HELIX.** Shell imperforated, sharply conical, Trochus-shaped, thin, rather diaphanous, whitish or rose, variously banded with blackish-red; whorls seven, convex at the upper part, then concave, the last sharply keeled, not descending in front, a little convex at the base; aperture very oblique, triangular; lip simple, white or rose, upper margin expanded, basal reflected.

*Trochus bifasciatus*, Burrows, Elements of Conchology, pl. 27. f. 2.

*Carocolla bifasciata*, Gray.

*Helix pyramidella*, Wagner.

*Helix Bosciana*, Férussac.

*Helix Blanchetiana*, Moricand.

*Helicina pyramidella*, Spix.

*Hab.* Brazil, Bahia.

Although described as variously banded, the bands are mostly two in number, the lower one, as in the specimen here figured, being the broader.

Species 575. (Fig. a, b, Mus. Cuming.)

**HELIX HARTWEGI.** *Hel. testá umbilicatá, depressá, carinatá, solidá, striatulá, fuscá; spirá vix elevatá; anfractibus quinque, planulatis, ultimo basi paulo convexiore, anticè non descendente; umbilico angusto, percio; aperturá perobliquá, irregulariter subquadratá; peristomate albo, incrassato, breviter reflexo, marginibus callo junctis, dextro sinuoso, basali subrecto, dilatato, introrsum calloso, dente unico interposito.*

**HARTWEG'S HELIX.** Shell umbilicated, depressed, keeled, solid, finely striated, brown; spire but little raised; whorls five, rather flat, the last a little more convex at the base, not descending in front; umbilicus narrow, open; aperture very oblique, irregularly subquadrate; lip white, thickened, shortly reflected, margins joined by a callosity, right margin sinuous,

basal nearly straight, dilated, callous inwardly, with a single tooth interposed.

PFEIFFER, Pro. Zool. Soc. 1845, p. 126.

*Hab.* El Catamajia, near Loxa, Ecuador; Hartweg.

A solid brown depressed shell, with a somewhat contracted aperture and callous lip.

Species 576. (Mus. Cuming.)

**HELIX GUILLARMADI.** *Hel. testá imperforatá, lentè et vix depressá, solidiusculá, acutè carinatá, lævigatá vel subtilissimè striatá, supernè stramineá, apertura roseo-rosco-aurantio tinctá; suturá opaco-albá, fuscá, et infra fuscó-nigrá juxta carinam cingulatá, subtus albá. Peristomate latiore fuscó-nigrá cingulatá; spirá obtusá, anfractibus quatuor, plano-convexis; aperturá subtriangularitè ovatá; peristomate calloso, reflexo, albo.*

**GUILLARMAD'S HELIX.** Shell imperforated, lentely depressed, rather solid, sharply keeled, smooth or very finely striated, straw-colour at the upper part, tinged with rose-orange towards the aperture. Aperture opake-white, encircled with a narrow brown-black band next the keel, white beneath, encircled with a broader black-brown band; spire obtuse; whorls four, flatly convex; aperture somewhat triangularly ovate; lip callous, reflected, white.

SHUTTLEWORTH, MSS., Mus. Cuming.

*Hab.* Vera Cruz.

A very characteristic species, in which the bands, at first obsolete and scarcely marked, become gradually broader and darker towards the aperture, when a second band is faintly marked next the suture.

Species 577. (Fig. a, b, Mus. Cuming.)

**HELIX TRIGRAMMETHORA.** *Hel. testá umbilicatá, rotundato-convexiusculá, striatá, vitulá, flavo-aurantí, limbo castaneis ornati; spirá brevi, obtusá; anfractibus quinque, convexiusculis, ultimo anticè descendente; aperturá rotundato-lunari; peristomate subduplato, albo, marginibus conniventibus, supro expanso, basali reflexo, columellari dilatato, umbilico unico, dente unico occultante.*

**THE THREE-LINE HELIX.** Shell umbilicated, rather rather convex, finely striated, shining, yellowish-

white, ornamented with three chestnut lines; spire short, obtuse; whorls five, rather convex, the last descending in front; aperture rotundately lunar; lip rather simple, white, margins approximating, upper margin expanded, basal reflected, columellar dilated, not sufficient to conceal the umbilicus.

D'ORBIGNY, Voyage dans l'Amér. Mérid. p. 242. pl. 25. f. 9-11.

*Hab.* Bolivia; D'Orbigny.

A semitransparent yellowish shell, encircled with three conspicuous chestnut lines, of which the middle one is on the periphery of the whorls.

Species 578. (Mus. Cuming.)

HELIX ESTELLA. *Hel. testá umbilicatá, globuloso-depressá, tenui, diaphaná, irregulariter malleatá, brunneo-flavicante vel olivaceá, fasciá unicá rufo-brunneá ornatá; spirá brevi, apice obtusá, brunneá; anfractibus quatuor, convexis, ultimo anticè deflexo; aperturá lunato-subcirculari; peristomate reflexo, albo, margine columellari dilatato, appresso, umbilicum fere occultante.*

THE ESTELLA HELIX. Shell umbilicated, globularly depressed, thin, diaphanous, irregularly indented, brownish-yellow or olive, ornamented with a single red-brown band; spire short, obtuse at the apex; whorls four, convex, the last deflected in front; aperture lunately circular; lip reflected, white, columellar margin dilated, appressed, almost concealing the umbilicus.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 241. pl. 25. f. 5-8.

*Hab.* Bolivia; D'Orbigny.

The surface of this species is peculiarly closely indented throughout.

Species 579. (Mus. Cuming.)

HELIX GRIFFITHI. *Hel. testá umbilicatá, globoso-depressá, solidiusculá, lævigatá, supernè leviter striatulá,*

*olivaceo-fuscá, corneá; spirá breviter elevatá, conoideá; anfractibus sex, convexiusculis, ultimo ad suturam castaneo-marginato, ventroso; umbilico mediocri, pervio; aperturá vir obliquá, amplá, rotundato-lunari, intus iridescente; peristomate simplici, acuto, marginibus callo tenuissimo junctis.*

GRIFFITH'S HELIX. Shell umbilicated, globosely depressed, rather solid, smooth, finely striated at the upper part, olive-brown, horny; spire a little raised, conoid; whorls six, rather convex, the last ventricose and edged with chestnut at the suture; umbilicus middling, open; aperture a little oblique, large, rotundately lunar, iridescent within; lip simple, sharp, margins joined by a very thin callosity.

PFEIFFER, Pro. Zool. Soc. 1845, p. 127.

*Hab.* —?

A dark horny species of solid growth, convoluted much after the manner of a *Cyclostoma*.

Species 580. (Mus. Cuming.)

HELIX STROBILUS. *Hel. testá imperforatá, conico-globosá, obliquè striatá, nitidá, nigricante-castancá, interdum cingulo lato fusco circumdatá, circa columellam areá flavá; anfractibus quinque ad sex, convexis, ultimo basi planulato, anticè deflexo; aperturá lunato-ovali; columellá lutá, albá, intrante, excavatá; peristomate albo, reflexo, margine columellari declivi.*

THE PINE-APPLE HELIX. Shell imperforated, conically globose, obliquely striated, shining, dark chestnut, sometimes encircled with a broad brown band, columellar area yellowish; whorls five to six, convex, the last flattened at the base, deflected in front; aperture lunar-oval; columella broad, white, entering, excavated; lip white, reflected, columellar margin slanting.

FERUSSAC, Hist. Moll. pl. 103. f. 1.

An eadem var. *Helix mamilla*, Lea.

*Hab.* Guatemala.

A very dark reddish-chestnut shell of solid growth, concavely hollowed about the columella.







581.



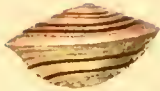
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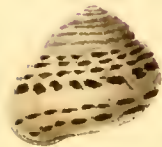
585<sup>a</sup>.



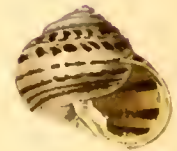
585<sup>b</sup>.



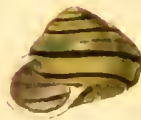
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587<sup>a</sup>.



587<sup>b</sup>.



588.

# HELIX.

PLATE CV.

Species 581. (Mus. Cuming.)

**HELIX CURVILABRUM.** *Hel. testâ umbilicatâ, conicâ, basi acutè carinatâ, lævi, flavicante, prope suturam cingulo lato rufo-castaneo ornatâ, basi planiusculâ, omnino castaneâ; anfractibus quinque ad sex, planatis; apertura subangulatâ, depressâ, obliquâ, margine superiore dilatato, inflexo; peristomate incrassato.*

**THE CURVED-LIP HELIX.** Shell umbilicated; conical, sharply keeled at the base, smooth, yellowish, ornamented with a broad reddish-chestnut belt near the suture, rather flat and chestnut-coloured at the base; whorls five to six, flattened; aperture somewhat angular, depressed, oblique, upper margin dilated, inflected; lip thickened.

ADAMS and REEVE, *Zool. Voy. Samarang*, Moll. p. 59. pl. 14. f. 9 a, b.

*Hab.* Philippine Islands.

A flat conical shell, conspicuously umbilicated, with the upper lip peculiarly curved at the edge. The base is of a dark reddish-chestnut, the spire yellowish, encircled by a chestnut belt next the suture.

Species 582. (Mus. Belcher.)

**HELIX TROPIDOPHORA.** *Hel. testâ imperforatâ, subdiscoideâ, acutè et fortiter carinatâ, brunneâ, striis minutis confertis reticulatâ; anfractibus quinque, convexiusculis; apertura lunato-transversâ, angulatâ; peristomate simplici, acuto.*

**THE KEEL-BEARING HELIX.** Shell imperforated, somewhat discoid, sharply and prominently keeled, brown, reticulated with close-set minute striæ; whorls five, rather convex; aperture lunar-transverse, angled; lip simple, sharp.

ADAMS and REEVE, *Zool. Voy. Samarang*, Moll. p. 59. pl. 14. f. 14.

*Hab.* Borneo.

A comparatively thin shell, with simple lip, sharply and prominently keeled, with a shining horny base.

Species 583. (Mus. Belcher.)

**HELIX TRADITA.** *Hel. testâ latè et profundè umbilicatâ, discoideâ, olivaceâ, obliquè striatâ, striis transversis distinctis decussatâ; spirâ depressâ; anfractibus quatuor ad quinque, rotundatis; apertura lunato-rotundatâ, labro simplici, acuto.*

**THE TRADITIONAL HELIX.** Shell broadly and deeply umbilicated, discoid, olive, obliquely striated, decussated with distinct transverse striæ; spire depressed, whorls four to five, rounded; aperture broadly rounded, lip simple, sharp.

*Helix obscurata*, Adams and Reeve (not of Porro), *Zool. Voy. Samarang*, Moll. p. 59. pl. 14. f. 18.

*Hab.* Borneo (under decayed leaves in the forests; Adams).

A small rounded species, belonging to the type represented in Pl. 97. Sp. 530-534.

Species 584. (Mus. Cuming.)

**HELIX TRIGONOSTOMA.** *Hel. testâ imperforatâ, Trochiformi, tenui, obliquè striatâ, lineis concentricis impressis notatâ, albâ, fasciis superuè linearibus, basi latioribus, fusco-violaceis ornatâ; spirâ brevè conicâ; anfractibus quatuor ad quinque, planatis, ultimo spiram superante, obsolete angulatis; columella brevis, callosâ; apertura subtriangulari; peristomate simplici, margine supero parvè expanso, columellari appresso, reflexo.*

**THE TRIANGULAR-MOUTH HELIX.** Shell imperforated, Trochus-shaped, thin, obliquely finely striated, marked with some concentric impressed lines, white, ornamented with brown-violet bands, which on the upper part of the shell are linear, on the lower broader; spire broadly conical; whorls four to five, rather flat the last exceeding the spire, obsolete angled; columella short, callous; aperture somewhat triangular; lip simple, upper margin but little expanded, columellar margin appressed, reflected.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 41.

*Hab.* Vera Cruz, Honduras.

A characteristic milk-white shell encircled with brown-violet lines about the spire, and with distinct bands at the base.

Species 585. (Mus. Belcher.)

**HELIX CALLIOSTOMA.** *Hel. testâ latè et profundè umbilicatâ, conicâ, acutè carinatâ, superuè planatis, obliquè striatâ, striis interruptis, lineis concentricis impressis decussatâ, albâ, cingulis angustis rufo-castaneis, centibus circa orbitâ; anfractibus quatuor ad quinque, planatis, ultimo infra suturem superante, basi con-*

*vexo, reticulato-striato, rufo multifasciato; aperturā angulatā, depressā, purpureo-violascente; peristomate intus incrassato, rubicundo.*

**THE BEAUTIFUL MOUTH HELIX.** Shell with a covered umbilicus, subconical, sharply keeled, rather flat about the upper part, obliquely striated, striae interrupted, closely decussated with impressed lines, white, encircled with red-violet blotches and narrow bands; whorls four to five, rather flat, the last concave beneath the keel, convex at the base, reticulately striated and profusely red-banded; aperture angled, depressed, purple-violet; lip thickened inwardly, red.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 59. pl. 14. f. 7 a, b.

*Hab.* — ?

A solid, depressed, sharply angular species, encircled throughout with irregular reddish-violet and purple-brown linear bands, whilst the aperture is deeply stained with violet-red.

Species 586. (Mus. Beleber.)

**HELIX DECORA.** *Hel. testā imperforatā, conoideo-globosā, pallidē stramineā, epidermide spadiceā indutā, obliquē striatā; anfractibus quatuor, planiusculis, ultimo subcarinato; aperturā lunato-orbiculari, intus albā; peristomate reflexo, albo, nitente.*

**THE GRACEFUL HELIX.** Shell imperforated, conoidly globose, pale straw-colour, covered with a fawn epidermis, obliquely striated; whorls four, rather flat, the last faintly keeled; aperture lunar-orbicular, white within; lip reflected, white, shining.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 62. pl. 16. f. 7.

*Hab.* Island of Mindoro, Philippines; Adams.

A smooth solid shell of a delicate shining straw-colour, the upper portion of the shell being covered with a fawn epidermis.

Species 587. (Fig. a, b, Mus. Cuming.)

**HELIX CANESCENS.** *Hel. testā subobtectē umbilicatā, glo-*

*bosā, opaco-albā, strigis obliquis lineisque plurimis concentricis nigricantibus interruptis interdum fasciā conspicuā centrali ornatā; anfractibus quinque, ultimo rotundato-inflato; aperturā lunato-rotundatā; peristomate intus incrassato, in margine columellari calloso.*

**THE GREY HELIX.** Shell with a partially covered umbilicus, globose, opaque-white, ornamented with oblique blackish streaks and numerous interrupted lines, with sometimes a conspicuous central band; whorls five, the last rotundately inflated; aperture lunar-rounded; lip thickened within, callous at the columellar edge.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 62. pl. 16. f. 10.

*Hab.* Africa.

A globose white shell with simple lip, variously streaked and linear-banded in an interrupted manner with rusty black.

Species 588. (Mus. Cuming.)

**HELIX BATANICA.** *Hel. testā angustē umbilicatā, subglobosā, sinistrali, albidā, fasciis fusco-rubris circumdatā, epidermide olivaceo-luteā indutā; anfractibus quinque, convexiusculis, transversim obliquē striatis, ultimo rotundato; aperturā transversē lunari; peristomate incrassato, subreflexo.*

**THE BATAN HELIX.** Shell narrowly umbilicated, somewhat globose, sinistral, whitish, encircled with brown-red bands, and covered with an olive-yellow epidermis; whorls five, rather convex, transversely obliquely striated, the last rounded; aperture transversely lunar; lip thickened, slightly reflected.

ADAMS and REEVE, Zool. Voy. Samarang, Moll. p. 60. pl. 15. f. 5.

*Hab.* Island of Batan, Bashee Group (under weeds and low plants on the ground); Adams.

Several specimens of this rare species were collected at the above-mentioned locality during the voyage of the Samarang, all distinctly characterized, with little or no variation of colour or marking.





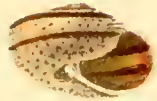
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590<sup>a</sup>



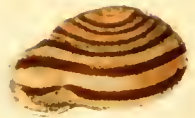
590<sup>b</sup>



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592<sup>a</sup>



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591<sup>b</sup>



593<sup>a</sup>



593<sup>b</sup>



594



# HELIX.

PLATE CVI.

Species 589. (Mus. Cuming.)

**HELIX PILEIFORMIS.** *Hel. testâ umbilicatâ, pyramidalitrochiformi, tenui, striatâ, fragili, olivaceo-fuscâ; spirâ elatâ, conicâ, acutâ; anfractibus septem, planatis, ultimo carinato, basi convexiusculo; aperturâ subquadrangulâri; peristomate simplici, marginibus callo tenui junctis, dextro et basali expansis, columellari dilatato, reflexo, umbilicum fere occultante.*

**THE CAP-SHAPED HELIX.** Shell umbilicated, pyramidally Trochus-shaped, thin, striated, fragile, olive-brown; spire raised, conical, sharp; whorls seven, flattened, the last keeled, rather convex; aperture somewhat square; lip simple, margins joined by a thin callosity, right and basal margins expanded, columellar dilated, reflected, nearly concealing the umbilicus.

MORICAND, Mémoires Nat. Hist. Soc. Geneva, vol. vii. part 2. p. 420. pl. 2. f. 2.

*Hab.* Brazil; Moricand.

A delicate pyramidal shell of horny texture, participating in the generic characters of *Bulinus*.

Species 590. (Fig. a, b, Mus. Cuming.)

**HELIX SULPHUROSA.** *Hel. testâ imperforatâ, subglobo-sâ, inflatâ, lævigatâ, sulphureâ; spirâ parvâ, abbreviatâ; suturis rubidis; anfractibus quatuor, convexis; aperturâ lunari-ovali, labro simplici, intus subincrassato.*

**THE BRIMSTONE-COLOURED HELIX.** Shell imperforated, somewhat globose, inflated, smooth, brimstone-coloured; spire small, short; sutures ruddy; whorls four, convex; aperture lunar-oval, lip simple, thickened inwardly.

MORELET, MSS. (Mus. Cuming.)

*Hab.* — ?

It is extremely doubtful whether this is distinct from *H. picta*. It varies a little from the ordinary form of that species, and Dr. Pfeiffer has confirmed the view taken of it by M. Morelet.

Species 591. (Fig. a, b, Mus. Cuming.)

**HELIX MENKEANA.** *Hel. testâ umbilicatâ, depressâ, subtus convexiore, tenuiusculâ, lævi, albâ, fasciis fuscis, supremâ latissimâ, punctisque promiscuis ornâtâ, epi-*

*dermide pallidè corneâ diaphanâ induta; spirâ depressâ; anfractibus quatuor, viz convexiusculis, celeriter accrescentibus; aperturâ subverticali, lunato-ovali, peristomate simplici, acuto, margine columellari supernè per dilatato, reflexo.*

**MENKE'S HELIX.** Shell umbilicated, depressed, convex beneath, rather thin, smooth, white, ornamented with three to four brown bands, the uppermost of which is the broadest, and with promiscuous dots, and covered with a pale horny transparent epidermis, spire depressed; whorls four, rather convex, increasing rapidly; aperture subvertical, lunar-oval; lip simple, sharp, columellar margin much dilated at the upper part, reflected.

PFEIFFER, Symboke, vol. ii. p. 33.

*Hab.* Cape of Good Hope; Krauss.

Peculiarly promiscuously dotted throughout in a manner resembling the appearance of fly-spots.

Species 592. (Fig. a, b, Mus. Cuming.)

**HELIX TRIZONALIS.** *Hel. testâ umbilicatâ, crassiusculâ, orbiculato-convexâ, subglobo-sâ, eleganter sulcato-plicatâ, pallidè lutescente, zonis tribus vividè castaneis cingulatâ, basi immaculatâ; anfractibus quatuor, convexis, ultimo pone labrum peculiariter scrobiculato, aperturâ obliquè ovatâ, intus bidentatâ, dente altero ad marginem basalem, altera in fauce; peristomate expanso, reflexo, ad columellam appresso-dilatato, umbilicum fere tegente.*

**THE THREE-ZONED HELIX.** Shell umbilicated, rather thick, orbicularly convex, subglobose, elegantly finely plicated and grooved, pale yellow, encircled with three bright chestnut bands, base unspotted; whorls four, convex, the last peculiarly furrowed behind the lip; aperture obliquely ovate, two-toothed within, one tooth on the basal margin, the other in the throat of the aperture; lip expanded, reflected, appressly dilated at the columella, almost covering the umbilicus.

GRATELOUP, Act. Soc. Linn. de Bordeaux, vol. xi. p. 401. pl. 1. f. 8.

*Hab.* Cuba.

A shell of solid growth, approximating to the *H. sinuata* form of Jamaica, but nevertheless distinct from it both specifically and typically.



Species 593. (Mus. Cuming.)

HELIX KUSTERI. *Hel. testā subumbilicatā, orbiculato-convexā, solidā, striatā, carinatā, castaneā, apice fulvā; spirā parum elevatā, obtusā; suturā marginatā; anfractibus sex ad septem, convexiusculis, ultimo anticè non descendente, basi vix convexo; aperturā depressā, lunato-triangulari; peristomate recto, margine supero simplici, antrorsum arcuato, basali strictiusculo, calloso, incrassato, columellari brevissimo.*

KUSTER'S HELIX. Shell slightly umbilicated, orbicularly convex, solid, striated, keeled, chestnut, fulvous at the apex; spire but little raised, obtuse; suture margined; whorls six to seven, rather convex, the last not descending in front, slightly convex at the base; aperture depressed, lunar-triangular; lip straight, upper margin simple, arched in front, basal margin rather drawn out, callous, thickened, columellar margin very short.

PFEIFFER, *Zeitschrift für Malac.* 1845, p. 153.

*Hab.* Tahiti.

A dark solid shell, nearly allied in form and general character to *H. curvilabrum*.

Species 594. (Mus. Cuming.)

HELIX DILUTA. *Hel. testā umbilicatā, depressā, orbiculari, tenui, pellucidā, flavo-corneā, fasciis ornatā, mediā saturatè rufā, superā et inferā latioribus dilutis; anfractibus quatuor, planiusculis; umbilico angusto, pervio; aperturā perobliquā, lunari; peristomate simplici, margine columellari expanso, carneo.*

THE WASHED HELIX. Shell umbilicated, depressed, orbicular, thin, pellucid, yellowish-horny, ornamented with three bands, the middle one dark red, the upper and lower ones fading into the ground-colour of the shell; whorls four, rather flat; umbilicus narrow, open; aperture very oblique, lunar; lip simple, columellar margin expanded, flesh-tinged.

PFEIFFER, *Symbolæ*, vol. ii. p. 27.

*Hab.* Cusco, Peru.

Banded with dark chestnut on a thin greenish ground.





595.



596.<sup>a</sup>



596.<sup>b</sup>



597.



598.<sup>a</sup>



598.<sup>b</sup>



599.



600.



601.



602.

# HELIX.

PLATE CVII.

Species 595. (Mus. Cuming.)

**HELIX COACTILIATA.** *Hel. testá latè umbilicatá, depressá, subdiscoideá, tenui, sub lente minutissimè granulato-striatá, haud nitente, pallidè corneá, fasciis angustis rufis ornatá; spirá vix elevatá; anfractibus quatuor, convexis, ultimo anticè subdeflexo, basi vix latiore; aperturá perobliquá, subcirculari; peristomate simplici, marginibus fere contiguís, supéro recto, basali breviter reflexo.*

**THE FELTED HELIX.** Shell broadly umbilicated, depressed, somewhat discoid, thin, very minutely granularly striated beneath the lens, not shining, pale horny, ornamented with three to four narrow red bands: spire but little raised; whorls four, convex, the last a little deflected in front, scarcely broader at the base; aperture very oblique, nearly circular; lip simple, margins nearly contiguous, upper margin straight, basal shortly reflected.

FERUSSAC, Hist. Moll. (Deshayes' edit.) p. 18. pl. 72. f. 1-5.

*Helix Nystiana*, Pfeiffer.

*Hab.* Central America.

A nearly discoid light horny shell, encircled with three distant red lines.

Species 596. (Fig. a, b, Mus. Cuming.)

**HELIX ORNATELLA.** *Hel. testá imperforatá, orbiculato-convexiusculá, leviter striatulá, nitidissimá, fulvescenteluteá, unicolore vel fasciis saturatè fulvis et castaneis multimodè ornatá et radiatá; spirá convexiusculá, obtusá; anfractibus tribus ad quatuor, vix convexiusculis, ultimo basi planiore; aperturá rotundato-lunari; peristomate simplici, acuto, margine columellari subobliquo, dilatato, albo.*

**THE ORNAMENTED HELIX.** Shell imperforated, orbicularly rather convex, finely striated, very shining, fulvous-yellow, of one colour, or variously ornamented and rayed with dark fulvous or chestnut bands; spire rather convex, obtuse; whorls three to four, slightly convex, the last flatter at the base; aperture rotundately lunar; lip simple, sharp, columellar margin rather oblique, dilated, white.

PFEIFFER, Symbolæ, vol. ii. p. 36.

*Hab.* Pitcairn's Island, and island of Opara; Cuming.

A shining horny species, sometimes pale yellow, sometimes prettily painted with dark bands.

Species 597. (Mus. Cuming.)

**HELIX HELICOIDEA.** *Hel. testá latissimè umbilicatá, depressissimá, discoideá, lævigatá, luteo-corneá; spirá planissimá, medio subimpressá; anfractibus novem, convexiusculis, utrinque æqualibus; aperturá obliquè semiovali, sinuosá; peristomate breviter reflexo, marginibus callo valido dentiformi triquetro junctis, supéro medio impresso, intus unidentato.*

**THE HELICOID HELIX.** Shell very broadly umbilicated, very depressed, discoid, smooth, yellowish-horny; spire very flat, slightly impressed in the middle; whorls nine, rather convex, equal on both sides, aperture oblique, semioval, sinuous; lip shortly reflected, margins joined by a strong triangularly-shaped tooth-like callosity, upper margin impressed in the middle, toothed within.

D'ORBIGNY, Voyage dans l'Amér. Mérid. p. 237. pl. 23. f. 1-4.

*Hab.* Guayaquil.

A flattened closely convoluted shell, completely discoid, after the manner of a *Planorbis*.

Species 598. (Fig. a, b, Mus. Cuming.)

**HELIX THAIS.** *Hel. testá imperforatá, depresso-conicá, acutè carinatá, tenui, corneá, saturatè fuscá, supernè striis concentricis et obliquis subtiliter decussatá, infernè lævigatá, nitente; anfractibus sex, parvis, aperturá trigono-lunari; labro simplici, ad columellam subexcavato.*

**THE THAIS HELIX.** Shell imperforated, depressly conical, sharply keeled, thin, horny, dark brown, finely decussated about the upper part with oblique and concentric striae, smooth and shining at the lower. whorls six, flattened; aperture triangularly lunar, lip simple, slightly excavated about the columella.

JACQUINOT, Zeitschrift für Malac. 1849 p. 65.

*Hab.* Marquesas Islands.

A thin dark brown horny shell of simple character, decussately striated above, smooth and shining beneath.

Species 599. (Mus. Cuming.)

HELIX HELICYCLOIDES. *Hel. testâ latissimè umbilicatâ, discoideâ, supra concavo-planâ, infra excavatâ, griseo-flavicante, subdiaphanâ; anfractibus decem, supernè planatis, deinde rotundatis; aperturâ parvâ, semilunari; labro simplici, subincrassato, albo.*

THE HELICYCLOID HELIX. Shell very broadly umbilicated, discoid, concavely flattened above, excavated beneath, greyish-yellow, subdiaphanous; whorls ten, flattened at the upper part, then rounded; aperture small, semilunar; lip simple, rather thickened, white.

D'ORBIGNY, Voyage dans l'Amér. Mérid. p. 246. pl. 28. f. 1-4.

*Hab.* Bolivia.

A very depressed shell of discoid growth, convoluted on a plane with the spire after the manner of the Brazilian *H. polygyrata*.

Species 600. (Mus. Cuming.)

HELIX WOODIANA. *Hel. testâ umbilicatâ, subdepresso-orbiculari, corneâ, pellucidâ, lævigatâ, nitente; anfractibus sex, convexis, ad suturam submarginatis, ultimo obsolete obtusè carinato; aperturâ transversè lunari; labro simplici.*

WOOD'S HELIX. Shell umbilicated, somewhat depressed, orbicular, horny, transparent, smooth, shining; whorls six, convex, slightly margined at the suture, last whorl obsoletely obtusely keeled; aperture transversely lunar; lip simple.

PFEIFFER (not of Lea), Pro. Zool. Soc. 1851.

*Hab.* Ceylon; Layard.

A fine horny shell of somewhat glassy texture, with a simple lip and small umbilicus.

Fig. 601. (Mus. Cuming.)

This little shell proves to be a variety of *H. tropidophora*, represented at Pl. CVII. Sp. 583.

Species 602. (Mus. Cuming.)

HELIX ORBICULA. *Hel. testâ latè umbilicatâ, subdiscovteâ, subtiliter striatâ, nitidâ, diaphanâ, griseo-flavicante; spirâ vix elevatâ, obtusissimâ; anfractibus septem ad octo, convexiusculis, ultimo basi vix latiore, non descendente; umbilico latissimo, tertiam anfractuum latitudinis partem monstrante; aperturâ vix obliquâ, rotundato-lunari; peristomate tenui, acuto.*

THE LITTLE ORB HELIX. Shell broadly umbilicated, nearly discoid, finely striated, shining, diaphanous, greyish-yellow; spire but little raised, very obtuse; whorls seven to eight, rather convex, the last scarcely broader at the base, not descending; umbilicus very broad, showing one-third part of the width of the whorls; aperture a little oblique, rotundately lunar; lip thin, sharp.

D'ORBIGNY, Voyage dans l'Amér. Mérid. p. 250. pl. 27. f. 16-19.

*Hab.* Bolivia.

Resembling the other Bolivian species figured above it, but of less discoid growth.







603.



604.



605.



605.



606.<sup>a</sup>



606.<sup>b</sup>



607.



608.



609.



610.

# HELIX.

PLATE CVIII.

Species 603. (Mus. Cuming.)

**HELIX APPROXIMATA.** *Hel. testâ umbilicatâ, abbreviato-conicâ, carinatâ, fuscâ, cinereo-lutescente variegatâ; anfractibus sex, subconvexis, basi depressis, ultimo margine acuto, subtus convexo, radiatim tenuiter striolato, striis concentricis signato; spirâ conico-depressâ; umbilico profundo; aperturâ obliquè quadratâ, incrassatâ, antèrius acutâ, supernè productâ exteriusque compressâ.*

**THE ALLIED HELIX.** Shell umbilicated, shortly conical, keeled, brown, variegated with ash-yellow; whorls six, slightly convex, depressed at the base, edge of the last whorl sharp, convex beneath, radiately finely striated, marked with concentric striae; spire conically depressed; umbilicus deep; aperture obliquely quadrate, thickened, sharp in front, produced at the upper part, and compressed outwardly.

LE GUILLOU, *Revue Zool. Soc. Cuv.* 1842. p. 139.

*Hab.* Island of Ternate.

The variegated ash-yellow colouring of this shell arises from the promiseous sprinkling of a thin epidermis upon a dark-brown band next the keel.

Species 604. (Mus. Cuming.)

**HELIX BRARDIANA.** *Hel. testâ umbilicatâ, subgloboso-turbinatâ, tenui, corneo-fuscâ, pellucidâ, obliquè creberrimè plicato-striatâ; anfractibus quinque, convexis, ultimo obtusè carinatâ, tumidiusculo; aperturâ lunato-circulâri; peristomate tenui, subexpanso.*

**BRARD'S HELIX.** Shell umbilicated, somewhat globosely turbinated, thin, horny-brown, transparent, obliquely very closely plicately striated; whorls five, convex, the last obtusely keeled, rather swollen; aperture lunately circular; lip thin, a little expanded.

PFEIFFER, *Pro. Zool. Soc.* 1851.

*Hab.* Island of Bourbon.

A transparent brown-horny shell, covered in parts with a light opake freckled epidermis.

Species 605. (Mus. Cuming.)

**HELIX ZOLLINGERI.** *Hel. testâ subampliter umbilicatâ, depressissimo-conicâ, subtus medio excavatâ, lævigatâ, saturatè rufo-brunneâ; spirâ obtusâ; anfractibus quin-*

*que, plano-convexis, tenuimarginatis, ultimo acutissimo carinato; aperturâ depresso-securiformi, labro simplici.*

**ZOLLINGER'S HELIX.** Shell rather largely umbilicated, very depressly conical, excavated in the middle beneath, smooth, dark red-brown; spire chus-whorls five, flatly convex, thinly margined, last whorl very sharply keeled; aperture depressly lunet-shaped, lip thin.

PFEIFFER, *Pro. Zool. Soc.* 1851.

*Hab.* Java.

A flatly compressed, largely umbilicated shell, of a peculiar dark red-brown colour.

Species 606. (Fig. a, b, Mus. Cuming.)

**HELIX TROCHIFORMIS.** *Hel. testâ umbilicatâ, subgloboso-trochiformi, apice obtusâ, basi planâ, acutè carinatâ, obliquè ruguloso-striatâ, saturatè rufâ vel fuscâ, lineâ nigricante-fusciatâ; anfractibus sex, supra carinâ prominentem stramineam vel opaco-albis concentricis; umbilico angusto, percio; aperturâ irregularè rhombâ; peristomate supernè simplici, recto, a circumsum dilatato, margine columbellari rectè descendente subdilatato, basali reflexiusculo.*

**THE TROCHUS-SHAPED HELIX.** Shell umbilicated, somewhat Trochus-shaped, obtuse at the apex, flat at the base, sharply keeled, obliquely rugulose striated, dark red or brownish-yellow, banded with brown-black whorls six, rather convex above the keel, which is straw-coloured or opake-white; umbilicus narrow open; aperture irregularly rhomboid; lip simple and straight at the upper part, dilated in front, columellar margin descending straightly, somewhat dilated basal margin a little reflected.

FERUSSAC, *Prodrome*, p. 301.

*Carocolla circumdata*, Muhlfeldt.

*Hab.* Islands of Tahiti and Opara.

The colour and marking of this species is extremely variable. The specimen represented at Fig. 606 a is encircled with a broad brown-black band, against which the fine keel is opake-white. That at Fig. 606 b is simply encircled with a red line upon a straw-coloured ground.

## Species 607. (Mus. Cuming.)

HELIX SWAINSONI. *Hel. testá umbilicatá, depressissimá, tenui, pellucidá, subarcuatum ruguloso-striatá, virescente-fultá, lineis rufis ornatá; anfractibus quinque, depressis, medio convexiusculis, carinalis, cariná acutá; umbilico mediocri, profundo; aperturá perobliquá, depressè securiformi; peristomale simplici, recto, margine columellari subincrassato.*

SWAINSON'S HELIX. Shell umbilicated, very depressed on both sides, thin, pellucid, somewhat arcuately roughly striated, greenish-yellow, ornamented with two red lines; whorls five, depressed, rather convex in the middle, keeled, keel sharp; umbilicus middling, deep; aperture very deep, depressly hatchet-shaped; lip simple, straight, columellar margin rather thickened.

PFEIFFER, Pro. Zool. Soc. 1846, p. 28.

*Hab.* Tahiti.

Very closely allied to *H. Zollingeri* figured above it. Of the two red lines mentioned in the description, one is above the keel and the other below it, but they are not always present, and the shell is sometimes partially covered with a light freckled epidermis.

## Species 608. (Fig. a, b, Mus. Cuming.)

HELIX EMILIANA. *Hel. testá minutè umbilicatá, depresso-*

*orbiculari, olivaceo-corneá, basi convexá, lævi, tumidulá, supernè creberrimè costulato-striatá, striis peculiariter granulatis; spirá apicem versus elevatá; anfractibus sex, convexis, ultimo aculé carinato; aperturá transversè ovatá, labro simplici.*

EMIL'S HELIX. Shell minutely umbilicated, depressly orbicular, olive-horny, convex at the base, smooth and rather swollen, very closely rib-like striated at the upper part, ribs peculiarly granuled; spire raised towards the apex; whorls six, convex, the last sharply keeled; aperture transversely ovate, lip simple.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Ceylon; Layard.

A thin horny shell, characterized by a very remarkable fine grain-ribbed sculpture on the upper surface, while all below the keel is smooth and polished.

## Fig. 609. (Mus. Cuning.)

The shell here figured appears to be identical with *H. Swainsoni* figured above it, and both answer to the *H. Eurydice* described in the same year by Dr. Gould, among the new shells collected by the United States Exploring Expedition. *H. Zollingeri* may prove to be only another variety of the same.





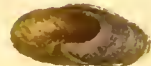
611



611<sup>a</sup>



611<sup>b</sup>



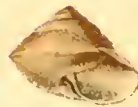
612.



613<sup>a</sup>



613<sup>b</sup>



614.



615<sup>a</sup>



615<sup>b</sup>



616.

# HELIX.

PLATE CIX.

Species 610. (Mus. Cuming.)

HELIX SANDVICENSIS. *Hel. testâ umbilicatâ, discoideâ, striatâ, nitidulâ, luteo-corneâ; spirâ planâ, suturâ impressâ; anfractibus quinque ad sex, lentè accrescentibus, ultimo depresso, basi vix convexiore; umbilico lato, dimidium fere diametri occupante; aperturâ parum obliquâ, lunari-rotundatâ; peristomate simplici, recto, tenui, marginibus conniventibus.*

THE SANDWICH HELIX. Shell umbilicated, discoid, striated, shining, yellowish-horny; spire flat, suture impressed; whorls five to six, increasing slowly, the last depressed, scarcely broader at the base; umbilicus broad, occupying nearly half the diameter of the shell; aperture a little oblique, lunar-rounded; lip simple, straight, thin, margins approximating.

PFEIFFER, Pro. Zool. Soc. 1849, p. 128.

*Hab.* Sandwich Islands.

An opaque horny shell of nearly discoid growth.

Species 611. (Fig. a, b, Mus. Cuming.)

HELIX TIARA. *Hel. testâ latè et profundè umbilicatâ, depressè turbinalâ, subrudè obliquè striatâ, flavicante, strigis fulguratis rufo-brunneis ornatâ; anfractibus quinque ad sex, convexis; aperturâ lunato-circulari, labro simplici, tenui.*

THE TURBAN HELIX. Shell broadly and deeply umbilicated, depressly turbinated, somewhat rudely obliquely striated, yellowish, ornamented with red-brown zigzag streaks; whorls five to six, convex; aperture lunar-circular, lip simple, thin.

MIGHELS, Pro. Nat. Hist. Soc. Boston, U. S. 1845, p. 19.

*Hab.* Sandwich Islands; Mighels.

A conspicuously red-streaked shell, distinguished by a very broad and deep umbilicus.

Species 612. (Mus. Cuming.)

HELIX POWISIANA. *Hel. testâ imperforatâ, depressâ, supernè convexiusculâ, basi planiusculâ, medio impressâ, tenuissimâ, striatulâ, nitidissimâ, corneâ; anfractibus planè involutis, ultimo anticè obliquè depresso; aperturâ depressâ, lunato-oblongâ; peristomate simplici, recto, marginibus utrinque centro testæ insertis, dextro antrorsum arcuato-dilatato.*

POWIS'S HELIX. Shell imperforated, depressed, rather convex at the upper part, rather flattened at the base, impressed in the middle, very thin, finely striated, very shining, horny; whorls involuted upon the same plane, the last obliquely depressed in front; aperture depressed, lunar-oblong; lip simple, straight, margins inserted in the centre of the shell on either side, right margin arcuately dilated in front.

PFEIFFER, Mon. Helic. viv. vol. i. p. 34.

*Helix involuta*, Pfeiffer (in Pro. Zool. Soc. 1845)

*Hab.* Quenden, New Granada.

A bright transparent horny shell, in which the whorls are involuted one into the other after the manner of *Natalilus*.

Species 613. (Fig. a, b, Mus. Cuming.)

HELIX VITRINA. *Hel. testâ latè umbilicatâ, depressâ, subdiscoideâ, striatulâ, nitidissimâ, pellucidâ, corneolutescente; spirâ planâ, subexcavatâ; anfractibus quatuor, convexiusculis, rapidè accrescentibus, ultimo latè depresso, peripheriâ rotundatâ, anticè non descendente; aperturâ lunato-rotundatâ; peristomate simplici, acuto; margine supèro antrorsum arcuato, columellari vix reflexo.*

THE VITRINA HELIX. Shell broadly umbilicated, depressed, nearly discoid, finely striated, very shining, transparent, horny-yellow; spire flat, a little excavated; whorls four, rather convex, increasing rapidly, last whorl broad, depressed, rounded at the periphery, not descending in front; aperture lunar-rounded. Lip simple, sharp, upper margin arched in front, columellar margin not reflected.

WAGNER, in Spix Test. Bras. p. 25.

*Helix circumplexa*, Férussac.

*Solarium imperforatum*, Spix.

Testa junior *Helix nana*, Wagner.

*Solarium pygmarum*, Spix.

*Hab.* South Brazil.

Of thin bright transparent horny texture, convoluted in a manner nearly discoid.

Species 614. (Mus. Cuming.)

HELIX LAYARDI. *Hel. testâ ex umbilicatâ, conico-turbi-*



*natá, inflatá, sub-Trochiformi, tenui, pellucido-corneo-  
albídá, superne lineis concentricis et obliquis creberrimè  
decussatá, inferne levigatá, nitente; spirá acutá; un-  
fractibus sex, convexiusculis, ultimo carinato, basi tu-  
mido; aperturá lunari; peristomate simplici, ad colu-  
mellam tenuè dilatato et reflexo, umbilicum fere legente.*

LAYARD'S HELIX. Shell scarcely umbilicated, conically turbinated, inflated, somewhat Trochus-shaped, thin, transparent horny-white, very closely decussated on the upper part with oblique and concentric lines, smooth and shining upon the lower; spire sharp; whorls six, rather convex, the last keeled, swollen at the base; aperture lunar; lip simple, thinly dilated and reflected at the columella, almost covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Ceylon; Layard.

A species of very characteristic form and sculpture, extremely thin and transparent.

Species 615. (Fig. *a, b*, Mus. Cuming.)

HELIX ZONITES. *Hel. testá umbilicatá, depressá, tenui, diaphaná, confertim costulato-striatá, lutescente-corneá, fasciá unicá aut pluribus castaneis, plerumque latiusculis, ornatá; anfractibus sex, superne planiusculis, ultimo ad peripheriam rotundato, basi leviore, nitente; umbilico parvo; aperturá obliquè lunari; peristomate simplici.*

THE ZONITES HELIX. Shell umbilicated, depressed, thin, diaphanous, closely rib-like striated, yellowish-horny, ornamented with one or more chestnut bands, mostly rather broad; whorls six, rather flat at the upper

part, the last rounded at the periphery, smoother and shining at the base; umbilicus small; aperture obliquely-lunar; lip simple.

PFEIFFER, Pro. Zool. Soc. 1845, p. 127.

*Hab.* Vera Cruz.

The specimen described by Dr. Pfeiffer was encircled by only a single chestnut band next the suture; that here described and figured has three broad bands.

Species 616. (Mus. Cuming.)

HELIX RECTANGULA. *Hel. testá imperforatá, orbiculato-conicá, solidá, striatulá, griseo-stramineá, fasciis luteis castaneis ornatá, lineá suturali areáque basali castaneis; spirá elevatá, obtusá; unfractibus sex ad septem, convexiusculis, ultimo subrectangulè carinato, basi planiusculo, medio subexcavato; aperturá depressá, subtrapeziá, margine columellari incrassato, calloso-subindentedato.*

THE RIGHT-ANGLED HELIX. Shell imperforated, orbicularly conical, solid, finely striated, greyish straw-colour, ornamented with chestnut bands, sutural line and basal area chestnut; spire elevated, obtuse; whorls six to seven, rather convex, the last keeled at a right angle, base rather flat, slightly excavated in the middle; aperture depressed, subtrapezoid, columellar margin thickened, with a slightly developed callous tooth.

PFEIFFER, Pro. Zool. Soc. 1845, p. 140.

*Hab.* Marquesas Islands.

A solid Trochus-shaped shell of the form of an abrupt cone.





617.



618.



619.



620.



621.<sup>a</sup>



621.



622.



623.



624.



625.

# HELIX.

PLATE CX.

Species 617. (Mus. Cuming.)

**HELIX SPIRULATA.** *Hel. testá imperforatá, depressá, lenticulari, subtilissimè striatá, lineis elevatis concentricis utrinque notatá, tenui, fulvá, carinatá, cariná compressá, subexsertá; spirá parum elevatá; anfractibus quinque, lentè accrescentibus, supra carinam convexiusculis, ultimo basi vix convexo, medio impresso; aperturá depressá, subrhomboideá; peristomate simplici, acuto.*

**THE SPIRULATED HELIX.** Shell imperforated, depressed, lenticular, very finely striated, marked on both sides with raised concentric lines, thin, fulvous, keeled, keel compressed, a little exserted; spire but little raised; whorls five, increasing slowly, rather convex above the keel, last whorl slightly convex at the base, impressed in the middle; aperture depressed, subrhomboid; lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1845, p. 129.

*Hab.* Real Llejos, Central America (on the bark of trees); Cuming.

A light reddish-fulvous shell, characterized above and beneath by concentric circles of raised lines.

Species 618. (Mus. Cuming.)

**HELIX RADIANS.** *Hel. testá imperforatá, depressá, tenui, vividè corneá, translucidá; anfractibus quatuor, levibus, plano-convexis, ad suturam subtilissimè marginalis, ultimo obtusè carinato; aperturá lunari; labro simplici, acuto.*

**THE GLITTERING HELIX.** Shell imperforated, depressed, thin, bright horny, transparent; whorls four, smooth, flatly convex, very finely margined at the suture, last whorl obtusely keeled; aperture lunar; lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Tahiti.

An extremely transparent bright horny species of simple character.

Species 619. (Mus. Cuming.)

**HELIX QUADRATA.** *Hel. testá umbilicatá, depressá, sub lente confertissimè striatá, tenui, diaphaná, stramineá, rufo-flammulatá et fasciatá; spirá depressá; anfrac-*

*tibus quinque, convexiusculis, celeriter accrescentibus umbilico majusculo, perspectivo; aperturá lunato-ovali; peristomate simplici, aculo, marginibus conniventibus, columellari subdilato.*

**THE QUADRATE HELIX.** Shell umbilicated, depressed, very closely striated beneath the lens, thin, diaphanous, straw-coloured, red-flamed and banded; spire depressed; whorls five, rather convex, increasing rapidly; umbilicus rather large, perspective; aperture lunar-oval; lip simple, sharp, margins approximating, columellar margin slightly dilated.

FERUSSAC, Hist. Moll. (Deshayes' edit.) p. 20. pl. 69 C. f. 11, 12.

*Helix Kingi*, Pfeiffer.

*Hab.* Juan Fernandez; Cuming.

A small *Cyclostoma*-like shell encircled with a red band, above which the shell is painted with red flames

Species 620. (Mus. Cuming.)

**HELIX CHRYSOMELA.** *Hel. testá imperforatá, depresso-globosá, rugoso-matteatá, albá; anfractibus quinque, planiusculis, ultimo subangulato, basi planiusculo, utrici breviter deflexo; aperturá perobliquá, truncato-ovali, peristomate simplici, obtuso, intus aurantio-umbilicatis, marginibus callo aurantio, nitido, introrsum diffusis, basali dilatato, planulato.*

**THE GOLDEN-LIPPED HELIX.** Shell imperforated, depressly globose, roughly indented, white, whorls five, rather flat, the last slightly angled, rather flat at the base, shortly deflected in front; aperture very oblique, truncately oval; lip simple, obtuse, edged inwardly with orange, margins joined by a shining orange callosity which is diffused inwardly, basal margin dilated, rather flat.

PFEIFFER, Symbolæ, vol. iii. p. 72

*Hab.* Brazil.

An opaque white indented shell, with a bright orange-red mouth, very much resembling a *Helicium*.

Species 621. (Fig. a, b, Mus. Cuming.)

**HELIX GUAYAQUILENSIS.** *Hel. testá latè umbilicatá, subdiscoidéá, pallidè corneá, obliquè crebrè striatá, spirá depressá; anfractibus sex, rotundatis, aperturá lunato-circulari; labro simplici, acuto*

THE GUAYAQUIL HELIX. Shell broadly umbilicated, somewhat discoid, pale horny, obliquely closely striated; spire depressed; whorls six, rounded; aperture lunar-circular; lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1851.

Hab. Babahoya, Guayaquil.

Of a pale horny but firm texture, marked irregularly with opaque white lines and patches.

Fig. 622. (Mus. Cuming.)

This shell, originally described under the name of *Helix Powisiana*, is now referred to the larger one of the same peculiar Nautiloid growth named *H. involuta*, of which it is supposed to be the young, see Pl. CIX. Fig. 612. For Sp. 622 see Pl. CXIV.

Species 623. (Mus. Cuming.)

HELIX ORBIS. *Hel. testā imperforatā, discoideā, virentilutescente, globerrimā, nitidā, pellucidā, supra planā, subtus convexiusculā, medio impressā; suturā submarginatā; anfractibus quinque ad sex, planis, ultimo*

*penultimo vix latiore, supernè angulatō, aperturā subverticali, latā, lunari; peristomate recto, acuto, simplici.*

THE ORB HELIX. Shell imperforated, discoid, greenish-yellow, very smooth, shining, transparent, above flattened, rather convex beneath, impressed in the middle; suture faintly margined; whorls five to six, flat, the last scarcely broader than the last but one, angled at the upper part; aperture nearly vertical, broad, lunar; lip straight, sharp, simple.

*Helicopsis orbis*, Beck, Index, p. 2.

*Helix orbis*, Pfeiffer.

*Helix planulata*, Anton.

Hab. Island of Opara, Pacific Ocean; Cuming.

A flat horny species of slowly enlarging growth, not umbilicated.

Fig. 624 and 625. (Mus. Cuming.)

These two figures have been inserted accidentally. The first is *H. paludosa*, represented in Pl. LXIV. Fig. 329, and the second is *H. suturalis*, Pl. LXI. Fig. 301. For Sp. 624 and 625 see Pl. CXIV.







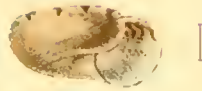
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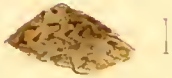
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628.



629.



630.



631.



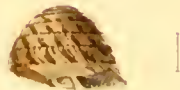
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633.



634.



635.

# HELIX.

## PLATE CXI.

Species 626. (Mus. Cuming.)

**HELIX SUBTILIS.** *Hel. testá imperforatá, depressá, tenerimá, nitidá, pallidè corneá; spirá vix exsertá; anfractibus quatuor ad quinque, planiusculis, sensim accrescentibus, ultimo basi paulo convexiore; suturá interdum rufo-marginatá; aperturá transversè lunari; peristomate simplici, acuto.*

**THE DELICATE HELIX.** Shell imperforated, depressed, very thin, shining, pale horny; spire but little exerted; whorls four to five, rather flat, increasing slowly, the last a little more convex at the base; suture sometimes edged with red; aperture transversely lunar; lip simple, sharp.

ANTON, Verz. p. 35, Chemn. Conch. Cab. (Kuster's edit.) Helix, pl. 29. f. 33-35.

*Hab.* Island of Ohetaroa, South Pacific; Cuming.

A dull shining horny species, of simple character.

Species 627. (Mus. Cuming.)

**HELIX EXÆQUATA.** *Hel. testá imperforatá, discoideá, tenui, lucidá, glabratá, corneá, ad peripheriam rotundatá, infra subplaná, in foveam centram devesá; anfractibus septem, arcuè volutis, supra planulatis, suturá marginatá, benè impressá, discretis, spiram planam efformantibus; aperturá angustá, transversá; labro simplici, portione sinistrá fere horizontali, recedente, sub-reflexá.*

**THE LEVELLED HELIX.** Shell imperforated, discoid, thin, lucid, smooth, horny, rounded at the periphery, rather flattened beneath, declining into a central pit; whorls seven, convoluted in an arched manner, rather flattened above, separated by a well-impressed suture, forming a flat spire; aperture narrow, transverse; lip simple, left portion almost horizontal, receding, a little reflected.

GOULD, Expedition Shells, f. 9.

*Hab.* Sandwich Islands.

A flattened discoid shell, rounded at the periphery.

Species 628. (Mus. Cuming.)

**HELIX BRUNNEA.** *Hel. testá imperforatá, orbiculato-convexá, nitidissimá, saturatè fulvâ, supernè punctis albis conspersá; spirá convexiusculá; anfractibus quatuor*

*ad quinque, subplanulatis, sensim accrescentibus, ultimo basi convexiusculo, medio impresso; aperturá rotundato-lunari; peristomate acuto, simplici, tenuissimo, loco umbilici subincrassato.*

**THE BROWN HELIX.** Shell imperforated, orbicularly convex, very shining, dark yellow, sprinkled about the upper part with white dots; spire rather convex, whorls four to five, rather flattened, increasing slowly, the last rather convex at the base, impressed in the middle; aperture rotundately lunar; lip sharp, simple, very thin, slightly thickened in the place of the umbilicus.

ANTON, Verz. p. 35.

*Hab.* Pitcairn's Island; Cuming.

Distinguished by its shining bright brown colour sprinkled with white dots.

Species 629. (Mus. Cuming.)

**HELIX DISSIMILIS.** *Hel. testá umbilicatá, depressa, tenui, supernè confertim plicatulá, pallidè corneo-stramineá, supernè maculis et flammis irregularibus, basi punctis rufis ornatá; spirá planá; suturá profundá, anfractibus quinque, convexis; umbilico magno, peristomate simplici, acuto.*

**THE DISSIMILAR HELIX.** Shell umbilicated, depressed, thin, closely finely plicated at the upper part, pale horny-straw, ornamented about the upper part with red spots and flames, and at the base with faint dots; spire flat; suture deep; whorls five, convex; umbilicus large, open; aperture a little oblique, rotundately lunar; lip simple, acute.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 247 pl. 26 f. 18-21.

*Helix histrio*, Müllfeldt.

*Hab.* Concepcion, Chili; D'Orbigny.

Painted in a very characteristic manner about the upper part with red-brown spots and flames.

Species 630. (Mus. Cuming.)

**HELIX LAMFLOSA.** *Hel. testá umbilicatá, lenticulari, tenui, nitidá, glabrâ, acutè carinatá, flavescente, maculis et flammis rufis ornatá; spirá subelevatá; a fr-*

*tibus septem, planis, ultimo basi inflato, ad umbilicum mediocre cylindricum angulato; aperturâ depressâ, trapeziâ, lamellis magnis duabus in pariete aperturâ, plurimis minoribus in margine columellari, quatuor in basali, unâ in supero.*

THE LAMELLOSE HELIX. Shell umbilicated, lens-shaped, thin, shining, smooth, sharply keeled, yellowish, ornamented with red spots and flames; spire slightly raised; whorls seven, flat, the last inflated at the base, angled about the umbilicus, which is middling and cylindrical; aperture depressed, trapezoid, furnished with two large lamellæ on the body-whorl, and several smaller ones, one on the columellar margin, four on the basal, and one on the upper margin.

FERUSSAC, Hist. Moll. pl. 51 A. f. 3.

Hab. Sandwich Islands.

Resembling the former species in respect of painting, but of a totally different form, being lens-shaped, with a sharp periphery, and having numerous lamellæ within the aperture.

Species 631. (Mus. Cuming.)

HELIX JACQUINOTI. *Hel. testâ umbilicatâ, depresso-conoideâ, solidulâ, acutè carinalâ, confertim arcuato-costatâ, fulvo et rufo variegatâ; anfractibus octo, angustis, subconcavis, omnibus carinatis, carinâ exsertâ, compressâ, costis decurrentibus denticulatâ, anfractu ultimo basi vix convexiusculo, radiatim striato; umbilico amplo, laminâ horizontali coarctato; aperturâ depressâ, securiformi, lamellis sex intrantibus munitâ; peristomate simplici, acuto.*

JACQUINOT'S HELIX. Shell umbilicated, depressly conoid, rather solid, sharply keeled, closely arcuately ribbed, variegated with fulvous and red; whorls eight, narrow, slightly concave, all keeled, the keel being exerted and compressed, and denticulated at the edge by the decurrent ribs, last whorl slightly convex at the base, radiately striated; umbilicus large, contracted by a horizontal lamina; aperture depressed, wedge-shaped, furnished with six entering lamellæ; lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1849, p. 128.

Hab. Tahiti and Marquesas Islands.

A prettily painted Solariiform shell, sculptured with fine ribs which run over and denticulate the periphery.

Species 632. (Mus. Cuming.)

HELIX MISELLA. *Hel. testâ imperforatâ, orbiculato-con-*

*convexiculâ, tenui, obsolete striatâ, nitidâ, pellucidâ, pallidè corneâ; anfractibus quinque ad sex, pluviusculis, ultimo carinato, basi convexiusculo, medio impresso; aperturâ subverticali, angulato-lunari; peristomate simplici, tenui, margine columellari obliquè arcuato, subincrassato.*

THE POOR HELIX. Shell imperforated, orbicularly rather convex, thin, very obsoletely finely striated, shining, transparent, pale horny; whorls five to six, rather flat, the last keeled, rather convex at the base, impressed in the middle; aperture nearly vertical, angularly lunar; lip simple, thin, columellar margin obliquely arched, rather thickened.

FERUSSAC, Voyage de Freycinet, Zool. p. 473.

Hab. Mouloua and Sandwich Islands.

A smooth bright transparent yellowish glassy shell.

Species 633. (Mus. Cuming.)

HELIX TUCKERI. *Hel. testâ umbilicatâ, depressâ, tenui, pellucidâ, obliquè striatâ, breviter et sparsim pilosâ, fusco-corneâ, rufo obsolete unicingulatâ; spirâ rix elatâ; anfractibus quatuor, pluviusculis, ultimo anticè gibbo, constricto, subitè deflexo; umbilico angusto, pervio; aperturâ perobliquâ, subcirculari; peristomate intus albido, undique breviter reflexo, marginibus approximatis.*

TUCKER'S HELIX. Shell umbilicated, depressed, thin, pellucid, obliquely striated, sparingly short-haired, brown-horny, encircled with an obsolete red line; spire but little raised; whorls four, rather flat, the last gibbous in front, constricted, suddenly deflected; umbilicus narrow, open; aperture very oblique, nearly circular; lip whitish within, shortly reflected throughout, with the margins approximated.

PFEIFFER, Symbole, vol. iii. p. 77.

Hab. Hardy's Island, Pacific Ocean.

Encircled with a single reddish line just above the periphery, beneath which it is whitish.

Species 634. (Mus. Cuming.)

HELIX CALLIFERA. *Hel. testâ imperforatâ, subdepresso-orbiculari, infra convexiore, levigatâ, pellucidâ, nitidâ, vividè corneâ; spirâ obtusâ; anfractibus quatuor ad quinque, convexis, ad suturam tenuimarginatis; aperturâ lunari; peristomate simplici, prope columellam calloso.*

THE CALLOUS HELIX. Shell imperforated, somewhat de-

pressly orbicular, more convex beneath, smooth, transparent, shining, bright horny; spire obtuse; whorls four to five, convex, finely margined at the suture; aperture lunar; lip simple, callous near the columella.

PREIFFER, Zeitschrift für Malac. 1850. p. 68.

*Hab.* Marquesas Islands.

A smooth thin transparent bright horny shell, with the lip a little callous next the columella.

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Species 635. (Mus. Cuming.)

HELIX BURSATELLA. *Hel. testâ umbilicatâ, conicâ vel planulatâ, pervariabili, supra maculis fuscis et albidis alternantibus flexuosis tessellatâ, infra cinereo-albidâ vel flammulis fuscis flexuosis radiatâ, costis numerosissimis oculis radiantibus liratâ, subtus convexiusculâ, interdum simplici, interdum concentricè striatâ, nunc radiatim costellatâ, nunc albidâ, nunc fusco-flammulatâ; anfractibus octo ad novem, exteruè excavatis, ultimo carinato; suturâ impressâ, plerumque marginatâ; aperturâ parvâ, transversâ, fauce cum lunellis septem, quarum duabus superioribus, unâ columellari, quatuor*

*remotis (unâ supra, tribus infra carinam) ad labrum simplex; umbilico cavernoso, in junioribus acetabuloformi, in majoribus ad januam parvo, constricto*

THE LITTLE TOWER HELIX. Shell umbilicated, conical or rather flat, very variable, tessellated about the upper part with alternating brown and white flexuous spots, ash-white beneath, rayed with little flexuous flames, sculptured with very numerous sharp radiating ribs, rather convex beneath, sometimes simple, sometimes concentrically striated, now rayed with fine ribs, now white, now brown-flamed: whorls eight to nine, excavated, the last keeled, suture impressed, generally margined; aperture small, transverse, with seven lamellæ in the interior, two of which are superior, one columellar, and four remote (one above the keel and three below it) from the lip, which is simple, umbilicus cavernous, in young specimens cup-shaped, in older specimens small and constricted at the entrance.

GOULD, Expedition Shells, 1846, p. 22.

*Hab.* Tahiti.

An extremely characteristic species, partaking of the characters and typical form of *H. Jacquan*.





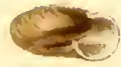




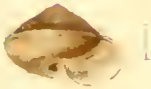
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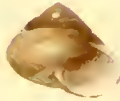
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# HELIX.

## PLATE CXII.

Species 636. (Mus. Cuming.)

**HELIX SHUTTLEWORTHII.** *Hel. testâ utrinque umbilicatâ, subcompressâ, corneâ, pellucidâ; spirâ immersâ; anfractibus quatuor ad quinque, rotundatis, involutis, lævibus, nitidis; aperturâ angustâ, compresso-lunari, labro simplici, acuto.*

**SHUTTLEWORTH'S HELIX.** Shell umbilicated on both sides, rather compressed, horny, transparent; spire immersed; whorls four to five, rounded, involuted, smooth, shining; aperture narrow, compressly lunar, lip simple, sharp.

PFEIFFER, *Zeitschrift für Malac.* 1851. p. 14.

*Hab.* Bahia.

A small Nautiloid species, the whorls being convoluted one into the other, so as to form an umbilicus on each side.

Species 637. (Mus. Cuming.)

**HELIX SEMEN-LINI.** *Hel. testâ umbilicatâ, subconicâ, tenui, corneâ, pellucidâ; spirâ brevi; anfractibus quinque, convexis, lævibus, nitidis; aperturâ lunari-ovatâ, subhorizontali.*

**THE FLAX-SEED HELIX.** Shell umbilicated, somewhat conical, thin, horny, transparent; spire short; whorls five, convex, smooth, shining; aperture lunar-ovate, nearly horizontal.

MORICAND, *Mem. Nat. Hist. Soc. Geneva*, 3rd suppl. p. 55. pl. 5. f. 17.

*Hab.* Bahia.

A little transparent horny species, of simple and regular subconical growth.

Species 638. (Mus. Cuming.)

**HELIX COSTELLATA.** *Hel. testâ subampliter umbilicatâ, tenui, fuscâ; spirâ depressâ; suturâ distinctâ; anfractibus quinque, rotundatis, subtilissimè costellatis; aperturâ rotundâ, labro tenui, acuto.*

**THE FINELY-RIBBED HELIX.** Shell rather largely umbilicated, thin, brown; spire depressed; suture distinct; whorls five, rounded, very finely ribbed; aperture round, lip thin, sharp.

D'ORBIGNY, *Voyage dans l'Amér. Mérid.* p. 252. pl. 26. f. 6-9.

*Hab.* Montevideo. Eastern Paraguay.

An opaque brown shell, as if covered with an epidermis partaking of the form of *Cyclostoma*.

Species 639. (Mus. Cuming.)

**HELIX EPIDERMIA.** *Hel. testâ latè et j profundè umbilicatâ, discoideâ, epidermide brunneâ indutâ, utrinque costellatâ; spirâ planâ; anfractibus quatuor, sensim convexentibus, convexiusculis; aperturâ subverticali, subcirculari; peristomate acuto, simplici, marginibus approximatis.*

**THE EPIDERMIS-COVERED HELIX.** Shell broadly and deeply umbilicated, discoid, covered with a brown epidermis, finely ribbed on both sides; spire flat; whorls four, increasing slowly, rather convex; aperture nearly vertical, subcircular; lip sharp, simple with the margins approximating.

ANTON, *Verz.* p. 36.

*Helix costellata*, Deshayes.

*Hab.* Valparaiso; Cuming.

It is extremely doubtful whether this species differs specifically from the preceding.

Species 640. (Mus. Cuming.)

**HELIX PACIFICA.** *Hel. testâ umbilicatâ, sub-Trichus formâ tenui, pellucidâ, striatulâ, corneâ; spirâ conicâ acutiusculâ; anfractibus sex ad septem, convexiusculis ultimo acutè carinato, basi paulo convexiore, lævigatè nitido; aperturâ depressâ, angulato-lunari; peristomate simplici, acuto, marginibus lunari rix dilatatis in perforationem punctiformem insertis.*

**THE PACIFIC HELIX.** Shell umbilicated, somewhat Trichus-shaped, thin, transparent, finely striated, horny; spire conoid, rather sharp; whorls six to seven, rather convex, the last sharply keeled, a little more convex smooth and shining at the base; aperture depressed angularly lunar; lip simple, sharp, columellar margin scarcely dilated, inserted in the punctiform umbilicus.

PFEIFFER, *Synthala*, vol. iii. p. 66.

*Hab.* Coeos Island, Pacific Ocean.

The surface of this little horny species has a slender keel above the keel, and a smooth pearl-line below it.

## Species 641. (Mus. Cuming.)

HELIX STREPTAXON. *Hel. testâ umbilicatâ, depressâ, distanter arcuato-costatâ et sub lente minutissimè spirālīter striatâ, spadiceâ, brunneo-tessellatâ; spirâ fornicatâ, superiè depressâ; anfractibus octo ad novem, angustis, carinatis, ultimo infra penultimum recedente, tertiam paginæ inferâ penultimi partem liberam relinquente, basi convexiusculo, radialim costato, distinctius concentricè striato; umbilico profundo, extus lamina horizontali coarctato; aperturâ depressâ, securiformi, lamellis sex intrantibus munitâ, duabus in pariete aperturali, duabus in margine basali, unâ in supero, unâ dentiformi in columellâ; peristomate simplici, recto, acuto, margine basali retrorsum in laminam umbilicam coarctantem continuatâ.*

THE STREPTAXIS-LIKE HELIX. Shell umbilicated, depressed, distantly arcuately ribbed, and, beneath the lens, very minutely spirally striated, fawn-colour, tessellated with brown; spire arched, depressed at the upper part; whorls eight to nine, narrow, keeled, last whorl receding below the penultimate whorl, leaving a third of the lower edge of the penultimate whorl bare, base rather convex, radiately striated; umbilicus deep, contracted outwardly by a horizontal lamina; aperture depressed, wedge-shaped, furnished with six entering lamella, two on the wall of the aperture, two on the basal margin, one on the upper margin, and one tooth-shaped on the columella; lip simple, straight, sharp, basal margin continued backward into a lamella contracting the umbilicus.

PFEIFFER, Pro. Zool. Soc. (*H. coarctata*) 1849. p. 129.

*Hab.* Tahiti.

A singularly-formed species, characterized by the peculiarly contracted growth of the last whorl.

## Species 642. (Mus. Cuming.)

HELIX LIVIDA. *Hel. testâ umbilicatâ, conicâ, tenui, striatâ, fusco-corneâ, diaphanâ; spirâ conicâ, obtusiusculâ; anfractibus sex, convexiusculis, ultimo basi ventroso, supra medium carinato; aperturâ rotundato-lunari; peristomate simplici, acuto, recto.*

THE LIVID HELIX. Shell umbilicated, conical, thin, finely striated, brown-horny, diaphanous; spire conical, rather obtuse; whorls six, rather convex, the last swollen at the base, keeled above the middle; aperture rotundately lunar; lip simple, sharp, straight.

*Stenopus lividus*, Guilding, Zoological Journal, vol. iii. p. 528. pl. (suppl.) 27. f. 1-3.

*Hab.* Island of St. Vincent, West Indies.

A transparent horny shell, of extremely simple and regular growth.

## Species 643. (Mus. Cuming.)

HELIX RADIELLA. *Hel. testâ umbilicatâ, depressâ, subdiscoideâ, spadiceâ, rufo-fusco undique flammâtâ; spirâ obtusâ; suturâ impressâ; anfractibus quinque, rotundatis, costellato-striatis; aperturâ rotundato-lunari, labro simplici, acuto.*

THE RAYED HELIX. Shell umbilicated, depressed, somewhat discoid, fawn-colour, flamed throughout with red-brown; spire obtuse; suture impressed; whorls five, rounded, rib-like striated; aperture rotundately lunar, lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1845. p. 125.

*Hab.* Island of Opara, Pacific Ocean; Cuming.

A flatly-compressed *Cyclostoma*-like species, very prettily marked throughout with waved red rays.

## Species 644. (Mus. Cuming.)

HELIX VORTEX. *Hel. testâ angustè umbilicatâ, convexo-discoideâ, hyalinâ; anfractibus quinque ad sex, convexiusculis, angustis, obsoletè striatis, ultimo subangulato, plerumque deorsum deciato; aperturâ latâ, lunari; peristomate simplici, acuto, margine columellari reflexiusculo.*

THE WHIRL HELIX. Shell narrowly umbilicated, convexly discoid, hyaline; whorls five to six, rather convex, narrow, obsoletely striated, the last slightly angled, generally turned downwards; aperture broad, lunar; lip simple, acute, columellar margin slightly reflected.

PFEIFFER, in Wiegman's Archives, 1839, vol. i. p. 351.

*Hab.* Islands of Cuba and Santa Cruz.

Of a light hyaline substance, very minutely striated beneath the lens.

## Species 645. (Mus. Cuming.)

HELIX CHILIENSIS. *Hel. testâ umbilicatâ, globoso-depressâ, tenui, pellucidâ, fusco-corneâ, sub lente rugosâ et minutissimè granulatâ; anfractibus quatuor, convexis; umbilico mediocri, pervio; aperturâ subcirculari; peristomate simplici, acuto, marginibus approximatis.*

THE CHILI HELIX. Shell umbilicated, globosely depressed, thin, pellucid, brown-horny, wrinkled and very minutely granulated beneath the lens; whorls four, convex; umbilicus middling, open; aperture nearly circular; lip simple, sharp, with the margins approximated.

MUHLFELDT, in Anton, Verz. p. 36.

*Hab.* Valparaiso (under stones); Cuming.

A small horny *Cyclostoma*-like shell, very minutely wrinkled and granulated.





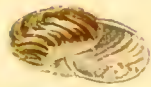
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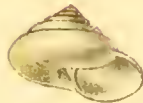
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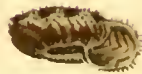
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# HELIX.

PLATE CXIII.

Species 646. (Mus. Cuming.)

**HELIX BILAMELLATA.** *Hel. testā umbilicatā, conicā, tenui, cornēā, longitudinaliter validè et regulariter plicatā; spirā elongatā, sursum valdè attenuatā, acutā; anfractibus novem, carinatis (carinā exsertā, acutā, subaculeatā), ultimo basi convexiusculo; umbilico angusto, pervio; aperturā subverticali, subquadrangulari, lamellis duabus coarctatā, alterā intrantē in pariete aperturali, alterā crassiore ad columellam; peristomate simplici, recto.*

**THE BILAMELLATED HELIX.** Shell umbilicated, conical, thin, horny, longitudinally strongly and regularly plicated; spire elongated, much attenuated and sharp towards the upper part; whorls nine, keeled (keel exserted, sharp, slightly prickly), last whorl rather convex at the base; umbilicus narrow, open; aperture subvertical, quadrangular, contracted by two lamellæ, one entering on the wall of the aperture, the other thicker, upon the columella; lip simple, straight.

PFEIFFER, *Zeitschrift für Malac.* 1845. p. 84.

*Hab.* Island of Opara, Pacific Ocean; Cuming.

A minute horny pyramidally conical shell, with one lamella on the inner surface of the body-whorl, the other on the columella.

Species 647. (Mus. Cuming.)

**HELIX CONTORTA.** *Hel. testā umbilicatā, depressā, tenui, fragili, striatā, tenuissimè pilosā, luteo-flavā, flammulis longitudinalibus rubris pictā; spirā vix convexā; anfractibus quatuor ad quinque, convexis; umbilico lato, pervio; aperturā subrotundā, dentatā, lamellis parallelis duabus intrantibus, parietem aperturalem coarctantibus; peristomate simplici, acuto, margine dextro dentibus acutis munito.*

**THE TWISTED HELIX.** Shell umbilicated, depressed, thin, fragile, striated, very finely hairy, yellowish, painted with red longitudinal flames; spire but little convex; whorls four to five, convex; umbilicus broad, open; aperture somewhat round, seven-toothed, with two parallel lamellæ, entering and contracting the wall of the aperture; lip simple, sharp, right margin furnished with five sharp teeth.

FERUSSAC, *Hist. Moll.* pl. 51 A. f. 2.

*Helix intercarinata*, Mighels.

*Hab.* Sandwich Islands.

A small eyeloid species, characterized by a complicated arrangement of teeth and lamellæ in the aperture.

Species 648. (Mus. Cuming.)

**HELIX SIXLAMELLATA.** *Hel. testā angustissima, melleo-fulcā, subsemiglobosā, tenui, regulariter costulatā, lutescente, maculis castaneis tessellatā; spirā elevatā, obtusā; anfractibus sex, convexis, angustis, ultimo basi planulato; aperturā depressā, obliquā lunari, lamellis sex acutè elevatis coarctatā; tribus parallelis in ventre anfractūs penultimi, tribus in fundo apertura vasis oppositis, pluribus minoribus obsolete interjectis; peristomate simplici, acuto.*

**THE SIX-LAMELLATED HELIX.** Shell very narrowly umbilicated, somewhat semiglobose, thin, regularly finely ribbed, yellowish, tessellated with chestnut spots; spire raised, obtuse; whorls six, convex, narrow, the last flattened at the base; aperture depressed, obliquely lunar, contracted by six sharply raised lamellæ, three parallel in the body of the penultimate whorl, three at the bottom of the aperture opposite to them, with many smaller obsolete ones lying between; lip simple, sharp.

PFEIFFER, *Zeitschrift für Malac.* 1845. p. 85.

*Hab.* Gambier Island, Pacific Ocean.

Another small species with a complicated arrangement of lamellæ in the aperture, but of very different form.

Species 649. (Mus. Cuming.)

**HELIX MARMORELLA.** *Hel. testā umbilicatā, depressā, tenuissimā, distanter costellatā, piceo-fulcā, stramineo-strigis obliquis et maculis rufis varietatā; spirā planā; anfractibus tribus, vix convexiusculis, rufopiceo-acrescentibus, ultimo basi paulo convexiore; aperturā perobliquā, amplā, lunari-ovali; peristomate simplici, acuto, marginibus callo tenui junctis, supra astringens subarcuato.*

**THE FINELY-MARBLED HELIX.** Shell umbilicated, depressed, very thin, distantly finely ribbed, transparent, straw-colour, marked with oblique red streaks and spots; spire flat; whorls three, slightly convex, increasing rapidly, the last a little more convex at the base; aperture very oblique, large, lunar-oval; lip simple, sharp, margins joined by a thin callosity, upper margin a little arched forward.

PFEIFFER, *Pro. Zool. Soc.* 1845. p. 125.

*Hab.* Juan Fernandez.

A very delicate zebra-like painted species.

Species 650. (Mus. Cuming.)

**HELIX HELICOPHANTOIDES.** *Hel. testā umbilicatā, depressā, tenui, obliquè et confertim costatā-stratā,*



*stramineâ, rufo tessellatâ et strigatâ; spirâ planiusculâ; anfractibus tribus ad quatuor, vix convexiusculis, rapidè accrescentibus, ultimo depresso; aperturâ perobliquâ, amplâ, subocali; peristomate simplici, acuto, marginibus approximatis, callo tenuissimo junctis.*

THE HELICOPHANTA-LIKE HELIX. Shell umbilicated, depressed, thin, obliquely and closely rib-like striated, straw-colour, streaked and tessellated with red; spire rather flat; whorls three to four, slightly convex, increasing rapidly, the last depressed; aperture very oblique, large, lunar-oval; lip simple, acute, with the margins approximating, and joined by a very thin callosity.

PFEIFFER, Pro. Zool. Soc. 1845. p. 125.

Hab. Juan Fernandez.

Closely resembling the preceding species, from which it differs in being uniformly smaller, and of more opaque substance.

Species 651. (Mus. Cuming.)

HELIX TESSELLATA. *Hel. testâ umbilicatâ, discoideâ, utrinque planâ, tenui, pallidè corneâ, strigis angustis undatis rufis pictâ; anfractibus sex ad septem, angustissimis, ultimo subtus subinflato; umbilico mediocri, pervio; aperturâ lunato-rotundatâ; peristomate simplici.*

THE TESSELLATED HELIX. Shell umbilicated, discoid, flat on both sides, thin, pale horny, painted with narrow waved red streaks; whorls six to seven, very narrow, the last slightly inflated beneath; umbilicus middling, open; aperture lunar-rounded; lip simple.

MUHLFELDT, Anton, Verz. p. 36.

Hab. Juan Fernandez.

Another example of this interesting little type from Juan Fernandez, of more discoid growth than either of the preceding species.

Fig. 652. (Mus. Cuming.)

The shell here figured proves to be a variety of *H. Turbiniformis*, Pl. XXXVII. Sp. 167.

Species 653. (Mus. Cuming.)

HELIX ARCTISPIRA. *Hel. testâ umbilicatâ, depressâ, subdiscoideâ, confertim costatâ, albidâ, epidermide tenui fusciscente indutâ; spirâ convexiusculâ; anfractibus quinque ad sex, convexis, angustissimis; umbilico lato, perspectivo; aperturâ parvulâ, subverticali, lunato-subcirculari; peristomate simplici, acuto.*

THE ARCHED-SPIRE HELIX. Shell umbilicated, depressed, subdiscoid, closely-ribbed, whitish, covered with a

thin light brown epidermis; spire rather convex; whorls five to six, convex, very narrow; umbilicus broad, perspective; aperture rather small, subvertical, lunar-subcircular; lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1846. p. 41.

Hab. Juan Fernandez.

Closely allied to *H. tessellata*, but of smaller and still more compressed growth, with a larger umbilicus.

Species 654. (Mus. Cuming.)

HELIX OPARICA. *Hel. testâ subumbilicatâ, orbiculato-convexiusculâ, tenui, costulato-striatâ, fusciscentè, obsolete rubro-maculatâ; spirâ depressâ; anfractibus quatuor ad quinque, angustis, convexiusculis; aperturâ latè lunari; peristomate acuto, usque ad umbilicum producto; dentibus tribus lamelliformibus in pariete aperturali, quatuor in margine basali.*

THE OPARA HELIX. Shell slightly umbilicated, orbicularly convex, thin, rib-like striated, brownish, obsolete red-spotted; spire depressed; whorls four to five, narrow, rather convex; aperture broadly lunar; lip sharp, produced as far as the umbilicus; three lamelliform teeth in the wall of the aperture, four on the basal margin.

ANTON, Verz. p. 39.

Hab. Island of Opara, Pacific Ocean; Cuming.

An interesting minute species, with the same typical characteristics as *H. contorta* and *serlunellata*.

Species 655. (Mus. Cuming.)

HELIX HYSTRIX. *Hel. testâ umbilicatâ, depressâ, subdiscoideâ, regulariter costulatâ, corneo-luteâ, pilis rectis rigidis deciduis hirsutâ, superne rufo tessellatâ; spirâ planâ, medio subimmersâ; anfractibus quinque, convexis, ultimo descendente, basi lineis elevatis, interdum obsoletioribus decussato; umbilico lato, perspectivo, aperturâ lunato-subcirculari; peristomate simplici, acuto.*

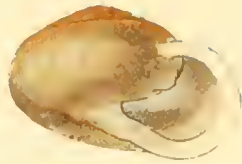
THE PORCUPINE HELIX. Shell umbilicated, depressed, nearly discoid, regularly finely ribbed, horny-yellow, covered with erect rigid hairs, tessellated about the upper part with red; spire flat, slightly immersed in the middle; whorls five, convex, the last descending, decussated at the base with raised lines, which are sometimes obsolete; umbilicus broad, perspective; aperture lunar-subcircular; lip simple, sharp.

MIGHELS, Pfeiffer, Symbolæ, vol. iii. p. 67.

Hab. Wahoo, Sandwich Islands.

Tessellated in a conspicuous manner with dark red, and curiously bristled over with rigid hairs.





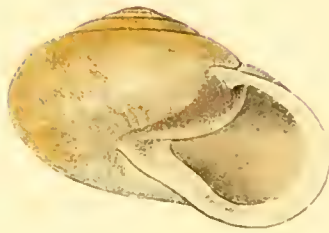
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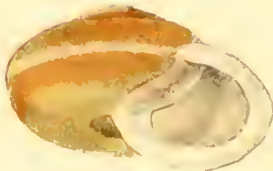
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# HELIX.

PLATE CXIV.

Species 622. (Mus. Cuming.)

**HELIX ZAËTA.** *Hel. testâ oblectè perforatâ, depresso-globosâ, confertissimè costulato-striatâ, flavâ; spirâ parum elatâ vel depressiusculâ; anfractibus quinque ad sex, convexiusculis; aperturâ rotundato-lunari; peristomate angululim latè reflexo, intus albo, nitido, calloso, marginibus callo tenuissimo, dentem compressam linguiformem obliquè intrantem emillente junctis, columellari brevi, arcuato, dilatato.*

**THE MUDDY HELIX.** Shell with a covered umbilicus, depressly globose, very closely rib-like striated, yellowish; spire a little raised or rather depressed; whorls five to six, rather convex; aperture rotundately lunar; lip angularly broadly reflected, white, shining and callous within, margins joined by a callosity, emitting an obliquely entering compressed tongue-shaped tooth, columellar margin short, arched, dilated.

SAY, Binney in Journ. Bost. Nat. Hist. Soc. vol. i. p. 492. pl. 20.

*Hab.* Ohio, Missouri, &c., North America.

This is probably a variety of the following, the callosity on the body-whorl being hardly sufficient to distinguish it specifically.

Species 624. (Mus. Cuming.)

**HELIX ALBOLABRIS.** *Hel. testâ oblectè umbilicatâ, depresso-globosâ, costulis obliquis striisque spiralibus obsolete confertissimis subdeussatâ, flavâ; spirâ parum elatâ; anfractibus quinque ad sex, convexiusculis; aperturâ rotundato-lunari; peristomate angululim latè reflexo, intus albo, nitido, calloso, ad columellam brevem arcuatam dilatato.*

**THE WHITE-LIP HELIX.** Shell with a covered umbilicus, depressly globose, faintly deussated with fine oblique riblets and very close-set obsolete spiral striae, yellowish; spire but little raised; whorls five to six, rather convex; aperture rotundately lunar; lip angularly broadly reflected, white, shining and callous within, dilated at the columella, which is short and arched.

SAY, Nicholson's Encyc. (Amer. edit.) vol. iv. pl. 1. f. 1.

*Hab.* North America.

"Found in large numbers," says Dr. Gould, of Boston,

U.S., "in all the partially cleared forests of New England, sheltered in the moist mould under decaying logs and rotten stumps; and sometimes about stone walls and rocks in the open fields. It is found in all the States, except perhaps the southernmost."

Species 625. (Mus. Cuming.)

**HELIX TOWNSENDIANA.** *Hel. testâ umbilicatâ, depresso-globosâ, tenui, concentricè minutissimè striatâ, longitudinaliter costulato-rugosâ, corneo lutescente; spirâ parum elatâ; anfractibus sex, peristomate ultimo inflato, anticè deflexo; aperturâ rotundato-lunari, intus fusciscente; peristomate albo, intus calloso, marginibus concentricis, supra latè expanso, infra strictiusculo, reflexo, columellari brevi, dilatato, umbilicum non occultante.*

**TOWNSEND'S HELIX.** Shell umbilicated, depressly globose, thin, concentrically very minutely striated, longitudinally fine rib-like wrinkled, horny variegated with yellow; spire but little raised; whorls six, rather flat, the last inflated, deflected in front; aperture rotundately lunar, brownish within, lip white-edged inwardly, margins approximating, upper broad and expanding, basal rather drawn out and reflected, columellar short, dilated, not concealing the umbilicus.

LEA, Observations, vol. ii. p. 99. pl. 23. f. 80.

*Hab.* Wahlamat, North America. California; Lea.

The surface of this species is characterized by a curious yellow-wrinkled character.

Fig. 656. (Mus. Cuming.)

The shell here figured is named in Mr. Cuming's collection *H. Politiana*, D'Orbigny, but it differs from the description of that species in being sculptured obliquely with close-set riblet striae, and in having from five to six whorls. It is doubtless only a monster *H. albolaris*.

Species 657. (Mus. Cuming.)

**HELIX FIDELIS.** *Hel. testâ umbilicatâ, orbiculato-globosâ, ruguloso-striatâ, subtilissimè deussatâ, fusciscente seu flavicante, interdum fuscio-nubulâ, tenui corneo, interdum nigricante-castaneâ, infra peripheriam diffusâ; anfractibus septem, convexis, umbilico nullo.*

*pervio* : *aperturâ obliquè lunari, intus lacteâ, fasciatâ* ;  
*peristomate supernè expanso, basi incrassato, subreflexo,*  
*marginibus subconniventibus, columellari dilatato.*

THE FAITHFUL HELIX. Shell umbilicated, orbicularly conoid, rugulosely striated, very finely decussated, brownish or yellowish, sometimes clouded with brown, convex at the base, sometimes blackish-chestnut, with a band beneath the periphery : whorls seven, convex ; umbilicus middling, open ; aperture obliquely lunar, milk-white within ; lip expanded at the upper part, thickened at the base, slightly reflected, margins somewhat approximating, columellar margin dilated.

GRAY, *Pro. Zool. Soc.* 1834, p. 67.

*Helix Nuttalliana*, Lea.

*Hab.* Fort Vancouver, Oregon, North America.

This species, as may be seen by the examples figured, varies considerably in colour, but the band which encircles it is always present.

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Species 658. (Mus. Cuming.)

HELIX AVCS. *Hel. testâ subampliter et profundè umbili-*

*catâ, subdepresso-orbiculari, solidâ, lævigatâ vel sub lente minutè obliquè striatâ, fusciscente tinctâ, ad suturam saturatiore, ad peripheriam albifasciatâ, spirâ convexâ, obtusâ* ; *anfractibus quatuor, planiusculis, aperturâ subrotundâ* ; *peristomate incrassato, calloso-reflexo, albo, marginibus callo albo conspicuo junctis.*

THE GRANDFATHER HELIX. Shell rather largely and deeply umbilicated, somewhat depressly orbicular, solid, smooth, or very minutely obliquely striated beneath the lens, stained with light brown, which is darker next the suture, white-banded at the periphery ; spire convex ; whorls four, rather flat ; aperture nearly round ; lip thickened, callous, reflected, white, margins joined by a conspicuous white callous layer.

PFEIFFER, *Pro. Zool. Soc.* 1852.

*Hab.* Philippine Islands.

A shell of very characteristic solid growth, largely and deeply umbilicated with a peculiarly callous, thickened, much reflected lip, the margins of which are joined on the body-whorl by a broad-spread callous layer.







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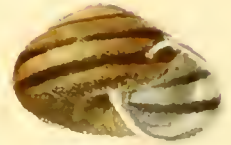
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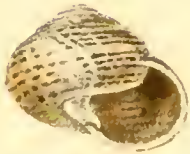
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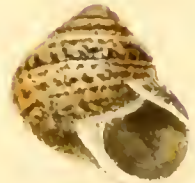
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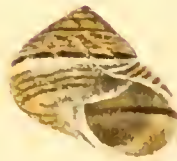
663.



664.



665<sup>a</sup>



665<sup>b</sup>

# HELIX.

PLATE CXV.

Species 659. (Mus. Cuming.)

**HELIX DUPETITHOUARSII.** *Hel. testā umbilicatā, orbiculato-convexā, lævigatā vel substriatā, saturatē castaneā, supernè pallidiore, nigricante-rufō cingulatā; spirā conoideo-obtusā; anfractibus septem ad octo, angustis, convexiusculis, ultimo inflato; aperturā ovato-semilunari, intus albā, fasciatā; peristomate simplici, brevissimè reflexo, margine columellari arcuato, supernè dilatato-reflexo, umbilicū medioerem non occultante.*

**DUPETIT-THOUARS' HELIX.** Shell umbilicated, orbicularly convex, smooth or finely striated, dark chestnut, paler at the upper part, encircled with blackish-red; spire conoidly obtuse; whorls seven to eight, narrow, rather convex, the last inflated; aperture ovately semilunar, white and banded within; lip simple, very shortly reflected, columellar margin arched, dilately reflected at the upper part, not concealing the middle umbilicus.

DESHAYES, *Revue Zool. Soc. Cuv.* 1839, p. 300.

*Hab.* California.

Belonging to the same type, and closely allied specifically, to *H. fidelis* of the preceding Plate.

Species 660. (Fig. a, b, Mus. Cuming.)

**HELIX VINCTA.** *Hel. testā obtectè umbilicatā, globosā, tenui, inflatā, obliquè subtiliter et densissimè rugulosostriatā, olivaceā, flavicante marmoratā, fasciā angustā nigricante-fuscă supra peripheriam cingulatā; anfractibus quinque, convexis; aperturā subcirculari; peristomate tenui, marginibus conniventibus, supero recto, columellari reflexo et dilatato.*

**THE HARD-GIRT HELIX.** Shell with a covered umbilicus, globose, thin, inflated, obliquely finely and very closely striated in a somewhat wrinkled manner, olive, marbled or freckled with yellow, encircled above the periphery with a narrow black-brown band; whorls five, convex; aperture nearly circular; lip thin, margins approximating, upper margin straight, columellar margin reflected and dilated.

VALENCIENNES, *Voyage de la Venus*, Moll. pl. 1. f. 2.

*Hab.* California.

A globose light inflated shell, finely sculptured with wrinkled subgranulated striae.

Species 661. (Mus. Cuming.)

**HELIX CALIFORNIENSIS.** *Hel. testā angustè umbilicatā depresso-globosā, tenui, rugulosā, granulatā, fulvā luteo-maculatā; spirā subturbinatā; anfractibus septem, convexiusculis, ultimo supra peripheriam fascia univā angustā rufā cincto, basi inflato; aperturā renato-rotundatā, intus albā, unifasciatā; peristomate intus albo-labiato, reflexiusculo, margine columellari dilatato, reflexo, umbilicū semioccultante.*

**THE CALIFORNIAN HELIX.** Shell narrowly umbilicated, depressly globose, thin, finely wrinkled and granular, fulvous, yellow-spotted; spire subturbinated; whorls seven, rather convex, the last encircled with a single red-brown band above the periphery, inflated at the base; aperture lunar-rounded, white within, red-banded; lip white-thickened inwardly, slightly reflected, columellar margin dilated and reflected, half-concealing the umbilicus.

LEA, *Observations*, vol. ii, p. 99, pl. 23. f. 79.

*Hab.* California, near Columbia River.

This agrees with the preceding species both in sculpture and painting, but differs in form, being composed of more whorls, more closely turbinated.

Species 662. (Fig. a, b, Mus. Cuming.)

**HELIX SOLITARIA.** *Hel. testā latè porcio-umbilicatā, giboso-depressā, solitiusculā, obliquè confertè rugosā. lutescente-corneā, brunneo-fasciatā; anfractibus sex, convexis; suturā profundā; aperturā lunato-rotundatā, intus nitidè albā, fasciatā; peristomate simplici acuto, margine columellari dilatato, subreflexo.*

**THE SOLITARY HELIX.** Shell with a broad open umbilicus, globose-depressed, rather solid, obliquely closely wrinkled, yellowish-horny, encircled with two to three brown bands, whorls six, convex; suture deep; aperture lunar-rounded, shining white within, banded; lip simple, sharp, columellar margin dilated a little reflected.

JAY, *Journ. Acad. Nat. Sci. Philadelphia*, vol. ii, p. 157.

*Hab.* Missouri, Ohio, North America.

Of a *Cyclostoma*-like form, encircled between the periphery and the suture with three dark burnt-brown bands.

## Species 663. (Mus. Cuming.)

HELIX REHBEINII. *Hel. testā imperforatā, globosā, solidiusculā, levigatā vel sub lente minutè obliquè striatā, latescente, viridi-nigricante, aut fusco trifasciatā, fasciā centrali latiore; aperturā lunato-circulari; peristomate albo, expanso, reflexo, ad columellam planato.*

REHBEIN'S HELIX. Shell imperforated, globose, rather solid, smooth, or beneath the lens minutely obliquely striated, yellowish, encircled with three greenish or brown bands, of which the middle one is broader than the others; aperture lunar-circular; lip white, expanded, reflected, flattened at the columella.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* Philippine Islands.

A new species received by Mr. Cuming from the Philippine Islands, closely allied to *H. spherica* and *orbitulus*.

## Species 664. (Mus. Cuming.)

HELIX AREOLATA. *Hel. testū vix umbilicatā, orbiculato-conoideā, striatā, nitidulā, albā, lineis fuscis interruptis variè ornatā; spirā depresso-conoideā; anfractibus quinque, convexiusculis, ultimo vix descendente, basi parum convexo; aperturā rotundato-lunari, intus fusciscente; peristomate acuto, intus sublabiato, margine columellari breviter arcuato, unidentato, dilatato, reflexo, umbilicum fere tegente.*

THE CHEQUERED HELIX. Shell scarcely umbilicated, orbicularly conoid, striated, shining, white, variously ornamented with interrupted brown lines; spire depressly conoid; whorls five, rather convex, the last a little descending, but little convex at the base; aperture rotundately lunar, brownish within; lip sharp, slightly thickened inwardly, columellar margin shortly arched, obsoletely one-toothed, dilated, reflected, almost covering the umbilicus.

SOWERBY, Pfeiffer, Zeitschrift für Malac. 1845. p. 154

*Hab.* California, near the Columbia River; Hinds.

Encircled with numerous irregular interrupted blotely brown lines, upon an opaque-white ground.

## Species 665. (Fig. a, b, Mus. Cuming.)

HELIX KELLETTII. *Hel. testā angustè umbilicatā, depresso-globosā, tenui, rugulosā, granulatā, fultā, sordidè flavo et opaco-albo conspersā, rufo unifasciatā; spirā subtruncatā; anfractibus sex, convexiusculis, ultimo ad peripheriam fasciā pallidā cincto, basi subinflato; aperturā lunato-rotundatā, intus pallidè fuscā unifasciatā; peristomate reflexiusculo, margine columellari dilatato, reflexo, umbilicum plus minus occultante.*

KELLETT'S HELIX. Shell narrowly umbilicated, depressly globose, thin, wrinkled, granulated, fulvous, sprinkled with dirty yellow and opaque white, with a single red-brown band round the middle; spire somewhat turbinate; whorls six, rather convex, last whorl encircled with a pale band at the periphery, slightly inflated at the base; aperture lunar-rounded, pale brown and one-banded within; lip a little reflected, columellar margin dilated, reflected, more or less concealing the umbilicus.

FORBES, Pro. Zool. Soc. 1850, p. 55.

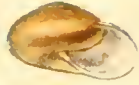
*Hab.* Central America?

This interesting species, besprinkled with opaque-white flames, belongs apparently to a Californian type of the genus. It is named by Professor Edward Forbes in honour of Captain Kellett, R.N., late of H.M.S. Herald, and now Commander of H.M.S. Resolute, on her way to the Polar Regions in search of Sir John Franklin.

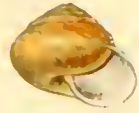




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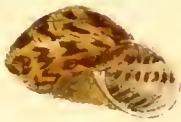
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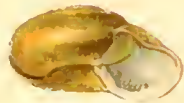
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675



# HELIX.

PLATE CXVI.

Species 666. (Mus. Cuming.)

**HELIX INORNATA.** *Hel. testá angustè et profundè umbilicatá, globoso-depressá, supernè confertim subtilissimè obliquè costellato-striatá, olivaceo-fuscá, basi subconcaeco-excavatá, virescente; spirá convexá, obtusá; anfractibus quinque, planiusculis; aperturá subamplá, lunato-circulari, fauce cærulescente; peristomate simplici, acuto, marginibus conniventibus, columellari breviter dilatato.*

**THE UNADORNED HELIX.** Shell narrowly and deeply umbilicated, globosely depressed, closely very finely obliquely rib-like striated at the upper part, olive-brown, greenish and somewhat concavely excavated at the base; spire convex, obtuse; whorls five, rather flat; aperture rather large, lunar-circular, interior bluish; lip simple, sharp, margins approximating, columellar margin shortly dilated.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 371.  
*Hab.* Pennsylvania.

The upper surface of this shell, which is of a delicate bright olive-brown colour, obtains a silky appearance from the close and regular accumulation of riblet striæ. The under surface of the shell is smooth, greenish, and impressly hollowed.

Species 667. (Mus. Cuming.)

**HELIX GLAPHYRA.** *Hel. testá vix umbilicatá, depressá, supernè planiusculá, tenui, olivaceo-virente, lævigatá, nitente; suturá lineari; anfractibus quinque, planiusculis, sensim accrescentibus; umbilico angustissimo; aperturá latá, lunari; peristomate simplici, acuto, marginibus conniventibus.*

**THE NEAT HELIX.** Shell scarcely umbilicated, depressed, rather flat at the upper part, thin, olive-green, smooth, shining; suture linear; whorls five, rather flat, increasing gradually; umbilicus very narrow; aperture broad, lunar; lip simple, sharp, margins approximating.

JAY, Nichol's American Cyclopædia, pl. 1. f. 3.  
*Hab.* Pennsylvania.

Dr. Gould considers this species to be identical with the European *H. cellaria* of Müller, and that it has been imported thence in plants or about water-casks. I take it to be distinct, belonging to a type indigenous to North

America, and abundantly represented in *H. Vancouverensis lævigata, inornata, intertexta, Planorboides, and fuliginosa* collected in this Plate.

Species 668. (Mus. Cuming.)

**HELIX INTERTEXTA.** *Hel. testá vix umbilicatá, orbiculato-convezá, virescente, obliquè argutè striatá, lineis confertis concentricis granulato-decussatá; spirá elevatá, obtusá; anfractibus sex ad septem, convexiusculis, ultimo obsoletè angulato, fasciis obsoletis saturatioribus cincto; aperturá lunari; peristomate simplici, recto, acuto, margine columellari supernè reflexiusculo, intus calloso-incrassato.*

**THE WOVEN HELIX.** Shell scarcely umbilicated, orbicularly convex, greenish, strongly obliquely striated, decussately granulated with close-set concentric lines, spire elevated, obtuse; whorls six to seven, rather convex, the last obsoletely angled, encircled with obsolete darker bands; aperture lunar; lip simple, straight, sharp, columellar margin a little reflected at the upper part, callously thickened inwardly.

BINNEY, Journ. Nat. Hist. Soc. Boston, U.S. vol. ii. p. 413. pl. 20. f. 2.  
*Hab.* Pennsylvania, Ohio, South Carolina.

Of a pale greenish colour, thickly set with obliquely arched striæ, which are crossed by minute, almost obsolete, spiral lines.

Species 669. (Mus. Cuming.)

**HELIX VANCOUVERENSIS.** *Hel. testá latè umbilicatá, orbiculato-depressá, solidiusculá, minutissimè et confertim striatá et rugulosá, olivaceo-corneá; spirá vix elevatá; anfractibus quatuor ad quinque, planiusculis, sensim accrescentibus, ultimo basi subcompressa, antè deflexo; aperturá perobliquá, subcirculari; peristomate supernè depresso, simplici, basi incrassato, breviter reflexo, marginibus approximatis.*

**THE VANCOUVER HELIX.** Shell broadly umbilicated, orbicularly depressed, rather solid, very minutely and closely striated and wrinkled, olive-horny, spire but little raised; whorls four to five, rather flat, increasing slowly, the last somewhat compressed at the base, deflected in front; aperture very oblique, nearly en-



cular; lip depressed at the upper part, simple, thickened and shortly reflected at the base, margins approximated.

LEA, Observations, vol. ii. p. 87. pl. 23. f. 72.

Hab. North America.

A fine dark olive species of *Cyclostoma*-like growth, inhabiting the banks of the Columbia River, &c.

Species 670. (Mus. Cuming.)

HELIX ALTERNATA. *Hel. testā latè umbilicatā, orbiculato-depressā, tenui, luteo-corneā, strigis interruptis rugis ornatā, striis confertis elevatis scabrā; anfractibus quinque ad sex, planiusculis, ultimo interdum obtusè carinato; umbilico magno, percio; aperturā perobliquā, lunato-ovali; peristomate simplici, acuto, ad umbilicum vix expanso.*

THE ALTERNATE HELIX. Shell broadly umbilicated, orbicularly depressed, thin, yellowish-horny, ornamented with red interrupted streaks, rough with close-set raised striæ; whorls five to six, rather flat, the last sometimes obtusely keeled; umbilicus large, open; aperture very oblique, lunar-oval; lip simple, acute, a little expanded at the umbilicus.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 161.

*Helix scabra*, Lamarck.

*Helix radiata*, Gmelin.

Hab. North America, on the banks of the rivers and in damp parts of the forests, upon decaying logs and stumps.

Characterized by its conspicuous red-streaked and mottled painting, and deep open perspective umbilicus.

Species 671. (Mus. Cuming.)

HELIX PANDORÆ. *Hel. testā oblectè umbilicatā, depresso-globosā, tenui, rugulosā, concentricè minutissimè striatā; anfractibus supra peripheriam fuscis, infra et prope peripheriam albidis, fusco cingulatis, basi albidis; aperturā rotundatā, intus fuscā, albedo-fasciatā, margine interno incrassato, albo; peristomate reflexiusculo, estus albo-labiato, margine columellari dilatato, reflexo, umbilicum occultante.*

PANDORA'S HELIX. Shell with a covered umbilicus, depressly globose, thin, wrinkled, concentrically very minutely striated; whorls above the periphery brown, beneath and near the periphery whitish, encircled with brown, at the base whitish; aperture rounded.

brown and white-banded within, inner edge thickened, white; lip slightly reflected, white-edged outwardly, columellar margin dilated, reflected, concealing the umbilicus.

FORBES, Pro. Zool. Soc. 1850, p. 55.

Hab. Central America, near the Straits of Juan del Fuaco.

A small grey-brown species with somewhat of a European aspect.

Species 672. (Mus. Cuming.)

HELIX LEVIGATA. *Hel. testā umbilicatā, depressā, tenui, virescente-corneā, supernè minutè costulato-striatā, basi convexiusculā, sublævigatā; spirā vix elevatā; anfractibus quinque, planiusculis, ultimo lato, anticè non descendente; aperturā amplā, latè lunari, intus cærulescente; peristomate acuto, recto, marginibus conniventibus, columellari vix dilatato, reflexiusculo.*

THE SMOOTH HELIX. Shell umbilicated, depressed, thin, greenish-horny, minutely rib-like striated, rather convex at the base, nearly smooth; spire but little raised; whorls five, rather flat, the last broad, not descending in front; aperture large, broadly lunar, bluish within; lip sharp, straight, margins approximating, columellar a little dilated and reflected.

*Mesomphix levigata*, Rafinesque, Beck, Index, p. 7.

Hab. Pennsylvania, Kentucky.

Thin, transparent, smooth, and horny, of a greenish hue, with only a moderate-sized umbilicus.

Species 673. (Mus. Cuming.)

HELIX VELLICATA. *Hel. testā apertè umbilicatā, tenui, convexo-depressā, luteo-virescente, subnitidā, sulcato-striatā, striis minutissimis spiratibus decussatā; spirā convexiusculā; anfractibus sex, ultimo rotundato, magno, anticè dilatato, subdescendente; aperturā perobliquā, lunato-oblongā, fauce albā; peristomate effuso, margine subreflexo, supernè deflexo-sinuato.*

THE PINCHED HELIX. Shell openly umbilicated, thin, convexly depressed, greenish-yellow, rather shining, groove-striated, decussated with very minute spiral striæ; spire rather convex; whorls six, the last rounded, large, dilated and a little descending in front; aperture very oblique, lunar-oblong, interior white; lip effused, edge a little reflected, deflectedly sinuated at the upper part.

FORBES, Pro. Zool. Soc. 1850, p. 55.

Hab. Panama?

Distinguished by the peculiar pinched deflected formation of the lip-margin.

Species 674. (Mus. Cuming.)

HELIX PLANORBOIDES. *Hel. testā latè umbilicatā, depressā, supernè læviusculā, basi costulato-striatā, diaphanā, corneo-flavidā; spirā brevissimā; suturā mediocri; anfractibus quinque, planiusculis, ultimo anticè non deflexo; aperturā vix obliquā, lunato-circulari; peristomate simplici, marginibus approximatis, basali reflexiusculo.*

THE PLANORBIS-LIKE HELIX. Shell broadly umbilicated, depressed, rather smooth at the upper part, finely rib-like striated at the base, diaphanous, horny-yellow; spire very short; suture middling; whorls five, rather flat, the last not deflected in front; aperture scarcely oblique, lunar-circular; lip simple, with the margins approximated, basal margin a little reflected.

FERUSSAC, Hist. Moll. pl. 82. f. 4.

*Mesomphix Planorboides*, Rafinesque.

*Helix concava*, Say.

*Hab.* Illinois and Missouri, North America.

A very delicate pale greenish-yellow shell, partaking of the form of *Planorbis* and of *Cyclostoma*.

Species 675. (Mus. Cuming.)

HELIX FULIGINOSA. *Hel. testā angustè umbilicatā, depressā, tenui, striatulā, nitidā, olivaceo-corneā, spaci vix elevatā; anfractibus quatuor ad quinque, planiusculis, rapidè accrescentibus, ultimo magno, subdepresso; aperturā perobliquā, amplā, lunato-oval, peristomate simplici, acuto, margine umbilicali reflexiusculo.*

THE SOOTY HELIX. Shell narrowly umbilicated, depressed, thin, finely striated, shining, olive-horny spire but little raised; whorls four to five, rather flat increasing rapidly, the last large, a little depressed; aperture very oblique, large, lunar-oval, lip simple sharp, umbilical edge a little reflected.

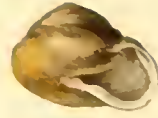
GRIFFITH, Binney, Journ. Nat. Hist. Soc. Boston, vol. 1. p. 417. pl. 24.

*Hab.* Pennsylvania, Ohio.

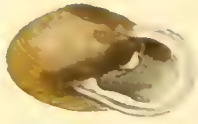
A sombre olive-horny species, rather inflated in the last whorl.







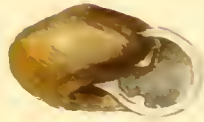
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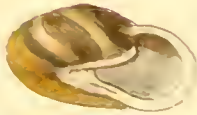
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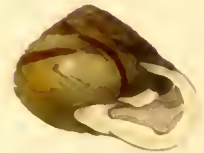
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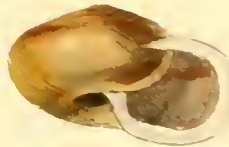
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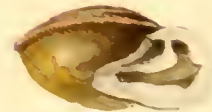
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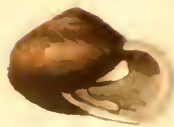
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683 a



683 b



684

*Helix pomatia*

*Helix pomatia*

# HELIX.

PLATE CAVII.

Species 676. (Mus. Cuming.)

**HELIX PENNSYLVANICA.** *Hel. testâ obteclè perforatâ, subgloboâ, tenui, pellucidâ, luteo-corneâ, subtiliter obliquè costulatâ; anfractibus quinque, planiusculis, ultimo ad aperturam subconstricto; aperturâ lunari; peristomate latè reflexo, intus albo-labiato, margine columellari subrecto, expanso, umbilicum obtegente.*

**THE PENNSYLVANIAN HELIX.** Shell with a covered umbilicus, subglobose, thin, pellucid, yellow-horny, finely obliquely ribbed; whorls five, rather flat, the last somewhat constricted at the aperture; aperture lunar; lip broadly reflected, white-edged inwardly, columellar margin nearly straight, expanded, covering the umbilicus.

GREEN, Contributions to Maclurian Lyceum of Natural History, No. 1. p. 5.

*Helix clausa*, Say.

*Hab.* Pennsylvania, Ohio, Illinois.

The species collected in this Plate are all different forms of one peculiar North American type.

Species 677. (Mus. Cuming.)

**HELIX THYROIDES.** *Hel. testâ angustè umbilicatâ, depresso-globoâ, corneo-luteâ, regulariter striatâ; spirâ magis minusve elevatâ; anfractibus quinque ad sex, planiusculis, ultimo basi convexo; aperturâ lunari; peristomate reflexo, intus albo, calloso, marginibus callosi medio tuberculum dentiforme gerente junctis, columellari umbilicum semiocculante.*

**THE SHIELD-LIKE HELIX.** Shell narrowly umbilicated, depressly globose, horny-yellow, regularly striated; spire more or less raised; whorls five to six, rather flat, the last convex at the base; aperture lunar; lip reflected, white and callous within, margins joined by a thin callosity bearing a tooth-shaped tubercle in the middle, columellar margin half-covering the umbilicus.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 161.

*Mesodon leucodon*, Rafinesque.

*Hab.* North America.

Of light subtransparent texture, with a broad flatly appressed lip and a tooth-like tubercle on the body-whorl.

Species 678. (Mus. Cuming.)

**HELIX PALLIATA.** *Hel. testâ obteclè umbilicatâ, depressâ tenui, fusco-corneâ, granulato-striatâ; spirâ viz elevatâ; anfractibus quinque, subplanulata, ultimo obtuse angulato, antice paululum descendente; aperturâ coarctatâ, subtriangulari; peristomate tenui, angulato-reflexo, intus bidentato, dente in margine dextro, altero transverso in basali pariete aperturâ dente tertio linguiformi munito.*

**THE CLOTHED HELIX.** Shell with a covered umbilicus, depressed, thin, brown-horny, granulately striated, spire but little raised, whorls five, rather flat, the last obtusely angled, a little descending in front, aperture contracted, somewhat triangular; lip thin, angularly reflected, two-toothed within, one tooth on the right margin, one transverse on the basal, furnished with a third linguiform tooth on the wall of the aperture.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. iii. p. 152.

*Helix denotata*, Péruze.

*Helix notata*, Deshayes.

*Helix Carolinensis*, Lea.

*Hab.* North America.

Of a more compressed form than the preceding species, with the lip toothed inwardly along the edge, and an elongated tongue-shaped tooth on the body-whorl.

Species 679. (Mus. Cuming.)

**HELIX SAYI.** *Hel. testâ umbilicatâ, orbiculato-depressâ tenui, luteo-corneâ, costato-striatâ, anfractibus sex convexiusculis, ultimo non descendente; umbilico obteclero; aperturâ lunari subcoarctata, dente linguiformi in pariete aperturâ coarctatâ; peristomate intus albo-labiato, angustè reflexo, margine basali nudo, dente columellari dilatato.*

**SAY'S HELIX.** Shell umbilicated, orbicularly depressed, thin, yellowish-horny, finely rib-like striated, whorls six, rather convex, the last not descending, umbilicus middle; aperture lunar-subcoarctate, contracted by a linguiform tooth on the wall of the aperture; lip white-edged inwardly, narrowly reflected, basal margin one-toothed, columellar dilated.

BINNEY, Journ. Nat. Hist. Soc. Boston, U.S. vol. iii. p. 379 pl. 16.



*Hab.* North America.

Broader and more widely convoluted, with a deep perspective umbilicus.

Species 650. (Mus. Cuming.)

**HELIX ROEMERI.** *Hel. testā obtectē umbilicatā, depressā, tenuiusculā, confertim striatulā, diaphanā, vix nitidulā, sordidē corneā; spirā vix elevatā; suturā leviter impressā; anfractibus quinque, convexiusculis, lentē accrescentibus, ultimo ad peripheriam subangulato, anticē vix descendente; aperturā obliquā, lunari, dente oblongo in pariete aperturali; peristomate validē albolabiato, margine supero recto, basali reflexo, columellari dilatato.*

**ROEMER'S HELIX.** Shell with a covered umbilicus, depressed, rather thin, closely finely striated, diaphanous, but little shining, dull horny; spire but little raised; suture slightly impressed; whorls five, rather convex, increasing slowly, the last slightly angled at the periphery, scarcely descending in front; aperture oblique, lunar, with an oblong tooth on the body-whorl; lip strongly white-edged, upper margin straight, basal reflected, columellar dilated.

**PFEIFFER,** *Zeitschrift für Malac.* 1848, p. 117.

*Hab.* Texas.

This species, collected near Braunfels, Texas, by Dr. Ferdinand Roemer, belongs to the same North American type as the other species figured in this Plate.

Species 681. (Mus. Cuming.)

**HELIX ELEVATA.** *Hel. testā obtectē umbilicatā, subglobosā, obliquē striatā, sub epidermide lutescente albā; spirā elevatā, turbinatā; anfractibus septem, convexiusculis, ultimo inflato; aperturā subtriangulari; peristomate lato, intus albo, labiato, marginibus callo tenui dentem validum linguiformem emittente junctis, dextro expanso, basali strictiusculo, reflexo, columellari dilatato.*

**THE RAISED HELIX.** Shell with a covered umbilicus, subglobose, obliquely striated, white, beneath a yellowish epidermis; spire raised, turbinated; whorls seven, rather convex, the last inflated; aperture somewhat triangular; lip broad, white edged, margins joined by a thin callosity emitting a strong tongue-shaped tooth, right margin expanded, basal margin rather drawn out and reflected, columellar dilated.

**SAY,** *Journ. Acad. Nat. Sci. Philadelphia*, vol. ii. p. 154.

*Helix Knoxvillea*, Ferrussac.

*Hab.* North America.

Chiefly distinguished from its congeners by its more elevated globose form.

Species 682. (Mus. Cuming.)

**HELIX PROFUNDA.** *Hel. testā profundē umbilicatā, orbiculato-convexā, tenui, confertim costulato-striatā, rivicē aureo-corneā, interdum fasciā unicā latā rufā supra peripheriam ornatā; spirā vix elevatā; anfractibus quinque, convexiusculis, ultimo vix descendente; umbilico percio, perspective; aperturā lunari; peristomate lato, angulatim expanso, margine basali reflexo.*

**THE DEEP HELIX.** Shell deeply umbilicated, orbicularly convex, thin, closely rib-like striated, bright golden-brown, sometimes ornamented above the periphery with a broad red band; spire scarcely raised; whorls five, rather convex, the last a little descending; umbilicus open, perspective; aperture lunar; lip broad, angularly expanded, basal margin reflected.

**SAY,** *Journ. Acad. Nat. Sci. Philadelphia*, vol. ii. p. 160.

*Hab.* North America.

A beautifully bright transparent species, with the whorls convoluted round a broad axis after the manner of a *Solarium*.

Species 683. (Fig. a, b, Mus. Cuming.)

**HELIX OBSTRUCTA.** *Hel. testā obtectē umbilicatā, depressā, costulato-striatā, epidermide nudā pallidē fuscā vestitā; spirā planiusculā; anfractibus quinque, depressis, acutē carinatis, carinā prominente, anfractu ultimo basi convexo; aperturā obliquā, subtriangulari, dente linguiformi arcuatim intrante parietis aperturalis coarctatā; peristomate tenui, latē expanso, intus latē albo-callososo, margine supero validē unidentato, basali stricto, dilatato, reflexo, obsolete unidentato.*

**THE TIED HELIX.** Shell with a covered umbilicus, depressed, rib-like striated, clothed with a pale brown naked epidermis; spire rather flat; whorls five, depressed, sharply keeled, keel prominent, last whorl convex at the base; aperture oblique, subtriangular, contracted by a tongue-shaped tooth entering in an arched manner upon the wall of the aperture; lip thin, broadly expanded, broadly white-callous within, upper margin strongly one-toothed, basal drawn out, reflected, obsolete one-toothed.

**SAY,** *Journ. Acad. Nat. Sci. Philadelphia*, vol. ii. p. 154.

*Hab.* Ohio, North America; Say.

Of the same type as the preceding species, but having the periphery produced throughout into a sharp prominent keel.

Species 684. (Mus. Cuning.)

HELIX BASKERVILLEI. *Hel. testâ umbilicatâ, globoso-depressâ, solidiusculâ, subpellucidâ, obliquè plicato-rugulosâ, lineis spiralibus impressis minutè decussatâ, olivaceo-fuscâ; spirâ subconoideâ; anfractibus sex, angustis, convexiusculis, ultimo rotundato, anticè vis descendente; aperturâ obliquè lunari, dente linguiformi albo pariete aperturali; peristomate latè incrassato, carneo-albido, margine basali appresso, subdentato, columellari dilatato, calloso, umbilicum semitegente.*

BASKERVILLE'S HELIX. Shell umbilicated, globosely depressed, rather solid, subtransparent, obliquely pli-

cately wrinkled, minutely decussated with impressed spiral lines, olive-brown; spire subconical, whorls six, narrow, rather convex, the last rounded, but little descending in front; aperture obliquely lunar with a white tongue-shaped tooth on the wall of the aperture; lip broadly thickened, flesh-white, basal margin appressed, slightly toothed, columellar dilated and callous, half-covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1849, p. 130

*Hab.* Vancouver's Island: Lieut. Baskerville

This species from Vancouver's Island presents the same trifling but characteristic departure from the North American type as the *H. Roemeri* from Texas, namely, that the regular rib-like striae are replaced by irregular plicately wrinkled striae.







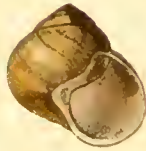
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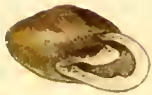
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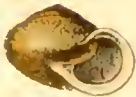
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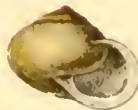
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# HELIX.

PLATE CXVIII.

Species 655. (Mus. Cuming.)

**HELIX SPINOSA.** *Hel. testâ oblectè umbilicatâ, lenticulari, tenui, corneo-fuscâ, hispida, basi convexâ; spirâ rix elevatâ; anfractibus sex, planis, lentè accrescentibus, ultimo anticè gibbo, subdeflexo, acutissimè carinato; aperturâ depressâ, transversâ, sublineari, dente magno linguiformi obliquè intrante in toto pariete aperturali coarctatâ; peristomate calloso, margine supero reflexo, basali introrsum incrassato, obsolete denticulato.*

**THE SPINOUS HELIX.** Shell with a covered umbilicus, lenticular, thin, horny-brown, hairy, convex at the base; spire scarcely raised; whorls six, flat, increasing slowly, last whorl gibbous in front, a little deflected, very sharply keeled; aperture depressed, transverse, nearly linear, contracted by a large tongue-shaped tooth, obliquely entering all along the wall of the aperture; lip callous, upper margin reflected, basal inwardly thickened, obsoletely toothed. *Carocolla spinosa*, Lea, Observations, vol. i. p. 114. pl. 15. f. 35.

*Helix spinosa*, Binney.

*Hab.* Alabama, Tennessee, North America.

A peculiarly flattened lens-shaped shell, characterized by a long erect linguiform tooth upon the body-whorl, which almost closes upon the aperture.

Species 656. (Mus. Cuming.)

**HELIX FALLAX.** *Hel. testâ umbilicatâ, depresso-globosâ, costulato-striatâ, corneo-luteâ; spirâ convexâ; anfractibus sex, convexiusculis, ultimo anticè deflexo, constricto; aperturâ trisinuosâ, dente parietis aperturalis magno linguiformi obliquè arcuatim intrante coarctatâ; peristomate reflexo, intus calloso, albo, bidentato, dente superiore introrsum flexo, a margine remoto, altero sub-basali.*

**THE FALSE HELIX.** Shell umbilicated, depressly globose, finely rib-like striated, horny-yellow; spire convex; whorls six, rather convex, the last deflected and constricted in front; aperture tri-sinuuous, contracted by a large oblique tongue-shaped tooth, entering upon the wall of the aperture in an arched manner; lip reflected, callous within, white, two-toothed, upper tooth bent inwardly, remote from the margin, the other sub-basal.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. v. p. 119.

*Hab.* North America, Virginia, Texas, Philadelphia.

A small compact shell, of a light semitransparent horny texture, peculiarly constricted round the aperture.

Species 657. (Mus. Cuming.)

**HELIX VENTROSULA.** *Hel. testâ angustè umbilicatâ, depresso-globosâ, tenui, subtiliter striatâ, pellucidâ, neo-albidâ; spirâ rix elevatâ; anfractibus quinque, rix convexiusculis, ultimo supernè subangulato, anticè deflexo, basi inflato, anticè gibbo et valde constricto; aperturâ perobliquâ; peristomate acuto, latè reflexo, marginibus rix conniventibus, lamina elevata in ventre anfractis penultimi angulatim junctâ emittentem, dextro laminâ subperpendiculari dilatato, basali denticulis acutis munito.*

**THE SWOLLEN HELIX.** Shell narrowly umbilicated, depressly globose, thin, finely striated, pellucid, horny white; spire but little raised; whorls five, rather convex, the last slightly angled at the upper part, suddenly deflected and inflated at the base, gibbous and much constricted in front; aperture very oblique, lip sharp, broadly reflected, margins a little approximating, emitting raised angularly joined lamella on the body-whorl, right margin dilated into a nearly perpendicular lamina, basal furnished with two sharp teeth.

PFEIFFER, Pro. Zool. Soc. 1845, p. 131.

*Hab.* Mexico; Hinds. Texas; Sowerby.

Somewhat like the last species in general aspect, but smoother, more swollen, and characterized by a peculiar triangular lamella on the body-whorl.

Species 658. (Mus. Cuming.)

**HELIX REDFIELDII.** *Hel. testâ angustè umbilicatâ, depresso-globoso-turbinatâ, tenui, ventricosâ, corneo-fuscâ; spirâ subacuminatâ; anfractibus quinque, convexis, obliquè plicato-striatis, hinc spirâ rix minutè impressè decussatis; aperturâ subcirculari; peristomate tenui, marginibus conniventibus, cetero rix breviter dilatato.*

**REDFIELD'S HELIX.** Shell narrowly umbilicated, somewhat globosely turbinated, thin, ventricose, light flesh-brown; spire somewhat acuminate, whorls



five, convex, obliquely plicately striated, impressly decussated with minute spiral lines; aperture nearly circular; lip thin, margins approximating, columellar margin shortly dilated.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* Shanghai, China; Fortune.

Of a subacuminated *Balimus*-like growth, thin and semi-transparent, and of a uniform light flesh-brown hue.

Species 689. (Mus. Cuming.)

HELIX APPRESSA. *Hel. testā obtectē umbilicatā, orbiculato-depressā, pellucidā, costulato-striatā, corneo-lutescente; spirā planulatā; anfractibus quinque, superne planulatis, ultimo obtusè angulato (angulo anticè evanescente), anticè constricto; aperturā coarctatā, subtriangulāri; peristomate angulatim latè reflexo, intus calloso, marginibus callo tenui, dentem linguiformem obliquè intrantem emittente, junctis, dextro et basali strictiusculo obsolete dentatis.*

THE APPRESSED HELIX. Shell with a covered umbilicus, orbicularly depressed, pellucid, finely rib-like striated, horny-yellow; spire flattened; whorls five, flattened at the upper part, the last obtusely angled (the angle disappearing towards the front) constricted anteriorly; aperture contracted, nearly triangular; lip angularly broadly reflected, callous within, margins joined by a thin callosity, emitting an obliquely entering tongue-shaped tooth, right and basal margins rather drawn out, obsolete toothed.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 151.

*Helix linguifera*, Férussac.

*Hab.* Ohio and Missouri, North America.

Characterized in great measure by its appressly flattened growth.

Species 690. (Mus. Cuming.)

HELIX TRIDENTATA. *Hel. testā umbilicatā, orbiculato-depressā, confertim costulato-striatā, corneo-luteā vel fuscescente; spirā brevissimā; anfractibus quinque ad sex, convexiusculis, ultimo anticè vix descendente; aperturā lunari, subtriangulāri; peristomate reflexo, albo, intus calloso, marginibus connitentibus, callo tenui dentem linguiformem intrantem emittente junctis, dextro et basali unidentatis, dentibus inæqualibus, in ipso margine calli positis.*

THE THREE-TOOTHED HELIX. Shell umbilicated, orbicularly depressed, closely rib-like striated, horny-yellow or brownish; spire very short; whorls five to

six, rather convex, the last a little descending in front; aperture lunar, subtriangular; lip reflected, white, callous within, margins approximating, joined by a thin callosity, emitting an entering tongue-shaped tooth, right and basal margins one-toothed, teeth unequal, placed on the callous edge.

SAY, Nichol's Encyclopædia (American edition), vol. iv.

*Hab.* Atlantic States of North America.

Although resembling *H. fallax* in the dentition of the aperture, the shell is specifically distinct in form and manner of convolution.

Species 691. (Mus. Cuming.)

HELIX MULTILINEATA. *Hel. testā obtectē umbilicatā, depresso-globosā, tenui, pellucidā, costulis minutis obliquis confertissimis ornatā, corneo-stramineā, cingulis variis angustis rufis circumdatā; anfractibus sex, convexiusculis; aperturā lunato-rotundatā; peristomate acuto, angulatim reflexo, margine columellari in laminam tenuem, umbilicum prorsus obtegentem, expanso.*

THE MANY-LINED HELIX. Shell with a covered umbilicus, depressly globose, thin, pellucid, ornamented with oblique close-set minute ribs, horny-straw colour, encircled with various narrow red bands and lines; whorls six, rather convex; aperture lunar-rounded; lip sharp, angularly reflected, columellar margin expanded into a thin lamella, entirely covering the umbilicus.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 150.

*Hab.* Illinois and Missouri, North America.

This delicate finely-ribbed transparent species, encircled with red bands and lines, stands alone as a distinct type by itself among the North American snails.

Species 692. (Mus. Cuming.)

HELIX COLUMBIANA. *Hel. testā umbilicatā, globoso-depressā, tenui, luteo-corneā, striatā, pilis brevibus rigidis obsitā; spirā elevatiusculā; anfractibus sex, convexis, ultimo anticè vix reflexo, ad aperturam constricto; aperturā rotundato-lunari; peristomate latè expanso, intus albo, calloso, margine columellari brevi, subverticali, dilatato, reflexo, umbilicum angustum fere occultante, basali strictiusculo.*

THE COLUMBIA HELIX. Shell umbilicated, globosely depressed, thin, yellowish-horny, striated, covered with short rigid hairs; spire somewhat raised; whorls six, convex, the last a little deflected in front, constricted at the aperture; aperture rotundately

lunar; lip broadly expanded, white, callous within, columellar margin short, subvertical, dilated, reflected, almost concealing the narrow umbilicus, basal margin rather drawn out.

LEA, Observations, vol. ii. p. 89. pl. 23. f. 75.

*Hab.* Fort Vancouver, California, Nootka Sound.

Distinguished by its covering of numerous short bristles, which are arranged obliquely in a direction contrary to the lines of growth.

Species 693. (Mus. Cuming.)

HELIX LIGERA. *Hel. testâ umbilicatâ, orbiculato-convexâ, nitidâ, pallide tuteâ, supernè arcuatim costulato-striatâ, basi lævigatâ; anfractibus sex, convexis, ultimo basi planiore; aperturâ lunari; peristomate simplici, acuto, recto, margine columellari vix reflexiusculo, intus subincrassato.*

THE TIED HELIX. Shell umbilicated, orbicularly convex,

shining, pale yellow, arcuately rib-like striated at the upper part, smooth at the base; whorls six, convex, the last flatter at the base; aperture lunar, lip simple, sharp, straight, columellar margin scarcely reflected, slightly thickened within.

SAY, Journ. Acad. Nat. Sci. Philadelphia vol. ii. p. 157

*Helix Wardiana*, Lea.

*Helix Rafinesquea*, Férussac.

*Hab.* Missouri, Kentucky, Cincinnati, North America.

The chief peculiarity of this species, compared with other forms of the same type, is that there is no callous reflected thickening of the lip.

Fig. 694. (Mus. Cuming.)

This species proves to be *H. clausa*, Say (not of Rafinesque), which is a variety of *H. Pennsylvanica*, represented in Pl. CXVII.







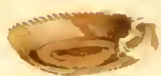
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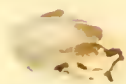
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# HELIX.

PLATE CXIX.

Species 695. (Mus. Cuming.)

**HELIX PERSPECTIVA.** *Hel. testá latè et perspectivè umbilicatá, depresso-orbiculari, supernè vix convexiusculá, subtus excavatá, tenui, rufo-corneá, regulariter costulatá; anfractibus sex ad septem, convexiusculis, lentè accrescentibus; aperturá parvâ, lunato-subcirculari; peristomate acuto, marginibus distantibus.*

**THE PERSPECTIVE HELIX.** Shell broadly and perspective-ly umbilicated, depressly orbicular, slightly convex at the upper part, excavated beneath, thin, red-horny, regularly finely ribbed; whorls six to seven, rather convex, increasing slowly; aperture small, lunar-subcircular; lip simple, acute, margins distant.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. i. p. 18.

*Helix patula*, Deshayes.

*Hab.* North America, near Lake Erie.

A small depressly excavated species, with the whorls widely convoluted so as to form a large open perspective umbilicus.

Species 696. (Mus. Cuming.)

**HELIX CONVEXA.** *Hel. testá subobtectè umbilicatá, globoso-depressá, diaphaná, rufescente-corneá, pilis brevissimis obsitá; spirá convexiusculá; anfractibus quinque ad sex, supremis planiusculis, ultimis duobus convexis, ultimo anticè gibbo, ad aperturam constricto; umbilico angusto, percio; aperturá latè lunari, dente lamelliformi in pariete aperturali coarctatá; peristomate acuto, reflexo, intus albo-callosa.*

**THE CONVEX HELIX.** Shell with a nearly covered umbilicus, globosely depressed, diaphanous, reddish-horny, covered with very short hairs; spire rather convex; whorls five to six, the uppermost rather flat, the last two convex, the last gibbous in front, constricted at the aperture; umbilicus narrow, open; aperture broadly lunar, contracted by a lamelliform tooth upon the wall of the aperture; lip sharp, reflected, white-callous within.

RAFINESQUE, Deshayes, Encyclopédie Méthodique, vol. ii. p. 253.

*Helix monodon*, Rackett.

Eadem var., *Helix fraterna*, Say

*Hab.* Ohio, North America.

A small globose species, covered with very short hairs, which, however, are generally more or less obsolete.

Species 697. (Mus. Cuming.)

**HELIX BICOSTATA.** *Hel. testá vix umbilicatá, semiglobosá, supernè subarcuatim rugoso-striatá, nitidulá, virente-flavidá; spirá magis minusve elevatá; anfractibus septem, angustis, convexiusculis, ultimo basi subplano, medio impresso, lævigato, lineis concentricis obsolete sub lente notato; aperturá latè lunari, bas costis validis, marginem non attingentibus, minutá; peristomate simplici, acuto, margine columellari perobliquo, calloso.*

**THE TWO-RIBBED HELIX.** Shell scarcely umbilicated, semiglobose, somewhat arcuately rugosely striated at the upper part, shining, greenish-yellow; spire more or less raised; whorls seven, narrow, rather convex, the last somewhat flattened at the base, impressed in the middle, smooth, marked beneath the lens with obsolete concentric lines; aperture broadly lunar, furnished at the base with two strong ribs, not reaching to the margin; lip simple, acute, columellar margin very oblique and callous.

PFEIFFER, Symbolæ, vol. iii. p. 69.

*Hab.* Tennessee, North America.

This little species partakes of the same peculiar typical characters as *H. Cookiana*, and others collected in Pl LXII., being of the same hollow-based pyramidal form furnished with internal ribs or lamellæ.

Species 698. (Mus. Cuming.)

**HELIX CEREOLUS.** *Hel. testá latè umbilicatá, orbiculatá, corneá, obliquè costulatá; spirá planati, anfractibus septem ad octo, supernè angustissimis, subæqualibus, penultimo supernè immerso, omnibus basi conspicuis, inequaliter prominentibus, ultimo supernè carinat; aperturá reniformi; peristomate simplici, angulato-reflexo, marginibus lamellâ dentiformi junctis.*

**THE LITTLE TAPER HELIX.** Shell broadly umbilicated, orbicular, horny, obliquely finely ribbed; spire flattened; whorls seven to eight, very narrow at the upper part, nearly equal, penultimate whorl immersed



at the upper part, all conspicuous at the base, unequally prominent, last whorl keeled at the upper part; aperture kidney-shaped; lip simple, angularly reflected, margins joined by a toothed lamella.

MUHLFELDT, Berlin, Mag. vol. viii. p. 11. pl. 2. f. 18.

*Helix septemvoluta*, Férussac.

*Helix planorbula*, Lamarck.

*Helix polygyrata*, Binney.

Hab. Georgia, Florida, North America.

A very singular species, with the whorls convoluted one over the other like a wax taper.

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Species 699. (Mus. Cuming.)

HELIX FLORULIFERA. *Hel. testá umbilicatá, globoso-depressá, supernè planiusculá, arcuatim striatá, basi rotundatá, griseo-albidá; anfractibus quinque, ultimo circa umbilicum parvum tumidiusculo; aperturá parviusculá, horizontali, constrictá, dentibus duobus lamelláque auriformi peculiariter coarctatá; peristomate expanso.*

THE FLOWER-BEARING HELIX. Shell umbilicated, globosely depressed, rather flat at the upper part, arcuately striated, rounded at the base, greyish-white; whorls five, the last rather swollen around the umbilicus, which is small; aperture rather small, horizontal, constricted, peculiarly contracted by two teeth and an ear-shaped lamella; lip expanded.

PFEIFFER, MSS.

Hab. Florida.

The dentition of this species is extremely peculiar.

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Species 700. (Mus. Cuming.)

HELIX AURICULATA. *Hel. testá compresso-umbilicatá, supernè planiusculá, subtus inflatá, costulato-striatá, lutescente vel fuscá; anfractibus quinque ad sex, angustis, ultimo ad aperturam deflexo, disjuncto, subtus constricto, scrobiculato; umbilico plano, penultimum anfractum modo monstrante; aperturá subhorizontali, auriformi, fere clausá; peristomate continuo, marginibus plicá oblongá intrante supernè excavatá junctis, dextro intus lamellá profundá munito, cum basali latè unituberculoso angulum subacutum formante.*

THE AURICULATED HELIX. Shell compressly umbilicated, rather flat at the upper part, inflated beneath, finely rib-like striated, yellowish or brown; whorls five to six, narrow, the last deflected at the aperture, disjoined, constricted and pitted underneath; umbi-

licus flat, sometimes showing the penultimate whorl; aperture subhorizontal, ear-shaped, almost closed; lip continuous, margins joined by an oblong entering fold, excavated at the upper part, right margin furnished with a deep lamella, inwardly forming with the broadly one-tubercled basal margin a rather sharp angle.

*Polygyra auriculata*, Say, Journ. Acad. Nat. Sci. Philadelphia, vol. i. part 2. p. 277.

*Helix auriculata*, Férussac.

Hab. Florida.

Closely allied to the preceding species, but more closely compressly convoluted.

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Species 701. (Mus. Cuming.)

HELIX CUMBERLANDIANA. *Hel. testá subampliter et perspectivè umbilicatá, depresso-orbiculari, subtus convexá, conspicuè arcuatim costulato-striatá, carinatá, infra carinam impressá, fusciscente, rufo maculatá; anfractibus quinque; operturá angulatá; peristomate tenui, acuto.*

THE CUMBERLAND HELIX. Shell somewhat largely and perspectively umbilicated, depressly orbicular, convex beneath, conspicuously arcuately rib-like striated, keeled, impressed beneath the keel, pale brownish, spotted with red; whorls five; aperture angled; lip thin, acute.

LEA, Observations, vol. iii. p. 67. pl. 6. f. 61.

Hab. Cumberland Mountains, Tennessee, North America.

A conspicuously rib-striated red-blotched shell, allied to *H. alternata*.

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Fig. 702. (Mus. Cuming.)

The shell here figured proves to be Dr. Pfeiffer's Variety  $\beta$  of the *Helix hirsuta*, Say, for which see Pl. CXXI. It is of much larger and more opaque growth than the typical species, and is said to have been named in manuscript by De Férussac *H. stenotrema*.

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Species 703. (Mus. Cuming.)

HELIX EDGARIANA. *Hel. testá imperforatá, tenticulari, subtus convexiore, arcuatim striatá, lineis spiralibus impressis minutissimè decussatá, pellucido-albicante, anfractibus quinque, plano-convexis, ultimo ad peripheriam carinato; aperturá angustissimá, horizontali, dente elongato lamináque coarctatá, dente in medio inciso; peristomate anticè incrassato, erecto.*

EDGAR'S HELIX. Shell imperforated, lenticular, more convex beneath, arcuately striated, very minutely de-  
cussated with spiral impressed lines, transparent whitish; whorls five, flatly convex, the last keeled at the periphery; aperture very narrow, horizontal, contracted by an elongated tooth which is slit in the middle and a lamina; lip thickened anteriorly and erect.

*Curocolla Edgariana*, Lea, Pro. American Phil. Soc. 1841, vol. ii. p. 31.

*Hab.* Cumberland Mountains, Tennessee, North America.

Closely allied to *H. hirsuta* in the form and dentition of the aperture, but of a different texture and sculpture.

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Species 704. (Mus. Cuming.)

HELIX CLAUSA. *Hel. testā obtectē umbilicatā, orbiculato-conve-xā, granulato-striatā, pubescente, griseo-fuscā; spirā brevi; anfractibus quinque, convexiusculis, ultimo*

*ad aperturam superne gibboso, lateraliter contracto aperturā coarctatā; peristomate reflexo, intus calloso, margine dextro dente majore intrante, basali dente minore marginali, munitis, pariete aperturali dente tertio linguiformi intrante prædito.*

THE CLOSED HELIX. Shell with a covered umbilicus, orbicularly convex, granularly striated, pubescent, greyish-brown; spire short; whorls five, slightly convex, the last gibbous about the aperture at the upper part, constricted at the side; aperture contracted. lip reflected, callous within, right margin furnished with a large entering tooth, basal margin with a smaller upon the edge, wall of the aperture with a third tongue-shaped entering tooth.

RAFINESQUE, Férussac, Hist. Moll. pl. 51. f. 2.

*Helix inflecta*, Say.

*Hab.* Missouri, Carolina, North America

A rather solid shell, covered with very fine pubescent hairs.







705



706



707



708



709 a



709 b



710



711



712



713

# HELIX.

PLATE CXX.

Species 705. (Mus. Cuming.)

**HELIX MICRODONTA.** *Hel. testā umbilicatā, orbiculato-planā, cornēā vel pallidē rufescente, supernè planā, obliquè et argutè striatā, subtus convexā, tenerrimè striatā, nitidā, maculis opacis radiantibus notatā; umbilico infundibuliformi, excavatā; anfractibus sex, ultimo ad aperturam gibbo; aperturā subtriangulāri; peristomate subincrassato, reflexiusculo, marginibus dente parvo calloso triangulāri junctis.*

**THE SMALL-TOOTH HELIX.** Shell umbilicated, orbicularly flattened, horny or pale red, flat at the upper part, obliquely and smartly striated, convex beneath, very finely striated, shining, marked with opaque radiating spots; umbilicus funnel-shaped, hollowed; whorls six, the last gibbous at the aperture; aperture somewhat triangular; lip rather thickened and a little reflected, margins joined by a small callous triangular tooth.

DESHAYES, in Férussac, Hist. Moll. p. 6. pl. 72. f. 13.

*Helix plana*, Dunker.

*Hab.* Texas and Bermuda Islands.

Distinguished by the small tooth which is set in a triangular form on the body-whorl.

Species 706. (Mus. Cuming.)

**HELIX TROOSTIANA.** *Hel. testā umbilicatā, discoideā, utrinque costulatā, cornēā, supernè planulatā, basi convexiore; spirā planiusculā; anfractibus quinque ad sex, planulatis, penultimo subtilus umbilicum latum planulatum formante, ultimo anticè deflexo, constricto; aperturā obliquā, lunari, coarctatā; peristomate acuto, angulatim reflexo, intus calloso, marginibus callo dentem linguiformem subtriangularem emittente junctis, basali dente submarginali, dextro dente latiore profundo, munitis.*

**TROOST'S HELIX.** Shell umbilicated, discoid, finely ribbed on both sides, horny, flattened at the upper part, convex at the base; spire rather flat; whorls five to six, flattened, penultimate whorl forming underneath a broad flattened umbilicus, last whorl deflected and constricted in front; aperture oblique, lunar, contracted; lip sharp, angularly reflected, callous within, margins joined by a callosity emitting a subtriangular

tongue-shaped tooth, basal tooth submarginal, right margin furnished with a deep broader tooth.

*Polygyra Troostiana*, Lea, Observations, vol. ii. p. 170 pl. 24. f. 119.

*Hab.* Tennessee, North America.

The tongue-shaped tooth upon the body-whorl of this species is unusually broad and excavated.

Species 707. (Mus. Cuming.)

**HELIX TEXASIANA.** *Hel. testā umbilicatā, orbiculato-depresso-globosā, tenuiusculā, nitidulā, albā vel rubellā, superius confertim plicatā, basi convexā, lævigatā; spirā brevissimā, vix elevatā; anfractibus sex, planulatis, ultimo prope aperturam argutè plicato, anticè deflexo, subtilius constricto, basi deviante, rimam arcuatam formante; aperturā lunari, coarctatā; peristomate albo, reflexo, marginibus dente linguiformi acuto triangulāri junctis, dextro dente minuto, basali dente validiore, munitis.*

**THE TEXAS HELIX.** Shell umbilicated, orbicularly depressed, rather thin, shining, whitish or reddish, closely plicated at the upper part, convex and smooth at the base; spire very short, scarcely raised; whorls six, flattened, the last neatly plicated near the aperture, deflected in front, constricted beneath, deviating at the base so as to form an arched rim; aperture lunar, contracted; lip white, reflected, margins joined by a sharp triangular tongue-shaped tooth, right margin furnished with a minute tooth, basal with a stronger one.

MORICAND, Mem. Soc. Hist. Nat. Geneva, vol. vi. p. 538 pl. 1. f. 2.

*Hab.* Texas, Alabama.

The tooth on the body-whorl forms a distinct hollowed triangle joining with the margins of the aperture

Species 708. (Mus. Cuming.)

**HELIX BERLANDERIANA.** *Hel. testā anguste umbilicatā, depresso-globosā, striatā, lucidā, albā vel cinerā, vix terdum unifasciatā; anfractibus quatuor ad quinque, convexiusculis, ultimo basi inflato; aperturā lunari subcirculari; peristomate acuto, intus calloso, marginibus columellari juxta umbilicum angustum reflexo, dextro dente*

**BERLANDER'S HELIX.** Shell narrowly umbilicated



pressly globose, striated, lucid, white or ash-coloured, sometimes one-banded; whorls four to five, rather convex, the last inflated at the base; aperture lunar-subcircular; lip sharp, thickened within, columellar margin reflected and dilated next the aperture.

MORICAND, Mem. Soc. Nat. Hist. Geneva, vol. vi. p. 537. pl. 1. f. 1.

Hab. Texas.

This species, which has the appearance of a glassy bubble, is very distinct from any of the North American forms; so much so, as almost to cast a doubt upon its locality.

Species 709. (Mus. Cuming.)

HELIX HOPETONENSIS. *Hel. testā umbilicatā, subdepresso-orbiculari, undique creberrimè costato-striatā, olivaceo-corneā; anfractibus quinque, rotundatis; aperturā lunato-circulari; peristomate effuso, subreflexo, intus labiato, marginibus conniventibus, dente brevi albo in pariete aperturali, margine columellari dente parvo, basali dente latiore, munitis.*

THE HOPETON HELIX. Shell umbilicated, somewhat depressly orbicular, very closely rib-like striated throughout, olive-horny; whorls five, rounded; aperture lunar-circular; lip effused, a little reflected, thickened within, margins approximating, with a short white tooth on the wall of the aperture, columellar margin furnished with a small tooth, basal with a broader one.

SHUTTLEWORTH, MS.

Hab. Texas.

A neatly closely ribbed rounded species, of a glossy olive aspect, having three small teeth in the aperture, one on the body-whorl, and two on the inner edge of the lip opposite.

Species 710. (Mus. Cuming.)

HELIX CAYENNENSIS. *Hel. testā umbilicatā, discoideā, striatulā, nitidā, corneo-lutescente; spirā subplanulatā; anfractibus quinque, vix convexiusculis, ultimo vix dilatato, non descendente; umbilico magno, pervio; aperturā lunato-circulari; peristomate simplici, acuto.*

THE CAYENNE HELIX. Shell umbilicated, discoid, finely striated, shining, horny-yellow; spire rather flattened; whorls five, but little convex, the last scarcely dilated, not descending; umbilicus large, open; aperture lunar-circular; lip simple, acute.

PELLEFFER, Symbolæ, vol. ii. p. 21.

Hab. Cayenne; Petit.

A shell of simple *Planorbis*-like growth, without any indication of teeth in the aperture.

Species 711. (Mus. Cuming.)

HELIX VULTUOSA. *Hel. testā umbilicatā, depresso-orbiculari, undique creberrimè costellato-striatā, olivaceo-corneā; spirā convexā; anfractibus sex, subangustis, convexis, ultimo subobscurè carinato; umbilico parvo, profundo; aperturā subquadrato-lunari, dente prominente linguiformi in pariete aperturali; peristomate incrassato, subreflexo, margine columellari dente oblongo, dextro dente triangulari introverto, munitis.*

THE GRIM-LOOKING HELIX. Shell umbilicated, depressly orbicular, very closely rib-like striated throughout, olive-horny; spire convex; whorls six, rather narrow, convex, the last somewhat obscurely keeled; umbilicus small, deep; aperture somewhat squarely lunar, with a prominent tongue-shaped tooth on the wall of the aperture; lip thickened, a little reflected, columellar margin furnished with an oblong tooth, right margin with a triangular tooth turned inwards.

GOULD, Pro. Nat. Hist. Soc. Boston, 1848, p. 35.

Hab. Texas.

This is very closely allied to *H. Hopetonensis*, but is more closely convoluted, having a whorl more, and there is a difference in the form of the teeth.

Species 712. (Mus. Cuming.)

HELIX HINDSI. *Hel. testā angustè umbilicatā, depressā, subtiliter striatā, corneo-lutescente, diaphanā, nitulā; spirā parum elevatā; anfractibus quinque, planiusculis, ultimo basi convexiore, anticè deflexo, subtus constricto; aperturā perobliquā, lunari; peristomate breviter reflexo, marginibus conniventibus, callo triangulari dentiformi junctis, dextro lamellā subverticali, basali dentibus aculis, munitis.*

HINDS'S HELIX. Shell narrowly umbilicated, depressed, finely striated, horny-yellow, diaphanous, shining; spire but little raised; whorls five, rather flat, the last more convex at the base, deflected in front, constricted beneath; aperture very oblique, lunar; lip shortly reflected, margins approximating, joined by a triangular tooth-shaped callosity, right margin furnished with a nearly vertical lamella, basal with two sharp teeth.

PFEIFFER, Pro. Zool. Soc. 1845, p. 132.

*Hab.* Texas.

Of a hyaline yellowish-white substance, only faintly striated, with a prolonged triangular tooth on the body-whorl.

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Species 713. (Mus. Cuming.)

HELIX DORFEUILLEANA. *Hel. testá umbilicatá, nitulá, rufo-corneá, supernè brevissimè conoideá, plicato-striatá, infernè subinflatá, lævigatá; anfractibus quinque ad sex, converiusculis, ultimo anticè vix deflexo; aperturá majusculá, interdum dente in pariete aperturali; peristomate reflexo, albo, dentibus duobus marginalibus intus minuto.*

DORFEUILLE'S HELIX. Shell umbilicated, shining, reddish-horny, very shortly conoid at the upper part, plicately striated, somewhat inflated and smooth at the lower; whorls five to six, rather convex, the last slightly deflected in front; aperture rather large, sometimes with a tooth on the wall of the aperture, lip reflected, white, furnished interiorly with two marginal teeth.

LEA, Observations, vol. ii. p. 197. pl. 24. f. 118.

*Hab.* Ohio, North America. Honduras: Dyson.

The specimen here figured has no teeth on the inner wall of the aperture, it being as commonly absent as present.







714



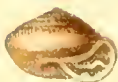
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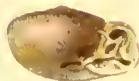
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# HELIX.

PLATE CXXI.

## Species 714. (Mus. Cuming.)

**HELIX HIRSUTA.** *Hel. testâ imperforatâ, globulosâ, diaphanâ, rufâ, undique hirsutâ, subtilis inflatâ; anfractibus quinque, convexiusculis, ultimo anticè gibbo, angularitè deflexo; aperturâ irregulariter transversè lunari, rimulâformi, dente prælongo lamelliformi in pariete aperturali coarctatâ; peristomate supernè vix expanso, basi callo trisinuoso introrsum prominente subincrassato.*

**THE HAIRY HELIX.** Shell imperforated, globular, diaphanous, reddish, hairy throughout, inflated beneath; whorls five, rather convex, the last gibbous in front, angularly deflected; aperture irregularly transversely lunar, rim-shaped, contracted by a prolonged lamelliform tooth on the apertural wall; lip a little expanded at the upper part, thickened inwardly at the base by a prominent trisinuous callosity.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. i. p. 17.

*Helix fraterna*, Wood.

*Hab.* Pennsylvania, North America.

Closely allied to *H. stenotrema*, but smaller and of more transparent texture.

## Species 715. (Mus. Cuming.)

**HELIX PURA.** *Hel. testâ umbilicatâ, depressâ, virescenti-corneâ, pellucidâ, nitidâ, striatulâ; spirâ subplanulatâ; anfractibus quatuor, vix convexiusculis, celeriter accrescentibus, ultimo depresso; umbilico mediocri, pervio; aperturâ perobliquâ, lunato-rotundatâ; peristomate simplici, acuto.*

**THE TRANSPARENT HELIX.** Shell umbilicated, depressed, greenish-horny, transparent, finely striated; spire rather flattened; whorls four, slightly convex, increasing quickly, last whorl depressed; umbilicus middling, open; aperture very oblique, lunar-rounded; lip simple, acute.

ALDER, Catalogue, p. 12.

*Helicella nitidiosa*, Férussac.

*Helix nitidiosa*, Rossmäissler.

*Helix nitidula*, var., Draparnaud.

*Helix lenticula*, Held.

*Helix electrina*, Gould.

*Zonites purus*, Gray.

Eadem var. *Helix radiatula*, Alder.

*Helix clara*, Held.

*Hab.* Germany, France, Britain, Massachusetts, U.S.

A small greenish glassy shell, more or less faintly striated.

## Species 716. (Mus. Cuming.)

**HELIX SELENINA.** *Hel. testâ umbilicatâ, depresso-orbiculari, pellucido-corneâ, albidâ, tenuissimè obsolete striatâ; anfractibus quinque, planiusculis, ultimo obtusè carinato; umbilico parvo, profundo; aperturâ lunato-circulari; peristomate tenui, simplici.*

**THE MOON-LIKE HELIX.** Shell umbilicated, depressly orbicular, transparent-horny, whitish, very finely obsolete striated; whorls five, rather flat, the last obtusely keeled; umbilicus open, deep; aperture lunar-circular; lip thin, simple.

GOULD, Pro. Nat. Hist. Soc. Boston, 1848, p. 38

*Hab.* Florida.

A small whitish-horny species of very simple character

## Fig. 717. (Mus. Cuming.)

This shell, received with the name *H. monodon*, Binney, proves to be identical with *H. convexa*, Rafinesque, 21800 at Pl. CXIX. Sp. 696.

## Species 718. (Mus. Cuming.)

**HELIX INTERNA.** *Hel. testâ angustissimè umbilicatâ, orbiculato-convexiusculâ, supernè regulariter et confertè costulatâ, subtilis lœviusculâ, nitidâ, pallidè corneâ, spirâ parum elevatâ; anfractibus septem, angustis, supernè planatis, ultimo basi emicriori, punctiformi; aperturâ latè lunari; peristomate simplici, acuto, margine basali dentibus plaitiformibus, et marginem non porrigentibus, munitè.*

**THE INTERNAL HELIX.** Shell very narrowly umbilicated, orbicularly convex, regularly and closely ribbed at the upper part, rather smooth and shining beneath, pale horny; spire but little raised, whorls seven, narrow, rather flat at the upper part, last whorl more convex at the base; umbilicus puncture-like, aperture broadly lunar; lip simple, sharp, basal margin furnished with two plait-like teeth, not reaching to the edge.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 155

*Helix pomum-Atlami*, Green.

*Hab.* Missouri, Ohio, Pennsylvania, Virginia, North America.

Distinguished by its numerous narrow whorls, strongly rib-striated, and by the internal plait-like teeth of the aperture.



## Species 719. (Mus. Cuming.)

HELIX GULARIS. *Hel. testâ subumbilicatâ, orbiculato-convexâ, tenui, striatulâ, nitidâ, luteo-corneâ; anfractibus quinque ad sex, angustis, planiusculis; aperturâ lunari, intus dentibus pliciformibus, margine basali adnatis, exlus conspicuis, coarctatâ; peristomate simplici, acuto.*

THE GULLET HELIX. Shell slightly umbilicated, orbicularly convex, thin, finely striated, shining, yellowish-horny; whorls five to six, narrow, rather flat; aperture lunar, contracted by two plait-like teeth, which extend to the margin, and are conspicuous from without; lip simple, acute.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 156.

*Hab.* Ohio, Pennsylvania, North America.

The internal plait or plaits extend for some little distance within the aperture, and are seen from the outside.

## Species 720. (Mus. Cuming.)

HELIX AVARA. *Hel. testâ rimato-umbilicatâ, depressâ, striatâ, hispidâ, fusco-corneâ; spirâ brevissimâ; anfractibus quinque, planiusculis, ultimo basi umbilicatum latum non perium formante; aperturâ brevi, coarctatâ, triangulari-subreniformi; peristomate reflexo, marginibus dente magno uncinato junctis, basili dente majusculo triangulari, dextro dente latiore illi approximato, munitis.*

THE GREEDY HELIX. Shell rim-like umbilicated, depressed, striated, hairy, brown-horny; spire very short; whorls five, rather flat, the last forming at the base a broad closed umbilicus; aperture short, contracted, triangularly somewhat kidney-shaped; lip reflected, margins joined by a large hooked tooth, basal margin furnished with a rather large triangular tooth, right margin with a broader tooth near to it.

*Polygyra avara*, Say, Journ. Acad. Nat. Sci. Philadelphia, vol. i. p. 277.

*Helix Sayi*, Wood.

*Hab.* Louisiana and West Florida.

The mouth of this species is nearly closed up by the strong development of the lip and marginal teeth.

## Species 721. (Mus. Cuming.)

HELIX PUSTULA. *Hel. testâ umbilicatâ, depressâ, minutè striatulâ, rufo vel pallidè corneâ; spirâ vix elevatâ; anfractibus quatuor ad quinque, vix convexiusculis, ultimo basi convexiore, anticè breviter deflexo, constricto; aperturâ obliquâ, angustâ, sinuato-lunari; peristomate breviter reflexo, marginibus dente mediocri linguiformi junctis, basali dilatato, dentibus approximatis munito.*

THE PUSTULE HELIX. Shell umbilicated, depressed, minutely striated, reddish or pale horny; spire scarcely raised; whorls four to five, slightly convex, the last

more convex at the base, shortly deflected and constricted in front; aperture oblique, narrow, sinuately lunar; lip shortly reflected, margins joined by a middling tongue-shaped tooth, basal margin dilated, furnished with two approximating teeth.

FERUSSAC, Hist. Moll. pl. 50. f. 1.

*Hab.* Texas.

This appears to be the smallest of the North American species, distinguished by an oblong tongue-shaped tooth on the body-whorl.

## Species 722. (Mus. Cuming.)

HELIX LEPORINA. *Hel. testâ angustè umbilicatâ, depressiusculâ, fusco-corneâ, obliquè striatâ; spirâ convexâ; anfractibus quinque, convexis, ultimo obtusè carinato; aperturâ obliquâ, angustâ, dente linguiformi laminari in pariete aperturali intrante; peristomate erecto, subeffuso, margine columellari dilatato, basali dentibus duobus intus munito.*

THE HARE HELIX. Shell narrowly umbilicated, rather depressed, brown-horny, obliquely striated; spire convex; whorls five, convex, the last obtusely keeled; aperture oblique, narrow, with a laminar tongue-shaped tooth entering upon the wall of the aperture; lip erect, effused, columellar margin dilated, basal furnished inwardly with two teeth.

GOULD, Pro. Nat. Hist. Soc. Boston, 1848, p. 39.

*Hab.* Tennessee, North America.

It has been much doubted whether this and the preceding species are not varieties of the same; still the smaller shell has the larger umbilicus.

## Species 723. (Mus. Cuming.)

HELIX SUPPRESSA. *Hel. testâ infundibuliformi-umbilicatâ, depresso-orbiculari, virescente-olivaceâ, vitreâ, subtiliter plicato-striatâ; anfractibus septem ad octo, angustis, plano-convexis, ultimo basi subconcano; aperturâ lunari, laminâ tenui internâ munitâ; peristomate simplici, acuto.*

THE CONCEALED HELIX. Shell with a funnel-shaped umbilicus, depressly orbicular, greenish-olive, glassy, finely plicately-striated; whorls seven to eight, narrow, flatly convex, the last somewhat concave at the base; aperture lunar, furnished with a thin internal lamina; lip simple, acute.

SAY, Description of new terrestrial shells, p. 14; Binney, Journ. Nat. Hist. Soc. Boston, vol. iii. p. 410 pl. 11. f. 3.

*Hab.* Tennessee, North America.

Dr. Pfeiffer quotes this species as a variety of *H. gularis*, but it is composed of more whorls, has a narrow deep funnel-shaped umbilicus, and the lamina of the aperture is more internal.





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# HELIX.

PLATE CXXII.

Species 724. (Mus. Cuming.)

**HELIX LINEATA.** *Hel. testâ latè umbilicatâ, subdiscoideâ, tenui, pallidè flavescente, striis concentricis confertis lineatâ; spirâ brevissimâ; anfractibus quatuor ad quinque, suturâ impressâ; aperturâ lunari, intus remotè bidentatâ; peristomate simplici.*

**THE LINEATED HELIX.** Shell broadly umbilicated, subdiscoid, thin, pale yellow, lineated with close-set concentric lines; spire very short; whorls four to five, with the suture impressed; aperture lunar, remotely two-toothed within; lip simple.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. i. part 1. p. 18; part 2. p. 373.

*Hab.* Philadelphia, Massachusetts, North America.

Distinctly characterized by its spiral concentric lines.

Species 725. (Mus. Cuming.)

**HELIX PULCHELLA.** *Hel. testâ umbilicatâ, subdepressâ, albidâ, nitidâ, glabrâ; anfractibus tribus ad quatuor, convexiusculis, ultimo anticè dilatato, non deflexo; aperturâ obliquâ, subcirculari; peristomate reflexo, candidè sublabiato, marginibus approximatis.*

**THE PRETTY HELIX.** Shell umbilicated, somewhat depressed, whitish, shining, smooth; whorls three to four, rather convex, the last dilated in front, not deflected; aperture oblique, nearly circular; lip reflected, white-thickened inwardly, with the margins approximating.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 30.

*Helix paludosa*, Walker.

*Helix minuta*, Say.

*Helix crystallina*, Dillwyn.

*Hab.* Europe, Madeira, North America.

A small white glassy *Cyclostoma*-like shell.

Fig. 726. (Mus. Cuming.)

This shell, an authentic specimen of *H. minuta*, Say, can only be regarded as a variety of the preceding, if not synonymous with it.

Species 727. (Mus. Cuming.)

**HELIX STRIATELLA.** *Hel. testâ umbilicatâ, orbiculato-convexiusculâ, tenuissimâ, fusco-corneâ, confertim con-*

*tulatâ; anfractibus quatuor, viz convexiusculis, ultimo basi inflato, latiusculo; umbilico majusculo, percio; aperturâ subcirculari; peristomate simplici, acuto. marginibus approximatis.*

**THE FINELY STRIATED HELIX.** Shell umbilicated, orbicularly convex, very thin, brown horny, closely finely ribbed; whorls four, rather convex, the last inflated and rather broad at the base; umbilicus rather large, open; aperture nearly circular; lip simple, sharp, with the margins approximating.

ANTHONY, Journ. Nat. Hist. Soc. Boston, U.S. vol. iii. p. 278. pl. 3. f. 2.

*Hab.* Ohio, Massachusetts, North America.

Distinguished by its hollowed base, dark-brown colour, and characteristic ribbed sculpture.

Species 728. (Mus. Cuming.)

**HELIX LABYRINTHICA.** *Hel. testâ umbilicatâ, conicâ, costulatâ, saturatè rufâ, subtus pallidiorè, lævigatâ, nitidâ; anfractibus quinque ad sex, convexiusculis; umbilico angusto, percio; aperturâ viz obliquâ, lunari; peristomate breviter reflexo, simplici; pariete aperturali dente majusculo lamelliformi intrante et lineâ elevatâ interdum obsoletâ prope columellam munito.*

**THE LABYRINTHINE HELIX.** Shell umbilicated, conical, finely ribbed, dark red, paler smooth and shining beneath; whorls five to six, rather convex; umbilicus narrow, open; aperture scarcely oblique, lunar; lip shortly reflected, simple; wall of the aperture furnished with a rather large entering lamelliform tooth, with a raised line, which is sometimes obsolete, near the columella.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. i. part 1. p. 124.

*Hab.* Pennsylvania, Missouri, Massachusetts, Texas, North America.

A small finely-ribbed shell, of conical growth, of a dark-brown colour, with sometimes a blood-red iridescent hue, having one sometimes two entering lamellar plates on the body-whorl.

Species 729. (Mus. Cuming.)

**HELIX MULTIDENTATA.** *Hel. testâ umbilicatâ, orbiculatâ, depressâ, nitidulâ, corneâ, supernè rugulosis*



*striatá, basi lævigatá; spirá vix elevatá, obtusá; anfractibus sex, angustis, subplanulatis, ultimo supernè subangulato, intus seriebus pluribus remotis dentium munito, dentibus in serie basi pellucete; umbilico angustissimo, pervio; aperturá depressá, lunari; peristomate simplici, acuto.*

THE MANY-TOOTHED HELIX. Shell umbilicated, orbicular, depressed, shining, horny, regularly striated at the upper part, smooth at the base; spire scarcely raised, obtuse; whorls six, narrow, rather flattened, the last slightly angled at the upper part, furnished within with several distant rows of teeth, five in a row on the transparent base; umbilicus very narrow, open; aperture depressed, lunar; lip simple, sharp.

GOULD, Journ. Nat. Hist. Soc. Boston, U. S. vol. iii. p. 425. pl. 22. f. 5.

*Hab.* Vermont, North America.

The rows of teeth which characterize this species are internal, and not seen at the aperture.

Species 730. (Mus. Cuming.)

HELIX INDENTATA. *Hel. testá vix umbilicatá, depressá, pellucidá, pallidè corneá, nitidissimá, lineis radiantibus impressis regulariter distantibus notatá; spirá planiusculá; anfractibus quatuor ad quinque, celeriter accrescentibus, ultimo circa umbilicum punctiforme excavato; aperturá depressá, amplá, lunari; peristomate simplici, acuto, margine supero antrorsum arcuato.*

THE INDENTED HELIX. Shell scarcely umbilicated, depressed, transparent, pale horny, very shining, marked with regularly distant impressed radiating lines; spire rather flat; whorls four to five, increasing rapidly, the last excavated around the puncture-like umbilicus; aperture depressed, large, lunar; lip simple, sharp, upper margin curved forward.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. ii. p. 372.

*Hab.* New Jersey, Massachusetts, Philadelphia, North America.

A bright glassy shell, indented throughout with radiating ridges.

Species 731. (Mus. Cuming.)

HELIX MINUSCULA. *Hel. testá umbilicatá, depressá, tenui, pellucidá, hyaliná, nitidá, sub lente ruguloso-striatá; spirá vix elevatá; anfractibus quatuor, planiusculis, ultimo tereti, vix latiore; umbilico lato, pervio; aperturá subcirculari; peristomate simplici, acuto.*

THE LITTLE HELIX. Shell umbilicated, depressed, thin,

transparent, hyaline, shining, finely striated in a wrinkled manner beneath the lens; spire but little raised; whorls four, rather flat, last whorl tapering, scarcely broader than the rest; umbilicus broad, open; aperture nearly circular; lip simple, sharp.

BINNEY, Journ. Nat. Hist. Soc. Boston, U. S. vol. iii. p. 435. pl. 22. f. 4.

*Hab.* Vermont, Ohio, North America.

The smallest of the North American species.

Species 732. (Mus. Cuming.)

HELIX FULVA. *Hel. testá vix umbilicatá, turbinato-globosá, corneá, minutissimè striatulá, nitidá; anfractibus sex, convexis, angustissimis, ultimo basi convexiusculo; aperturá depressá, lunari; peristomate recto, simplici, acuto.*

THE FULVOUS HELIX. Shell scarcely umbilicated, turbinate-globose, horny, very minutely striated, shining; whorls six, convex, very narrow, the last rather convex at the base; aperture depressed, lunar; lip straight, simple, sharp.

MULLER, Verm. terr. et fluv. Hist. vol. ii. p. 56.

*Helix trochiformis*, Montagu.

*Helix trochulus*, Dillwyn.

*Helix chersina*, Say.

*Helix Mandralisci*, Bivon.

*Helix Mortoni*, Jeffreys.

*Hab.* Europe, North America.

A smooth transparent globular shell.

Species 733. (Mus. Cuming.)

HELIX ARBOREA. *Hel. testá umbilicatá, depressá, nitidulá, striatulá, virente vel fulvescente corneá; spirá convexá, parum elatá; anfractibus quatuor ad quinque, convexiusculis, ultimo vix depresso; umbilico angusto, pervio; aperturá lunato-circulari; peristomate simplici, acuto.*

THE ARBOREAL HELIX. Shell umbilicated, depressed, shining, finely striated, greenish or fulvous horny; spire convex, but little raised; whorls four to five, rather convex, the last slightly depressed; umbilicus narrow, open; aperture lunar-circular; lip simple, sharp.

SAY, American Encyclopædia, pl. 4. f. 4.

*Helix Ottonis*, Pfeiffer.

*Hab.* Ohio, Massachusetts, North America.

A bright olive glassy shell, extremely thin and transparent.



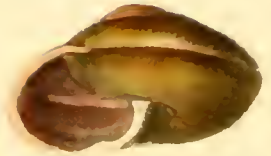




734



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735.6



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# HELIX.

PLATE CXXIII.

Species 734. (Mus. Benson.)

**HELIX OXYTES.** *Hel. testā ampliter umbilicatā, depressā, lenticulari, ferrugineo-carneā aut fulvescente, arcuatim tenuè plicato-striatā; spirā convexā, suturis non excavatis; anfractibus quinque ad sex, planulatis, ultimo aculé carinato; umbilico latè perspectivo, anfractus usque ad apicem exhibente; aperturā subquadrato-lunari; peristomate paululum reflexo.*

**THE SHARP-EDGED HELIX.** Shell largely umbilicated, depressed, lenticular, rusty flesh-colour or yellowish, arcuately finely plicately striated; spire convex, with the sutures not excavated; whorls five to six, rather flattened, the last sharply keeled; umbilicus broadly perspective, exhibiting the whorls as far as the apex; aperture somewhat squarely lunar; lip a little reflected.

BENSON, Journ. Asiatic Soc. of Calcutta, 1836. vol. v. p. 351.

*Hab.* East Frontier of Bengal.

A fine large sharply keeled species, remarkable for its large and deep perspective umbilicus.

Species 735. (Fig. a, b, Mus. Benson.)

**HELIX THYREUS.** *Hel. testā profundè umbilicatā, sinistrali, olivaceo-corneā, infra carinam pallidè fusco-fasciatā, solidiusculā, arcuatim subtilissimè striatā; spirā parum convexā, apice obtusā; anfractibus quinque, planulatis, ultimo carinato, deinde rotundato; aperturā subquadrato-lunari; peristomate paululum incrassato, reflexo, carneo, marginibus conniventibus.*

**THE SHIELD HELIX.** Shell deeply umbilicated, sinistral, olive-horny, faintly banded with brown beneath the keel, rather solid, arcuately very finely striated; spire but little convex, obtuse at the apex; whorls five, flattened, the last keeled, then rounded; aperture somewhat squarely lunar; lip a little thickened, dilated, flesh-coloured, with the margins approximated.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. ix.

*Hab.* Southern India; Jerdon.

A rather solid reversed species, of a dull olive hue, faintly banded below the keel, with a deep, but not broad, umbilicus.

Species 736. (Fig. a, b, Mus. Benson.)

**HELIX AMPULLA.** *Hel. testā imperforatā, obliquè oratā, tenui, valde inflatā, intensè virente-olivaceā, corni; spirā parvā, obtusā; anfractibus tribus, primis duobus confertim plicato-costellatis, ultimo radiatim et divaricatim anguloso-striato et malleato, costellis veanulis; aperturā peramplā; peristomate tenui, marginibus approximalis.*

**THE FLASK HELIX.** Shell imperforated, obliquely ovate, thin, very much inflated, dark greenish-olive, horny. spire small, obtuse; whorls three, the first two finely and closely plicately ribbed, the last radiately and divaricately striated and indented in a wrinkled manner, ribs faded away; aperture very large; lip thin, margins approximated.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 213.

*Hab.* Khoonda Pass, Nilgherries; Jerdon.

This very interesting and distinct species has the oblong-ovate inflated form of *H. magnifica*, with the texture and external sculpture of the South African *H. Cyfra*, save that in the last whorl the riblets disappear and the surface is indented and cross-veined with broad superficial wrinkled striae. It is a remarkable species both as regards its specific and its typical character.

Species 737. (Mus. Benson.)

**HELIX CYSTIS.** *Hel. testā subangustè umbilicatā, sinistrali, sordidè olivaceā, apicem versus carneo-tinctā, arcuatim tenui-striatā; spirā convexā, subobtusā, anfractibus quinque, plano-concavis; aperturā lunari-circulari, peristomate paululum reflexo, marginibus conniventibus.*

**THE BLADDER HELIX.** Shell somewhat narrowly umbilicated, sinistral, dirty-olive, flesh-tinged towards the apex, arcuately finely striated; spire convex, rather obtuse; whorls five, flatly convex; aperture lunar-circular; lip a little reflected, with the margins approximating.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. ix.

*Hab.* Nilgherry Mountains; Jerdon.

A large reversed dirty-olive shell, flesh-tinged towards the apex, covered with a very thin darker olive epidermis.

Species 738. (Mus. Benson.)

HELIX OROBIA. *Hel. testā minutè umbilicatā, orbiculari, subdepressā, arcuatim striatā, striis juxta suturam plitatis, lineis impressis spiralibus sub lente subtilissimè decussatā, fulvo-olivaceā, fasciā rufescente-castaneā ad peripheriam cingulatā, basi virescente, sub lente minutissimè granulatā; anfractibus quinque, convexis; aperturā lunari; peristomate simplici, intus callosos-annulato.*

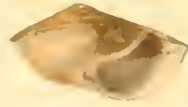
THE MOUNTAINEER HELIX. Shell minutely umbilicated, orbicular, slightly depressed, arcuately striated, striae

plicated next the suture, very finely decussated beneath the lens with impressed spiral striae, fulvous-horny, encircled with a reddish-chestnut band at the periphery, base greenish, beneath the lens very minutely granulated; whorls five, convex; aperture lunar; lip simple, callous-ringed within.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 158.  
*Hab.* Darjeeling, Sikkim-Himalaya.

Convex on both sides, with a very small but deep umbilicus, characterized by minute sculpture beneath the lens.

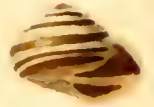




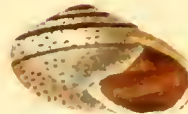
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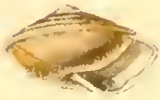
740. a



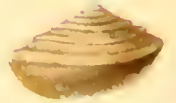
741. b



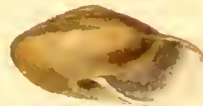
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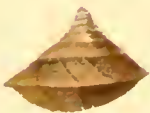
742. a



742. b



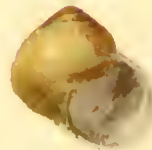
743



744. a



744. b



745

# HELIX.

PLATE CXXIV.

Species 739. (Mus. Benson.)

**HELIX ACUDUCTA.** *Hel. testā minutē umbilicatā, tenui, supernē plano-depressā, subtus rotundatā, fulvescente-corneā, arcuatim costellato-striatā, striis lineis spiralibus minutis impressis sub lente decussatā, basi læviore; anfractibus quinque, ultimo acutissimē carinato, supra et infra carinam subconcavo-impresso; aperturā subquadrato-lunari; peristomate tenui, acuto, margine columellari breviter revoluto.*

**THE SCRATCHED HELIX.** Shell minutely umbilicated, thin, flatly depressed at the upper part, rounded beneath, fulvous-horny, arcuately rib-like striated, striæ decussated beneath the lens with minute impressed lines, base smoother; whorls five, the last sharply keeled, slightly concavely impressed above and below the keel; aperture somewhat squarely lunar; lip thin, sharp, columellar margin shortly turned back.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 214.

*Hab.* In woods on the summits of the Nilgherries; Jerdon.

A brittle transparent horny shell sharply keeled in the middle, of which the upper surface is comparatively flat, in part concave, throughout elaborately finely sculptured, and the under surface is rounded and smoother.

Species 740. (Fig. a, b, Mus. Benson.)

**HELIX COTYLEDONIS.** *Hel. testā imperforatā, subconoidē, tenui, lævigatā, pellucido-corneā, rufo-fuscā, fasciā latā epidermidis hydrophanæ opaco-albæ cingulatā; anfractibus quinque, convexis; aperturā lunari, labro tenui, acuto.*

**THE COTYLEDON HELIX.** Shell imperforated, subconoid, thin, smooth, transparent horny, red-brown, encircled with a broad opaque-white band of hydrophanous epidermis; whorls five, convex; aperture lunar, lip thin, acute.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 216.

*Hab.* Simon's Bay, Cape of Good Hope; Benson.

A delicate red-brown transparent shell, distinguished by a band of opaque-white hydrophanous epidermis, after the manner of the Philippine snails.

Species 741. (Mus. Benson.)

**HELIX SOLUTA.** *Hel. testā subobtectē umbilicatā, depresso-orbiculari, anticē subobliquē productā, plicato-striatā, opaco-albā, cinereo-tinctā, nigro-punctatā, livā fusco-rufā cingulatā, apicem versus livido-purpurascente, anfractibus quinque, plano-convexis; aperturā transversē lunari, fauce fusco-rufā, labro subsimplici, margine columellari reflexiusculo.*

**THE FRECKLED HELIX.** Shell with a nearly covered umbilicus, depressly orbicular, rather obliquely produced in front, plicately striated, opaque white, ash-tinged, black-dotted, and encircled with a brown-red line, livid purple towards the apex; whorls five, flatly convex; aperture transversely lunar, brown-red in the interior, lip nearly simple, columellar margin a little reflected.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 158.

*Hab.* Nilgherries; Jerdon.

Of a peculiar ash-tinted opaque white, changing to livid purple towards the apex, promiscuously sprinkled throughout with black dots.

Species 742. (Fig. a, b, Mus. Benson.)

**HELIX CLIMACTERICA.** *Hel. testā imperforatā, depresso-pyramidalī, subtus tumidā, sordidē albā; spirā gradatā, apice elevatā; anfractibus octo, supernē arcuatim creberrimē costellato-striatis, deinde acutē angulato-carinatis, ultimo basi convexo, medio excavato; aperturā transversē lunari, ad carinam subsinuatā; peristomate simplici, subincrassato.*

**THE STAIR HELIX.** Shell imperforated, depressly pyramidal, swollen beneath, dirty-white; spire step-like, raised at the apex; whorls eight, very closely arcuately rib-like striated at the upper part, then sharply angularly keeled, last whorl convex at the base, excavated in the middle; aperture transversely lunar, a little sinuated at the keel; lip simple, rather thickened.

BENSON, Journ. Asiatic Soc. of Calcutta, 1836, vol. v. p. 352.

*Hab.* East Frontier of Bengal.

A very peculiar species, in which each whorl drops one below the other throughout, so as to form on the spire a keel-banded stair, ascending step by step to the apex.

August, 1852.



## Species 743. (Mus. Benson.)

HELIX DECUSSATA. *Hel. testā minutè umbilicatā, depressā, subdiscoideā, tenui, vividè corneā, pellucidā; anfractibus sex ad septem, supra planiusculis, lævigatis, ad suturam marginatis et tenuiplicatis, ultimo obtusè carinato, subtus convexo, medio excavato; aperturā obliquè lunari; peristomate simplici.*

THE DECUSSATED HELIX. Shell minutely umbilicated, depressed, somewhat discoid, thin, bright horny, transparent; whorls six to seven, rather flat at the upper part, smooth, margined and finely plicated at the suture, last whorl obtusely keeled, convex beneath, excavated in the middle; aperture obliquely lunar; lip simple.

*Natina decussata*, Benson, Journ. Asiatic Soc. of Calcutta, 1836, vol. v. p. 351.

*Hab.* East Frontier of Bengal.

A bright pellucid golden-horny shell, with a horny coating about the under part which is more or less deciduous.

## Species 744. (Mus. Benson.)

HELIX CACUMINIFERA. *Hel. testā vix umbilicatā, tenui, fusco-corneā, pyramidal-Trochiformi; spirā concavo-elevatā, apice acutā; anfractibus octo, supernè plano-concavis, granulis spiraliter gemmatis, ultimo acutissimè carinato, subtus convexo, polito; aperturā transversè lunari; peristomate simplici, acuto, ad carinam subinualo.*

THE STEEPLE-CROWNED HELIX. Shell scarcely umbilicated, thin, brown-horny, pyramidally Trochus-

shaped; spire concavely raised, sharp at the apex; whorls eight, flatly concave at the upper part, and spirally gemmed with granules, last whorl very sharply keeled, convex and polished beneath; aperture transversely lunar; lip simple, sharp, slightly sinuated at the keel.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 214.

*Hab.* Summits of Nilgherry Mountains.

This is a remarkable species, differing from all others in the development of a Trochus-like grain-pattern sculpture.

## Species 745. (Mus. Benson.)

HELIX TROTTERIANA. *Hel. testā imperforatā, subglobosoturbinatā, inflatā, tenuissimā, hyalino-albā, epidermide tenui corneā virescente indutā, apice carneo-rufā; spirā breviusculā; anfractibus quatuor, convexis, irregulariter plicato-striatis; aperturā amplā; peristomate simplici, acuto, margine columellari breviter revoluto.*

TROTTER'S HELIX. Shell imperforated, somewhat globosely turbinated, inflated, very thin, hyaline-white, covered with a thin horny greenish epidermis, fleshed at the apex; spire rather short; whorls four, convex, irregularly plicately striated; aperture large; lip simple, sharp, columellar margin shortly turned back.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 161.

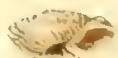
*Hab.* Uitenhage, South Africa; R. Trotter.

An inflated vesicular species, of hyaline substance, covered with a transparent greenish-horny epidermis, tinged with red at the apex.





746



747



748



749



750 a



750



751



752 a



752 b



753

# HELIX.

PLATE CXXV.

Species 746. (Mus. Benson.)

**HELIX CRINIGERA.** *Hel. testâ umbilicatâ, depresso-conoideâ, sordidè olivaceâ, hirsulâ, præsertim ad suturas; spirâ obtusâ; anfractibus sex ad septem, planatis, ultimo acutè carinato, basi convexo, medio excavato; aperturâ transversè lunari; peristomate simplici, acuto.*

**THE HAIRY HELIX.** Shell umbilicated, depressly conoid, dirty-olive, hairy, especially at the sutures; spire obtuse; whorls six to seven, flattened, the last sharply keeled, convex at the base, excavated in the middle; aperture transversely lunar; lip simple, acute.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 214.

*Hab.* Nilgherry Mountains; Jerdon.

Characterized by a sprinkling of bristly hairs, protruding chiefly from the sutures.

Species 747. (Mus. Benson.)

**HELIX CRASSICOSTATA.** *Hel. testâ latè umbilicatâ, depresso-planâ, sublus rotundatâ, opaco-lacteâ; anfractibus quatuor, undique valde irregulariter plicato-costatâ, ultimo supernè angulato-carinato; operturâ transversè ovatâ; peristomate subreflexo, marginibus fere junctis.*

**THE THICK-RIBBED HELIX.** Shell broadly umbilicated, depressly flattened, rounded beneath, opaque cream-colour; whorls four, very irregularly plicately ribbed throughout, the last angularly keeled at the upper part; aperture transversely ovate; lip a little reflected, margins almost joined.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 159.

*Hab.* Southern India; Jerdon.

A peculiarly wrinkle-ribbed chalk-like shell, with a perfectly level spire.

Species 748. (Mus. Benson.)

**HELIX RUGINOSA.** *Hel. testâ subampliter umbilicatâ, depressâ, opaco-lacteâ, fasciâ angustâ rufâ cingulatâ; spirâ subelevatâ; anfractibus quatuor, convexis, irregulariter plicato-costatis; aperturâ transversè ovatâ; peristomate subreflexo, marginibus fere junctis.*

**THE WRINKLED HELIX.** Shell rather largely umbilicated, depressed, opaque cream-colour, encircled with a narrow red band; spire somewhat raised; whorls four,

convex, irregularly plicately ribbed, aperture transversely ovate; lip a little reflected, margins almost joined.

FERUSSAC, Hist. Moll. pl. 71. f. 4.

*Hab.* Southern India.

The preceding species only differs from this in having the spire completely flatly depressed, and in having a larger umbilicus. The presence of a red band is a character of little importance.

Species 749. (Mus. Benson.)

**HELIX CAPITUM.** *Hel. testâ umbilicatâ, Trachyspirâ tenui, striatâ, rufescente-corneâ, opaco-alba lentiginosâ; anfractibus quinque ad sex, supernè rotundatis deinde subconvexis, ultimo acutè carinato, basi plano-convexis; aperturâ transversè ovatâ; peristomate tenui, margine columellari latè dilatato, umbilicum fere tegente.*

**THE TOP-KNOT HELIX.** Shell umbilicated, Trochus-shaped, thin, finely striated, reddish-horny, freckled with opaque-white; whorls five to six, rounded at the upper part, then slightly concave, last whorl sharply keeled, flatly convex at the base; aperture transversely ovate; lip thin, columellar margin broadly dilated, almost covering the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 160.

*Hab.* Sicrigully, Province of Bihar, Northern India. Boys.

A very characteristic white-freckled species, partaking of the characters of *Bulinus*.

Species 750. (Fig. a, b, Mus. Benson.)

**HELIX TAPEINA.** *Hel. testâ parvèter umbilicatâ, depressâ, subdiscoidâ, lutescenti, anfractibus sex, convexis, superficialiter plicato-striatâ, ultimo angulato-sublus rotundato; umbilico latè perspicuo, a fasciâ omnes exhibente; aperturâ limbo-circulari, rotundate sic reflexo, marginibus convexis.*

**THE LOWLY HELIX.** Shell very largely umbilicated, depressed, somewhat discoid, yellowish, whorls six, convex, superficially plicately striated, last whorl keeled, rounded underneath; umbilicus broadly circumscribed, exhibiting all the whorls; aperture circular.

August, 1852.

circular; lip slightly reflected, margins approximating.

BENSON, Journ. Asiatic Soc. of Calcutta, 1836, vol. v. p. 352.

*Hab.* East Frontier of Bengal.

Mr Benson describes this species as being covered with a very minutely wrinkled epidermis.

Species 751. (Mus. Benson.)

HELIX CESTUS. *Hel. testá angustè umbilicatá, subconoideá, creberrimè obliquè plicato-striatá, fuscescente, fasciá angustá rufá supra peripheriam cingulatá; anfractibus quinque, plano-convexis, ultimo obtusè angulato; aperturá obliquè ovatá; peristomate tenui, reflexo, margine columellari latè dilatato, umbilicum fere tegente.*

THE GIRDLE HELIX. Shell narrowly umbilicated, subconoid, very closely obliquely plicately striated, brownish, encircled above the periphery with a narrow red band; whorls five, flatly convex, last whorl obtusely angled; aperture obliquely ovate; lip thin, reflected, columellar margin broadly dilated, almost covering the umbilicus.

BENSON, Journ. Asiatic Soc. of Calcutta, 1836, vol. v. p. 353.

*Hab.* Nilgherry Mountains; Jerdon.

An authentic specimen of this species enables me to correct an error, copied from Dr. Pfeiffer, in quoting it as a variety of *H. similis* (Pl. XXXIV. fig. 149). It is of a more angular obliquely convoluted form and altogether different.

Species 752. (Fig. a, b, Mus. Benson.)

HELIX ASPERELLA. *Hel. testá umbilicatá, depressá, granulis minutis undique exasperatá, sordidè albá, fasciis rufis variè cingulatá; spirá vix elevatá; anfractibus*

*quatuor, planiusculis, ultimo basi convexo, anticè parum descendente, juxta umbilicum mediocrem infundibuliformem subcompresso; aperturá obliquá, latá, subcirculari; peristomate expanso, marginibus approximatis callo tenui junctis.*

THE ROUGHISH HELIX. Shell umbilicated, depressed, faintly roughened throughout with minute grains, dull white, variously encircled with red lines; spire but little raised; whorls four, rather flat, the last convex at the base, descending but little in front, compressed near the umbilicus, middling and funnel-shaped; aperture oblique, broad, nearly circular; lip expanded, margins approximating, joined by a thin callosity.

PFEIFFER, Symbolæ, vol. iii. p. 78.

*Hab.* Bundelkhund, India; Benson.

A prettily banded species, very minutely granulated throughout.

Species 753. (Mus. Benson.)

HELIX RADICICOLA. *Hel. testá minutè umbilicatá, subgloboseo-conoideá, pellucido-corneá, tenuè plicato-striatá, anfractibus quatuor ad quinque, plano-convexis, ultimo obsolete angulato; aperturá orbiculari, subverticali, peristomate tenui, reflexiusculo, margine columellari dilatato, umbilicum fere tegente.*

THE ROOT-DWELLING HELIX. Shell minutely umbilicated, somewhat globosely-conoid, transparent-horny, finely plicately striated; whorls four to five, flatly convex, the last obsolete angled; aperture orbicular, subvertical; lip thin, a little reflected, columellar margin dilated, almost covering the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1848, vol. ii. p. 161

*Hab.* Landour, Western Himalaya (in ravines); Benson

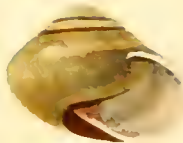
A transparent yellowish-horny shell.



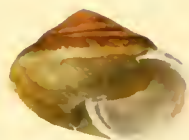




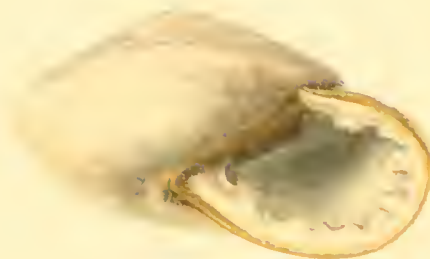
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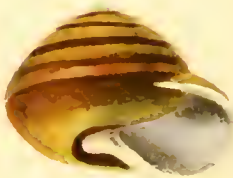
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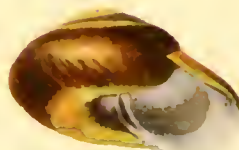
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# HELIX.

PLATE CXXVI.

Species 754. (Mus. Cuming.)

**HELIX LESSONI.** *Hel. testâ obtectè umbilicatâ, globulosâ, minutè striatulâ, solidulâ, nigricante-castaneâ, apicem versus pallidiore; spirâ obtusâ; anfractibus sex, viz convexiusculis, ultimo inflato, anticè deflexo; aperturâ lunato-rotundatâ, intus lilaceâ; peristomate undique expanso, albo, margine columellari supernè per dilatato, umbilicum tegente.*

**LESSON'S HELIX.** Shell with a covered umbilicus, globular, minutely finely striated, rather solid, blackish-chestnut, paler towards the apex; spire obtuse; whorls six, slightly convex, last whorl inflated, deflected in front; aperture inner-rounded, lilac within; lip expanded throughout, white, columellar margin very broadly dilated at the upper part, covering the umbilicus.

**PFEIFFER,** Symbolæ, vol. iii. p. 71.

*Helix Rangii*, Lesson (not of Férussac).

*Hab.* Australia.

A very dark chestnut shell, with a somewhat livid purplish hue.

Species 755. (Mus. Cuming.)

**HELIX GRAYI.** *Hel. testâ obtectè umbilicatâ, subglobosâ, tenui, corneâ, fasciâ purpureo-rufâ ad suturam et circa umbilicum ornatâ; spirâ breviusculâ, suturâ impressâ; anfractibus quinque ad sex, convexis, minutè granulatis, plicato-striatis, striis apicem versus costellatis, anfractu ultimo rotundatâ; aperturâ lunari; peristomate tenui, reflexiusculo, roseo-labiato, margine columellari purpureo-rufo, per dilatato, umbilicum fere tegente.*

**GRAY'S HELIX.** Shell with a covered umbilicus, subglobose, thin, horny, ornamented on the suture and around the umbilicus with a purple-red band; spire rather short, with the suture impressed; whorls five to six, convex, minutely granulated, plicately striated, striæ towards the apex rib-like, last whorl rounded; aperture lunar; lip thin, pink-edged, slightly reflected, columellar margin very broadly dilated, almost covering the umbilicus.

**PFEIFFER,** Symbolæ, vol. iii. p. 68. Mon. Hel. viv. vol. i. p. 134.

*Hab.* Eastern Australia.

A globose yellowish horny shell, of rather solid growth,

enireled next the suture and around the umbilicus with a dark purple-red band.

Species 756. (Mus. Cuming.)

**HELIX DUNKIENSIS.** *Hel. testâ profundè umbilicatâ, depresso-globosâ, supernè rudè plicato-striatâ et minutè granulatâ, subtilus læviore, politâ, vix rudè olivaceâ; anfractibus sex, convexis; aperturâ subcirculari; peristomate tenui, expanso, parum reflexo, marginibus conniventibus.*

**THE DUNK ISLAND HELIX.** Shell deeply umbilicated, depressly globose, rudely plicately striated and minutely granulated at the upper part, smooth and polished at the lower; whorls six, convex, aperture nearly circular; lip thin, expanded, but little reflected, margins approximating.

**FORBES,** Moll. Voyage of H.M.S. Rattlesnake, Appendix, p. 378, pl. 2, f. 7, a, b

*Hab.* Dunk Island, north-east coast of Australia.

This is also an olive horny-like species, but of more solid growth than the preceding, the interior of the aperture being lined with a thin whitish callous layer.

Species 757. (Mus. Cuming.)

**HELIX IMPERATOR.** *Hel. testâ obtectè umbilicatâ, depressâ, carinatâ, obliquè rugosâ et striatâ, fuscâ, ad circumferentiam pallidè fasciatâ; anfractibus quinque, planiusculis, aperturâ lunato-rotundatâ; peristomate cordè incrassato, calloso, reflexo, albo, intus dentibus septem inæqualibus obtusis instructo, marginibus per dilatatis, callis junctis.*

**THE EMPEROR HELIX.** Shell with a covered umbilicus, depressed, keeled, obliquely wrinkled and striated, brown, faintly banded at the keel; whorls five, rather flat; aperture lunar-rounded; lip very much thickened, callous, reflected, white, furnished within with seven obtuse unequal teeth, margins broadly dilated, joined by a callous layer.

**Polydotes imperator,** De Montford, Conch. Syst. vol. ii. p. 155. pl. 39.

*Helix imperator,* Férussac.

*Hab.* Cuba.

Of this extremely rare species, the specimen here figured,

which is stripped of its epidermis, and not, therefore, brown, as described above, is the only one I have seen.

Species 758. (Mus. Cuming.)

HELIX JERVIENSIS. *Hel. testā subobtectè umbilicatā, globoso-depressā, solidiusculā, rufescente-fuscā, obscurè fasciatā, subtus pallidè olivaceā, circa umbilicum fuscā; anfractibus sex, convexis, obliquè rudè plicato-striatis; aperturā obliquè lunari; peristomate subincrassato-reflexo, margine columellari dilatato, umbilicum tegente.*

THE JERVIS BAY HELIX. Shell with a nearly covered umbilicus, globosely depressed, rather solid, reddish-brown, obscurely banded, pale olive beneath, brown around the umbilicus; whorls six, convex, obliquely rudely plicately striated; aperture obliquely lunar; lip somewhat thickly reflected, columellar margin dilated, covering the umbilicus.

QUOY and GAIMARD, Voy. de l'Astrolabe, vol. ii. pl. 10. f. 26-30.

*Hab.* Jervis Bay; Quoy and Gaimard. Brisbane Water (under logs in dry, stony, and scrubby ground); Maegillivray.

Allied to *H. Grayi*, and somewhat similarly painted, but of much more solid obliquely compacted growth.

Species 759. (Mus. Cuming.)

HELIX TENNIS. *Hel. testā imperforatā, subglobosā, tenui, fuscā, rufo-zonatā, lineis obsoletis impressis concentricis notatā, epidermide tenuissimā sericinā indulā; spirā obtusiusculā; anfractibus quinque, veleriter accrescentibus, vir convexiusculis, ultimo maximo, inflato, ad columellam obliquam subtortam excavato; aperturā lunato-ovali; peristomate recto, simplici, basi subincrassato.*

THE THIN HELIX. Shell imperforated, subglobose, thin,

brown, red-zoned, marked with obsolete concentric impressed lines, covered with a very thin silken epidermis; spire rather obtuse; whorls five, increasing rapidly, but little convex, the last large, inflated, excavated at the columella, which is oblique and rather twisted; aperture lunar-oval; lip straight, simple, slightly thickened at the base.

PFEIFFER, Pro. Zool. Soc. 1845, p. 41.

*Hab.* —?

A very distinct and characteristic species, of which the habitat is not yet known.

Species 760. (Mus. Cuming.)

HELIX PTYCHOMPHALA. *Hel. testā ampliter umbilicatā, subdepressā, supernè creberrimè ruguloso-striatā, striis conspicuè elevatis, subtus lævigatā, rufo-castaneā, apice roseā, circa umbilicum lutescente; anfractibus quatuor ad quinque, convexo-declivibus, ultimo anticè deflexo, umbilico perspectivo, profundo, plicato-ruguloso; aperturā obliquè lunari; peristomate simplici, marginibus conniventibus.*

THE PPLICATED UMBILICUS HELIX. Shell largely umbilicated, somewhat depressed, very closely rugulosely striated at the upper part, the striae being conspicuously raised, smooth underneath, reddish-chestnut, pink at the apex, yellowish around the umbilicus; whorls four to five, convexly slanting, the last deflected in front; umbilicus perspective, deep, plicately wrinkled; aperture obliquely lunar; lip simple, with the margins approximating.

PFEIFFER, Pro. Zool. Soc. 1852.

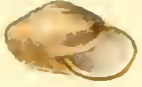
*Hab.* Port Essington.

Of a *Cyclostoma*-like form, with the whorls peculiarly slanting, not to say depressed, round the upper part, with a large wrinkle-lined umbilicus.

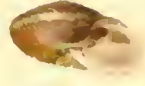




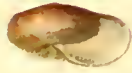
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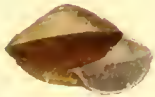
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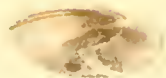
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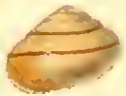
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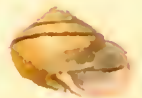
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# HELIX.

PLATE CXXVII

Species 761. (Mus. Cuming.)

**HELIX DUCLOSIANA.** *Hel. testâ umbilicatâ, depresso-globosâ, tenui, pellucidâ, lævigatâ, vel arcuatim plicato-striatâ, albidâ; anfractibus quinque, convexiusculis; umbilico parvo; aperturâ subangustâ, lunari-ellipticâ, intus callo lato protuberante coarctatâ; peristomate simplici, acuto, margine columellari reflexo.*

**DUCCLOS' HELIX.** Shell umbilicated, depressly globose, thin, transparent, smooth, or arcuately plicately striated, white; whorls five, rather convex; umbilicus small; aperture rather narrow, lunar-elliptic, contracted within by a broad swollen callosity; lip simple, sharp, columellar margin reflected.

FERUSSAC, Hist. Moll. pl. 51 A. f. 6.

*Helix macrondon*, Menke.

*Hab.* New Holland.

A semitransparent white shell, having a tooth-like callosity within the aperture, and no corresponding indentation without.

Species 762. (Mus. Cuming.)

**HELIX CONVEXA.** *Hel. testâ vix umbilicatâ, depressâ, subdiscoideâ, fusco-corneâ, striatâ, lineis concentricis confertis minutissimè reticulatâ; spirâ vix elevatâ, apice obtusatâ; anfractibus sex, vix convexiusculis, ultimo obsolete angulato; suturâ leviter impressâ; aperturâ latâ, lunari; peristomate simplici, recto, intus callo albido latè labiato, margine columellari vix reflexo.*

**THE CONVEX HELIX.** Shell umbilicated, depressed, somewhat discoid, brown-horny, striated, very minutely reticulated with close-set concentric lines; spire but little raised, blunted at the apex; whorls six, slightly convex, the last obsolete angled; suture slightly impressed; aperture broad, lunar; lip simple, straight, broadly bandied within by a white callosity, columellar margin slightly reflected.

BENSON, Pfeiffer, Monog. Hel. viv. vol. i. p. 130.

*Nanina monticola*, Hutton.

*Hab.* Mahassa, Himalaya; Hutton.

Distinguished, like *H. labiata*, by a broad callous band within the lip.

Species 763. (Mus. Cuming.)

**HELIX SFRUMOSA.** *Hel. testâ subprofunde umbilicata, depressâ, subpellucidâ, obliquè undique nitidè costulatâ, pullidè olivaceâ, medio brunnescente, supra peripheriam pullidè fasciatâ; spirâ suturis impressâ, anfractibus quinque, ultimo, e labro subremotè, serobuculato, aperturâ oratâ, subhorizontali, marginibus carneis, emarginatis, columellari reflexo, intus oblongo-dentato.*

**THE NECK-PITTED HELIX.** Shell rather deeply umbilicated, depressed, subtransparent, neatly obliquely finely ribbed throughout, pale olive, brownish in the middle, with a light band immediately above the periphery; sutures of the spire impressed, whorls five, the last pitted rather distantly from the lip, aperture oval, nearly horizontal, margins flesh-tinted, approximating, columellar margin reflected, oblong-toothed within.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* St. Domingo; Sallé.

A neatly finely ribbed shell, with a pit in the last whorl at some little distance from the aperture.

Fig. 764. (Mus. Cuming.)

A finer specimen of *H. Citrinoides* than was represented at Pl. XXXIV. Fig. 151, from Landour, India.

Fig. 765. (Mus. Cuming.)

The shell here figured proves to be identical with *H. Campbelli*, represented in Pl. LXXXII. sp. 158.

Species 766. (Mus. Cuming.)

**HELIX GABATA.** *Hel. testâ subprofunde umbilicatâ, albidocorneâ, supra peripheriam, fere totâ circumferentiâ anfractibus quatuor vel quinque, convexiusculis, ultimo carinâ costatâ circumdatâ; aperturâ subangustâ, oratâ, peristomate latè reflexo, marginibus concentricis.*

**THE PLATTER HELIX.** Shell broadly and deeply umbilicated, whitish-horny, flattened above, very convex beneath, whorls four to five, lightly striated, last whorl surrounded by a chevron-like periphery concentric.



what squarely oval; lip broadly reflected, with the margins approximating.

GOULD, Journ. Nat. Hist. Soc. Boston, U.S., vol. iv. p. 454. pl. 24. f. 9.

*Hab.* Tavoy, Burmah.

This species, which does not appear to have been known to Dr. Pfeiffer, is an extremely characteristic one, as well in form as in the chestnut-tinted keel with which it is encircled.

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Fig. 767. (Mus. Cuming.)

A characteristic variety of *H. similis*, represented at Pl. XXXIV. Fig. 149.

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Species 768. (Mus. Cuming.)

HELIX PLEDRÆ. *Hel. testâ obtectè umbilicatâ, depressâ, sublus concavâ, corneâ, valde pellucidâ; anfractibus quinque, subobscurè plicato-sulcatis, ultimo obtusè carinato; aperturâ lunari, subproductâ; peristomate simplici, subincrassato, margine columellari latè dilatato.*

THE PLEDRÆ HELIX. Shell with a covered umbilicus, depressed, hollowed beneath, horny, very transparent; whorls five, somewhat obscurely plicately grooved, last whorl obtusely keeled; aperture lunar, somewhat produced; lip simple, slightly thickened, columellar margin broadly dilated.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* St. Domingo; Sallè.

A *Vitrina*-like species, of very transparent horny substance.





769



770



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772<sup>a</sup>



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775<sup>b</sup>



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# HELIX.

PLATE CXXVIII.

Species 769. (Mus. Cuming.)

**HELIX DRINGI.** *Hel. testâ obtectè umbilicatâ, depressâ, tenui, fragili, supernè confertim plicatâ, albidâ, opacâ, lineis pellucidis cingulatâ; spirâ subplanulatâ; anfractibus quatuor ad quinque, vix convexiusculis, ultimo latere subcompresso, basi levigato, inflato; aperturâ lunari; peristomate expanso, intus subincrassato, margine columellari breviter arcuato, dilatato, reflexo, appresso.*

**DRING'S HELIX.** Shell with a covered umbilicus, depressed, thin, fragile, very closely finely plicated at the upper part, whitish, opaque, encircled with transparent lines; spire rather flattened; whorls four to five, scarcely convex, the last a little compressed at the side, smooth and inflated at the base; aperture lunar; lip simple, slightly thickened, columellar margin shortly arched, dilated, reflected, appressed.

**PFEIFFER,** *Symbolæ*, vol. iii. p. 73.

*Hab.* Torres Straits, East Australia (under decayed leaves); Dring.

A delicate flatly globose opaque-white species, encircled with pellucid bands and lines. The specimen here figured from Mr. Cuming's collection is the only one at present known.

Species 770. (Mus. Cuming.)

**HELIX INFRENDENS.** *Hel. testâ imperforatâ, orbiculatâ, depresso-conoideâ, corneo-virescente, subcurinatâ, supra rugoso-striatâ, subtus glabrâ, nitidâ, regione umbilicali excavatâ; anfractibus septem, convexiusculis; suturâ impressâ; aperturâ coarctatâ, labro vix reflexo, calloso, margine basali sinuato, dentibus complanatis majoribus nonnullisque minoribus munito.*

**THE TEETH-GNASHING HELIX.** Shell imperforated, orbicular, depressly conoid, horny-greenish, slightly keeled, roughly striated above, smooth beneath, shining, region of the umbilicus excavated; whorls seven, rather convex; suture impressed; aperture contracted, lip slightly reflected, callous, basal margin sinuated, furnished with two larger smooth teeth and some smaller ones.

**GOULD,** *Journ. Nat. Hist. Soc. Boston, U.S.*, vol. iv. p. 453. pl. 24. f. 6.

*Hab.* Tavoy, Burmah.

A small species, having the lip much appressed upon

the body-whorl, and still further contracted by small teeth.

Species 771. (Mus. Cuming.)

**HELIX GLAUCA.** *Hel. testâ subumbilicatâ, orbiculato-conoideâ, glaberrimâ, nitidâ, glaucescente-hyalinâ; spirâ elevatâ, acutiusculâ; anfractibus sex, convexiusculis, ultimo multo latiore, rotundato; aperturâ subverticali, lunari; peristomate simplici, recto, margine columellari vix dilatato, perforationem fore claudente.*

**THE GLAUCOUS HELIX.** Shell slightly umbilicated, orbicularly conoid, very smooth, shining, pale glaucous-hyaline; spire raised, rather sharp; whorls six, rather convex, the last much broader and rounder; aperture subvertical, lunar; lip simple, straight, columellar margin a little dilated, almost closing the umbilicus.

*Nanina glauca*, Benson, *Pfeiffer, Symbolæ*, vol. iii. p. 65.

*Hab.* Almorah, Bengal.

A transparent azure straw-coloured shell, tinged with brown at the lip.

Species 772. (Mus. Cuming.)

**HELIX REINGA.** *Hel. testâ obtectè umbilicatâ, globoso-depressâ, solidulâ, obliquè striatâ, albidâ, fasciâ unica castaneâ pluribusque lineis aurantiis ornatâ; spirâ subelevatâ; anfractibus quinque ad sex, convexiusculis, sensim accrescentibus, ultimo subtus convexo, antice descendente; aperturâ perobliquâ, angustâ, subtriangulâ, lunari; peristomate breviter expanso, intus albidâ, margine columellari strictiusculo, obsolete et obtuse crenulato.*

**THE REINGA HELIX.** Shell with a covered umbilicus, globosely depressed, solid, obliquely striated, whitish, ornamented with a chestnut band and numerous orange lines; spire rather elevated, whorls five to six, rather convex, increasing by degrees, the last convex beneath, descending in front, aperture very oblique, narrow, somewhat triangularly lunar, lip shortly expanded, white-edged within, columellar margin rather drawn out, obsolete and obtusely one-toothed.

**GRAY** (Mus. Cuming).

*Hab.* New Zealand.

Allied in general typical form to the *H. Dringi* from

Eastern Australia, but of more solid structure richly banded

Species 773. (Mus. Cuming.)

HELIX SUBRUGATA. *Hel. testâ rix umbilicatâ, depressâ, tenui, pellucido-corneâ, arcuatim irregulariter rugatâ; anfractibus sex, planulatis, ultimo carinato; aperturâ subtrigono-ovata, labro simplici, acuto.*

THE FAINTLY-WRINKLED HELIX. Shell scarcely umbilicated, depressed, thin, transparent-horny, arcuately irregularly wrinkled; whorls six, flattened, the last keeled; aperture somewhat triangularly ovate, lip simple, sharp.

PFEIFFER, Pro. Zool. Soc. 1851.

Hab. New Zealand.

A very thin, perfectly transparent, bright horny species.

Species 774. (Mus. Cuming.)

HELIX IGNIFLUA. *Hel. testâ subprofundè umbilicatâ, depressiusculâ, arcuatim striatâ, lineis spiratibus impressis sub lente minutissimè decussatâ, sordidè fuscâ, flammis rufis e suturâ obliquè divergentibus; anfractibus quinque, planulatis, ultimo obtusè carinato; aperturâ subcirculari; peristomate tenui, acuto, marginibus conniventibus.*

THE FIRE-FLOWING HELIX. Shell somewhat deeply umbilicated, rather depressed, arcuately striated, very minutely decussated beneath the lens with spiral impressed lines, dull brown, with red flames diverging from the suture; whorls five, flattened, the last obtusely keeled; aperture nearly circular; lip thin, sharp, with the margins approximating.

*Helix lambda*, Pfeiffer, Pro. Zool. Soc. 1852.

Hab. New Zealand.

The letters of the Greek alphabet cannot be recognized for specific names; first, because the use of them for that purpose is not in accordance with the established form of nomenclature, and, secondly, because they are frequently used to distinguish varieties.

Species 775. (Mus. Cuming.)

HELIX DIMORPHA. *Hel. testâ rix umbilicatâ, globoso-discoidèâ, tenui, pellucido-fuscescente, maculis rufis variegatâ; spirâ planatâ; suturâ impressâ; anfractibus tribus ad quatuor, subtiliter costellato-striatis, ultimo tumido, basi medio concavo; aperturâ verticaliter lunari; peristomate tenui, acuto, margine columellari reflexo-dilatato.*

THE DIMORPHOUS HELIX. Shell scarcely umbilicated, globosely discoid, thin, transparent-brown, variegated with red spots; spire flattened; suture impressed; whorls three to four, finely rib-like striated, the last

swollen, concave at the base in the middle; aperture vertically lunar; lip thin, acute, columellar margin reflexedly dilated.

PFEIFFER, Pro. Zool. Soc. 1851.

Hab. New Zealand.

Being flat at the spire and concave at the base, the shell is convoluted in a manner nearly discoid.

Species 776. (Mus. Cuming.)

HELIX INDISTINCTA. *Hel. testâ umbilicatâ, orbiculari, undique obliquè confertim nitidè costellatâ, sordidè olivaceâ; anfractibus quatuor, convexis, ultimo rotundato, subtus convexo-plano; aperturâ circulari-ovali; peristomate tenui, reflexo, marginibus conniventibus, columellari incrassato, dilatato, intus dente oblongo instructo.*

THE INDISTINCT HELIX. Shell umbilicated, orbicular, obliquely closely neatly fine-ribbed throughout, dull olive; whorls four, convex, the last rounded, convexly flattened beneath; aperture circularly oval; lip thin, reflected, margins approximating, columellar margin thickened, dilated, furnished within with an oblong tooth.

FERUSSAC, Hist. Moll. pl. 38. f. 1.

Hab. Island of Haiti.

A shell of rather solid growth, neatly obliquely rib-like striated throughout.

Species 777. (Mus. Cuming.)

HELIX BREVIPILA. *Hel. testâ umbilicatâ, globoso-depressâ, pilis brevissimis rigidis quincuncialiter dispositis, haud nitidâ, saturatè brunneâ; spirâ parum elevatâ, obtusâ; anfractibus rix quinque, convexiusculis, ultimo rotundato, anticè subreflexo, circa umbilicem angustum subcompresso; aperturâ obliquâ, rotundato-lunari, intus nitidâ; peristomate tenui, brunneo-carnoso, breviter expanso, marginibus conniventibus, columellari subdilatato-reflexo.*

THE SHORT-HAIR HELIX. Shell umbilicated, globosely depressed, roughened with very short stiff hairs, disposed in rows of five, not shining, very dark brown; spire but little raised, obtuse; whorls scarcely five, rather convex, the last rounded, slightly deflected in front, a little compressed around the umbilicus, which is narrow; aperture oblique, rotundately lunar, shining within; lip thin, brown-flesh, shortly expanded, margins approximating, columellar margin somewhat dilately reflected.

PFEIFFER, Pro. Zool. Soc. 1849, p. 130

Hab. East coast of New Holland; Dr. Stanger.

Well distinguished by its rough covering of minute rigid hairs.







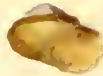
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# HELIX.

PLATE CXXIX.

Species 778. (Mus. Cuming.)

**HELIX SOLARIUM.** *Hel. testā umbilicatā, orbiculato-pyramidalatā, subdepressā, aculē carinatā, striatā, diaphanā, fulvā; spirā brevi, conicā, apice obtusā; anfractibus septem, exertiusculis, planis, ultimo basi planulato, ad umbilicum pervium perspectivum angulato; aperturā depressā, securiformi; peristomate simplici, acuto.*

**THE SOLARIUM HELIX.** Shell umbilicated, orbicularly pyramidal, rather depressed, sharply keeled, striated, diaphanous, fulvous; spire short, conical, obtuse at the apex; whorls seven, rather exerted, flat, the last flattened at the base, angled round the umbilicus, which is open and perspective; aperture depressed, hatched-shaped; lip simple, sharp.

QUOY and GAIMARD, Voy. de l'Astrolabe, vol. ii. p. 131. pl. 11. f. 24-29.

*Hab.* Port Carteret, New Ireland.

Named after its resemblance in form to a *Solarium*.

Species 779. (Mus. Cuming.)

**HELIX LIGHTFOOTI.** *Hel. testā angustē umbilicatā, subdepressā, corneo-albā; spirā elevatiusculā; anfractibus sex, rotundatis; aperturā lunato-circulari, labro subincrassato, marginibus callo tenui junctis, in umbilicum retrorso, margine basali subexpanso, unidentato.*

**LIGHTFOOT'S HELIX.** Shell narrowly umbilicated, somewhat depressed, horny-white; spire slightly raised; whorls six, rounded; aperture lunar-circular, lip slightly thickened, margins joined by a thin callosity, which turns back into the umbilicus, basal margin slightly expanded, one-toothed.

PREIFFER, Pro. Zool. Soc. 1851.

*Hab.* Banks of the Brisbane River, Australia; Strange.

A small whitish horny shell, peculiarly characterized by the thin callosity which connects the margins of the aperture turning back into the umbilicus.

Species 780. (Mus. Cuming.)

**HELIX ZELANDIÆ.** *Hel. testā umbilicatā, depressā, turbiniformi, pallidē corneā, pellucidā, maculis rufis variegatā, minutē striatulā; spirā convexā; anfractibus quinque, planulatis, ultimo carinato, convexo; umbilico profundo; aperturā lunato-circulari; peristomate simplici, acuto.*

**THE NEW ZEALAND HELIX.** Shell umbilicated, depressed, turbiniform, pale horny, transparent, variegated with red spots, minutely striated; spire convex; whorls five, rather flattened, the last keeled, convex, umbilicus deep; aperture lunar-circular; lip simple, sharp.

GRAY, Dieffenbach's Travels, vol. i. p. 247

*Hab.* New Zealand.

A small horny shell, faintly variegated towards the apex with red-brown spots.

Species 781. (Mus. Cuming.)

**HELIX NUDA.** *Hel. testā ex umbilicatā, turbiniformi, tenuissimā, vitreā, vicidē vitaceā, vitentē; anfractibus quinque, convexis; aperturā lunato-circulari, peristomate tenui, acuto.*

**THE NAKED HELIX.** Shell scarcely umbilicated, rather swollen, very thin, glassy, bright shining, chrysalis-whorls five, convex; aperture lunar-circular; lip thin, sharp.

PREIFFER, Pro. Zool. Soc. 1852.

*Hab.* Himalaya; Fortune.

A delicate bright olive glassy *Vitrina*-like shell.

Species 782. (Mus. Cuming.)

**HELIX PLECTOSTOMA.** *Hel. testā sinistrali, umbilicatā, depresso-conoidē, subtilis turridi, pallidā, aperturā corneā deciduā indatā; spirā exertiusculā; anfractibus sex, supra planatis, rufatā plicata, lineis elevatis confertis decussatis, ut in superne angulato lineis paucis elevatis infra angulato; labro peristomate lunari, dente triangulari parvulo aperturā subintrando, umbilico subcylindrico, portis; peristomate simplici, aculiter angulatum reflexo, marginibus callo junctis, supra antrorsum arcuato-dilatato.*

**THE PLAIT-MOUTH HELIX.** Shell sinistral, umbilicated, depressly conoid, swollen beneath, whitish, covered with a deciduous horny epidemis; spire rather exerted; whorls six, flattened above, radially plicated, decussated with close-set raised lines, last whorl angled at the upper part, marked with a few raised lines below the angle; aperture lunar, with a triangular tooth on the wall of the aperture, often more obsolete; umbilicus subcylindrical, open; lip white, shortly angularly reflected, margins joined by a callosity, upper margin arcuately dilated forward.

BENSON, Journ. Asiatic Soc. Calcutta, vol. v. p. 351.

*Hab.* North Bengal.

A reversed rounded horny shell, with one or two more or less obsolete folds upon the body-whorl within the aperture.

Species 783. (Mus. Cuming.)

HELIX INFULA. *Hel. testâ vix umbilicatâ, pyramidaliturbinatâ, tenuissimâ, pellucido-corneâ, subtiliter striatâ; anfractibus sex ad septem, plano-converis, medio obsolete carinatis, ultimo basi plano-converso; aperturâ subverticali, lunari; peristomate simplici, acuto.*

THE TURBAN HELIX. Shell scarcely umbilicated, pyramidally turbinated, very thin, transparent-horny, finely striated; whorls six to seven, flatly convex, obsoletely keeled in the middle, last whorl flatly convex at the base; aperture nearly vertical, lunar; lip simple, acute.

BENSON, Ann. and Mag. Nat. Hist. 1848, p. 160.

*Hab.* Rajmahal Hills, Hindoostan.

Of very transparent horny substance, with the whorls faintly keeled.

Species 784. (Mus. Cuming.)

HELIX PRUINOSA. *Hel. testâ vix umbilicatâ, globosâ, tenui, inflatâ, undique creberrimè costellato-plicatâ, rufescente-fuscâ, medio pallidè fasciatâ, non nitente; spirâ parvâ, depressâ; suturâ impressâ; anfractibus tribus ad quatuor, ultimo multo maximo; aperturâ amplâ; peristomate simplici, acuto.*

THE RAGGED HELIX. Shell umbilicated, globose, thin, inflated, very closely rib-like plicated, reddish-brown, faintly banded in the middle, not shining; spire small, depressed; suture impressed; whorls three to four, the last much the largest; aperture large; lip simple, acute.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* St. Domingo; Sallè.

A peculiarly formed inflated dull red-brown shell, very closely rib-like striated throughout.

Species 785. (Mus. Cuming.)

HELIX ACUMINATA. *Hel. testâ imperforatâ, acuminatoglobosâ, solidiusculâ, obliquè productâ, opaco-alba, lineis saturatoribus sub lente obscure cingulatâ; anfractibus quatuor, ultimo anticè descendente; apertura obliquè ovalâ; peristomate effuso, vix reflexo, fauce pallidè fusciscente.*

THE ACUMINATED HELIX. Shell imperforated, acuminate-globose, rather solid, obliquely produced, opaque-white, obscurely encircled beneath the lens with faint darker lines; whorls four, the last descending in front; aperture obliquely ovate; lip effused, scarcely reflected, interior light brown.

PFEIFFER, Zeitschrift für Malac. 1851, p. 16.

*Hab.* St. Domingo; Sallè.

A rather solid oblique-globose shell, partaking somewhat of the typical form of *Helicina*.

Species 786. (Mus. Cuming.)

HELIX HUTTONI. *Hel. testâ umbilicatâ, orbiculato-converiusculâ, subdiaphanâ, pallidè corneâ, epidermide scabrâ indutâ; anfractibus sex, convexiusculis, ultimo angulato, anticè vix descendente; umbilico latiusculo, perspectivo; aperturâ obliquâ, lunato-rotundatâ; peristomate simplici, marginibus conniventibus, dextro recto. basali breviter reflexo, columellari subdilato.*

HUTTON'S HELIX. Shell umbilicated, orbicularly convex, subdiaphanous, pale horny, covered with a rough epidermis; whorls six, rather convex, last whorl angled, a little descending in front; umbilicus rather broad, perspective; aperture oblique, lunar-rounded, lip simple, margins approximating, right margin straight, basal margin shortly reflected, columellar margin rather dilated.

PFEIFFER, Synbolæ, vol. ii. p. 82.

*Helix orbicula*, Hutton (not of D'Orbigny).

*Hab.* Himalaya.

A horny species, with an open *Solarium*-like umbilicus.

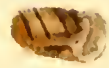




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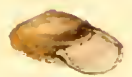
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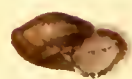
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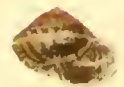
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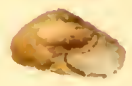
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# HELIX.

PLATE CXXV

Species 787. (Mus. Cuning.)

**HELIX HYPOPOLEA.** *Hel. testâ umbilicatâ, depressâ, undique creberrimè plicato-striatâ, olivaceâ; spirâ convexâ, suturâ impressâ; anfractibus quinque, convexis, ultimo basi rotundato; aperturâ lunato-circulari; peristomate tenui, acuto.*

**THE UNDER-TURNED HELIX.** Shell umbilicated, depressed, very closely plicately striated throughout, olive; spire convex, suture impressed; whorls five, convex, the last rounded at the base; aperture lunar-circular; lip thin, sharp.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand; Strange.

A small horny shell, with the whorls somewhat rounded and finely plicated.

Species 788. (Mus. Cuning.)

**HELIX JEFFREYSIANA.** *Hel. testâ latissimè umbilicatâ, depressâ, subdiscoideâ, impresso-striatâ, pellucido-corneâ, nitente; spirâ planatâ, suturâ impressâ; anfractibus tribus ad quatuor, ultimo rotundato; aperturâ circulari, marginibus convergentibus.*

**JEFFREY'S HELIX.** Shell very broadly umbilicated, depressed, somewhat discoid, impressly striated, transparent horny, shining; spire flattened, with the suture impressed; whorls three to four, last whorl rounded; aperture circular, margins approximating.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* —?

Of a thin shining horny substance, with the whorls convoluted after the manner of a *Planorbis*.

Species 789. (Mus. Cuning.)

**HELIX IDE.** *Hel. testâ subampliter umbilicatâ, depressâ, pellucidâ, intensè castaneo subremotè radiatâ, liris membranaceis pilosis undique decussatâ; spirâ impressâ, subconvexâ; anfractibus quinque, ultimo tumidiusculo; aperturâ lunari; peristomate simplici, acuto.*

**THE IDE HELIX.** Shell rather largely umbilicated, depressed, transparent, somewhat distantly rayed with dark chestnut, decussated throughout with hairy membranaceous ridges; spire impressed, somewhat con-

convex whorls five, the last rather swollen; aperture lunar, lip simple, acute.

GRAY, Pro. Zool. Soc. 1849, p. 166.

*Hab.* Auckland, New Zealand, Greenwood.

An extremely characteristic species, peculiar in form, sculpture, and marking.

Species 790. (Mus. Cuning.)

**HELIX PHLOGOPHORA.** *Hel. testâ subampliter umbilicatâ, depressiusculâ, tenuissimâ, strictâ, plicatâ, nitenti fulvulenta, flammulis angulatis et serratis, reflexis, angustis, pictâ; spirâ parvâ convexâ, apice subpapillatâ; anfractibus tribus ad quatuor, convexis, rap. ult. acerrimis, ultimo depresso, basi planissimo; aperturâ perobliquâ, rotundato-lunari; peristomate simplici, recto, margine columellari subreflexo.*

**THE FLAME-BEARING HELIX.** Shell slightly umbilicated, rather depressed, very thin, finely striated, transparent, shining, fulvous-yellow, painted with chestnut angled and serrulated flames; spire but little rounded, somewhat papillated at the apex, whorls three to four, convex, increasing rapidly, the last depressed, rather flattened at the base; aperture very convex, rotundately lunar; lip simple, straight, chestnut margin slightly reflected.

PFEIFFER, Pro. Zool. Soc. 1849, p. 127.

*Helix multiumbata?* Hambr. u. and J. a. p. 1842.

*Hab.* New Zealand.

A light delicate horny shell, brightly painted with chestnut brown stripes.

Species 791. (Mus. Cuning.)

**HELIX COMPRESSIVOLUTA.** *Hel. testâ subampliter umbilicatâ, depressâ, subtilis convexâ, tenui plicato-striatâ, pellucido-corneâ; anfractibus quatuor, angustis, separatis declivibus; aperturâ lunari-circulari, peristomate simplici, margine columellari truncato, basi dilatato, subulato, cum feri occurrente.*

**THE COMPRESSLY-WHORLED HELIX.** Shell narrowly umbilicated, depressed, convex underneath, thinly plicately striated, transparent horny, whorls four, narrow, slanting at the upper part, aperture lunato-circular; lip thin, columellar margin very thin, broadly dilated, almost covering the umbilicus.



*Helix omega*, Pfeiffer.

*Hab.* New Zealand.

The whorls of this species slant towards the periphery at the upper part, and at the lower are concavely compressed.

Species 792. (Mus. Cuming.)

HELIX OBNUBILA. *Hel. testâ umbilicatâ, depressâ, intense fuscâ, sulcis impressis spiralibus striisque obliquis undique decussatâ; spirâ depressâ, suturâ distinctâ; anfractibus quinque, plano-convexis, ultimo rotundato; aperturâ lunari; peristomate simplici, acuto.*

THE DUSKY HELIX. Shell umbilicated, depressed, dusky brown, decussated with impressed spiral grooves and oblique striæ; spire depressed, suture distinct; whorls five, flatly convex, the last rounded; aperture lunar; lip simple, sharp.

*Helix sigma*, Pfeiffer.

*Hab.* New Zealand.

Of a peculiarly dark dusky-brown colour, decussated with oblique striæ and distinct spiral grooves.

Species 793. (Mus. Cuming.)

HELIX PYXIS. *Hel. testâ imperforatâ, pyramidali-globosâ, diaphanâ, solidulâ, pellucido-albâ, nitente; anfractibus quatuor ad quinque, subrotundatis, carinâ angustâ acutâ medio cingulatis; aperturâ horizontali, subcirculari; peristomate acuto, reflexo.*

THE BOX HELIX. Shell imperforated, pyramidally globose, diaphanous, rather solid, transparent white, shining; whorls four to five, somewhat rounded, encircled round the middle with a sharp narrow keel; aperture horizontal, nearly circular; lip sharp, reflected.

HINDS, Zool. Voy. Sulphur, Moll. p. 55. pl. 19. f. 10.

*Hab.* — ?

A very characteristic species, of rather solid growth, but yet of delicate transparent white substance, encircled by a narrow sharp keel-like ridge.

Species 794. (Mus. Cuming.)

HELIX KIVI. *Hel. testâ imperforatâ, turbinatâ, albâ, tenui, obliquè confertim striatâ, strigis brevibus irregularibus obliquis purpurea-brunneis ornatâ; spirâ subconicâ, obtusâ; anfractibus sex, planiusculis, ultimo rotundato, basi convexa, levigato; aperturâ latâ, lu-*

*nari; peristomate simplici, reflexo, margine columellari reflexiusculo.*

THE KIVI HELIX. Shell imperforated, turbinated, white, thin, obliquely closely striated, ornamented with short, irregular, oblique, purple-brown stripes; spire subconical, obtuse; whorls six, rather flat, the last rounded, convex and smooth at the base; aperture broad, lunar; lip simple, straight, columellar margin slightly reflected.

GRAY, Dieffenbach's Travels, vol. i. p. 262.

*Hab.* New Zealand.

The brown stripes which distinguish this species are broad, short, and rather distant, not seen from the underside of the shell.

Species 795. (Mus. Cuming.)

HELIX IMPEXA. *Hel. testâ vix umbilicatâ, convexo-depressâ, pellucido-corneâ, tenui, nitente; spirâ obtusâ; anfractibus quatuor ad quinque, supernè declivibus, aperturâ transversè lunari; peristomate tenui, acuto, margine columellari tenuè dilatato.*

THE UNDECKED HELIX. Shell scarcely umbilicated, convexly depressed, transparent horny, thin, shining, spire obtuse; whorls four to five, slanting at the upper part; aperture transversely lunar; lip thin, sharp, columellar margin thinly dilated.

*Helix inconspicua*, Forbes (not of Benson), Voy. Rattlesnake, App. p. 372. pl. 2. f. 3.

*Hab.* Islet in Trinity Bay, Australia; Macgillivray.

Of very simple character, without sculpture or marking.

Species 796. (Mus. Cuming.)

HELIX COMA. *Hel. testâ latè umbilicatâ, depressâ, pallidè fuscâ; spirâ planulatâ; anfractibus quinque, convexis, obliquè et confertim acutè elevato-lineatis, fusco-striatis, umbilico conico, perspectivo; aperturâ perobliquâ, rotundato-lunari; peristomate simplici, tenui.*

THE HAIR HELIX. Shell broadly umbilicated, depressed, light brown; spire flattened; whorls five, convex, obliquely and closely, sharply, elevatedly lined, brown-striated; umbilicus conical, perspective; aperture very oblique, rotundately lunar; lip simple, thin.

*Zonites coma*, Gray, Dieffenbach's Travels, vol. i. p. 263.

*Hab.* New Zealand.

The whole spire of this shell is conspicuous, blotched and rayed with chestnut-red.





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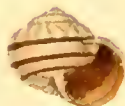
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# HELIX.

PLATE CXXXI.

Species 797. (Mus. Cuming.)

**HELIX CHIRON.** *Hel. testā umbilicatā, depressā, olivaceo-viridi, pellucido-vitrēā, nitente; spirā plano-concavā, suturā impressā; anfractibus tribus, convexis, sub lente superne arcuatim plicato-liratis; aperturā lunato-circulari.*

**THE CHIRON HELIX.** Shell umbilicated, depressed, olive-green, transparent glassy, shining; spire flatly concave, with the suture impressed; whorls three, convex, arcuately plicately ridged at the upper part beneath the lens; aperture lunar-circular.

*Zonites Chiron*, Gray, Pro. Zool. Soc. 1849, p. 166.

*Hab.* Auckland, New Zealand; Greenwood.

Of very transparent dark olive-green glassy substance.

Species 798. (Mus. Cuming.)

**HELIX EGESTA.** *Hel. testā latē umbilicatā, depressā, intense fuscā; spirā planatā; anfractibus quinque, rotundatis, sulcis spiralibus lirisque obliquis decussatis, anfractu ultimo peculiariter descendente; aperturā lunato-circulari; peristomate simplici, acuto.*

**THE EGESTA HELIX.** Shell broadly umbilicated, depressed, dark brown; spire flattened; whorls five, rounded, decussated with spiral grooves and oblique ridges, last whorl peculiarly descending; aperture lunar-circular; lip simple, acute.

GRAY, Pro. Zool. Soc. 1849, p. 166.

*Hab.* Auckland, New Zealand; Dr. Sinclair.

Distinguished by a peculiar distorted appearance, from the dropping of the last whorl.

Species 799. (Mus. Cuming.)

**HELIX CELINDE.** *Hel. testā vix umbilicatā, subdepresso-conicā, fuscā, obliquē tenuissimē costellato-striatā; anfractibus quinque, rotundatis; aperturā lunari; peristomate tenui, margine columellari subreflexo-dilatato.*

**THE CELINDE HELIX.** Shell scarcely umbilicated, somewhat depressly conical, brown, obliquely very finely rib-like striated; whorls five, rounded; aperture lunar; lip thin, columellar margin somewhat reflectedly dilated.

*Nanina Celine*, Pro. Zool. Soc. 1849, p. 164.

*Hab.* Auckland, New Zealand.

The umbilicus, which is extremely small, is nearly concealed by a thinly reflected dilation of the columellar margin.

Fig. 800. (Mus. Cuming.)

This proves to be a variety in fine condition of *H. com* figured in the preceding plate.

Species 801. (Mus. Cuming.)

**HELIX HELLENENSIS.** *Hel. testā latissimē umbilicatā, plano-discoidē, sordidē fuscā, rufo-variegatā; spirā suturā distinctā; anfractibus septem, rotundatis, longitudinaliter creberrimē costellato-striatis; aperturā lunato-circulari, parvā, lamellis duabus angustis in pariete aperturali, plurimis minoribus oppositis.*

**THE ST. HELENA HELIX.** Shell very broadly umbilicated, flatly discoid, dirty brown, variegated with red; suture of the spire distinct; whorls seven, rounded, longitudinally very closely rib-like striated, aperture lunar-circular, small, with two narrow lamellæ on the body-whorl, and several smaller ones opposite.

FORBES, Pro. Zool. Soc. 1851.

*Hab.* St. Helena.

A pretty variegated shell, of nearly discoid growth, having the aperture crowded with small lamellæ.

Species 802. (Mus. Cuming.)

**HELIX ANGVICULUS.** *Hel. testā umbilicatā, depressā, sub-discoidē, fuscē, strigis rufis subrenatis ornata. spirā suturā impressā; anfractibus quinque, rotundatis, longitudinaliter tenuissimē costellato-striatis; aperturā subcirculari; peristomate tenui, marginibus convergentibus.*

**THE LITTLE SNAKE HELIX.** Shell umbilicated, depressed, nearly discoid, light brown, ornamented with rather distant red streaks; suture of the spire impressed, whorls five, rounded, longitudinally very finely rib-like striated; aperture nearly circular; lip thin, with the margins approximating.

*Helix theta*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Less widely convoluted than the preceding species, and without lamellæ in the aperture.

Species 803. (Mus. Cuming.)

HELIX AUSTRALIS. *Hel. testâ umbilicatâ, orbiculato-convexâ, glabrâ, obsolete striatâ, albidâ, maculis radiantibus fasciisque interruptis obsolete cinereis pictâ; anfractibus quinque, rapidè accrescentibus; umbilico angusto, aperto; aperturâ lunari-rotundatâ, fauce ferrugineâ; peristomate simplici, margine columellari reflexo-dilatato.*

THE SOUTHERN HELIX. Shell umbilicated, orbicularly convex, smooth, obsolete striated, whitish, painted with ash-coloured radiating spots and interrupted bands; whorls five, rapidly increasing: umbilicus narrow, open; aperture lunar-rounded, interior rust-coloured; lip simple, columellar margin reflectedly dilated.

MENKE, Moll. Nov. Holl. p. 6.

*Hab.* Swan River, New Holland.

A small striped species of European aspect.

Species 804. (Mus. Cuming.)

HELIX MARIÆ. *Hel. testâ angustè obtectè umbilicatâ, perdepresso-conicâ, fumeo-fuscâ, acutè carinatâ, supra corrugatâ, infra superficialiter granulatâ; anfractibus quinque, planatis; aperturâ trigono-ovatâ; peristomate simplici, margine columellari tenuè dilatato.*

MARIÆ'S HELIX. Shell with a narrow covered umbilicus, very depressly conical, smoky-brown, sharply keeled, wrinkled above, superficially granulated below; whorls five, flattened; aperture triangularly ovate; lip simple, columellar margin thinly dilated.

*Nanina Mariæ*, Gray, Fauna of New Zealand, p. 262.

*Hab.* Auckland, New Zealand; Greenwood.

A finely keeled species, of dingy brown colour, finely

reticularly granularly sculptured above and below, the upper sculptures being disposed in arched wrinkles.

Species 805. (Mus. Cuming.)

HELIX CREBRIFLAMMEA. *Hel. testâ subampliter umbilicatâ, depresso-turbinatâ, pellucido-lutescente, flammis rubidis undique creberrimè pictâ; spirâ parvâ, suturâ impressâ; anfractibus tribus, lævigatis, juxta suturam tenuiplicatis, ultimo rotundato; aperturâ subtransversè ovatâ; peristomate simplici.*

THE CLOSE-FLAMED HELIX. Shell somewhat largely umbilicated, depressly turbinated, transparent yellow, very closely painted throughout with red flames, spire small, with the suture impressed; whorls three, smooth, finely plicated next the suture, last whorl rounded; aperture somewhat transversely ovate; lip simple.

PEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

A conspicuously striped shell, of transparent horny substance.

Species 806. (Mus. Cuming.)

HELIX PORTIA. *Hel. testâ subampliter umbilicatâ, convexo-depressâ, fuscâ, strigis rufis angulatis subremotis ornatâ; spirâ suturâ impressâ; anfractibus quinque, rotundatis, undique creberrimè costellato-striatis; aperturâ lunato-circulari; peristomate simplici, subexpanso.*

THE PORTIA HELIX. Shell rather largely umbilicated, convexly depressed, brown, ornamented with rather remote red angled streaks; suture of the spire impressed; whorls five, rounded, very closely rib-like striated; aperture lunar-circular; lip simple, a little expanded.

GRAY, Pro. Zool. Soc. 1849. p. 165.

*Hab.* Auckland, New Zealand; Dr. Sinclair.

Of a dull brown, streaked at rather wide intervals with red, and sculptured throughout with fine ring-like raised striae.







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# HELIX.

PLATE CXXXII.

Species 807. (Mus. Cuming.)

**HELIX CORESIA.** *Hel. testâ umbilicatâ, depressiusculâ, pellucido-corneâ, olivaceâ; spirâ parvâ; anfractibus tribus ad quatuor, tenuè costellato-striatis, ultimo rotundato; aperturâ subimplâ, circulari; peristomate subexpanso.*

**THE CORESIA HELIX.** Shell umbilicated, rather depressed, transparent horny, olive; spire small; whorls three to four, finely rib-like striated, the last rounded; aperture rather large, circular; lip a little expanded.

*Zonites Coriesia*, Gray, Pro. Zool. Soc. 1849, p. 166.

*Hab.* Auckland, New Zealand; Greenwood.

A very delicate subtransparent shell, composed of horny epidermal substance.

Species 808. (Mus. Cuming.)

**HELIX INFECTA.** *Hel. testâ ampliter umbilicatâ, convexo-depressâ, fuscescente, maculis rufis grandibus quadratis ornatâ; anfractibus quatuor ad quinque, tenuè costellato-striatis, ultimo rotundato; aperturâ parvâ, lunato-circulari; peristomate simplici.*

**THE TAINTED HELIX.** Shell largely umbilicated, convexly depressed, light brown, ornamented with large red square spots; whorls four to five, finely rib-like striated, last whorl rounded; aperture small, lunar-circular; lip simple.

*Helix zeta*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Well characterized at the upper part by its tessellated painting of large square red blotches.

Species 809. (Mus. Cuming.)

**HELIX PILULA.** *Hel. testâ umbilicatâ, subglobosâ, tumidi-usculâ, fuscescente, rufo tenuè lentiginosâ; anfractibus quatuor ad quinque, convexis, creberrimè costellato-striatis; aperturâ lunari; peristomate simplici.*

**THE PILL HELIX.** Shell umbilicated, somewhat globose, rather swollen, light brown, finely freckled with red; whorls four to five, convex, very closely rib-like striated; aperture lunar; lip simple.

*Helix iota*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Of the same typical character as the preceding species, but globosely rounded, and more closely striated.

Species 810. (Mus. Cuming.)

**HELIX BICONCAVA.** *Hel. testâ latissimè umbilicatâ, angustè discoidè, fuscescente, rufo strigatâ et variegatâ spirâ concavo-impresâ; anfractibus quinque, creberrimè tenuissimè costellato-striatis; aperturâ lunato-circulari; peristomate simplici.*

**THE BICONCAVE HELIX.** Shell very broadly umbilicated, narrowly discoid, light brown, streaked and variegated with red; spire concavely impressed, whorls five, very closely and finely rib-like striated; aperture lunar-circular; lip simple.

Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Convolved on a discoid plane, concave both on the upper and under surface.

Species 811. (Mus. Cuming.)

**HELIX COLLYRULA.** *Hel. testâ umbilicatâ, supra pinnata, infra convexâ, fuscescente, rufo maculati et lentiginosi; anfractibus quatuor, supernè obtusè angulatis, creberrimè et tenuissimè costellato-striatis, aperturâ lunato-circulari; peristomate simplici.*

**THE LITTLE CAKE HELIX.** Shell umbilicated, flattened above, convex beneath, light brown, blotched and freckled with red; whorls four, obtusely angled at the upper part, very closely and finely rib-like striated; aperture lunar; lip simple.

*Helix kappa*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

This and the two preceding species, though differing so materially in their plan of convolution, belong to the same peculiar type of which so many different forms have been collected in New Zealand.

Species 812. (Mus. Cuming.)

**HELIX SERICATULA.** *Hel. testâ umbilicatâ, depresso-convexâ, subtiliter et confertè costellato-striatâ, subsericâ, gris-escorci, macis brevibus irregularibus reticulatâ; spirâ pinnâ; anfractibus quatuor ad quinque, convexiusculis, ultimo subrotundato, juxta umbilicum.*

*subimpresso, aperturâ subverticali, latè lunari; peristomate simplici, recto, oblusiusculo, margine basali declivi, supernè reflexo, umbilicium fere occultante.*

THE SILKY HELIX. Shell umbilicated, depressed, discoid, finely and closely rib-like striated, somewhat silky, greyish-horny, rayed with irregular brown lines; spire flat; whorls four to five, convex, the last somewhat rounded, slightly impressed near the umbilicus; aperture subvertical, broadly lunar; lip simple, straight, rather obtuse, basal margin slanting, reflected at the upper part, almost concealing the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1849, p. 127.

*Hab.* Port Jackson, Australia; Strange.

Allied in general character to the small New Zealand type of the genus.

Species 813. (Mus. Cuning.)

HELIX STIPULATA. *Hel. testâ subpyramidali-conicâ, obliquè costellato-striatâ, striis subremotis, fuscescente, obscure maculatâ, epidermide indutâ; anfractibus sex, planulatis, ultimo basi angulato; aperturâ parvâ, subtrigono-ovatâ; peristomate simplici, juxta umbilicium subexpanso.*

THE THATCHED HELIX. Shell somewhat pyramidally conical, obliquely rib-like striated, striae rather distant, light brown, obscurely spotted, covered with an epidermis; whorls six, flattened, last whorl angled at the base; aperture small, somewhat triangularly ovate; lip simple, a little expanded next the columella.

*Helix alpha*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Distinguished from its numerous allies by its pyramid-like conical form.

Species 814. (Mus. Cuning.)

HELIX BARBATULA. *Hel. testâ subangustè umbilicatâ, pyramidali-conicâ, obliquè arcuatim costellato-striatâ, fuscescente, maculis rufis subquadratis tessellatâ, subpilosâ; anfractibus sex, planatis, ultimo basi angulato; aperturâ parvâ, subtrigono-ovatâ; peristomate simplici.*

THE FINELY BEARDED HELIX. Shell rather narrowly umbilicated, pyramidally conical, obliquely arcuately

rib-like striated, light brown, tessellated with somewhat square red spots, a little hairy; whorls six, flattened, last whorl angled at the base; aperture small, somewhat triangularly ovate; lip simple.

*Helix beta*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

This approaches very closely to the preceding species, but it is more narrowly pyramidal and more sharply angled at the base.

Species 815. (Mus. Cuning.)

HELIX PÆCILOSTICTA. *Hel. testâ oblectè umbilicatâ, pyramidali-conicâ, obliquè tenuissimè et creberrimè elevato-striatâ, sericeo-fuscescente, carinâ angustâ prominente rufo-punctatâ ad basin anfractuum cingulatâ; anfractibus sex, planulatis, ultimo ongulato; aperturâ transversè ovalâ; peristomate simplici, prope columellam dilatato-reflexo.*

THE VARI-DOTTED HELIX. Shell with a covered umbilicus, pyramidally conical, obliquely very finely and closely elevately striated, light silky-brown, encircled round the base of the whorls with a prominent narrow red-dotted keel; whorls six, flattened, the last angled; aperture transversely ovate; lip simple, dilately reflected.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Neatly characterized by the narrow red-dotted necklace-like keel.

Species 816. (Mus. Cuning.)

HELIX BARRAKPORENSIS. *Hel. testâ vix umbilicatâ, pyramidali-conicâ, tenuissimâ, lævigatâ, pellucido-corneâ; anfractibus sex, planulatis, ad basin tenuicarinatis; aperturâ subtrigono-ovatâ; peristomate simplici, juxta columellam dilatato-reflexo.*

THE BARRAKPORE HELIX. Shell scarcely umbilicated, pyramidally conical, very thin, smooth, transparent-horny; whorls six, flattened, thinly keeled at the base; aperture somewhat triangularly ovate; lip simple, dilately reflected next the columella.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* Barrakpore, India; Bacon.

A simple bright horny conical shell, finely keeled.





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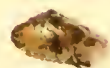
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# HELIX.

PLATE CXXXIII.

Species 817. (Mus. Cuming.)

**HELIX ERIGONE.** *Hel. testâ angustè umbilicatâ, pyramidal-conicâ, apice obtusâ, pellucido-corneâ, fusco maculatâ; anfractibus quatuor ad quinque, convexiusculis, subtilissimè corrugato-striatis, ultimo basi angulato et carinato; aperturâ subtrigono-ovatâ; peristomate tenui, juxta columellam dilatato-reflexo.*

**THE ERIGONE HELIX.** Shell narrowly umbilicated, pyramidally conical, obtuse at the apex, transparent horny, spotted with brown; whorls four to five, rather convex, very finely wrinkled-striated, the last angled and keeled at the base; aperture somewhat triangularly ovate; lip thin, dilately reflected next the columella.

*Narina Erigone*, Gray, Pro. Zool. Soc. 1849, p. 165.

*Hab.* Auckland, New Zealand; Greenwood.

The smallest species of the genus at present known.

Species 818. (Mus. Cuming.)

**HELIX CAPUT-SPINULÆ.** *Hel. testâ umbilicatâ, turbinatâ, pellucido-corneâ, laxigatâ; anfractibus tribus ad quatuor, rotundatis; aperturâ subcirculari; peristomate subexpanso.*

**THE PIN'S-HEAD HELIX.** Shell umbilicated, turbinated, transparent horny, smooth; whorls three to four, rounded; aperture nearly circular; lip a little expanded.

*Helix epsilon*, Pfeiffer, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

A very minute horny species, turbinated somewhat after the manner of a *Cyclostoma*.

Species 819. (Mus. Cuming.)

**HELIX BULLULA.** *Hel. testâ obtectè umbilicatâ, subgloboâ, tenui, pellucido-stramineâ; anfractibus sex, angustis, convexis, ultimo basi tumidiusculo; aperturâ lunari; peristomate simplici, margine columellari dilatato-reflexo.*

**THE LITTLE BUBBLE HELIX.** Shell with a covered umbilicus, somewhat globose, thin, transparent straw-colour; whorls six, narrow, convex, last whorl rather swollen at the base; aperture lunar; lip simple, columellar margin dilately reflected.

HUTTON, Journ. Asiatic Society of Calcutta, vol. vii part 1 p. 218.

*Hab.* Landour, India.

A subtransparent straw-coloured globular shell, composed of several narrow whorls.

Species 820. (Mus. Cuming.)

**HELIX LEIMONIAS.** *Hel. testâ subobtectè umbilicatâ, pyramidal-conicâ, pellucido-corneâ, tenuissimâ; anfractibus septem, planatis, laxigatis, nitentibus, ultimo medio spiritaliter sulcato; aperturâ trigono-ovatâ, tri-lamellatâ, lamellis angustis, acutis, unâ in pariete aperturæ, duabus oppositis; peristomate simplici, margine columellari dilatato-reflexo.*

**THE LEIMONIAS HELIX.** Shell with a nearly covered umbilicus, pyramidally conical, transparent horny, very thin; whorls seven, flat, smooth, shining, last whorl spirally grooved in the middle; aperture triangularly ovate, three-lamellated, lamellæ narrow, sharp, one on the wall of the aperture, two opposite to it; lip simple, columellar margin dilately reflected.

*Bulimus? (Lima) Leimonias*, Gray, Pro. Zool. Soc. 1849 p. 167.

*Hab.* Auckland, New Zealand; Greenwood.

This is certainly not the young of a *Puja*, as Mr. Cuming intimates it may be, but a well-defined mature species.

Species 821. (Mus. Cuming.)

**HELIX BUCCINELLA.** *Hel. testâ subapertè umbilicatâ, discoidâ, fuscescente, strigis rufis substriatis obliquè pictâ; spirâ planulatâ, suturâ impressâ; anfractibus quinque, convexis; aperturâ suboblong-ovatâ; peristomate simplici, subexpanso.*

**THE LITTLE TRUMPET HELIX.** Shell rather broadly umbilicated, discoid, brown, obliquely painted with rather distant red streaks; spire flattened, with the suture impressed; whorls five, convex; aperture suboblong-ovate; lip simple, a little expanded.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Of open discoid growth, painted with rather distant oblique streaks.



## Species 822. (Mus. Cuming.)

HELIX GLABRIUSCULA. *Hel. testā vix umbilicatā, conico-depressā, pellucido-corneā, strigis castaneis angustis medio flexuosis ornatā; anfractibus quinque, convexis, ultimo obtusè angulato; aperturā transversè ovatā; peristomate simplici.*

THE SMOOTH HELIX. Shell scarcely umbilicated, conically depressed, transparent horny, ornamented with narrow chestnut streaks, flexuous in the middle; whorls five, convex, the last obtusely angled; aperture transversely ovate; lip simple.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

A shining transparent horny shell, prettily marked with fine flexuous red lines.

## Species 823. (Mus. Cuming.)

HELIX FASTIGIATA. *Hel. testā vix umbilicatā, albido-corneā, pyramidali, minutissimè granulatā; anfractibus septem, convexiusculis, ultimo acutè angulato, basi plano-convexo; aperturā transverse ovatā; peristomate simplici, margine columellari reflexo.*

THE PYRAMIDAL HELIX. Shell scarcely umbilicated, white-horny, pyramidal, very minutely granulated; whorls seven, rather convex, the last sharply angled, flatly convex; aperture transversely ovate; lip simple, columellar margin reflected.

HUTTON, Journ. Asiatic Society of Calcutta, vol. vii. part 1. p. 217.

*Hab.* Simla, Himalaya.

Of very simple character, the granules being almost obsolete.

## Species 824. (Mus. Cuming.)

HELIX VARICOSA. *Hel. testā umbilicatā, subdepressā, apice acutā, fuscescente, rufo-maculatā; anfractibus quinque, supernè subplanatis, deinde convexis, costis subdistantibus undique ornatis; aperturā lunato-circulari; peristomate simplici, subexpanso.*

THE VARICOSE HELIX. Shell umbilicated, subdepressed,

sharp at the apex, brownish, spotted with red, whorls five, rather flattened at the upper part, then convex, ornamented throughout with rather distant ribs; aperture lunac-circular; lip simple, a little expanded.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* New Zealand.

Distinguished in a peculiar manner by the prominent varix-like development of the ribs.

## Species 825. (Mus. Cuming.)

HELIX HUMILIS. *Hel. testā latissimè umbilicatā, convexo-depressā, corneā, sordidè fuscā; anfractibus quinque, subangustis, rotundatis; aperturā fere circulari; peristomate simplici.*

THE HUMBLE HELIX. Shell very broadly umbilicated, convexly depressed, horny, dull brown; whorls five, rather narrow, rounded; aperture nearly circular, lip simple.

HUTTON, Journ. Asiatic Society of Calcutta, vol. vii. part 1. p. 217.

*Hab.* Landour and Simla, Himalaya.

A minute smooth horny circular species.

## Species 826. (Mus. Cuming.)

HELIX CORNICULUM. *Hel. testā ampliter umbilicatā, discoideā, tenui, sub lente tenuissimè et creberrimè elevato-striatā, lutescente, immaculatā; spirā impressā, suturā distinctā; anfractibus quatuor, rotundatis; aperturā fere circulari; peristomate simplici.*

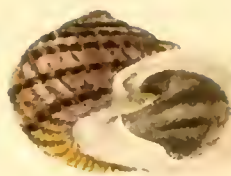
THE LITTLE HORN HELIX. Shell largely umbilicated, discoid, thin, very finely and closely elevately striated beneath the lens, yellowish, unspotted; suture impressed, suture distinct; whorls four, rounded; aperture nearly circular; lip thin.

*Helix eta*, Pfeiffer, Pro. Zool. Soc. 1851.

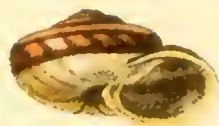
*Hab.* New Zealand.

A delicate unspotted horny species, of the small New Zealand type, in which the rib-like striae are very finely developed.

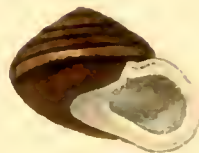




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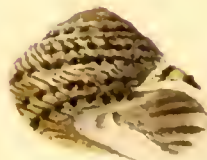
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# HELIX.

PLATE CXXXIV

Species 827. (Mus. Cuming.)

**HELIX SARCOSTOMA.** *Hel. testâ imperforatâ, subglobosâ, solidulâ, obsolete striatâ et granulato-punctulatâ, fuscâ, castaneo fasciatâ et pullidè marmoratâ; anfractibus quinque, vix convexiusculis, ultimo anticè deflexo; aperturâ perobliquâ, lunato-ovali; peristomate amplo, reflexo, subrevoluto, nitido, carneo, marginibus approximatis, callo crassiusculo junctis, basali sæpe subdentato.*

**THE FLESH-MOUTH HELIX.** Shell imperforated, somewhat globose, rather solid, obsoletely striated and granularly dotted, brown, banded and faintly marbled with chestnut; whorls five, slightly convex, the last deflected in front; aperture very oblique, lunar-oval; lip large, reflected, a little turned back, shining, flesh-colour, margins approximated, joined by a rather thick callosity, basal margin often slightly toothed.

**WEBB and BERTHELOT, Syn. p. 312.**

*Hab.* Grand Canary Island.

A prettily variegated solid shell, distinguished by an unusually broadly reflected flesh-tinged lip.

Species 828. (Mus. Cuming.)

**HELIX PORTO-SANCTANA.** *Hel. testâ umbilicatâ, depressâ, obliquè rugoso-striatâ, obsolete granulatâ, superiù rufâ, pallidè fasciatâ, basi lutescente vel albidâ; spirâ subprominulâ; anfractibus quinque, convexiusculis, ultimo anticè deflexo; umbilico mediocri, percio; aperturâ perobliquâ, subcirculari; peristomate carneo, marginibus fere contiguïs, callo crassiusculo junctis, supèro expanso, basali incrassato, reflexo.*

**THE PORTO SANCTO HELIX.** Shell umbilicated, depressed, obliquely rugosely striated, obsoletely granuled, reddish and faintly banded at the upper part, yellowish or whitish at the base; spire rather prominent; whorls five, rather convex, the last deflected in front; umbilicus middling, open; aperture very oblique, nearly circular; lip flesh-tinged, with the margins almost contiguous, joined by a rather thick callosity, upper margin expanded, basal thickened and reflected.

**SOWERBY, Zoological Journal, vol. i. p. 57. pl. 3. f. 5.**

*Hab.* Island of Porto Sancto, Madeiras.

A lightly wrinkled red-banded shell, with a nearly circular aperture.

Species 829. (Mus. Cuming.)

**HELIX ADANSONI.** *Hel. testâ imperforatâ, depresso-globosâ, solidâ, viridè-fulcâ vel castaneâ, minutissime granulatâ; anfractibus quinque, convexiusculis, ultimo convexo, angulato, anticè inflato, ad aperturam deflexo, constricto; aperturâ subtriangulato-lunari, intus lacteâ; peristomate incrassato, marginè supèro breviter reflexo, infero recto, latè appresso, ad columellam subtuberculato.*

**ADANSON'S HELIX.** Shell imperforated, depressly globose, solid, greenish-fulvous or chestnut, very minutely granulated; whorls five, rather convex, the last convex, angulated, inflated in front, deflected and constricted at the aperture; aperture somewhat triangularly lunar, milk-white within; lip thickened, upper margin shortly reflected, lower margin straight, broadly appressed, slightly tubercled at the columella.

**WEBB and BERTHELOT, Syn. p. 313.**

*Le Pouchet, Adanson.*

*Helix Pouchet, Deshayes.*

*Hab.* Senegal, Canaries, and Cape de Verd Islands.

This species was first published by Adanson, in his 'Voyage en Sénégâl,' but his names are not available for our present form of nomenclature.

Species 830. (Mus. Cuming.)

**HELIX LOWII.** *Hel. testâ umbilicatâ, turbatâ, tenui sabinulatâ, densissime ruguloso-striatâ, rufescent-lacteâ, lineis rufis duabus medio circumdatâ; spirâ sublevatâ, anfractibus quinque, convexis, ultimo ad peripheriam subangulato, basi rotundato; aperturâ circulari, vix reflexiusculo, marginibus fere contiguïs, callositate junctis.*

**LOWE'S HELIX.** Shell umbilicated, turbated, thus somewhat inflated, very thickly rugosely striated, reddish-cream colour, encircled round the middle with two red lines; spire somewhat raised, whorls five, convex, the last slightly angled at the periphery, rounded at the base, aperture circular, lip rather reflected, with the margins almost contiguous, joined by a callosity.

**FERRUSSAC, Bull. Zool. 1835. p. 89.**

*Hab.* Island of Porto Sancto, Madeiras.

This shell, which is only found in a pale semi-fossil state

is regarded by Dr. Pfeiffer as a colossal variety of *H. Porto-Sanctana*. The spire is more raised, and the marking differs slightly.

Species 831. (Mus. Cuming.)

HELIX UNDATA. *Hel. testá imperforatá, depresso-turbinatá, nigricante-fuscá, plicis calidis undatim corrugatá; spirá latè conoideá; anfractibus quinque ad sex, convexiusculis, ultimo anticè valde deflexo; aperturá amplá, lunato-ovali; peristomate supernè simplici, marginibus callo tenuissimo junctis, columellari dilatato, appressè reflexo, plano.*

THE WAVED HELIX. Shell imperforated, depressly turbinated, blackish-brown, wrinkled in a waved manner with strong plaits; spire broadly conoid; whorls five to six, rather convex, the last strongly deflected in front; aperture large, lunar-oval; lip simple at the upper part, with the margins joined by a very thin callosity, columellar margin dilated, appressly reflected, flat.

LOWE, Faun. Mader. p. 41. pl. 5. f. 5.

*Helix Groviana*, Férussac.

*Helix scabra*, Wood.

*Hab.* Madeira.

Remarkably sculptured throughout with very strong plicated wrinkles.

Species 832. (Mus. Cuming.)

HELIX SAULCYI. *Hel. testá imperforatá, globoso-depressá, obliquè rugulasá, undique minutè malleatá, albidá, fusco-maculatá, fuscis angustis castaneis ornatá; anfractibus quinque, convexiusculis, ultimo anticè subitò deflexo; aperturá perobliquá, cuneatá, lunato-ovali; peristomate albo vel roseo, marginibus subparallelis, dextra latè expanso, reflexiusculo, columellari dilatato, introrsum latè tuberculato.*

SAULCY'S HELIX. Shell imperforated, globosely depressed, obliquely wrinkled, minutely indented throughout, whitish, spotted with brown, ornamented with five narrow chestnut bands; whorls five, rather convex, the last suddenly deflected in front; aperture very oblique, contracted, lunar-oval; lip white or rose-tinted, margins nearly parallel, right margin broadly expanded, rather reflected, columellar margin dilated, broadly tubercled inwardly.

D'ORBIGNY, Moll. Canaries, p. 56. pl. 3. f. 9-11.

*Hab.* Island of Fuerteventura, Canaries.

Distinguished by a somewhat white-freckled appearance, with the striae forming into oblique wrinkles.

Species 833. (Mus. Cuming.)

HELIX SUBPLICATA. *Hel. testá imperforatá, subglobosá, longitudinaliter validè plicatá, epidermide luteo-fuscá vel castaneá indutá; spirá elatá, obtusá; anfractibus tribus ad quatuor, inflatis, rapidè accrescentibus, aperturá amplá, subcirculari, intus nitidá, plicatá; peristomate simplici, marginibus fere contiguis, callo tenui junctis, columellari subincrassato, dilatato.*

THE SUBPLICATE HELIX. Shell imperforated, subglobose, longitudinally strongly plicated, covered with a yellowish-brown or chestnut epidermis; spire raised, obtuse; whorls three to four, inflated, increasing rapidly; aperture large, nearly circular, shining and plicated within; lip simple, with the margins almost continuous, joined by a thin callosity, columellar margin rather thickened, dilated.

SOWERBY, Zool. Journ. vol. i. p. 56. pl. 3. f. 1.

*Hab.* Island of Porto Saneto, Madeiras

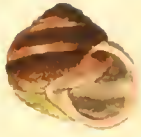
An obliquely plicated inflated shell, with a rather prominent turbinated spire



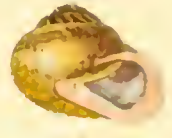




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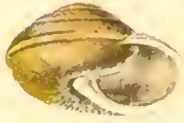
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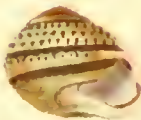
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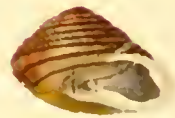
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N. 13.

# HELIX.

PLATE CXXXV

Species 834. (Mus. Cuming.)

**HELIX GAUDRYI.** *Hel. testâ imperforatâ, depresso-globosâ, striatâ, obsolete malleatâ, supernè fusco-violaceâ, maculis violaceis in zonas dispositis vel maculis albidis ornatâ; spirâ brevi, obtusâ; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè subito deflexo; aperturâ perobliquâ, lunato-oblongâ; peristomate subincrassato, albo, marginibus subparallelis, supero expanso, basali strictiusculo, dilatato, appresso.*

**GAUDRY'S HELIX.** Shell imperforated, depressly globose, striated, obsolete indented, brownish-violet at the upper part, ornamented with violet spots arranged in four bands, or with whitish spots; spire short, obtuse; whorls four to five, rather convex, the last suddenly deflected in front; aperture very oblique, lunar-oblong; lip rather thickened, white, margins nearly parallel, upper margin expanded, basal rather drawn out, dilated, and appressed.

D'ORBIGNY, Moll. Isles Canaries, p. 57. pl. 3. f. 15-17.

*Hab.* Island of Teneriffe, Canaries.

Of the four violet-tinged bands which characterize this species, the lowest is nearly obsolete.

Species 835. (Mus. Cuming.)

**HELIX PUNCTULATA.** *Hel. testâ subobtectè umbilicatâ, subglobosâ, concentricè lineatâ, flavo-fuscâ, fasciis saturatè brunneis vel nigricantibus ornatâ, epidermide setigerâ indutâ; spirâ breviusculâ, suturâ distinctâ, depressiusculâ; anfractibus quinque, ultimo convexo; aperturâ rotundato-lunari; peristomate simplici, margine dextro breviter expanso, columellari dilatato, albo, reflexo.*

**THE DOTTED HELIX.** Shell with a nearly covered umbilicus, subglobose, concentrically lined, yellowish-brown, ornamented with two dark brown or blackish bands, covered with a bristly epidermis; spire rather short, with the suture distinct and a little depressed; whorls five, the last convex; aperture rotundately lunar; lip simple, right margin shortly expanded, columellar margin dilated, white, reflected.

SOWERBY, Zool. Journal, vol. i. p. 56. pl. 3. f. 2.

Eadem subfossilis, *Helix Bowdichiana*, Férussac.

*Hab.* Porto Santo, Madeira.

Covered, except at the base, with granular dots.

Species 836. (Mus. Cuming.)

**HELIX MODESTA.** *Hel. testâ imperforatâ, depresso-globosâ, tenui, reticulato-malleatâ, viride-luteâ, spirâ subelevatâ; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè subito deflexo, basi subbilobata; aperturâ perobliquâ, lunato-ovali, intus albâ, peristomate latè expanso, reflexiusculo, albo vel roseo, marginibus subconcurrentibus, basali strictiusculo, dilatato-planato.*

**THE MODEST HELIX.** Shell imperforated, depressly globose, thin, reticulately indented, greenish-yellow; spire a little raised; whorls four to five, rather convex, the last suddenly deflected in front, slightly gibbous at the base; aperture very oblique, lunar-oval, white within; lip broadly expanded, a little reflected, white or rose-tinted, margins somewhat approximating, basal margin rather drawn out, dilated, flattened.

FÉRUSSAC, Hist. Moll. pl. 42. f. 1.

*Hab.* Island of Fuertaventura, Canaries.

The surface of this species is peculiar in being finely reticulately indented throughout.

Species 837. (Mus. Cuming.)

**HELIX PLICARIA.** *Hel. testâ obtectè umbilicatâ, orbiculato-depressâ, violascente-fuscâ, basi pallidiorè, plicato-costatâ; anfractibus quatuor ad quinque, convexis, ultimo anticè valde deflexo, aperturâ subhorizontali, angustâ, subovali, intus albâ, peristomate acuto, angulatim latissimè expanso, inter se et columellari marginibus callo junctis.*

**THE PLICATED HELIX.** Shell with a covered umbilicus, orbicularly depressed, violet-brown, paler at the base, obliquely plicately ribbed, whorls four to five convex, the last much deflected in front, aperture rather horizontal, narrow, sub-oval, white within. Lip sharp, very broadly angularly expanded, thickened within, margins joined by a callosity.

LAMARCK, Encyclopédie Methodique, pl. 462. f. 1.

*Helix plicatula*, Lamarck (in Anim. sans vert.)

*Helix orbiculata*, Wood

*Hab.* Island of Teneriffe, Canaries.

Strongly marked by its sharply wrinkled plicated sculpture.

## Species 838. (Mus. Cuming.)

HELIX VILLIERSII. *Hel. testá umbilicatá, orbiculato-depressá, tenui, rugosá, profundè et irregulariter plicatá (plicis obliquis, acutis, interruptis), fusco-corneá, lineis angustis fuscis vittatá; spirá viz elevatá; anfractibus quinque, planiusculis, subcarinatis; aperturá perobliquá, lunato-ovalí; peristomate tenui, acuto, margine supéro expanso, columellari dilatato, ad umbilicem reflexo.*

VILLIERS' HELIX. Shell umbilicated, orbicularly depressed, thin, rough, deeply and irregularly plicated (plaits oblique, sharp, and interrupted), brown-horny, filleted with narrow brown lines; spire but little raised; whorls five, rather flat, slightly keeled; aperture very oblique, lunar-oval; lip thin, sharp, upper margin expanded, columellar dilated, reflected at the umbilicus.

D'ORBIGNY, Moll. Isles Canaries, p. 5. pl. 3. f. 12-14.

*Hab.* Grand Canary Island.

A worn discoloured specimen, showing the plaited sculpture but indistinctly, is the only one I have been able to procure of this species.

## Species 839. (Mus. Cuming.)

HELIX XANTHODON. *Hel. testá imperforatá, subglobosá, depressiusculá, albá, solidá; spirá convexá; anfractibus quinque, convexiusculis, sensim accrescentibus; aperturá rotundatá, perobliquá, minusculá; peristomate reflexo, albo-labiato, margine columellari calloso, unidentato.*

THE YELLOW TOOTH HELIX. Shell imperforated, subglobose, a little depressed, white, solid; spire convex; whorls five, rather convex, increasing slowly; aperture rounded, very oblique, rather small; lip reflected, white-edged, columellar margin callous, one-toothed.

ANTON, Rossmäsler, Moll. vol. 9. p. 6. f. 363.

*Hab.* Oran, Algiers.

A globose, solid species, with a conspicuously developed oblong tooth on the columellar margin.

## Species 840. (Mus. Cuming.)

HELIX CONSOBRIANA. *Hel. testá imperforatá, globoso-depressá, reticulato-malleatá, fusco et flavido marmoratá et obsolete fasciatá; anfractibus quatuor ad quinque, convexiusculis, ultimo magno, ad aperturam constricto; aperturá subhorizontali, transversè auriformi, intus nitidá, carulescente; peristomate latè expanso, reflexo,*

*roseo, marginibus subparallelis, basali dilatato, latetuberculato.*

THE COUSIN HELIX. Shell imperforated, globosely depressed, reticulately indented, marbled and obsoletely banded with brown and yellow; whorls four to five, rather convex, the last large, constricted at the aperture; aperture rather horizontal, transversely ear-shaped, shining and bluish within; lip broadly expanded, reflected, rose-coloured, margins subparallel basal margin dilated, broadly tubercled.

FERUSSAC, Hist. Moll. pl. 42. f. 2.

*Hab.* Island of Teneriffe, Canaries.

Of a dark chestnut-colour, with little yellowish flames emerging from the suture.

## Species 841. (Mus. Cuming.)

HELIX PELLIS-LACERTI. *Hel. testá imperforatá, depresso-globosá, solidiusculá, undique confertim subtiliter granulosa, virente-fulvâ, fasciis saturatè castaneis ornatá, strigis albis epidermidis lentiginosâ, apice purpurascente-roseâ; anfractibus quatuor ad quinque, convexiusculis, ultimo inflato, anticè breviter deflexo; aperturá perobliquá, obtusè triangulâri; peristomate fusco-carneo, incrassato, breviter reflexo, margine dextro ad insertionem obsolete, in medio validè, tuberculato, basali strictiusculo, introrsum dilatato, calloso.*

THE LIZARD-SKIN HELIX. Shell imperforated, depressly globose, rather solid, closely finely granulated throughout, greenish-yellow, ornamented with dark chestnut bands, and freckled with white streaks of epidermis, purple-rose at the apex; whorls four to five, rather convex, the last inflated, shortly deflected in front; aperture very oblique, obtusely triangular; lip brown, flesh-tinged, thickened, shortly reflected, right margin obsoletely tubercled at the insertion, strongly tubercled in the middle, basal margin rather drawn out, dilated inwards and callous.

*Helix malleata*, var.  $\beta$ , Pfeiffer.

*Hab.* Island of Lancerota, Canaries.

Instead of being plicately wrinkled and indented, as in *H. malleata*, the surface of this species is very closely finely granulated throughout.

## Species 842. (Mus. Cuming.)

HELIX MALLEATA. *Hel. testá imperforatá, depresso-globosá, solidiusculá, undique obliquè corrugato-plicatá et malleatá, fulvescente, castaneo fasciatá, epidermide albâ*

*lentiginosa, apice purpurascens-roseâ, anfractibus quatuor ad quinque, convexiusculis, ultimo anticè subito deflexo; aperturâ transversè obliquâ, obtusè triangulari; peristomate incrassato, albo, breviter reflexo, margine dextro ad insertionem obsolete, medio calidè tuberculato, basali strictiusculo, introrsum dilatato, calloso.*

THE INDENTED HELIX. Shell imperforated, depressly globose, rather solid, obliquely corrugately plicated and indented throughout, fulvous, banded with chestnut, and freckled with white epidermis, purple-rose at the apex; whorls four to five, rather convex, last whorl suddenly deflected in front; aperture transversely oblique, obtusely triangular; lip thickened, white, shortly reflected, right margin obsolete, tubercled at the insertion, strongly tubercled in the middle, basal margin rather drawn out, dilated inwards, callous.

FERUSSAC, Hist. Moll. pl. 48. f. 4.

*Helix bidentalis*, Lamarek.

*Hab.* Island of Teneriffe, Canaries.

This and the preceding species are peculiarly characteristic of the principal natural type of this locality.

## Species 843 (Mus. Cuming.)

HELIX VULCANIA. *Hel. testâ obtete umbilicatâ, depressè globosâ, tenui, subpellucidâ, obliquè corrugatè-plicatâ, et malleatâ, fumeo-olivaceâ, fasciis duabus nigro-fusci subrimotis superne cingulatâ, lineis brevibus orbibus cristatum dispositis, e suturâ obscure emergentibus, anfractibus quinque, convexis; aperturâ obliquè circulari peristomate tenuiter reflexo, intus callosè-tuberculatis marginibus convergentibus, columellâ subappressâ.*

THE VULCAN HELIX. Shell with a covered umbilicus, depressly globose, thin, subtransparent, obliquely corrugately plicated and indented, dingy-olive color, set round the upper part with two black-brown bands with short whitish lines, arranged in tufts emerging from the suture; whorls five, convex; aperture obliquely circular; lip thinly reflected, callos-edged within, margins approximating, columella a little depressed.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 113.

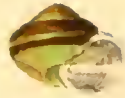
*Hab.* Island of Deserte Grande, Madeira.

An extremely characteristic species, of scarpelucid substance, wrinkled and indented throughout.

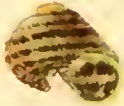




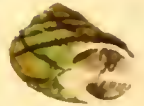




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# HELIX.

PLATE CXXXVI.

Species 844. (Mus. Cuming.)

**HELIX NITIDIUSCULA.** *Hel. testâ umbilicatâ, depresso-globosâ, striatâ et punctulatâ, floridâ, supernè lineis rufis circumdatâ; anfractibus quinque ad sex, convexis, ultimo basi subinflato; aperturâ subcirculari; peristomate simplici, tenui, margine columellari subdilatato, umbilicum non occultante, basali subreflexo.*

**THE SHINING HELIX.** Shell umbilicated, depressly globose, striated and finely punctured, yellowish, encircled about the upper part with reddish lines: whorls five to six, convex, the last somewhat inflated at the base; aperture nearly circular; lip simple, thin, columellar margin slightly dilated, not covering the umbilicus, basal margin a little reflected.

SOWERBY, Zool. Journ. vol. i. p. 57. pl. 3. f. 1.

*Hab.* Island of Porto Santo, Madciras.

The aperture is nearly circular, and the umbilicus rather open and deep.

Species 845. (Fig. 845 and 846, Mus. Cuming.)

**HELIX NIVOSA.** *Hel. testâ imperforatâ, globulosâ, tenui, irregulariter pallidè rugoso-costulatâ, luteo-fulvescente, fusco interruptè fusciatâ; spirâ conoideâ; anfractibus quinque, convexis, ultimo anticè arcuatim deflexo; aperturâ subcirculari; peristomate simplici, marginibus subcontiguis, callo tenui junctis, supero obtusiusculo, columellari dilatato, roseo.*

**THE SNOWY HELIX.** Shell imperforated, globular, thin, irregularly faintly rugosely ribbed, yellowish-fulvous, banded interruptedly with brown; spire conoid, whorls five, convex, last whorl arcuately deflected in front; aperture nearly circular; lip simple, with the margins almost contiguous, joined by a thin callosity, upper margin rather obtuse, columellar margin dilated, rose-coloured.

SOWERBY, Zool. Journ. vol. i. p. 56. pl. 3. f. 3.

*Helix exalbida*, Wood.

*Helix phleophora*, Lowe.

*Hab.* Island of Porto Santo, Madciras.

The bands of this delicately wrinkle-ribbed species are more or less interrupted. The appressed columellar margin is of a characteristic rose-colour.

Species 847. (Mus. Cuming.)

**HELIX ERUDESCENS.** *Hel. testâ imperforatâ, depresso-globosâ, rugulâ striatâ et punctatâ, roseo-fulvâ, spirâ fuscâ et interruptè costatâ; spirâ conoideâ, anticè anfractibus quatuor ad quinque, convexis, ultimo magno, anticè arcuato deflexo; aperturâ subcirculari; peristomate simplici, tenui, margine supero expansiusculo, columellari subinflato.*

**THE BLUSHING HELIX.** Shell imperforated, depressly globose, roughly striated and indented, rose-fulvous, often ornamented with interrupted lines: spire a little raised, obtuse, whorls four to five, rather convex, the last large, scarcely descending in front: aperture linear-subcircular. Lip sharp, flesh-tongued, thickened inwardly, upper margin rather expanded, columellar margin somewhat flattened.

LOWE, Faun. Mader. p. 40. pl. 3. f. 3.

*H. b.* Madcira.

In fine condition this species is adorned with pinkish white epidermis.

Species 848. (Fig. 848 and 849, Mus. Cuming.)

**HELIX BULWERIANA.** *Hel. testâ umbilicatâ, semiglobosâ, solutius striatâ, anticè striatâ et subcostatâ, granulatâ, fuscâ, fusco carâ fuscâ et interruptè spirâ levi planâ, obtusâ, spirâ conoideâ; anfractibus octo, planis, apertis, et planis, ultimo subcarinato, subhis perulatis; peristomate simplici, marginibus junctis, basali incrassatâ, ad umbilicum angustâ, perium subreflexo.*

**BULWER'S HELIX.** Shell umbilicated, semi-globose, rather solid, minutely striated, and, beneath the base, very minutely granulated, fulvous, variably banded and mottled with brown; spire hemispherical, sutures obsolete, whorls eight, flat, narrow, nearly equal, the last sharply keeled, flattened beneath: aperture nearly circular; lip simple and straight at the upper part, margin joined by a thin callously basal margin thickened, a little reflected next the umbilicus, which is narrow and open.

LOWE, Faun. Mader. p. 44. pl. 5. f. 11.

*Circularis erythra*, Menke.

Evolem, *Helix testudinaria*, Lowe.

*H. b.* Island of Porto Santo, Madcira.

Curiously resembling certain varieties of *Helix Listeri* of the Philippines.

## Species 850. (Mus. Cuming.)

HELIX WEBBIANA. *Hel. testá imperforatá, subdiscoidéa, subtus convexá, acutè carinatá, tenui, diaphaná, corneo-virescente, minutissimè granulatá; spirá brevi, conoideá, obtusá; anfractibus tribus, rapidè crescentibus, vix convexiusculis; aperturá amplá, perobliquá, ovali, intus nitidissimá; peristomate simplici, acuto, margine columellari arcuato, dilatato, basali breviter reflexo.*

WEBB'S HELIX. Shell imperforated, subdiscoid, convex beneath, sharply keeled, thin, diaphanous, horny-greenish, very minutely granulated; spire short, conoid, obtuse; whorls three, increasing rapidly, slightly convex; aperture large, very oblique, oval, shining within; lip simple, sharp, columellar margin arched, dilated, basal margin shortly reflected.

LOWE, Faun. Mader. p. 44. pl. 5. f. 10.

*Hab.* Island of Porto Santo, Madeiras.

Chiefly distinguished by the oblique enlargement of the aperture.

## Species 851. (Mus. Cuming.)

HELIX FURVA. *Hel. testá imperforatá, subglobosá, tenui, obsoletè rugulosá et malleatá, lutescente, fusco unifasciatá, epidermide umbriná indutá; anfractibus sex, subplanatis, ultimo subangulato, basi convexo, anticè paulum descendente; suturá distinctá; aperturá rotundato-lunari; peristomate simplici, acuto, margine columellari subincrassato.*

THE DUSKY HELIX. Shell imperforated, subglobose, thin, obsoletely wrinkled and indented, yellowish, encircled with a brown band, and covered with a shadowy epidermis; whorls six, rather flattened, the last slightly angled, convex at the base, a little descending in front; suture distinct; aperture rotundately lunar; lip simple, sharp, columellar margin rather thickened.

LOWE, Faun. Mader. p. 40. pl. 5. f. 2.

*Hab.* Madeira.

The band is not unfrequently interrupted, so as to present a beaded pattern.

## Species 852. (Mus. Cuming.)

HELIX ADVENA. *Hel. testá imperforatá, depresso-globosá, tenui, creberrimè undulato-striatá, pallidè corneá, fasciá latá livido-fuscá, sæpe albo-maculatá supra peripheriam, fasciis duabus angustioribus obsoletis subtus notatá; anfractibus quatuor, convexiusculis, ultimo anticè sensim descendente; aperturá lunato-subcirculari; peristomate simplici, margine supero subexpanso, columellari dilatato-appresso.*

THE STRANGE HELIX. Shell imperforated, depressly globose, thin, very closely undulately striated, pale horny, encircled with a broad livid-brown band, often white-spotted above the periphery, and two narrower fainter bands below it; whorls four, rather convex, the last gradually descending in front; aperture lunar-subcircular; lip simple, upper margin rather expanded, columellar margin dilately appressed.

WEBB and BERTHELOT, Synopsis, p. 324. D'Orbigny, Moll. des Isles Canaries, p. 58. pl. 1. f. 18-20.

*Hab.* Island of Teneriffe, Canaries.

The dilately appressed columellar margin is of an orange-carnelian enamel-like colour.

## Species 853. (Mus. Cuming.)

HELIX WOLLASTONI. *Hel. testá imperforatá, depressá, undique obliquè plicato-corrugatá, acutè carinatá, olivaceá, obscurè fusco-fasciatá; anfractibus quinque, planulatis, infra carinam convexis, ultimo anticè descendente; aperturá trigono-ovalí; peristomate tenui, vix reflexo, marginibus roseis, callo roseo junctis, columellari plano-appresso.*

WOLLASTON'S HELIX. Shell imperforated, depressed, obliquely plicately wrinkled throughout, sharply keeled, olive, faintly banded with brown; whorls five, flattened, convex beneath the keel, last whorl descending in front; aperture triangularly oval; lip thin, scarcely reflected, margins pink, joined by a pink callosity, columellar margin flatly appressed.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 119.

*Hab.* Island of Porto Santo, Madeiras.

This species resembles *H. plicaria* in sculpture, but differs in the form and delicate painting of the aperture.





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# HELIX.

PLATE CXXXVII

Species 854. (Mus. Cuning.)

**HELIX LURIDA.** *Hel. testá subglobosá, depressiusculá, sublus convexá, umbilicatá, tenuiusculá, fusco-subfasciatá, nitidiusculá; suturá distinctá; anfractibus quinque ad sex, convexis, minutissimè et obsoletissimè reticulato-granulatis, ultimo rotundato, juxta suturam granulato, infernè lævi; umbilico parvo, cylindrico, profundo, aperto; aperturá lunari, subovali; peristomate simplici.*

**THE LURID HELIX.** Shell somewhat globose, rather depressed, convex beneath, umbilicated, rather thin, faintly banded with brown, a little shining; suture distinct; whorls five to six, convex, very minutely obsoletely reticulately granulated, last whorl rounded, granulated next the suture, smooth beneath; umbilicus small, cylindrical, deep, open; aperture lunar, suboval; lip simple.

LOWE, Faun. Mader. p. 52. pl. 6. f. 5.

*Hab.* Island of Porto Santo, Madeiras.

The bands are of a reddish tinge and mostly two in number.

Species 855. (Mus. Cuning.)

**HELIX POLYMORPHA.** *Hel. testá umbilicatá, depresso-pyramidatá, striatá, granulis confertis magis minusve exasperatá, supernè fusco et albo marmoratá, basi sordidè albá, fusco-fasciatá; anfractibus septem ad octo, planulatis, ultimo acutè carinato, anticè subgibbo, subitè deflexo, basi convexiusculo, interdum sublævigato; umbilico infundibuliformi; aperturá perobliquá, subcirculari; peristomate simplici, marginibus approximatis, callo tenui junctis, basali reflexo.*

**THE MULTIFORM HELIX.** Shell umbilicated, depressly pyramidal, striated, more or less roughened with close-set granules, marbled at the upper part with brown and white, dead-white, brown-banded, at the base; whorls seven to eight, flattened, the last sharply keeled, rather gibbous and suddenly deflected in front, slightly convex at the base, sometimes rather smooth; umbilicus funnel-shaped; aperture very oblique, nearly circular; lip simple, with the margins approximating and joined by a thin callosity, basal margin reflected.

LOWE, Faun. Mader. p. 54. pl. 6. f. 11-16.

*Helix elegantula*, Jan

*Helix pulcinata*, Michaud

*Hab.* Island of Porto Santo, Madeiras.

The spire of this species is distinguished by a concavely impressed aspect.

Species 856. (Mus. Cuning.)

**HELIX ATTRITA.** *Hel. testá umbilicatá, depressá, minutè granulatá, grisá, albo lentiginosá, infra fusco anifasciatá, anfractibus septem, supernè emacato-impressa, ad peripheriam acutè carinatis, deinde convexis, anfractu ultimo anticè subitè deflexo; aperturá obliquá, subcirculari; peristomate rix expanso, marginibus approximatis, callo tenui junctis.*

**THE WORN HELIX.** Shell umbilicated, depressed, minutely granulated, grey, freckled with white, one-banded beneath with brown; whorls seven, concavely impressed at the upper part, sharply keeled at the periphery, then convex, last whorl suddenly deflected in front; aperture oblique, nearly circular, lip a little expanded, margins approximating, joined by a thin callosity.

LOWE, Ann. and Mag. Nat. Hist. 1851, p. 116.

*Hab.* Island of Porto Santo, Madeiras

The spire is pressed down so as to give a peculiar elevation to the periphery of the last whorl

Fig. 857. (Mus. Cuning.)

This has been named *H. asperata*, but it proves to be a variety of *H. polymorpha*, in which the spire is more depressed.

Species 858. (Mus. Cuning.)

**HELIX ROTULA.** *Hel. testá oblate rotundatá, depressá, striatá et granulis oblongis basali, nitidiusculá, fulvâ, laterè cælesti, carinatá et fasciatâ, granulis rufis angustis circumdatâ, spirâ breviusculâ, suturâ lunari; anfractibus octo, primis, ultimo acutè carinatis, basi rix convexis, anticè rotundè, subgibbo, ochraceo, subitè deflexo, aperturá perobliquâ circulari, utroque callosi, peristomate simplici.*



*quibus callo junctis, dextro arcuato, basali dilatato, reflexo, umbilicum tegente.*

THE LITTLE WHEEL HELIX. Shell with a covered umbilicus, conoidly depressed, striated and covered with oblong granules, rather shining, fulvous, obsoletely marbled with yellow, and encircled with some narrow red bands; spire depressly conical, with the suture linear; whorls eight, flat, the last sharply keeled, scarcely more convex at the base, rounded, subgibbous, ochraceous and suddenly deflected in front; aperture lunar-subcircular, white-callous within; lip white, margins joined by a callosity, right margin arched, basal margin dilated and reflected, covering the umbilicus.

LOWE, Faun. Mader. p. 53. pl. 6. f. 10.

*Hab.* Island of Porto Santo, Madeiras.

It is a peculiarity in this species of the group that the umbilicus, which must be very small, is covered over by the broadly appressed enamelling of the columellar margin.

Species 859. (Mus. Cuming.)

HELIX TUMULORUM. *Hel. testâ suboblectè umbilicatâ, trochiformi, basi convexiusculâ, acutè carinatâ, distinctè et confertim striatâ, albâ, fasciis fuscis interruptis ornâtâ; spirâ conicâ, apice acutiusculâ; anfractibus sex ad septem, vix convexiusculis, ultimo anticè non descendente; aperturâ latè angulato-lunari, intus fuscicululâ; peristomate simplici, acuto, margine basali reflexiusculo, columellari dilatato, perforationem subtegente.*

THE GRAVE HELIX. Shell with a covered umbilicus, trochus-shaped, rather convex at the base, sharply keeled, distinctly and closely striated, white, ornamented with interrupted brown bands; spire conical, rather sharp at the apex; whorls six to seven, slightly convex, the last not descending in front; aperture broadly angularly lunar, brownish within; lip simple, sharp, basal margin a little reflected, columellar margin dilated, nearly covering the umbilicus.

WEBB and BERTHELOT, Synopsis, p. 315.

*Hab.* Island of Graud Canary.

A Trochus-shaped species, with a thin simple lip.

Species 860. (Mus. Cuming.)

HELIX TECTIFORMIS. *Hel. testâ umbilicatâ, depressè semiglobosâ, tenuiusculâ, calcareâ, supernè leviter striatâ,*

*plerumque detritâ, basi confertim granulatâ; spirâ brevi, obtusâ; anfractibus septem, planatis, lentè accrescentibus, ultimo acutè carinato; curinâ latè deflexâ, tectiformi; aperturâ trapeziâ; peristomate acuto, supernè simplici, recto, basi reflexiusculo, ad umbilicum angustum pervio, vix dilatato.*

THE ROOF-SHAPED HELIX. Shell umbilicated, depressly semiglobose, rather thin, chalk-like, finely striated at the upper part, mostly rubbed, closely granulated at the base; spire short, obtuse; whorls seven, flattened, increasing slowly, last whorl sharply keeled, keel broadly deflected, roof-like; aperture trapezoid, lip sharp, simple and straight at the upper part, a little reflected at the base, scarcely dilated at the umbilicus, which is open.

SOWERBY, Zool. Journ. vol. i. p. 57. pl. 3. f. 6.

*Hab.* Island of Baxo, Madciras.

Distinguished by its dead chalk-white appearance and by the irregular pressing down of the keel at the periphery.

Species 861. (Mus. Cuming.)

HELIX SACCHARATA. *Hel. testâ umbilicatâ, pyramidali-conicâ, undique conspicuè granatâ, fuscescente, purpureo-fusco maculatâ, ad basin fasciatâ; anfractibus septem ad octo, convexiusculis, ultimo obtusè carinato. aperturâ subcirculari; peristomate subexpanso, marginibus approximatis, callo tenui junctis.*

THE SUGARED HELIX. Shell umbilicated, pyramidally conical, conspicuously grained throughout, light brown, spotted with purple-brown, banded at the base; whorls seven to eight, rather convex, the last obtusely keeled; aperture nearly circular; lip a little expanded, margins approximating, joined by a thin callosity.

LOWE (Mus. Cuming).

*Hab.* Island of Tora, Madeiras.

Remarkable for its strongly grained sculpture.

Species 862. (Mus. Cuming.)

HELIX DISCINA. *Hel. testâ umbilicatâ, depressâ, granulatâ, fuscescente-albâ, purpureo-fusco fasciatâ et variegatâ; anfractibus septem ad octo, plano-convexis, ultimo acutè carinato; aperturâ subcirculari; peristomate vix expanso, marginibus approximatis, callo tenui junctis.*

THE LITTLE DISK HELIX. Shell umbilicated, depressed, granulated, brownish-white, banded and variegated with purple-brown; whorls seven to eight, flatly convex, the last sharply keeled: aperture nearly circular; lip a little expanded, margins approximating, joined by a thin callosity.

LOWE, Ann. and Mag. Nat. Hist. 1851, p. 147.

*Hab.* Island of Porto Santo, Madeiras.

It may be doubted whether this is anything more than a variety of *H. polymorpha*.

Species 863. (Mus. Cuming.)

HELIX TENIATA. *Hel. testâ umbilicatâ, depressâ, subtus*

*convexiusculâ, granulatâ, submercâ, fasciâ supra unecâ fusco-purpureâ, margine laceratâ, subtus integrâ, latio-re; anfractibus septem; aperturâ orbiculari, continuâ; peristomate libero, crassiusculo, rix revoluta, umbilico magno, profundo.*

THE FILLETED HELIX. Shell umbilicated, depressed, rather convex and granulated beneath, pale ash-colour, with a brown-purple band above, broken at the edge, and a broader entire one beneath; whorls seven, aperture orbicular, continuous; lip free, rather thick, scarcely turned back; umbilicus large, deep

WEBB and BERTHELOT, Synopsis, p. 324.

*Hab.* Canary Islands.

Very closely allied also to *H. polymorpha*







866.



865.



868.



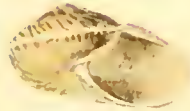
867.



869.



864.



870.



871.



872.



873.

# HELIX.

PLATE CXXXVIII.

Species 864. (Mus. Cuming.)

**HELIX FAUSTA.** *Hel. testā subobtectè umbilicatā, globoso-depressā, basi convexiore, granulosa, subsetosa, corneo-brunneā, opaco-albo sparsim maculatā; spirā elevatiusculā, depresso-conoideā; anfractibus quinque, planiusculis, ultimo carinato; aperturā transversè ovalā; peristomate expanso, subreflexo, margine columellari intus dente oblongo obsolete incrassato.*

**THE LUCKY HELIX.** Shell with a nearly covered umbilicus, globosely depressed, more convex at the base, granulated, somewhat bristly, horny-brown, sparingly spotted with opaque-white; spire somewhat raised, depressly conoid; whorls five, rather flat, last whorl keeled; aperture transversely ovate; lip expanded, slightly reflected, columellar margin thickened within by an obsolete oblong tooth.

LOWE, Faun. Mader. p. 43. pl. 5. f. 8.

*Hab.* Madeira.

Mr. Cuming has this as an authentic specimen of Mr. Lowe's *H. fausta*, but it does not agree in all respects with his description.

Species 865. (Mus. Cuming.)

**HELIX LEPTOSTICTA.** *Hel. testā umbilicatā, rotundato-depressā, subcarinatā, nitidiusculā, tenui, pallidè corneā, obsolete fasciatā; spirā convexo-depressā; suturā distinctā; anfractibus quinque ad sex, convexis, substriatis, minutè et elegantissimè reticulato-granulatis; umbilico patulo, spirali; aperturā rotundato-ovalī; peristomate continuo, subreflexo.*

**THE FINE-DOTTED HELIX.** Shell umbilicated, rotundately depressed, slightly keeled, rather shining, thin, pale horny, obsolete banded; spire convexly depressed; suture distinct; whorls five to six, convex, finely striated, minutely and very elegantly reticulately granulated; umbilicus open, spiral; aperture rotundately oval; lip continuous, a little reflected.

LOWE, Faun. Mader. p. 49. pl. 5. f. 24.

*Hab.* Madeira.

The granules of this delicate subtransparent species are very indistinct.

Species 866. (Mus. Cuming.)

**HELIX FICTILIS.** *Hel. testā umbilicatā, depressā, subducoideā, supra arcuatim plicato-striatā, infra laevigatā, corneo-fuscescente, rufo-fusco unifasciatā; anfractibus quinque, subangustis, supernè planulatis et obtusè carinatis; aperturā subcirculari; peristomate viz reflexo, marginibus callo tenui junctis.*

**THE EARTHEN HELIX.** Shell umbilicated, depressed, rather discoid, arcuately plicately striated above, smooth beneath, horny-brown, encircled by a red-brown band; whorls five, rather narrow, flattened and obtusely keeled at the upper part; aperture nearly circular; lip scarcely reflected, margins joined by a thin callosity.

LOWE, Ann. and Mag. Nat. Hist. 1851, p. 118.

*Hab.* Island of Porto Santo.

The upper edge of the band appears throughout the spire in the suture.

Species 867. (Mus. Cuming.)

**HELIX TURRICULA.** *Hel. testā viz umbilicatā, pyramidatiturratā, minutè et confertissimè granulata, fusca, subtus obsolete fasciatā; spirā valde elevatā, obtusā; suturā distinctā; anfractibus octo ad novem, bicarinatis (carinis aequalibus, prominentibus, distinctis, sulco divisis), ultimo anticè viz reflexo, basi convexiusculo; aperturā perobliquā, subcirculari; peristomate continuo, viz disjuncto, tenui, supernè recto, basi breviter reflexo.*

**THE LITTLE TOWER HELIX.** Shell scarcely umbilicated, pyramidally turreted, minutely and very closely granulated, dark brown, obsolete banded beneath, spire much raised, obtuse; suture distinct, whorls eight to nine, two-keeled (keels equal, prominent, distinct, divided by a groove), last whorl but little deflected in front, rather convex at the base, aperture very oblique, nearly circular; lip continuous, scarcely disjoined, thin, straight at the upper part, shortly reflected at the base.

LOWE, Faun. Mader. p. 58. pl. 6. f. 21.

*Hab.* Island of Cima, Madeiras.

A tall double-keeled smoky-brown pyramidal shell, with a small pucture-like umbilicus.



## Species 868. (Mus. Cuming.)

HELIX OXYTROPIS. *Hel. testā umbilicatā, depresso-conicā, granulis undique exasperatā, carinatā, fumeo-castaneā, basi flavidā; suturā lineari; spirā elevatā, obtusā; anfractibus sex, planulis, ultimo anticè deflexo, basi vix convexo, acutè carinato, carinā subtus sulco distincto; umbilico angustissimo, non pervio; aperturā subhorizontali, circulari; peristomate simplici, acuto, subexpanso, continuo.*

THE STRONGLY-KEELED HELIX. Shell umbilicated, depressly conical, sharply granulated throughout, keeled, smoky-chestnut, yellowish at the base; suture linear; spire raised, obtuse; whorls six, flattened, the last deflected in front, scarcely convex at the base, sharply keeled, keel with a distinct groove beneath; umbilicus very narrow, not open; aperture nearly horizontal, circular; lip simple, sharp, a little expanded, continuous.

LOWE, Faun. Mader. p. 57. pl. 6. f. 18.

*Hab.* Island of Porto Santo, Madeiras.

Of the same peculiar dark smoky-brown colour as the preceding species, but roughly grained throughout.

## Species 869. (Mus. Cuming.)

HELIX DEPAUPERATA. *Hel. testā umbilicatā, globoso-depressā, solidiusculā, rugoso-striatā, obsoletissimè granulatā, sordidè albidā; spirā subelevatā, obtusā; anfractibus quinque, convexis, ultimo basi convexiore, anticè deflexo; umbilico angusto, pervio; aperturā lunato-circulari; peristomate acuto, intus albo-labiato, marginibus laminā callosā junctis.*

THE IMPOVERISHED HELIX. Shell umbilicated, globosely depressed, rather solid, roughly striated, very obsoletely granulated, dirty white; spire slightly raised, obtuse; whorls five, convex, the last more convex at the base, deflected in front; umbilicus narrow, open; aperture lunar-circular; lip sharp, white-edged within, margins joined by a callous lamina.

LOWE, Faun. Mader. p. 51. pl. 6. f. 4.

*Hab.* Island of Porto Santo, Madeiras.

Of a dirty olive-white colour, void of pattern, and rough texture.

## Species 870. (Mus. Cuming.)

HELIX MEMBRANACEA. *Hel. testā imperforatā, depresso-tumidā, tenuissimā, membranacā, pellucido-vitrā,*

*arcuatim subtiliter plicato-corrugatā, virescente, rugis partim opaco-albis; anfractibus quatuor, ultimo inflato, medio obtusè carinato; aperturā transversè ovatā; peristomate vix incrassato.*

THE MEMBRANACEOUS HELIX. Shell imperforated, depressly swollen, very thin, membranaceous, transparent glassy, arcuately finely plicately wrinkled, greenish, wrinkles partially opaque-white; whorls four, last whorl inflated, obtusely keeled in the middle; aperture transversely ovate; lip scarcely thickened.

LOWE, Ann. and Mag. Nat. Hist. 1851, p. 112.

*Hab.* Madeira.

A very transparent glassy *Vitrina*-like species.

## Species 871. (Mus. Cuming.)

HELIX MADERENSIS. *Hel. testā umbilicatā, depressā, sublenticulari, solidiusculā, albido-corneā, supernè costulato-striatā, basi striatulā, lævigatā, rufo-unifasciatā; spirā vix elevatā; anfractibus sex, convexiusculis, ultimo carinato, anticè subgranulato, subitò deflexo; aperturā perobliquā, circulari; peristomate simplici, marginibus callo continuo junctis, basali reflexiusculo.*

THE MADEIRA HELIX. Shell umbilicated, depressed, somewhat lens-shaped, rather solid, whitish-horny, rib-like striated about the upper part, finely striated and smooth at the base, encircled with a single red band; spire but little raised; whorls six, rather convex, the last keeled, faintly granulated and suddenly deflected in front; aperture very oblique, circular; lip simple, margins joined by a continuous callosity, basal margin a little reflected.

WOOD, Ind. Test. Suppl. pl. 8. f. 84.

*Hab.* Madeira.

The spire of this species is somewhat concavely flattened.

## Species 872. (Mus. Cuming.)

HELIX ABJECTA. *Hel. testā umbilicatā, globoso-conicā, supernè rugoso-striatā, undique minutè granulatā, solidā, rudiusculā, griseā, basi obsoletè fusco-unifasciatā; spirā elatā; anfractibus sex ad septem, convexis, ultimo carinato, basi convexiusculo, anticè subitò deflexo; aperturā perobliquā, circulari, intus fuscā; umbilico punctiformi; peristomate simplici, continuo, breviter reflexo.*

THE NEGLECTED HELIX. Shell umbilicated, globosely conic, roughly striated about the upper part, minutely granulated throughout, solid, somewhat rude,

grey, obsolete brown-banded at the base; spire raised; whorls six to seven, convex, the last keeled, rather convex at the base, suddenly deflected in front; aperture very oblique, circular, brownish within; umbilicus puncture-like, lip simple, continuous, shortly reflected.

LOWE, Faun. Mader. p. 50. pl. 6. f. 1.

*Hab.* Island of Porto Santo, Madeiras.

A small globose species, with the whorls more or less strongly keeled, obliquely rib-like striated above the keel, smooth below it.

Species 873. (Mus. Cuming.)

HELIX MICHAUDI. *Hel. testã subobtectè umbilicatã, globuloso-conoideã, ruguloso-striatã, nitidã, fusco-albidã, fasciis castaneis ornatã; spirã elevatã, obtusã; anfractibus sex, planiusculis, ultimo basi rix convexiore, anticè*

*non descendente; aperturã depressã, latã, lunari, peristomate acuto, intus labiato, marginibus remotis, columellari brevi, subverticali, reflexo, umbilicum angustissimum tegente.*

MICHAUD'S HELIX. Shell with a nearly covered umbilicus, globosely conoid, rugulosely striated, brownish-white, ornamented with three chestnut bands, spire raised, obtuse; whorls six, rather flat, the last rather more convex at the base, not descending in front. aperture depressed, broad, lunar. lip sharp edged within, margins distant, columellar margin short, subvertical, reflected, covering a very narrow umbilicus.

DESHAYES, Encyclopédie Méthodique, vol. II. p. 263.

*Helix bicolor*, Lowe.

*Hab.* Island of Porto Santo, Madeiras

A neatly banded conical species, closely finely rib-like striated throughout.



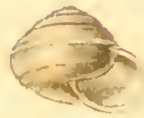




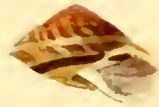
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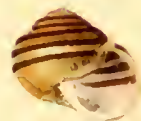
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# HELIX.

PLATE CXXXIX.

Species 874. (Mus. Cuming.)

**HELIX PAPILIO.** *Hel. testâ angustè umbilicatâ, depresso-orbiculari, superâè granulato-corrugatâ, albidâ, maculis rufis subdistantibus tessellatâ, sublus lævigatâ, immaculatâ; spirâ medio elevatâ; anfractibus septem, angustis, ultimo superâè angulato; aperturâ lunato-circulari, subhorizontali; peristomate reflexo-expanso, marginibus conniventibus.*

**THE BUTTERFLY HELIX.** Shell narrowly umbilicated, depressly orbicular, granularly wrinkled at the upper part, whitish, tessellated with rather distant red spots, smooth beneath, unspotted; spire raised in the middle; whorls seven, narrow, the last angled at the upper part; aperture lunar-circular, rather horizontal; lip reflectedly expanded, margins approximating.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 116.

*Hab.* Island of Baxo, Madeiras.

A prettily painted species, of a depressed subpyramidal form.

Species 875. (Mus. Cuming.)

**HELIX CHEIRANTHICOLA.** *Hel. testâ umbilicatâ, pyramiduli, subcarinatâ, solidiusculâ, rugoso-striatâ et undique granulato-scabrâ, sordidè albâ, fasciâ latâ rufâ ad suturam, obsoletioribusque ad basin ornatâ; spirâ elevatâ, obtusâ; suturâ impressâ; anfractibus octo, convexis, tumidis, ultimo basi convexiusculo, antiè deflexo; umbilico infundibuliformi, non percio; aperturâ perobliquâ, subcirculari; peristomate acuto, simplici, marginibus approximatis, callo junctis, basali reflexo.*

**THE CHEIRANTHUS-INHABITING HELIX.** Shell umbilicated, pyramidal, slightly keeled, rather solid, rugosely striated and everywhere granularly roughened, dull white, encircled with a broad red band at the suture, and more obsolete bands at the base; spire raised, obtuse; whorls eight, convex, swollen, the last slightly convex at the base, deflected in front; umbilicus funnel-shaped, not open; aperture very oblique, nearly circular; lip sharp, simple, margins approximating, joined by a callosity, basal margin reflected.

LOWE, Faun. Mader. p. 57. pl. 6. f. 17.

*Hab.* Island of Porto Santo, Madeiras (on shrubs of *Cheiranthus tenuifolius*); Lowe.

A strongly marked brown-banded Trochus-shaped species.

Species 876. (Mus. Cuming.)

**HELIX LEMNISCATA.** *Hel. testâ oblectè umbilicatâ, turbinatâ, oblique distinctè striatâ, fasciculâ vel albâ, rufâ vel nigricante fasculatâ, fasciis pluribus sæpe interruptis; spirâ flatâ, conicâ, apice acutiusculâ; anfractibus sex, pumiusculis, ultimo non descendente, basi subplanulato; aperturâ rotundato-lunari; peristomate recto, intus fusco sublabiato, margine columæ vari brevis, subverticali, reflexiusculo, umbilicum omnino tegente.*

**THE RIBAND-BOUND HELIX.** Shell with a covered umbilicus, turbinated, obliquely distinctly striated, light brown or white, banded with red or black, many of the bands often interrupted; spire raised, conical, rather sharp at the apex; whorls six, rather flattened, the last not descending, a little flattened at the base; aperture rotundately lunar; lip straight, white-edged within, columellar margin short, subvertical, slightly reflected, altogether covering the umbilicus.

WEBB and BERTHELOT, Synopsis, p. 317.

*Hab.* Canary Islands.

Of a globosely conical form, encircled for the most part with rather distant narrow dark bands, covered with a slight epidermis.

Species 877. (Mus. Cuming.)

**HELIX CALCAREA.** *Hel. testâ vix umbilicatâ, subglobosâ, tenuissimè schirregulariter striatâ, calcareo-fulvâ, fasciâ pallidâ sublus fasciatâ; spirâ convexâ; anfractibus quinque, convexis, medio subtilissimè plus minusve soleè cernatis, ultimo subflato; aperturâ lunari, peristomate simplici, intus vixat, margine columæ laterali reflexo, umbilicum fere tegente.*

**THE CALCAREOUS HELIX.** Shell umbilicated, subglobosely, very finely somewhat irregularly striated, chalk-white, banded below with a faint line; spire convex; whorls five, convex, very finely obsolete y keeled in the middle, last whorl rather inflated; aperture lunar; lip simple, edged within, columellar margin reflected, almost covering the umbilicus.

November, 1852.



PELLETER, Pro. Zool. Soc. 1850.

*Hab.* Island of Porto Santo, Madeiras.

A perfectly white shell, encircled beneath with a faint subtransparent thread-like line and obscurely keeled round the middle.

Species 878. (Mus. Cuming.)

**HELIX OBTECTA.** *Hel. testá umbilicatá, depressá, supernè planiusculá, basi convexá, solidiusculá, veso-scribiculata, subgranulatá, sordidè fuscéscente; anfractibus quinque, convexis, primis immersis, sequentibus largulis, ultimo supernè angulato, anticè deflexo; umbilico medioeri, pervio; aperturá subcirculari; peristomate continuo, vix expanso, intus subincrussato.*

**THE COVERED HELIX.** Shell umbilicated, depressed, rather flat at the upper part, convex and rather solid at the base, erodely pitted, subgranular, dull brownish; whorls five, convex, the first immersed, the following swollen, the last angled at the upper part, deflected in front; umbilicus middling, open; aperture nearly circular; lip continuous, a little expanded, slightly thickened within.

LOWE, Faun. Mader. p. 47. pl. 5. f. 20.

*Hab.* Islands of Baxo and Porto Santo, Madeiras.

Characterized in chief measure by its roughly pitted surface.

Species 879. (Mus. Cuming.)

**HELIX SEMICOSTULATA.** *Hel. testá umbilicatá, depressá, subtus convexá, subdiscoideá, solidè corneá, livido-cinereá, nitente, supra tenuè striatá, infra levigatá; spirá plano-convexá; anfractibus quinque, planiusculis; aperturá obliquè lunari; peristomate simplici, acuto.*

**THE HALF-RIBBED HELIX.** Shell umbilicated, depressed, convex beneath, somewhat discoid, solid horny, livid-ash, shining, thinly finely striated above, smooth below; spire flatly convex; whorls five, rather flattened; aperture obliquely lunar; lip simple, sharp.

BLACK, Péciffer, Monog. Helic. viv. p. 435.

*Hab.* Island of Grand Canary.

A livid-ash horny species, with somewhat of a *Planorbis*-aspect.

Species 880. (Mus. Cuming.)

**HELIX LYELLIANA.** *Hel. testá umbilicatá, depresso-conico, solidiusculá, acutissimè carinatá, arcuatim tenui-*

*striatá, fuscéscente, castaneo fusciatá et variegatá, spirá obtusá; anfractibus octo, planis; aperturá lunari-circulari; peristomate simplici, expanso, marginibus callo tenui junctis, columellari reflexo.*

**LYELL'S HELIX.** Shell umbilicated, depressly conic, rather solid, very sharply keeled, arcuately finely striated, light brownish, banded and variegated with chestnut; spire obtuse; whorls eight, flattened; aperture lunar-circular; lip simple, expanded, margins joined by a thin callosity, columellar margin reflected.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 117.

*Hab.* Island of Deserte Grande, Canaries.

Curiously allied to the *H. Listeri* type of the Philippine Islands.

Species 881. (Mus. Cuming.)

**HELIX BIFRONS.** *Hel. testá umbilicatá, orbiculari-conveiusculá, subcarinatá, tenui, nitulá, corneo-cinerecente, infra leviusculá, obsolè striatá, supra costulato-striatá; spirá vix elevatá; suturá distinctá, impressá; anfractibus septem, levè accrescentibus, ultimo basi convexo; umbilico parvo, cylindraco, profundo; aperturá lunari; peristomate simplici, tenui, acuto, intus latissimè albo-labiato.*

**THE TWO-FACED HELIX.** Shell umbilicated, orbicularly rather convex, slightly keeled, thin, shining, horny greenish, rather smooth beneath, obsoletely striated, rib-like striated above; spire but little raised; suture distinct, impressed; whorls seven, increasing slowly. the last convex at the base; umbilicus small, cylindrical, deep; aperture lunar; lip simple, thin, sharp, very broadly white-edged within.

LOWE, Faun. Mader. p. 46. pl. 5. f. 18.

*Hab.* Madeira.

Of regular circular growth, rib-like striated above, and smooth below.

Species 882. (Mus. Cuming.)

**HELIX LENIS.** *Hel. testá latè umbilicatá, globoso-depressá, tenerá, striatá, diaphaná, olivariá aut ruféscente, nitente; spirá vix elevatá, obtusá; anfractibus quatuor ad quinque, convexiusculis, ultimo subrotundito; aperturá lunari-circulari, parvisculá, peristomate recto, simplici, acuto.*

**THE SMOOTH HELIX.** Shell broadly umbilicated, globosely depressed, thin, striated, diaphanous, olive or reddish, shining; spire but little raised, obtuse. whorls four to five, rather convex, the last somewhat

rounded; aperture unimarginate (rather small); lip straight, simple, sharp.

*Zonites lewis*, Shuttleworth, Diag. Mellicken, No. 1, p. 1, pl. 1, f. 3.

*Hab.* Island of Palma, Canaries.

A horny Cyclostoma-like species with an open spiral umbilicus.

Species 883 (Mus Cuming.)

HELIX ANAGLYPTICA *Hel. testis propinqua, globulosa, globosa, tumidiuscula, undique griseo-striatula, virescente, castaneo-brunnea, et subfuscula,*

*preconstrata* (Cuming) *propinqua, globulosa, globosa, tumidiuscula, undique griseo-striatula, virescente, castaneo-brunnea, et subfuscula, preconstrata*.

100. EMISSIVE PEARL. Shell deep umbilicose, gibbous, rather widely 2-angled and plately striate throughout (pinnis); broadly banded (small to upper part with opacit-brown) spine rather pointed when fully expanded; rounded aperture; outer lip simple, straight, anti-umbilic within, margin opposite to the umbilic margin dilated.

*Hab.* Island of San Domingo, Canaries.

This form is more common in Canarian Islands than it appears to be by Cuming's description.







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# HELIX.

PLATE CXL.

Species 881. (Mus. Cuming.)

**HELIX CUTICULA.** *Hel. testâ imperforatâ, tenui, membranaceâ, olivaceo-viridi, depresso-orbiculari; spirâ brevi, acutâ; anfractibus tribus, arcuatim plicato-striatis, ad peripheriam acutè carinalis, ultimo peramplo, obliquè inflato: aperturâ ovali-securiforme; peristomate vix reflexo.*

**THE CUTICLE HELIX.** Shell imperforated, thin, membranaceous, olive-green, depressly orbicular; spire short, sharp; whorls three, arcuately plicately striated, sharply keeled at the periphery, last whorl very large, obliquely inflated: aperture oval hatchet-shaped; lip scarcely inflated.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. p. 8. pl. 4. f. 5.

*Hab.* Island of Teneriffe, Canaries (in fissures of the rocks and under plants); Shuttleworth.

A membranaceous species, not shining, but plicately striated.

Species 885. (Mus. Cuming.)

**HELIX LENTICULA.** *Hel. testâ umbilicatâ, lenticulari, carinatâ, subtilissimè costulato-striatâ, fusco-cornuâ, opacâ; anfractibus quinque, convexiusculis, ultimo anticè vix descendente; aperturâ lunari; peristomate flexuoso, superuè simplici, recto, marginibus callo tenui junctis, columellari reflexiusculo, subtiliter limbato.*

**THE PIMPLE HELIX.** Shell umbilicated, lens-shaped, keeled, very finely rib-like striated, brown-horny, opaque; whorls five, rather convex, the last a little descending in front; aperture lunar; lip flexuous, simple at the upper part, straight, margins joined by a thin callosity, columellar margin a little reflected, finely edged.

FERUSSAC, *Hist. Moll.* pl. 66. f. 1

*Helix subtilis*, Lowe.

*Helix Pintorella*, Bonelli.

*Hab.* Southern Europe, North Africa, Sicily, Madeira and Canary Islands.

A small horny orbicular plicately striated species, with an open subperspective umbilicus.

Species 886. (Mus. Cuming.)

**HELIX ACTINOPHORA.** *Hel. testâ umbilicatâ, orbiculari,*

*depressâ, basi convexâ, subtili, lâ, castoreo, fusco-rufescente, acutè carinatâ; spirâ brevè siccè-depressâ, suturâ distinctâ; anfractibus quinque, fœniculatis, strus creberrimis, tenuissimis, transversè arduè et latissimis, quibusdam ad carinam suturæ radiantibus, umbilico parvo; aperturâ transversâ, rotundatè-ovalè, sublunatâ; peristomate reflexiusculo.*

**THE RAYED HELIX.** Shell umbilicated, orbicular, depressed, more convex at the base, swollen, thin, brown-red, sharply keeled; spire rather convexly depressed: suture distinct; whorls five, flattened, transversely undulately laminated with very fine close-set striae, some of which radiate on the setum and at the keel; umbilicus small; aperture transverse, rotundately oval, sublunar; lip a little reflected.

LOWE, *Faun. Mader.* p. 45. pl. 5. f. 11.

*Hab.* Madeira (in the woods); Lowe.

Allied in form and sculpture to *H. cuticula*, but of more solid structure and umbilicated.

Species 887. (Mus. Cuming.)

**HELIX LACINIOSA.** *Hel. testâ umbilicatâ, subglobosâ, obliquè corrugato-plicatâ, intense castoreâ, nitidâ, interruptè trifasciatâ, epidermide subsetosa: communibâ; suturâ impressâ; anfractibus quinque, rotundatis, ultimo anticè descendente, ultimo peramplo, aperturâ circulari, peristomate reflexo, marginibus junctis.*

**THE PLAITED HELIX.** Shell umbilicated, subglobose, obliquely corrugately plaited, dark chestnut, shining, three-banded in an interrupted manner with white, furnished here and there with bristly epidermis, suture impressed; whorls five, rounded, last whorl descending in front; umbilicus small; aperture circular; lip reddish, expandedly reflected, margins joined.

LOWE, *Ann. and Mag. Nat. Hist.* vol. ix. p. 114

*Hab.* Island of Deserte Minor, Canaries.

A richly coloured shell, of a rounded form, with an impressed suture.

Species 888. (Mus. Cuming.)

**HELIX CIRCUMFESSUS.** *Hel. testâ perspective umbilicatâ,*



*depresso-orbiculari, rufescente-corneâ, subtiliter plicato-striatâ; spirâ convexâ; suturâ impressâ; anfractibus quatuor ad quinque, convexis, sensim accrescentibus; aperturâ lunari-ovali, obliquâ; peristomate simplici, marginibus conniventibus.*

THE SURROUNDED HELIX. Shell perspectivevely umbilicated, depressly orbicular, reddish-horny, finely plicately striated; spire convex; suture impressed; whorls four to five, convex, increasing gradually; aperture lunar-oval, oblique; lip simple, with the margins approximating.

SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 5. pl. 1. f. 6.  
*Hab.* Island of Teneriffe (under stones and dead leaves); Shuttleworth.

A bright reddish-horny rounded species, rather largely umbilicated.

Species 889. (Mus. Cuming.)

HELIX STEPHANOPHORA. *Hel. testâ umbilicatâ, conico-globosâ, olivaceo-corneâ; anfractibus novem, angustis, supernè creberrimè obliquè costatis, infra lævibus; umbilico parviusculo, profundo; aperturâ subangustè lunari, laminarum brevium seriebus ad intervalla æqualia internè munitâ; peristomate simplici.*

THE CROWNED HELIX. Shell umbilicated, conically globose, olive-horny; whorls nine, narrow, very closely obliquely ribbed on the upper surface, smooth beneath; umbilicus rather small, deep; aperture rather narrowly lunar, furnished interiorly at equal distances with rows of short lamellæ; lip simple.

DESHAYES, Ed. Férussac, Hist. Moll. vol. i. p. 111. pl. 90. f. 8.

*Helix calathus*, Lowe.

*Hab.* Madeira.

Curiously distinguished by the presence of rows of short inner laminae, placed throughout the shell at intervals like cross internal varices.

Species 890. (Mus. Cuming.)

HELIX CONSORS. *Hel. testâ subumbilicatâ, orbiculato-convexâ, supernè costulato-granulatâ, basi lævigatâ, striatulatâ, nitidâ, albo et fusco variegatâ, subtilis pallidiorè; spirâ convexâ; anfractibus sex, convexiusculis, ultimo rotundato, basi convexo, anticè subito deflexo; umbilico punctiformi; aperturâ lunato-ovali, intus albâ; peristomate simplici, marginibus distantibus, superno recto, basali reflexiusculo.*

THE CONSORT HELIX. Shell slightly umbilicated, orbicularly convex, rib-like granulated at the upper part, smooth at the base, finely striated, shining, variegated with white and brown, paler underneath; spire convex; whorls six, rather convex, the last rounded, convex at the base, suddenly deflected in front; umbilicus puncture-like; aperture lunar-oval, white within; lip simple, margins distant, upper margin straight, basal a little reflected.

LOWE, Faun. Mader. p. 51. pl. 6. f. 3.

*Hab.* Island of Porto Santo, Madeiras.

A chestnut-brown transparent horny species, mottled with opaque-white, and slightly granulated.

Species 891. (Mus. Cuming.)

HELIX LAUTUS. *Hel. testâ umbilicatâ, subglobosâ, subtilis convexâ, tenuiusculâ, albâ, fasciis angustis interruptis fascis obsolete ornatâ, nitidiusculâ; suturâ distinctâ; anfractibus quinque, convexis, confertissimè transversim striatis, ultimo rotundato; umbilico parvo, cylindraceo, profundo, aperto; aperturâ lunatâ, subrotundâ; peristomate acuto.*

THE WASHED HELIX. Shell umbilicated, subglobose, convex beneath, rather thin, white, ornamented with obsolete, narrow, interrupted brown bands, rather shining; suture distinct; whorls five, convex, very closely transversely striated, the last rounded; umbilicus small, cylindrical, deep, open; aperture lunar-rounded; lip sharp.

LOWE, Faun. Mader. p. 53. pl. 6. f. 9.

*Hab.* Island of Porto Santo, Madeiras.

The interrupted brown band next the suture is mostly well-marked.

Species 892. (Mus. Cuming.)

HELIX DEALBATA. *Hel. testâ angustè umbilicatâ, depressâ, striatulatâ, et granulis minutis undique exasperatâ, solidiusculâ, albidâ; spirâ parvè elevatâ; anfractibus sex, planiusculis, ultimo supernè subangulato, basi convexo, anticè vix descendente; aperturâ subcirculari; peristomate simplici, intus sublabiato, marginibus callo junctis.*

THE WHITED HELIX. Shell narrowly umbilicated, depressed, finely striated, roughened throughout with minute granules, rather solid, whitish; spire but little raised; whorls six, rather flat, the last slightly angled at the upper part, convex at the base, a little

deflected in front; aperture nearly circular; lip simple, slightly edged within, margins joined by a callosity.

LOWE, Faun. Mader. p. 48. pl. 5. f. 21.

*Hab.* Islands of Porto Santo and Baxo, Madeiras.

Of an ash tinge, the lip of the circular aperture being yellowish-brown.

Species 893. (Mus. Cuning.)

HELIX DESPREAUXII. *Hel. testá umbilicatá, acutè conicá, Trochiformi. basi convexiusculá, rugoso-tuberculatá, calcareá, albá, acutè carinatá; anfractibus quinque, exsertis, bicarinatis; carinis dentato-serratis, inferiore magis prominente; aperturá perobliquá, depressá, ellipticá, intus fusciculá; peristomate simplici, recto, mar-*

*ginibus fere contiguus, callo tenui junctis, columbelli reflexo, umbilicum angustum fere occultante.*

DESPREAUX'S HELIX. Shell umbilicated, sharply conical. Trochus-shaped, rather convex at the base, rugosely tubercled, chalky, white, sharply keeled. whorls five, exserted, two-keeled, keels dentately serrated, the lower the more prominent. aperture very oblique, depressed, elliptic, brown within, lip simple, straight, with the margins nearly contiguous, joined by a thin callosity, columellar margin reflected, almost covering the narrow umbilicus.

D'ORBIGNY, Moll. Isles Canaries, p. 65. pl. 3. f. 21-23

*Hab.* Island of Fuerteventura, Canaries.

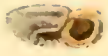
A very characteristically sculptured Trochus-like species, of chalk-white substance, stained in the mouth with dark chestnut







894



895



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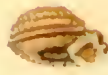
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# HELIX.

PLATE CXLI.

Species 894. (Mus. Cuming.)

**HELIX THIARELLA.** *Hel. testâ angustissimè umbilicatâ, trochiformi, albo et fusco variegatâ, bicarinatâ, ad suturam tuberculato-plicatâ; spirâ conicâ, apice obtusâ; anfractibus sex ad septem, ultimo basi confertim et concentricè granulato-sulcato, anticè angulata deflecto; aperturâ subhorizontali, circulari; peristomate expanso, continuo, soluto.*

**THE LITTLE TURBAN HELIX.** Shell very narrowly umbilicated, trochus-shaped, variegated with brown and white, two-keeled, tubercularly plicated at the suture; spire conical, obtuse at the apex; whorls six to seven, the last closely concentrically granularly grooved at the base, angularly deflected in front; aperture subhorizontal, circular; lip expanded, continuous, free.

WEBB and BERTHELOT, Synopsis, p. 316. D'Orbigny, Moll. Isles Canaries, p. 62. pl. 1. f. 26-28.

*Hab.* Madeira and Canary Islands.

The shell here represented is dead and discoloured, but characteristic in respect of form and sculpture.

Species 895. (Mus. Cuming.)

**HELIX PAUPERCULA.** *Hel. testâ latè umbilicatâ, subdiscoideâ, superne planâ vel parvè elevatâ, sub lente minutissimè granulatâ, griseâ, punctis fuscis aspersâ; anfractibus tribus ad quatuor, supra planis, ultimo superne angulato, basi convexo, ad aperturam circulem angulata contracto; peristomate continuo, acuto, fusco, quasi duplicato.*

**THE POOR HELIX.** Shell broadly umbilicated, somewhat discoid, flat or but little raised at the upper part, very minutely granulated beneath the lens, grey, sprinkled with brown dots; whorls three to four, flat above, the last angled at the upper part, convex at the base, angularly contracted at the aperture, which is circular; lip continuous, sharp, brown, as though double.

LOWE, Faun. Mader. p. 47. pl. 5. f. 19.

*Hab.* Islands of Madeira and Porto Santo.

The peculiar thickening of the lip behind its sharp edge appears to be constant.

Species 896. (Mus. Cuming.)

**HELIX LENTIGINOSA.** *Hel. testâ umbilicatâ, rotundatè depressâ, infra subplanulatâ, bicarinatâ, tenui, maculatâ et subfasciatâ; spirâ convexo-depressâ; suturâ distinctâ; anfractibus quinque, convexiusculis, striatis, aperturâ transversè ovali; peristomate reflexo, expanso, marginibus callo junctis.*

**THE FRECKLED HELIX.** Shell umbilicated, rotundately depressed, rather flattened beneath, slightly keeled, thin, spotted and faintly banded with brown; spire convexly depressed; suture distinct; whorls five, rather convex, striated; aperture transversely oval lip reflected, expanded, margin joined by a edosity

LOWE, Faun. Mader. p. 49. pl. 5. f. 25.

*Hab.* Madeira.

The colouring of this species in fine condition is a bright chestnut-brown, freckled with opaque-white.

Species 897. (Mus. Cuming.)

**HELIX MICROMPHALA.** *Hel. testâ angustè umbilicatâ, subglosâ, virenti-corneâ, pellucidâ, superne subobsolete plicato-striatâ, sublus latijunctâ; anfractibus sex, subangustis, convexis, ultimo anticè paululè deflexo; aperturâ lunato-circulari; peristomate subreflexo, marginibus comitantibus, callo tenui junctis.*

**THE SMALL-UMBILICUS HELIX.** Shell narrowly umbilicated, somewhat globose, greenish-horny, transparent, somewhat obsolete plicately striated at the upper part, smooth beneath; whorls six, rather narrow, convex, the last a little deflected in front; aperture lunar-circular; lip a little expanded, margin approximating, joined by a thin edosity.

LOWE, Pro. Zool. Soc. 1850.

*Hab.* Island of Deserte Grande, Madeiras.

A rounded horny species of simple form, striated above and smooth beneath.

Species 898. (Mus. Cuming.)

**HELIX ARMITAGLANA.** *Hel. testâ angustè umbilicatâ, depressâ, virenti-corneâ, fusco punctatè lutescenti, pellucidâ, subplanulatè plicato-striatâ, tenui subduplex.*



*veris, ultimo anticè subdeflexo; aperturá latè lunari; peristomate reflexo-expanso.*

ARMITAGE'S HELIX. Shell narrowly and deeply umbilicated, depressly globose, greenish-horny, faintly two-banded with brown, transparent, obliquely rather obsoletely plicately striated, striae a little hairy; whorls five, convex, the last a little deflected in front; aperture broadly lunar; lip reflectedly expanded.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 115.

*Hab.* Madeira.

Distinguished chiefly by its faint banded colouring and delicate hairy striae.

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Species 899. (Mus. Cuming.)

HELIX COMPACTA. *Hel. testá umbilicatá, orbiculato-converzá, solidiusculá, supernè costulato-striatá et granulátá, basi lævigatá, striatulá, nitidá, albido et corneo variegatá, subtus obsoletè fusco-unifasciatá; spirá convexá; anfractibus sex, vix convexiusculis, ultimo obsoletè angulato, anticè vix descendente; umbilico minimo; aperturá lunato-circulari; peristomate simplici, marginibus approximatis, basali reflexiusculo.*

THE COMPACT HELIX. Shell umbilicated, orbicularly convex, rather solid, rib-like striated and granulated, smooth at the base, shining, variegated with white and horn, encircled with an obsolete brown band beneath; spire convex; whorls six, slightly convex, the last obsoletely angled, a little descending in front; umbilicus very small; aperture lunar-circular; lip simple, margins approximating, basal margin a little reflected.

LOWE, Faun. Mader. p. 59. pl. 6. f. 2.

*Helix innominata*, Gray.

*Hab.* Island of Porto Santo, Madeira.

The umbilicus of this little solid species is nearly closed in.

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Species 900. (Mus. Cuming.)

HELIX CALVA. *Hel. testá obtectè umbilicatá, subdepresso-globosá, supernè costulato-striatá, basi lævigatá, diaphaná, corneá, obsoletè et angustè fusco-bifasciatá; anfractibus septem, vix convexiusculis, ultimo anticè vix descendente; aperturá lunari; peristomate tenui, sub-expanso, intus albo-labiato, margine basali planè arcuato.*

THE SCALP HELIX. Shell with a covered umbilicus, globose depressed, rib-like striated at the upper part, smooth at the base, diaphanous, horny, obsoletely

narrowly brown-banded; whorls seven, slightly convex, the last a little descending in front; aperture lunar; lip thin, a little expanded, white-edged within, basal margin flatly arched.

LOWE, Faun. Mader. p. 49. pl. 5. f. 26.

*Hab.* Madeira.

Of more globose form than its congeners, encircled with two light brown bands.

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Species 901. (Mus. Cuming.)

HELIX PERSIMILIS. *Hel. testá subobtectè umbilicatá, globoso-turbinatá, plicato-striatá, tenui, sordidè corneá, fasciis duabus fuscis, sæpe interruptis, maculisque albidis variegatá; spirá globoso-elevatá, subobtusá; anfractibus sex, sensim accrescentibus, convexis, ultimo obsoletè subangulato, anticè non descendente; aperturá rotundato-lunari; peristomate simplici, recto, acuto, margine columellari tenuiter dilatato, umbilicum semi-occultante.*

THE VERY-LIKE HELIX. Shell with a nearly covered umbilicus, globose turbinate, plicately striated, thin, dull horny, variegated with two often interrupted brown bands and white spots; spire globose raised, rather obtuse; whorls six, increasing slowly, convex, last whorl obsoletely slightly angled, not descending in front; aperture rotundately lunar; lip simple, straight, sharp, columellar margin thinly dilated, half-covering the umbilicus.

SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 7. pl. 3. f. 8

*Hab.* Island of Teneriffe, Canaries.

A bright very prettily painted species.

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Species 902. (Mus. Cuming.)

HELIX CORONATA. *Hel. testá profundè et sublatè umbilicatá, discoideá, planulatá, lacteá, solidá; anfractibus quinque, obliquè arcuatim costato-laminatis, medio spiraliter acutè carinatis, cariná prominente, erectá; aperturá minimá, peculiariter trigonuliter contractá, medi-unidentatá.*

THE CROWNED HELIX. Shell deeply and rather broadly umbilicated, discoid, flattened, cream-colour, solid; whorls five, obliquely arcuately riblike-laminated, spirally sharply keeled in the middle, keel prominent and erect; aperture very small, peculiarly triangularly contracted, one-toothed in the middle.

DESHAYES, Ed. Ferrussac, Hist. Moll. vol. i. p. 71. pl. 69 k

f. 1-4.

*Helix Juliformis*, Lowe

*Hab.* Island of Porto Santo, Madeiras.

Distinguished in a prominent degree by its peculiarity of sculpture, the whorls being encircled round the middle by a sharp raised keel, with arched somewhat distant ribs above and below it.

Species 903. (Mus. Cuming.)

HELIX LATENS. *Hel. testá umbilicatá, depressá, striatá, submembranacá; spirá planá; suturá impressá; an-*

*fractibus tribus, superne angulato-carinatis, infra rotundatis; aperturá subcirculari; peristomate tenui, irregulari.*

THE LURKING HELIX. Shell umbilicated, depressed, striated, submembranaceous; spire flat; suture impressed; whorls three, angularly keeled at the upper part, rounded beneath, aperture nearly circular. Lip thin, irregular.

LOWE, Ann and Mag Nat Hist vol ix p 114

*Hab.* Madeira.

The dark appearance of the figure of this species arises from its being encrusted with agglutinated earth.







904



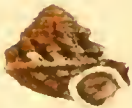
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# HELIX.

PLATE CXLII.

Species 904. (Mus. Cuming.)

**HELIX PULCHELLA.** *Hel. testâ latè umbilicatâ, subdepressâ, albidâ, nitidâ, glabrâ; anfractibus tribus ad quatuor, convexiusculis, ultimo anticè dilatato, non deflexo; aperturâ obliquâ, subcirculari; peristomate reflexo, candidè sublabiato, marginibus approximatis.*

**THE PRETTY HELIX.** Shell broadly umbilicated, rather depressed, whitish, shining, smooth; whorls three to four, rather convex, the last dilated in front, not deflected; aperture oblique, nearly circular; lip reflected, white-edged, margins approximating.

MULLER, Verm. vol. ii. p. 30.

*Helix paludosa*, Walker.

*Helix nitidula*, Studer.

*Helix minuta*, Say.

*Helix crystallina*, Dillwyn.

*Hab.* Europe, Madeiras, North America.

A minute subglassy species, widely distributed throughout the chief portion of the north temperate zone.

Species 905. (Mus. Cuming.)

**HELIX ARCTA.** *Hel. testâ umbilicatâ, depressâ, distinctè et confertim costulatâ, pallidè corneâ, albo-marmoratâ, rufo-maculatâ et obsoletè fasciatâ; spirâ vix convexâ; anfractibus quinque ad sex, planiusculis, ultimo carinato, basi convexiore, anticè subitè breviter deflexo; umbilico punctiformi; aperturâ perobliquâ, lunato-circulari, dente obliquè intrante albo calloso coarctatâ; peristomate acuto, reflexo, intus albo-callosa, marginibus fere contiguâ.*

**THE SMALL HELIX.** Shell umbilicated, depressed, distinctly and closely finely ribbed, pale horny, white-marbled, red spotted and obsoletely banded; spire but little convex; whorls five to six, rather flat, the last keeled, more convex at the base, suddenly shortly deflected in front; umbilicus puncture-like; aperture very oblique, lunar-circular, contracted by a narrow tooth entering obliquely; lip sharp, reflected, white-callous within, margins almost contiguous.

LOWE, Faun. Mader. p. 42. pl. 5. f. 7.

*Hab.* Madeira.

Much variegated in marking, chestnut-brown, freckled with white.

Species 906. (Mus. Cuming.)

**HELIX ARMILLATA.** *Hel. testâ umbilicatâ, depressâ, obliquè elevato-striatâ, castaneo-brunnèâ, albidè lentiginosâ; spirâ subobtusâ; anfractibus quatuor, subangulatis, deinde rotundatis; aperturâ subcirculari, marginibus conniventibus, columellari paululum reflexo.*

**THE BRACELET HELIX.** Shell umbilicated, depressed, obliquely elevately striated, chestnut-brown, freckled with whitish; spire somewhat obtuse, whorls four, rather angled, then rounded, aperture nearly circular, margins approximating, columellar margin a little reflected.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 113.

*Hab.* Madeira.

Resembling the preceding species in colour and marking, but of a more rounded form.

Species 907. (Mus. Cuming.)

**HELIX GUERINIANA.** *Hel. testâ latè spirâ perspective umbilicatâ, depresso-planâ, discoidèâ, albidè-ferrugineâ; subcorneâ, supra maculis rufis tessellatâ, infra paulè strigatâ; anfractibus septem, angustis, costatè striatis, obtusè angulatis; aperturâ parvâ, basi peristomate simplici, acuto.*

**GUERIN'S HELIX.** Shell very broadly perspective-ly umbilicated, depressly flattened, discoid, whitish-brown, subhorny, tessellated with red spots above, finely streaked beneath; whorls seven, narrow, rib-like striated, obtusely angled; aperture small, linear; lip simple, sharp.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 115.

*Hab.* Madeira.

A very characteristic discoid *Planorbis*-like species, conspicuously tessellated on the spire with square red spots.

Species 908. (Fig. 908 and 909, Mus. Cuming.)

**HELIX BICARINATA.** *Hel. testâ umbilicatâ, Trilobiformi, granulis aspersis undique elevatâ, brevissimâ, spirâ elevatâ, scaliformi; anfractibus quinque, brevissimis, ultimo anticè subitè deflexo, basi vix convexo, umbilico punctiformi; aperturâ brevissimâ, circulari, peristomate simplici, acuto, brevissimè undique cæsposo, marginibus continuis, solutis.*



THE TWO-KEELED HELIX. Shell umbilicated, Trochus-shaped, set throughout with sharp granules; spire raised, step-formed; whorls five, two-keeled, the last suddenly deflected in front, but little convex at the base; umbilicus puncture-like; aperture horizontal, circular; lip simple, sharp, very shortly expanded throughout, margins continuous, free.

SOWERBY, Zool. Journ. vol. i. p. 58. pl. 3. f. 7.

*Helix duplicata*, Lowe.

*Hab.* Island of Porto Santo, Madeiras.

A roughly granuled rather solid prominently two-keeled species, of a dark brown colour.

Species 910. (Mus. Cuming.)

HELIX ECHINULATA. *Hel. testâ umbilicatâ, Trochiformi, granulis echinulatis scaberrimâ, fuscâ, basi rufo-bifasciatâ; spirâ elevatâ, apice obtusâ; anfractibus sex, convexis, ultimo acutè carinato, basi planiusculo, juncta carinam sulcato, anticè subito deflexo; umbilico minimo, punctiformi; aperturâ circulari; peristomate simplici, acuto, continuo, soluto, expansiusculo.*

THE PRICKLY HELIX. Shell umbilicated, Trochus-shaped, roughed with prickly granules, brown, encircled with two red bands at the base; spire raised, obtuse at the apex; whorls six, convex, the last sharply keeled, rather flat at the base, grooved next the keel, suddenly deflected in front; umbilicus very small, puncture-like; aperture circular; lip simple, sharp, continuous, free, a little expanded.

LOWE, Faun. Mader. p. 57. pl. 6. f. 19.

*Hab.* Island of Porto Santo, Madeiras.

Allied to the preceding species, but more strongly grained and having but one keel.

Species 911. (Mus. Cuming.)

HELIX STELLARIS. *Hel. testâ subampliter umbilicatâ, depressâ, tenuiculâ, vividè fuscescente, albido lentiginosâ; anfractibus quatuor, convexiusculis; aperturâ transversè ovatâ; peristomate tenui, subexpanso, marginibus fere contiguâ.*

THE STELLAR HELIX. Shell rather largely umbilicated, depressed, rather thin, bright brown, freckled with whitish; whorls four, rather convex; aperture transversely ovate; lip thin, a little expanded, margins almost contiguous.

LOWE, Ann. and Mag. Nat. Hist. vol. ix. p. 118

*Hab.* Madeira.

Resembling *H. arcta*, but thinner and of a more transparent colour.

Species 912. (Mus. Cuming.)

HELIX ARRIDENS. *Hel. testâ umbilicatâ, depressâ, carinatâ, tenui, pallidè corneâ, rugoso-striatâ, hispidâ, spirâ vix elevatâ; anfractibus quinque, planulatis, ultimo basi concaviores, anticè breviter deflexo; aperturâ perobliquâ, depressâ, irregulariter lunari; peristomate acuto, margine dextro simplici, brevi, arcuato, basali strictiusculo, breviter reflexo, umbilicum semioccultante.*

THE SMILING HELIX. Shell umbilicated, depressed, keeled, thin, pale horny, finely rugosely striated, hairy; spire scarcely raised; whorls five, rather flattened, the last more convex at the base, shortly deflected in front; aperture very oblique, depressed, irregularly lunar; lip sharp, right margin simple, short, arched, basal rather drawn out, shortly reflected, half-covering the umbilicus.

LOWE, Faun. Mader. p. 43. pl. 5. f. 9.

*Hab.* Madeira.

A more broadly lunar aperture than in its allied species, the basal margin being dilated half over the umbilicus.

Species 913. (Mus. Cuming.)

HELIX ENGNATA. *Hel. testâ latissimè perspectivè umbilicatâ, depressâ, brunneo-rufescente, costulatâ; spirâ convexâ; anfractibus sex ad septem, convexiusculis, ultimo ad peripheriam carinato, circa umbilicum conicum acutè angulato; aperturâ non descendente, subquadratâ; peristomate recto, simplici, acuto.*

THE MANY-ANGLED HELIX. Shell very broadly perspectivevly umbilicated, depressed, brownish-red, finely ribbed; spire convex; whorls six to seven, rather convex, last whorl keeled at the periphery, sharply angled around the conical umbilicus; aperture not descending, somewhat square; lip straight, simple, sharp.

SHUTTLEWORTH, Diag. Mollusken, p. 5. pl. 1. No. 1. f. 9, 10.

*Hab.* Island of Teneriffe, Canaries.

Of widely convoluted discoid growth, allied to *H. Gueriniana*.





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Species 914 (Mus. Cuming.)

HELIX CLYMENE. *Hel. testā minutā, latē umbilicatā, depressā, discoidēā, Nautiliformi, tenui, laevigatā, diaphanā, rufescente-corneā, subtus nitidatā; spirā exiguā, profundē immersā; anfractibus tribus, celeriter accrescentibus, ultimo magno, inflato, anticē paululum deflexo; aperturā obliquā, lunari-subcirculari; peristomate simplici, recto, marginibus remotis.*

THE CLYMENE HELIX. Shell minute, broadly umbilicated, depressed, discoid, Nautilus-shaped, thin, smooth, diaphanous, reddish-horny, shining beneath; spire small, deeply immersed; whorls three, increasing quickly, the last large, inflated, a little deflected in front; aperture oblique, lunar-subcircular; lip simple, straight, margins distant.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. p. 4. Mem. Conch. pl. 1. f. 5.

*Hab.* Island of Teneriffe, Canaries.

An extremely minute species, of discoid Nautiloid growth.

Species 915. (Mus. Cuming.)

HELIX SERVILIS. *Hel. testā subampliter umbilicatā, globoso-depressā, lamellis tenuissimis eximie costulatā, corneo-rufescente; anfractibus quatuor, convexiusculis, ultimo non descendente; aperturā rotundatā; peristomate recto, simplici, acuto.*

THE SERVILE HELIX. Shell rather largely umbilicated, globosely depressed, delicately finely ribbed with very thin lamellæ, horny-red; whorls four, rather convex, last whorl not descending; aperture rounded; lip straight, simple, sharp.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. p. 6. Mem. Conch. pl. 2. f. 2.

*Hab.* Island of Teneriffe, Canaries.

Of more globose form than the preceding species.

Species 916. (Mus. Cuming.)

HELIX PYGMEA. *Hel. testā apertē umbilicatā, orbiculato-convexā, fusculā, minutissimē striatā, sericinā; anfractibus tribus ad quatuor, subæqualibus, convexiusculis; aperturā lunari; peristomate simplici, recto, acuto.*

THE PYGMY HELIX. Shell openly umbilicated, orbicularly convex, brownish, very minutely striated, silky; whorls three to four, nearly equal, rather convex; aperture lunar; lip simple, straight, sharp.

DRAPARNAUD, *Hist. Moll.* p. 114. pl. s. f. 8-10

*Helix minuta*, Studer.

*Helix Kirbyi*, Sheppard.

*Zonites pygmaeus*, Gray.

*Hab.* Europe.

A minute subglobose horny species, with a rather large open umbilicus.

Species 917. (Mus. Cuming.)

HELIX PLACIDA. *Hel. testā apertē sed evadocriter umbilicatā, depresso-turbinatā, tenui, subtilissimē striatā diaphanā, sericinā, pallidē corneā; anfractibus quatuor, convexis, ultimo anticē rix descendente; apertura rotundatā; peristomate simplici, recto, acuto.*

THE PLACID HELIX. Shell openly but middlingly umbilicated, depressly turbinated, thin, very finely striated diaphanous, silky, pale horny; whorls four, convex last whorl a little descending in front; aperture rounded; lip simple, straight, sharp.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. p. 6. Mem. Conch. pl. 2. f. 1.

*Hab.* Island of Teneriffe, Canaries.

Not so largely umbilicated as the preceding species and of more globular form.

Species 918. (Mus. Cuming.)

HELIX TEXTILIS. *Hel. testā perspectivē umbilicatā, globoso-depressā, tenui, suborbiculari, corneo-flavulā, indistinctē rufescente-maculatā, costulatā; anfractibus septem, convexis, lentē accrescentibus; aperturā subverticali, lunari; peristomate recto, simplici, marginibus convergentibus.*

THE TEXTILE HELIX. Shell perspectivevely umbilicated, globosely depressed, thin, nearly circular, horny-yellow, indistinctly red-spotted, finely ribbed, whorls seven, convex, increasing slowly; aperture subvertical, lunar, lip straight, simple, margins approximating.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. p. 6. Mem. Conch. pl. 1. f. 11.

*Hab.* Island of Palma, Canaries.

Of much larger size than the preceding species, more depressed and more largely umbilicated.

Species 919. (Mus. Cuming.)

HELIX ROSATI. *Hel. testā umbilicatā, corneo-corniculā,*

*distinctè costulato-striatá, sordidè albá, fasciá interrúptá rufá et maculis fuscis serialis ornatá; spirá elevatá, conicá; anfractibus sex, convexiusculis, ultimo obsoletè angulato, anticè non descendente; aperturá rotundato-lunari; peristomate acuto, recto, intus sublabiato, margine columellari subdilatato, umbilicum non occultante.*

ROSET'S HELIX. Shell umbilicated, semiglobosely conical, distinctly rib-like striated, dead-white, ornamented with an interrupted red band and brown spots; spire raised, conical; whorls six, rather convex, the last obsoletely slightly angled, not descending in front; aperture rotundately lunar; lip sharp, straight, slightly edged inwardly, columellar margin subdilated, not concealing the umbilicus.

MICHAUD, Cat. coq. d'Algérie, p. 6. pl. 1. f. 17, 18.

*Helix phalerata*, Webb and Berthelot.

Hab. Algeria, Morea, and Canary Islands.

A light prettily marked conical species, with a small deep umbilicus.

Species 920. (Mus. Cuming.)

HELIX ORBIGNYI. *Hel. testá angustè umbilicatá, globosoturbinatá, sordidè albá; anfractibus quatuor, convexis, medio obsoletè angulatis, irregulariter striatis; aperturá rotundatá, subamplá; peristomate simplici.*

ORBIGNY'S HELIX. Shell narrowly umbilicated, globosely turbinated, dirty white; whorls four, convex, obsoletely angled in the middle, irregularly striated; aperture rounded, rather large; lip simple.

WEBB and BERTHELOT, Synopsis, p. 59. pl. 2. f. 31-33.

Hab. Island of Tenerife, Canaries.

A thin white-brown species, with a rather large rounded aperture.

Species 921. (Mus. Cuming.)

HELIX CONSPURCATA. *Hel. testá umbilicatá, depressá, subcarinatá, corneo-cinereá, minutè variegatá, capillaceo-costulatá, hispidulá; spirá vix elevatá; anfractibus quatuor ad quinque, depressis; umbilico angusto; aperturá rotundato-lunari; peristomate recto, simplici, acuto, margine columellari vix reflexiusculo.*

THE SPRINKLED HELIX. Shell umbilicated, depressed, slightly keeled, horny-ash, minutely variegated, finely ribbed, hairy; spire but little elevated; whorls four to five, depressed; umbilicus narrow; aperture rotundately lunar; lip straight, simple, sharp, columellar margin a little reflected.

DRAPARNAUD, Hist. Moll. p. 105. pl. 7. f. 23-25.

*Helix hispida*, Jeffrey.

Hab. France, Spain.

A rather depressed shell, brown-sprinkled about the upper part.

Species 922. (Mus. Cuming.)

HELIX POMPYLIA. *Hel. testá umbilicatá, supra depressá, subtus convexá, suborbiculari, aretispirá, corneo-rufescente, subtus strigis maculisque albidis tenuissimis figuratim radiatá, superne costulatá; anfractibus octo, lentissimè accrescentibus, ultimo circa umbilicum excavato; aperturá subverticali, angustè lunari; peristomate subflexuoso, acuto, simplici, marginibus callo tenui junctis.*

THE POMPYLIA HELIX. Shell umbilicated, depressed at the upper part, convex beneath, suborbicular, close-spined, radiated beneath with very fine white zigzag streaks and spots, finely ribbed at the upper part; whorls eight, increasing very slowly, the last excavated around the umbilicus; aperture subvertical, narrowly lunar; lip rather flexuous, sharp, simple, margins joined by a thin callosity.

SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 6. Mem. Conch. pl. 1. f. 12.

Hab. Island of Palma, Canaries.

Convolute in a peculiar vertically compressed manner, which gives to the species a very characteristic aspect.

Species 923. (Mus. Cuming.)

HELIX OLEACEA. *Hel. testá suboblectè umbilicatá, tenui, globoso-depressá, obtusè crenatá, cornei, subtiliter striatá, maculis brunneis subserialis strigisque pallidis ornatá, spirá subelevatá; anfractibus quinque, convexiusculis, sensim accrescentibus; aperturá lunari-ovali; peristomate reflexiusculo, tenui, acuto, margine columellari subdilatato.*

THE OLIVE HELIX. Shell with a partially covered umbilicus, thin, globosely depressed, obtusely keeled, horny, finely striated, ornamented with pale streaks and rows of brown spots; spire somewhat raised, whorls five, rather convex, increasing gradually; aperture lunar-oval; lip a little reflected, thin, sharp, columellar margin somewhat dilated.

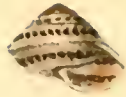
SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 8. Mem. Conch. pl. 3. f. 9.

Hab. Island of Palma, Canaries.

Resembling *H. Roseti*, both in form and marking, but of a more delicate horny substance.







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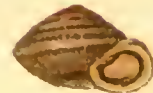
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# HELIX.

PLATE CXLIV

Species 924. (Mus. Cuming.)

**HELIX NIVARIENSIS.** *Hel. testâ suboblectè angustissimâ umbilicatâ, globoso-conicâ, carinatâ, argutè striatâ, sordidè albâ, fasciis duabus interruptis rufis maculise fascis serialim ornatâ; spirâ conicâ, acutâ; anfractibus sex, sensim accrescentibus, planulatis, sublus planatis, carinâ versus aperturam evanidâ; aperturâ rotundatolunari; peristomate acuto, recto, margine columellari tenuiter dilatato.*

**THE NIVARIA HELIX.** Shell with a very narrow, partially covered umbilicus, globosely conical, keeled, briskly striated, dead white, ornamented with two interrupted red bands or brown spots; spire conical, acute; whorls six, increasing slowly, rather flattened, flat beneath, keel fading away towards the aperture, aperture rotundately lunar; lip sharp, straight, columellar margin thinly dilated.

SHUTTLEWORTH, *Diag. Mollusken*, No. 1. *Mem. Conch.* pl. 3. f. 4.

*Hab.* Island of Teneriffe, Canaries.

Very closely allied to *H. Roseti*.

Species 925. (Mus. Cuming.)

**HELIX ARMENIACA.** *Hel. testâ umbilicatâ, depresso-orbiculari, convexiusculâ, validè plicato-striatâ, coraco et cinerascens-albido variegatâ; anfractibus sex, depressis, ultimo angulato, breviter deflexo; umbilico mediocri, pervio; aperturâ perobliquâ, subcirculari; peristomate remotè et prominulè albo-labiato, marginibus approximatis, supèro recto, basali breviter reflexo.*

**THE ARMENIA HELIX.** Shell umbilicated, depressly orbicular, strongly plicately striated, variegated with horn and ash-white; whorls six, depressed, the last angled, shortly deflected; umbilicus middling, open; aperture very oblique, nearly circular; lip remotely and prominently white-edged, margins approximated, upper margin straight, basal margin shortly reflected.

PFEIFFER, *Mon. Helic.* vii. p. 363.

*Hab.* Armenia.

The strong plicated striae are opaque ash-white upon a livid red-brown ground.

Species 926. (Mus. Cuming.)

**HELIX HISPIDULA.** *Hel. testâ orbiculato-depressâ, sublus convexiusculâ, carinatâ, substriatâ, hispidulâ, fuscorovâ; spirâ depresso-conicâ; anfractibus quinque, carinatis; aperturâ suborbiculari, compressâ; peristomate reflexo, acuto; umbilico magno, pululo.*

**THE HAIRY HELIX.** Shell orbicularly depressed, rather convex beneath, keeled, substriated, hairy, brown-horn; spire depressly conical; whorls five; aperture nearly orbicular, compressed; lip reflected, sharp, umbilicus large, open.

*Circœulæ Helicæ*, Lamarek, *Mém. sans vert.* (Deshayes edit.) vol. viii. p. 148.

*Hab.* Island of Teneriffe, Canaries.

A subtransparent dark horny shell, obliquely rib-like striated and slightly hairy.

Species 927. (Mus. Cuming.)

**HELIX MEDA.** *Hel. testâ vix umbilicatâ, supra gibbosâ, sublus convexâ, obliquè costato-striatâ, cœciliâ fuscâ subferrugineâ interruptâ maculisque obscure plicatâ anfractibus quinque, convexis, ultimo (ultimo) aperturâ lunari; peristomate simplici, margine columellari subdilatato.*

**THE MEDA HELIX.** Shell scarcely umbilicated, gibbous above, convex beneath, obliquely rib-like striated whitish, obscurely pincted with a somewhat rusty interrupted band and spots, whorls five, convex, the last faintly keeled; aperture lunar; lip simple, columellar margin a little dilated.

PORRO, *Rev. Zool. Soc. Civ.* 1849. p. 126.

*Hab.* Sardinia.

Of simple growth, strongly plicately rib-like striated.

Species 928. (Mus. Cuming.)

**HELIX BILINEATA.** *Hel. testâ umbilicatâ, depressâ, hornâ, nitidâ, pulucidâ, latij latâ, testâ cinerascens, striâ planiusculâ; suturâ striatâ; anfractibus quinque, vix convexiusculis, regulariter incrementis, ultimo subdepresso, limbo castoreo, striâ supra-periphericâ, alterâ suturali, ad aperturâ usque convexâ, rectâ; umbilico magno; aperturâ subquadrata, peristomate simplici, acuto, margine subumbilico convexâ reflexo.*

**THE TWO-LINE HELIX.** Shell umbilicated, depressed, shining, transparent, succine, yellowish-brown; spire rather flat, suture finely striated, whorls five, slightly convex, increasing regularly, the last a little depressed, ornamented with two elegant lines, one above the periphery, the other sutural, converging to the apex, umbilicus narrow, aperture compressly lunar; lip simple, sharp, columellar margin very shortly reflected.

PFEIFFER, *Pro. Zool. Soc.* 1845, p. 128.

*Hab.* —?

The strong chestnut lines which characterize this species being upon a transparent olive ground, are unusually conspicuous.

## Species 929. (Mus. Cuming.)

HELIX GYRIA. *Hel. testā apertè umbilicatā, orbiculatā, valde depressā, supra planā, radiatim striatā, olivaceo-fuscā; spirā demersā; anfractibus septem, angustis, subæqualibus, basi convexiusculā, circa umbilicum angulatā, lævi; aperturā semilunari; peristomate reflexo.*

THE WHORL HELIX. Shell openly umbilicated, orbicular, very depressed, flat above, radiately striated, olive-brown; spire concavely sunk; whorls seven, narrow, nearly equal, rather convex at the base, angled and smooth around the umbilicus; aperture semilunar; lip reflected.

ROTH, Diss. p. 16. pl. 1. f. 17, 18.

*Hab.* Asia Minor.

Of a peculiar discoid growth, with the spire sunk into a slight hollow.

## Species 930. (Mus. Cuming.)

HELIX MARITIMA. *Hel. testā umbilicatā, conoideo-globosā, subcarinatā, albā, fasciis et maculis striatis fuscis multiformi variantē; anfractibus quinque, planiusculis; aperturā rotundato-lunatā; peristomate recto, acuto, fusculo, intus albo-labiato.*

THE MARITIME HELIX. Shell umbilicated, conoid-globose, slightly keeled, white, variously painted with brown bands and striated spots; whorls five, rather flat; aperture rotundately lunar; lip straight, sharp, brownish, white-edged within.

DRAPARNAUD, Hist. Moll. p. 55. pl. 5. f. 9, 10.

*Hab.* Island of Teneriffe, Canaries.

This prettily-marked species is said to inhabit also the south of France.

## Species 931. (Mus. Cuming.)

HELIX FORTUNATA. *Hel. testā umbilicatā, lenticulari, carinatā, striatā, ex nitidulā; spirā depresso-convexiusculā; anfractibus quinque ad sex, planis, sensim ærescentibus, ultimo supra carinam impresso, anticè subdilatato, subdeflexo; aperturā perobliquā, securiformi; peristomate subexpanso, superne acuto, basi arcuato, reflexo, subincrassato, ad umbilicum modicè dilatato.*

THE FORTUNATE HELIX. Shell umbilicated, lenticular, keeled, striated, a little shining; spire depressly convex; whorls five to six, flat, increasing gradually, last whorl impressed above the keel, slightly dilated and a little deflected in front; aperture very oblique, hatchet-shaped; lip rather expanded, sharp at the upper part, arched at the base, reflected, slightly thickened, moderately dilated at the umbilicus.

SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 7. Mem. Conch. pl. 2. f. 4.

*Hab.* Island of Teneriffe, Canaries.

The keel of this species is rather high up on the whorls, giving a flattened lens-like aspect to the spire.

## Species 932. (Mus. Cuming.)

HELIX AFFICTA. *Hel. testā umbilicatā, discoideā, lutescente-corneā, subpelluculā, minutissimè striatā, nitidā, spirā planā; anfractibus quinque ad sex, planis, acutissimè albo-carinatis, ultimo subtilis medio convexiusculo, circa umbilicum mediocrem, pervio, obtusè angulato; aperturā perobliquā, securiformi; peristomate superne simplici, acuto, basi arcuato, reflexo.*

THE FRAMED HELIX. Shell umbilicated, discoid, yellowish-horny, subtransparent, very minutely striated, shining; spire flat; whorls five to six, flat, very sharply white-keeled, last whorl rather convex in the middle beneath, obtusely angled round the umbilicus, which is middling and open; aperture very oblique, hatchet-shaped; lip simple and sharp at the upper part, arched and reflected at the base.

FERUSSAC, Hist. Moll. pl. 66. f. 5.

*Carocollu planaria, Lamarek.*

*Hab.* Island of Teneriffe, Canaries.

Resembling the preceding species, but more sharply keeled.

## Species 933. (Mus. Cuming.)

HELIX POLYMORPHA. *Hel. testā umbilicatā, depresso-pyramidalatā, striatā, granulis confertis magis minuste exasperatā, superne fusco el albo marmoratā, basi sordidè albā, fusco-fasciatā; anfractibus septem ad octo, planulatis, ultimo acutè carinato, anticè subgibbo, subito deflexo, basi convexiusculo, interdum subhærrigato; umbilico infundibuliformi; aperturā perobliquā, subcirculari; peristomate simplici, marginibus approximatis, callo tenui junctis, basali reflexo.*

THE MULTIFORM HELIX. Shell umbilicated, depressly pyramidal, striated, more or less granulated, marbled about the upper part with brown and white, dirty white at the base, banded with brown; whorls seven to eight, rather flat, last whorl sharply keeled, slightly gibbous in front, suddenly deflected, rather convex, and sometimes smooth at the base; umbilicus funnel-shaped; aperture very oblique, nearly circular; lip simple, with the margins approximated, joined by a thin callosity, basal margin reflected.

LOWE, Faun. Mader. p. 54. pl. 6. f. 11-16.

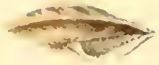
*Hab.* Madeira.

A characteristic granulated subconical species, with a rounded enamelled aperture.





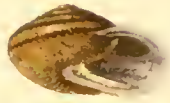
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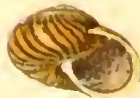
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# HELIX.

PLATE CXLV

Species 934. (Mus. Cuming.)

**HELIX RAVERGIENSIS.** *Hel. testâ umbilicatâ, globoso-depressâ, tenui, subtiliter rugoso-striatâ, sub lente granulatâ, corneo-albidâ, pellucidâ, fasciâ latâ subopacâ albidâ ad suturam, angustiore albâ ad peripheriam, ornatâ; anfractibus sex, convexiusculis, ultimo anticè subdeflexo; aperturâ lunato-rotundatâ; peristomate acuto, expanso, intus calloso-albo, aculè labiato, margine columellari dilatato, umbilicum angustum perivium semitegente.*

**THE RAVERGIAN HELIX.** Shell umbilicated, globosely depressed, thin, finely rugosely striated, granulated beneath the lens, horny-white, transparent, ornamented with a broad whitish subopake band at the suture, and a narrow white band at the periphery; whorls six, rather convex, the last a little deflected in front; aperture lunar-shaped; lip sharp, expanded, callous-white within, sharply edged, columellar margin dilated, half-covering the umbilicus which is narrow and open.

FERUSSAC, Bull. Zool. 1835, p. 21.

*Helix limbata*, Krynicki.

*Helix Caucasica*, Pfeiffer.

*Hab.* Caucasia.

Of an extremely delicate transparent straw-colour, striated and banded with opaque-white.

Species 935. (Mus. Cuming.)

**HELIX NUMMUS.** *Hel. testâ subumbilicatâ, depressissimâ, subdiscoideâ, aculè carinatâ, tenuiusculâ, confertim rugoso-striatâ, supernè albido et fusco variegatâ, basi pallidè lividâ; spirâ vix elevatâ; anfractibus quinque ad sex, planis, non exsertis, ultimo basi cir ventricosiore, anticè non descendente; aperturâ depressâ, angulato-lunari; peristomate tenui, marginibus subparallelis, supero recto, basali breviter reflexo, columellari vix dilatato, reflexo, appresso.*

**THE MONEY HELIX.** Shell slightly umbilicated, very depressed, subdiscoïd, sharply keeled, very thin, closely roughly striated, variegated on the upper part with brown and white, pale livid at the base; spire but little raised; whorls five to six, flat, not exserted, the last scarcely more ventricose at the base, not descending in front; aperture depressed, angular-

lunar, lip thin, margin nearly parallel, upper margin straight, basal margin shortly reflected, columellar margin a little dilated, reflexed, appressed.

EHRENBERG, Synb. Phys. Moll. Pfeiffer, Hel. vix vol. 1, p. 209.

*Helix Hebenbergi*, Pfeiffer.

*Hab.* Syria, Egypt.

Peculiarly characterized on the upper part with a profusion of curved opaque-white streaks upon a subtransparent horny ground. The keel is also opaque-white.

Species 936. (Mus. Cuming.)

**HELIX PRATENSIS.** *Hel. testâ subumbilicatâ, orbiculato-convexâ, rugulosostriatâ, albidâ, fasciâ suturâ albâ spirâ subelevatâ; anfractibus sex, convexiusculis, ultimo anticè vix descendente; aperturâ rotundato-lunari; peristomate expanso, intus remotè albis-labiato, marginibus convexiusculis, columellari dilatato.*

**THE MEADOW HELIX.** Shell umbilicated, orbicularly convex, rugulosely striated, whitish, encircled with two chestnut bands; spire somewhat raised, whorls six, rather convex, the last slightly descending in front; umbilicus middling, open, aperture rotundately lunar; lip expanded, remotely white-edged within, margins approximating, columellar margin dilated.

PFEIFFER, Pro. Zool. Soc. 1845, p. 132.

*Hab.* Banks of the river Tirtoom, Asiatic Russia.

Not very unlike the widely-distributed *H. sinularis*.

Species 937. (Mus. Cuming.)

**HELIX BETHENCOURTIANA.** *Hel. testâ subumbilicatâ tenui, orbiculato-depressâ, subdiscoideâ, fusca quinque brunneis interlinea confluentibus et subdiscoideâ ornatâ, eleganter puncto-striatâ, costâ brunnâ, spirâ depressâ; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè subitè deflexo; aperturâ subrotundato-lunari, subacuta; peristomate acuto, expanso, reflexo-fusco-violaceo, marginibus convexiusculis, basali columellari dilatato.*

**BETHENCOURT'S HELIX.** Shell obtusely umbilicated, thin orbicularly depressed, yellowish-brown, ornamented with five brown bands, sometimes flowing together



sometimes obsolete, elegantly plicately ribbed, ribs smooth; spire depressed; whorls four to five, rather convex, last whorl suddenly deflected in front; aperture nearly horizontal, suboval; lip sharp, expanded, reflected, brown-violet, margins approximating, basal margin callous.

SHUTTLEWORTH, Diag. Mollusken, No. 1. p. 9. Mem. Conch. pl. 5. f. 3.

*Hab.* Island of Teneriffe, Canaries.

Apparently distinct from *H. plicaria*, though belonging to the same exact type.

Species 935. (Mus. Cuming.)

HELIX SPLENDIDA. *Hel. testá oblectè umbilicatá, globoso-depressá, albidá, læviusculá, fasciis fuscis sæpe evanescentibus vel supernè confluentibus ornatá; anfractibus quatuor ad quinque, convexiusculis, celeriter accrescentibus, ultimo anticè subdeflexo; aperturá latá, ovali; peristomate recto, albo-labiato, margine columellari dilatato, umbilicum angustissimum obtegente.*

THE SPLENDID HELIX. Shell with a covered umbilicus, globosely depressed, whitish, rather smooth, ornamented with five brown bands, often fading or flowing into each other at the upper part; whorls four to five, rather convex, increasing quickly, the last a little deflected in front; aperture broadly oval; lip straight, white-edged, columellar margin dilated, covering a very narrow umbilicus.

DRAPARNAUD, Hist. Moll. p. 98. pl. 6. f. 9-11.

*Hab.* Southern France and Spain.

A light strongly banded species, the bands being very irregular, according to the different varieties.

Species 939. (Mus. Cuming.)

HELIX GRÆLLSIANA. *Hel. testá imperforatá, globosá, luteo-corneá, tenui, obliquè leviter striatá; anfractibus quatuor, ultimo cæteris duplo majore, zonis ex maculis rufo-fasciis seriatim dispositis ornatá; labro tenui, columellá et peristomate carneis.*

GRÆLLS' HELIX. Shell imperforated, globose, yellowish-horny, thin, obliquely lightly striated; whorls four, the last twice as large as the rest, ornamented with five red-spotted zones; lip thin, columella and lip flesh-tinged.

PEIFFER, Helic. viv. vol. i. p. 437.

*Helix Grælloupi*, Grælls (not of Pfeiffer).

*Hab.* Island of Majorca.

The zones articulated red-brown and white, and the flesh-tinged enamel of the columella, are characteristic features in this species.

Species 940. (Mus. Cuming.)

HELIX CIRCUMORNATA. *Hel. testá imperforatá, globoso-depressá, glabrá, albá, fasciá unicá rufá in medio, et seriebus macularum aurantio-fuscarum cingulatá; anfractibus quatuor, planulatis, ultimo inflato; aperturá lunato-ellipticá, intus fasculá; peristomate subreflexo.*

THE ENCIRCLED HELIX. Shell imperforated, globosely depressed, smooth, white, encircled with a single red band in the middle, and with three rows of orange-brown spots; whorls four, rather flat, the last inflated; aperture lunar-elliptic, brownish within; lip a little reflected.

FERUSSAC, Hist. Moll. pl. 41. f. 2.

*Hab.* — ?

The rows of spots are mostly broken up into waved flames.

Species 941. (Mus. Cuming.)

HELIX EICHWALDI. *Hel. testá umbilicatá, depressá, ruguloso-striatá, nitidá, albidá, punctis corneis conspersá et corneo-bifasciatá; spirá planiusculá; anfractibus sex, eir convexiusculis, ultimo anticè deflexo; umbilico latiusculo, percio; aperturá perobliquá, fere circulari; peristomate expanso, intus remotè et prominenter albo-labiato, marginibus acutis, fere contiguus.*

EICHWALD'S HELIX. Shell umbilicated, depressed, roughly striated, shining, whitish, sprinkled with horny spots, and two-banded with horn; spire rather flat; whorls six, slightly convex, the last deflected in front; umbilicus rather broad, open; aperture very oblique, almost circular; lip expanded, remotely and prominently white-edged within, margins sharp, almost contiguous.

PEIFFER, Symbolæ, vol. iii. p. 77.

*Hab.* Caucasia.

A bluish-white shell, encircled with two horn-brown bands, having a round expanded aperture with a strong callous ring within.

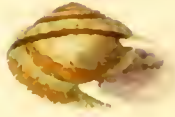
Fig. 942. (Mus. Cuming.)

The shell here figured, *H. rulis*, Muhlfeldt, is a variety of *H. arbustorum*.





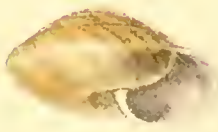
943



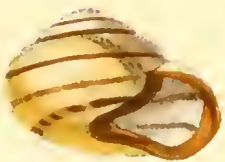
945.



944



946



947. a



947. b



948



949. a



949. b



950

Species 943. (Mus. Cuming.)

**HELIX ARBUSTORUM.** *Hel. testâ subobtectè umbilicatâ, depresso-globosâ, tenui, concentricè minutissimè striatâ, longitudinaliter, præsertim ad suturam, ruguloso-striatâ, fuscâ, stramineo conspersâ, plerumque rufa-unifasciatâ; spirâ magis minusve elevatâ; unfractibus sex, convexis, ultimo anticè vix descendente; aperturâ lunato-rotundatâ; peristomate candidè labiato, margine supero expanso, basali reflexo, ad umbilicum dilatato.*

**THE TREE HELIX.** Shell with a partially covered umbilicus, depressly globose, thin, concentrically very minutely striated, longitudinally, especially at the suture, roughly striated, brown, sprinkled with straw-colour, generally red-banded; spire more or less raised; whorls six, convex, the last a little descending in front; aperture lunar-rounded; lip white-edged, upper margin expanded, basal reflected, dilated at the umbilicus.

LINNÆUS, Syst. Nat. (10th edit.) p. 771.

*Helix castanea*, Mühlfeldt.

*Helix rudis*, Mühlfeldt.

*Cochlea unifasciata*, Costa.

*Helix Wittmanni*, Zawadsky.

*Helix Natarlii*, Farini.

*Helix alpestris*, Ziegler.

*Helix turgidula*, Wood.

*Hab.* Europe.

Widely distributed under various aspects, not differing particularly in colour, throughout Europe.

Species 944. (Mus. Cuming.)

**HELIX MARMORATA.** *Hel. testâ imperforatâ, globoso-depressâ, lutescente-cornéâ, interruptè fasciatâ, fuscâ albidoque marmoratâ; unfractibus quinque, vix convexiusculis, ultimo anticè deflexo; aperturâ latè lunari; peristomate simplici, intus roseo, marginibus conniventibus, dextro patulo, columellari appresso, subdilatato, lævigato.*

**THE MARBLED HELIX.** Shell imperforated, globosely depressed, yellowish-horny, interruptedly five-banded, marbled with light brown and white, whorls five, but little convex, the last deflected in front; aperture broadly lunar; lip simple, pinkish within, margins

approximating, right margin patulo, columellar margin appressed, subdilated, smooth.

FERUSSAC, Hist. Moll. pl. 40. f. 8

*Hab.* Gibraltar.

The bands below the periphery are firm and distinct whilst those above it are broken up into marbling.

Fig. 945. (Mus. Cuming.)

This shell, illustrative of *H. Repehii*, Chapentier, must we fear be regarded as a variety of *H. arbustorum*. It is of a more depressly orbicular growth and the umbilicus is only partially overlaid, but all its essential details of character are the same.

Species 946. (Mus. Cuming.)

**HELIX CARIÆ.** *Hel. testâ latè umbilicatâ, depresso-rotundatâ, obtusè carinatâ, supra sericeâ, subtilissimè decussatâ, seriatim granulatâ, striatâ, corneo-albescente, sublus lævi, corneo-albescente, latero-radialâ; sutura profundâ; unfractibus quinque, convexiusculis; aperturâ obliquè lunato-ovali; peristomate acuto, recto, intus callosi, polius labiato, albo-roseo, exteriè subpelluculo.*

**THE CARIAN HELIX.** Shell broadly umbilicated, depressly orbicular, silky above, very finely decussately seriately granulated, striated, horny-yellow, smooth beneath, horny-white, yellow-rayed, sericeous above, whorls five, rather convex, aperture obliquely lunar-oval; lip sharp, straight, callos within, rather orange-edge white, outwardly transparent yellow.

ROTH, Diss. p. 17. pl. 1. f. 6, 7, 21

*Hab.* Caria, Asia Minor.

Of a somewhat tropical aspect, elaborately granulated on the upper surface, smooth below.

Species 947. (Fig. &c. Mus. Cuming.)

**HELIX SYLVATICA.** *Hel. testâ depresso-globosa, sublus lutescente, striatâ, quadrifasciatâ, fasciis supero-infero intus rufis, reo-angustibus, unfractibus quinque, convexiusculis, ultimo anticè vix descendente; aperturâ lunato-rotundatâ; peristomate simplici, intus callosi, latero-radialâ, margine conniventibus, dextro patulo, columellari appresso, subdilatato, minutè punctato, peristomate intus rufis.*

THE WOOD HELIX. Shell depressly globose, whitish-yellow, striated, four-banded, bands often interrupted in blotches or flowing together; whorls five, rather convex, the last a little descending in front; aperture lunar-rounded; lip slightly patulate, straight, edged, columellar margin furnished inwardly with a subdilated callosity and with an umbilical spot which are generally violet-red.

DRAPARNAUD, Hist. Moll. p. 93. pl. 6. f. 1, 2.

*Helix signata*, Férussac.

*Helix mutabilis*, Hartmann.

Hab. France and Switzerland.

The bands vary in number from three to five, and frequently flow broadly into each other.

Species 948. (Fig. a, b, Mus. Cuming.)

HELIX ATROLABIATA. *Hel. testá imperforatá, depresso-globosá, solidá, ruguloso-striatá, epidermide sordidè flavescente indutá, nigro-trifasciatá; spirá exertá, apice obtusá; anfractibus quinque ad sex, convexiusculis, ultimo anticè valde deflexo; aperturá transversim dilatá, lunari; peristomate latè expanso, intus atrobrunnescente, marginibus callo nigro, introrsum diffuso, junctis, basali reflexo, lato, plano, medio subincrassato.*

THE BLACK-LIPPED HELIX. Shell imperforated, depressly globose, solid, roughly striated, covered with a dull yellowish epidermis, encircled with three black bands; spire exerted, obtuse at the apex; whorls five to six, rather convex, the last much deflected in front; aperture transversely dilated, lunar; lip broadly expanded, black-brown within, margins joined by a black callosity which is diffused inwardly, basal

margin dilated, broad, flat, rather thickened in the middle.

KRYNICKI, Bull. Mose. vol. vi. p. 425. pl. 9

Hab. Caucasia.

Closely allied to the preceding species, though larger and stouter, and conspicuously enamelled with brown-black.

Species 949. (Fig. a, b, Mus. Cuming.)

HELIX VINDOBONENSIS. *Hel. testá imperforatá, subglobosá, costulato-striatá, luteo-albá vel luteá, fasciatá, anfractibus quinque, convexiusculis, ultimo anticè breviter deflexo; aperturá latè subangulato-lunari; peristomate latè expanso, hepatico, marginibus approximatis, columellari strictiusculo, albo-labiato, basi replicatim adnato.*

THE VIENNA HELIX. Shell imperforated, subglobose, rib-like striated, yellowish-white or yellow, four-banded; whorls five, rather convex, the last shortly deflected in front; aperture broadly subangularly lunar; lip broadly expanded, liver-coloured, margins approximated, columellar margin rather drawn out, white-edged, folded back at the base.

*Helix sylvatica*, var. *Vindobonensis*, Férussac, Hist. Moll. pl. 32 A. f. 6, 7.

*Helix Vindobonensis*, C. Pfeiffer.

*Helix mutabilis*, Hartmann.

*Helix Austriaca*, Mühlfeldt.

*Helix arvensis*, Krynicki.

Hab. Austria.

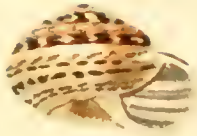
Chiefly distinguished from *H. sylvatica* by its more globose form.







950.



951. a



951. b.



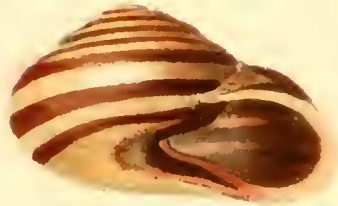
952



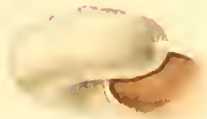
953.



954



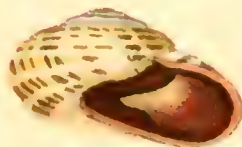
955. a



956



957



955. b

# HELIX.

## PLATE CXLVII.

Species 950. (Mus. Cuming.)

**HELIX CONSTANTINA.** *Hel. testâ imperforatâ, subglobosâ, striatulâ, nitidâ, albidâ, fasciis interdum obsoletis fasciis vel rufis ornatâ; anfractibus quinque, convexis, ultimo anticè deflexo; aperturâ rotundato-lunari; peristomate simplici, albo, sublabiato, latè expanso, marginè columellari strictiusculo, subdentato.*

**THE CONSTANTINE HELIX.** Shell imperforated, subglobose, finely striated, shining, whitish, ornamented with five sometimes obsolete brown or red bands; whorls five, convex, the last deflected in front; aperture rotundately lunar; lip simple, white, slightly edged, broadly expanded, columellar margin rather drawn out, slightly toothed.

FORBES, Ann. Mag. Nat. Hist. 1838.

*Helix Cirta*, Terver.

*Hab.* Province of Constantina, Algiers.

Distinguished from *H. vermiculata* chiefly by its short globose form.

Species 951. (Fig. a, b, Mus. Cuming.)

**HELIX CESPITUM.** *Hel. testâ umbilicatâ, globoso-depressâ, striatâ, albâ, plerumque fusco-multifasciatâ; spirâ parum elevatâ, obtusâ; anfractibus sex, convexiusculis, ultimo magno, lereli, anticè vix descendente; umbilico mediocri, pervio; aperturâ lunato-rotundatâ; peristomate recto, acuto, albo-labiato, marginibus conniventibus, columellari subdilato, patente.*

**THE TURF HELIX.** Shell umbilicated, globosely depressed, striated, white, generally many-banded with brown; spire but little raised, obtuse; whorls six, rather convex, the last large, terete, scarcely descending in front; umbilicus middling, open; aperture lunar-rounded; lip straight, acute, white-edged, margins approximating, columellar margin subdilated, open.

DRAPARNAUD, Hist. Moll. p. 109. pl. 16. f. 14, 15.

*Helix fusciolata*, Poiret.

*Helicella Eurythmia*, Hartmann.

*Hab.* Southern Europe.

The form of this species is rather depressed and inclined to discoid, the band-painting being extremely variable.

Species 952. (Mus. Cuming.)

**HELIX EHRENBERGI.** *Hel. testâ obtectè umbilicatâ, globoso-depressâ, transversè dilatâ, calcareâ, crassâ, solidâ; anfractibus quatuor ad quinque, ultimo ventricosâ, aperturâ angulosâ, latiore quam altâ; peristomate recto, superstructo, marginè columellari striato, callosâ, gibbâ, albo, fauce fuscâ.*

**EHRENBERG'S HELIX.** Shell with a covered umbilicus, globosely depressed, transversely dilated, calcareous, thick, solid; whorls four to five, the last ventricose; aperture angular, broader than high, lip straight, built upon, columellar margin drawn out, callos-gibbous, white, interior brown.

ROTH, Diss. p. 12. pl. 1. f. 15.

*Helix irregularis*, var. Férussac.

*Hab.* Banks of Lake Mareotis, Egypt.

A white chalk-like shell, peculiarly irregularly wrinkled and indented, brown-stained in the interior.

Species 953. (Mus. Cuming.)

**HELIX GUTATA.** *Hel. testâ obtectè umbilicatâ, depressâ supernè planiusculâ, basi convexiore, tenui, costatâ striatâ, griseâ, interruptè fusco-fasciatâ, anfractibus quatuor ad quinque, planulatis, ultimo anticè vix deflexo; aperturâ rotundato-lunari; peristomate expanso, intus sublabiato, marginibus conniventibus, columellari dilatato, regione umbilicali prorsus legitè.*

**THE MOTTLED HELIX.** Shell with a covered umbilicus, depressed, rather flat about the upper part, more convex at the base, thin, rib-like striated, grey, interruptedly brown-banded; whorls four to five, rather flat, the last a little deflected in front; aperture rotundately lunar; lip expanded, slightly edged, margins approximating, columellar margin dilated, altogether covering the region of the umbilicus.

OLIVIER, Voy. Levant, vol. ii. p. 334. pl. 31. f. 8.

*Hab.* Syria, Egypt.

Peculiarly characterized by an edging prominence of the whorls at the suture.

Species 954. (Mus. Cuming.)

**HELIX SPIRIPLANA.** *Hel. testâ uniuscostâ, subobovata, depressâ, obliquè sulcatâ-plicatâ, ovaceo-lutescèntè, a-*

*ludo-subflammulata, maculoso-subfasciata; anfractibus quinque, supremis planulatis, carinalis, ultimo rotundato, anticè subito deflexo; aperturâ perobliquâ, transversè ovali; peristomate albo-labiato, marginibus subcontiguâ, callo elevato junctis, supere expansa, basali reflexo, columellari dilatato, umbilicum semitegente.*

THE FLATTENED SPIRE HELIX. Shell umbilicated, sub-orbicularly depressed, obliquely groove-plaited, olive-yellowish, white-flamed and interruptedly five-banded; whorls five, the uppermost flattened, keeled, the last rounded, suddenly deflected in front; aperture very oblique, transversely oval; lip white-edged, margins nearly contiguous, joined by a raised callosity, upper margin expanded, basal reflected, columellar margin dilated, half-covering the umbilicus.

OLIVIER, Voy. Levant, vol. i. p. 415, pl. 17. f. 7.

*Hab.* Islands of Crete and Rhodes.

This appears to be a variety of the preceding species, in which the whorls are more widely convoluted, and the umbilicus only partially covered by the columellar margin.

Species 955. (Fig. a, b, Mus. Cuming.)

HELIX LACTEA. *Hel. testâ imperforatâ, globoso-depressâ, transversè dilatatâ, albidâ vel lutescente, plerumque rufo-fasciatâ, lacteo-alomatâ; anfractibus quatuor ad quinque, summis planulatis, ultimo convexo, anticè deflexo; aperturâ perobliquâ, latè lunari; peristomate incrassato, obtuso, sublabiato, reflexo, margine columellari stricto, calloso, gibbo, fauce et peristomate castaneis.*

THE CREAM-COLOURED HELIX. Shell imperforated, globosely depressed, transversely dilated, whitish or yellowish, generally red-banded and white-punctured; whorls four to five, the uppermost flattened, the last convex, deflected in front; aperture very oblique, broadly lunar; lip thickened, obtuse, slightly edged, reflected, columellar margin drawn out, callous, gibbous, lip and interior of the aperture chestnut.

MÜLLER, Verm. Hist. Nat. vol. ii. p. 19.

*Helix faux-nigra*, Chemnitz.

*Helix punctata*, Müller.

*Hab.* Southern Europe and North Africa.

Extremely variable in painting and in size, but always characterized by the chestnut-black enamel of the aperture.

Species 956. (Mus. Cuming.)

HELIX EREMOPHILA. *Hel. testâ subprofundè umbilicata, orbiculari-depressâ, subdiscoidea, calcareo-albâ; spira planulatâ, suturâ distinctâ; anfractibus quinque, subrotundatis, irregulariter malleatis et corrugatis; aperturâ parviusculâ, obliquè horizontali, subcirculari; peristomate tenui, marginibus connitentibus, fauce fuscocente lineatâ.*

THE SOLITUDE-LOVING HELIX. Shell rather deeply umbilicated, orbicularly depressed, rather discoid, chalk-white; spire rather flattened, suture distinct; whorls five, somewhat rounded, irregularly indented and wrinkled; aperture rather small, obliquely horizontal, nearly circular; lip thin, margins approximating, interior stained with brown.

BOISSIER, (Mus. Cuming.)

*Hab.* Palestine.

In the chalk-white substance, in the peculiar crinkling of the surface, and in the coloured interior, this shell resembles *H. Ehrenbergi*, but it is widely different in form.

Species 957. (Mus. Cuming.)

HELIX MACROSTOMA. *Hel. testâ apertè umbilicatâ, orbiculato-depressâ, opacâ, superne subtilissimè granulatâ, flavescente, rufo-unizonatâ; anfractibus quinque, exconvexiusculis, ultimo anticè descendente; aperturâ latè lunari; peristomate latè reflexo, albo-labiato, palato subincrassato.*

THE LONG-MOUTH HELIX. Shell openly umbilicated, orbicularly depressed, opaque, very finely granulated at the upper part, yellowish, with a single red zone; whorls five, rather convex, the last descending in front; aperture broadly lunar; lip broadly reflected, white-edged, palate rather thickened.

MUHLFELDT, in Mus. Cas. Vindobonensis, Rossmâser Hist. Moll. vol. 4. p. 1. f. 216.

*Helix planospira*, Philippi.

*Helix Siculina*, Ziegler.

*Helix pervia*, Muhlfeldt.

*Helix cryptozona*, Ziegler.

*Hab.* Sicily.

This shell partakes somewhat of a tropical aspect.





958.



959.



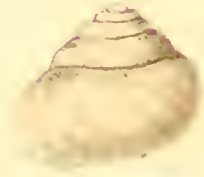
506 b



960.



961 a



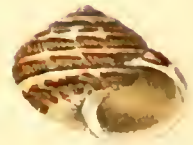
961 b.



962.



963.



964 a



964 b



# HELIX.

PLATE CLVIII.

Species 958. (Mus. Cuming.)

**HELIX ARABICA.** *Hel. testâ imperforatâ, globosâ, albidâ, solidâ, minutissimè striatâ, fasciis fuscis interruptis albo-punctatis ornata; anfractibus quinque, planiusculis, lentè accrescentibus, ultimo anticè inflato, subito deflexo; aperturâ angustatâ, intus castaneâ; peristomate albo-labiato, marginibus subparallelis, dextro expanso, basali dilatato, gibbo, unidentato.*

**THE ARABIC HELIX.** Shell imperforated, globose, whitish, solid, very minutely striated, ornamented with white-punctured interrupted brown bands; whorls five, rather flat, increasing slowly, the last inflated in front, suddenly deflected; aperture narrow, chestnut within; lip white-edged, margins nearly parallel, right margin expanded, basal dilated, gibbous, one-toothed.

TERVER, Catalogue, p. 14. pl. 2. f. 1, 2.

*Hab.* Atlas mountains, North Africa.

A rather solid bepunctured shell, with a prominent tooth in the aperture.

Species 959. (Mus. Cuming.)

**HELIX SEETZENI.** *Hel. testâ angustissimè umbilicatâ, depresso-globosâ, solidulâ, cretaceâ, striatâ; spirâ parum elatâ, vertice subtili; anfractibus quinque ad sex, convexiusculis, ultimo ventroso, anticè parum descendente, aperturâ lunari-subcirculari, intus albâ; peristomate recto, acuto, intus labiato, marginibus convergentibus, columellari subdilatato, valde arcuato.*

**SEETZEN'S HELIX.** Shell very narrowly umbilicated, depressly globose, rather solid, chalky, striated; spire but little raised, fine at the apex; whorls five to six, rather convex, the last ventricose, but little descending in front; aperture lunar-subcircular, white within; lip straight, sharp, edged within, margins converging, columellar margin subdilated, much arched.

KOCH, Zeitschrift für Malae. 1847, p. 14.

*Hab.* On the shores of the Dead Sea, between Dschidda and Jericho; Seetzen.

A dead white calcareous shell, of simple growth.

Fig. 506 b. (Mus. Cuming.)

A variety of *Helix Hispanica*, described and figured at Pl. XCIII.

Species 960. (Mus. Cuming.)

**HELIX DUPOTETIANÆ.** *Hel. testâ imperforatâ, subglobosâ, albidâ, rugulis et lineis fuscis subpâcis, interdum fusco-fusculatâ vel canalicatâ, anfractibus quinque, praeter primalem, ultimis duabus convexis, ultimâ anticè subtili valde deflexo; aperturâ parabolicâ, latiusculâ, peristomate fuscobasali, reflexo, acuto, sublabiali margine emarginato striato, gibbo, junctura unidentato.*

**DUPOTET'S HELIX.** Shell imperforated, subglobose, whitish, subopaque, with fine wrinkles and spiral lines, sometimes with five brown bands, or with a few brownish; whorls five, the uppermost rather flattened, the last two convex, the last suddenly much deflected in front; aperture very oblique, rather small, lunar; lip brownish-white, reflected, sharp, double-lipped, columellar margin more drawn out, gibbous, and with the interior chestnut.

TERVER, Catalogue, p. 13. pl. 1. f. 4-6.

*Helix Z. flarica*, Terver.

*Hab.* North Africa.

The white specimen selected for representation in this accompanying plate is the more frequent state of the species.

Species 961. (Fig. a, b. Mus. Cuming.)

**HELIX BOISSIERI.** *Hel. testâ obtusè umbilicatâ, parvis, globosâ, crassâ, irregulariter striatâ, solidâ, cretaceâ; spirâ elevata, apice obtusi, anfractibus quinque, convexiusculis, ultimo anticè deflexo, rugulis, anfractibus basi impresso; aperturâ parabolicâ, parvâ, sinuiformi, latere dextro angustâ, peristomate recto, acuto, intus albo unido, marginibus valde convexis, ultimâ anticè expanso junctis, labio marginibus arcuatis, columellari versus dextrum attenuato, margine superiore laterali crassis subelevatis dextrâ.*

**BOISSIER'S HELIX.** Shell with a covered umbilicus, nominally globose, thick, irregularly striated, somewhat chalky; spire raised, obtuse at the apex; whorls five, rather convex, last whorl deflected in front, whorls constricted, impressed at the base; aperture very oblique, rather small, hatchet-shaped, arched on the right side; lip thick, white-edged, margins joined by a thin callosity, expanded above the umbilicus; edge of the basal margin arched, dilated, and somewhat



towards the right, furnished upon the upper margin with two thick tubercles flowing together.

CHARPENTIER, *Zeitschrift für Malac.* 1847, p. 133.

*Hab.* Arabia Petrea.

Singularly characterized by the hatchet-shaped contraction of the aperture.

Species 962. (Mus. Cuming.)

HELIX VERMICULATA. *Hel. testâ imperforatâ, globoso-depressâ, lutescente, lineolis punctisque incrassatis albis, fasciisque rufis superis sapissimè teniatis variè ornatâ; unfractibus quinque, convexiusculis, ultimo anticè deflexo; aperturâ perobliquâ, latè lunari; peristomate albo, latè reflexo, margine columellari strictiusculo, calloso.*

THE WORM-EATEN HELIX. Shell imperforated, globosely depressed, yellowish, variously ornamented with white thickened lines and punctures and red bands, the uppermost often filleted; whorls five, rather convex, the last deflected in front; aperture very oblique; broadly lunar; lip white, broadly reflected, columellar margin rather drawn out, callous.

MULLER, *Verm. Hist. Nat.* vol. ii. p. 20.

*Helix lactea*, Hartmann.

*Helix thalassina*, Porro.

*Hab.* Southern Europe.

The surface of this fine species is peculiarly characterized by a multitude of oblique worm-like indentations.

Species 963. (Mus. Cuming.)

HELIX HIEROGLYPHICULA. *Hel. testâ imperforatâ, depressâ, solidâ, nitidâ, albido-carneâ, fusco-atomatâ, fasciis nigro-fuscis, superioribus plerumque maculosè interruptis ornatâ; spirâ convexâ, obtusâ; unfractibus quatuor ad quinque, planis, summis carinatis, ultimo anticè valde deflexo; aperturâ ovato-lunari, subhorizontali, intus castaneâ; peristomate obtusato, marginibus subparallelis, dextro leviter arcuato, columellari strictiore, culloso, gibbo.*

THE HIEROGLYPHIC HELIX. Shell imperforated, depressed, solid, shining, whitish-flesh, brown-punctured, ornamented with four to five black-brown bands, the upper ones being generally spot-interrupted; spire convex, obtuse; whorls four to five, flat, the uppermost keeled, the last much deflected in front; aperture ovately lunar, subhorizontal, chestnut within; lip obtuse, margins nearly parallel, right margin shortly arched, columellar margin more drawn out, callous, gibbous.

MICHAUD, *Cat. Moll. d'Alger.*

*Hab.* North Africa.

Chiefly distinguished by the freckled character of a light epidermis, which makes the upper bands appear broken up into spots.

Species 964. (Fig. a, b, Mus. Cuming.)

HELIX DESERTORUM. *Hel. testâ subobtectè umbilicatâ, subglobosâ, depressiusculâ, longitudinaliter striatâ aut læviusculâ, variè coloratâ et zonatâ; unfractibus quatuor ad quinque, convexiusculis; aperturâ angulatâ, margine columellari in angulum descendente; fauce fuscâ; peristomate simplici cel reflexo.*

THE DESERT HELIX. Shell with a nearly covered umbilicus, subglobose, rather depressed, longitudinally striated or rather smooth, variously coloured and zoned; whorls four to five, rather convex; aperture angled, columellar margin descending into an angle interior brown; lip simple or reflected:

FORSKÆL, *Ehrenberg, Symb. Phys.*

*Helix maculosa*, Born.

*Helix irregularis*, Férussac.

*Helix rhodia*, Chemnitz.

*Helix Forskælii*, Ehrenberg.

*Helix Hemprichii*, Ehrenberg.

*Helix Hasselquistii*, Ehrenberg.

*Hab.* Deserts of Egypt, Libya, Arabia Petrea, etc.

Variouly dark zoned and streaked; sometimes without marking.





965



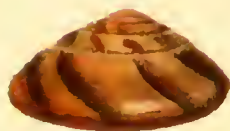
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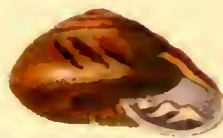
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968 a



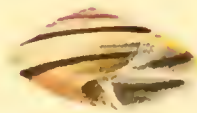
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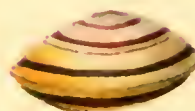
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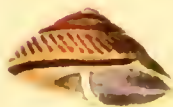
969 c



970 a



970 b



971

# HELIX.

PLATE CXLIX.

Species 965. (Mus. Cuming.)

**HELIX ISODON.** *Hel. testâ subampliter umbilicatâ, lenticulari, fulvo-fuscâ; spirâ subelevatâ, densè tenuistriatâ; anfractibus quinque, convexis, ultimo carinato, anticè valde deflexo; aperturâ transversè trigono-ovatâ; peristomate expanso-reflexo, marginibus continuis, dentibus tribus aut quatuor ad basalem, dente magno lamelliformi ad parietem oppositam.*

**THE EQUAL-TOOTHED HELIX.** Shell somewhat largely umbilicated, lenticular, fulvous-brown; spire somewhat raised, densely finely striated; whorls five, convex, the last keeled, much deflected in front; aperture transversely triangularly ovate; lip expandedly reflected, margins continuous, with three to four teeth on the basal margin, and one large lamelliform tooth on the opposite wall.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* West Columbia.

A very prominently-toothed species, of a livid fulvous-brown colour, with the edge of the aperture continuous and prominently expanded.

Species 966. (Mus. Cuming.)

**HELIX BERYTENSIS.** *Hel. testâ umbilicatâ, depresso-globosâ, tenui, subpellucidâ, luteo-fulvicaule, minutissimè granulatâ; anfractibus quinque ad sex, planiusculis, ultimo magno, obsolete angulato; umbilico angusto; aperturâ lunato-rotundatâ; peristomate simplici, intus labiato, margine columellari reflexo, basali et dextro vir expansis.*

**THE BEYROUT HELIX.** Shell umbilicated, depressly globose, thin, subtransparent, yellowish-fulvous, very minutely granulated; whorls five to six, rather flattened, the last large, obsolete angled; umbilicus narrow; aperture lunar-rounded; lip simple, edged within, columellar margin reflected, basal and right margins a little expanded.

FERUSSAC, Prodrôme, p. 260.

*Helix granulata*, Roth.

*Hab.* Beyrout, Syria.

Of an uniform light fawn colour, without spot or marking.

Species 967. (Mus. Cuming.)

**HELIX DICHROA.** *Hel. testâ umbilicatâ, globoso-depressâ, tenui, oblique striatâ, lineis confertis subleatè d'ussatâ, pallidè corneâ, diaphinâ, angulis periculis opacis et interruptis opulâ; anfractibus sex, convexis, ultimo anticè deflexo, basi carinato; umbilico angustâ; aperturâ lunato-circulari; peristomate tenui, marginibus convergentibus, supere expanso, basi et dextro similè reflexo, columellari dilatato, nitido, reflexo.*

**THE TWO-COLOURED HELIX.** Shell umbilicated, gibbously depressed, thin, obliquely striated, d'ussated beneath the lens with close-set lines, pale horny, opaculous, ornamented with many interrupted opaque white bands; whorls six, rather convex, the last deflected in front, convex at the base; umbilicus narrow; aperture lunar-circular; lip thin, margins approximating, upper margin a little expanded, basal very shortly reflected, columellar dilated, shining, reflected.

PFEIFFER, Synchone, vol. iii. p. 76.

*Hab.* Shanghai, China; Fortune.

The opaque-white bands above described exist only in the epidermis, and are sometimes wanting.

Species 968. (Mus. Cuming.)

**HELIX LAUNCESTONENSIS.** *Hel. testâ subampliter umbilicatâ, obtusè conici, supra ferrugineo-fuscâ, rufâ tenuibus lineisque granulata supraelevatâ, angulâ, infra corneâ, obsolete, nigro et limbo virâ tenuatâ, anfractibus quinque, convexis, aperturâ lunato-rotundatâ, peristomate reflexo, marginibus continuis, intus labiato, margine columellari reflexo, basali et dextro vir expansis.*

**THE LAUNCESTON HELIX.** Shell rather largely umbilicated, obtusely conical, rusty-brown above, ornamented with fine wrinkles and blackish granulated ridges, horny and shining beneath, vividly banded with black and yellow, whorls five, rather convex, slightly depressed at the upper part, last whorl a little deflected; aperture transversely somewhat triangularly reflected, purple-tinted.

REEVY, Pro. Zool. Soc. 1852.

*Hab.* Launceston, Van Diemen's Land, Guam.

For the discovery of this interesting species, which presents a different set of typical characters from any other.

known group, we are indebted to the researches of Mr. Ronald C. Gunn.

Species 969. (Mus. Cuming.)

HELIX BISULCATA. *Hel. testá ampliter umbilicatá, Solariformi, peculiariter tenuè corrugato-striatá, striis subdistantibus concentricis incisís decussatá, vividè olivaceá, nitente, apice rufescente; spirá convexo-depressá; anfractibus sex, ad saturam breviplicatis, deinde declivi-convexis, ultimo sulco amplo superficiali supra et infra notato; umbilico perspectivo, intus plicato-corrugato; aperturá sublunari; peristomate simplici, intus per sulcum peculiariter verruco-dentato.*

THE DOUBLE-GROOVED HELIX. Shell largely umbilicated, Solarium-shaped, peculiarly finely wrinkle-striated, decussated with rather distant engraved striae, bright olive, shining, tinged with red at the apex; spire convexly depressed; whorls six, puckered at the suture, then slantingly convex, last whorl marked above and below by a large superficial groove; umbilicus perspective, plicately wrinkled within; aperture sublunar; lip simple, peculiarly wart-toothed within along the ridge formed by the impressed groove.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* Van Diemen's Land; Gunn.

Another very peculiar typical species, collected also by Mr. Gunn in the above-named country.

Species 970. (Mus. Cuming.)

HELIX MINERVA. *Hel. testá profundè umbilicatá, depresso-orbiculari, tenuiculá, subtilissimè striatá et mal-leatá, lutescente, versus apicem purpurascens-lividá, fasciá intensè castaneá angustá supra et infra cingulátá; anfractibus quatuor, plano-convexis, ultimo acutè*

*carinato; aperturá lunari; peristomate simplici, margine columellari sublatè dilatato.*

THE MINERVA HELIX. Shell deeply umbilicated, depressly orbicular, rather thin, very finely striated and indented, yellowish, tinged with purple-livid towards the apex, and encircled above and below with a narrow dark chestnut band; whorls four, flatly convex, the last sharply keeled; aperture lunar; lip simple columellar margin rather broadly dilated.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* Island of Celebes?

A shell of simple character, but yet distinct from any hitherto-described species.

Species 971. (Mus. Cuming.)

HELIX MERZIANA. *Hel. testá subampliter perspective umbilicatá, tenuiculá, supra depresso-conicá, infra plano-concavá, castaneo-fuscá, strigis luteis brevibus interruptis hic illic aspersá, infra circa umbilicum lutescente, immaculatá; anfractibus quinque, convexo-declivibus, ultimo acutè carinato, cariná albidá; aperturá ovato-trapeziformi; peristomate simplici, margine basali paululum reflexo.*

MERZ'S HELIX. Shell somewhat largely perspective umbilicated, rather thin, depressly-conical above, flatly concave beneath, chestnut-brown, sprinkled here and there with short interrupted yellowish streaks, yellowish and unspotted beneath around the umbilicus; whorls five, convexly slanting, the last sharply keeled, the keel whitish; aperture ovately trapeziform; lip simple, basal margin a little reflected.

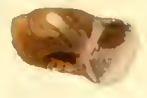
PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* St. Christoval, Solomon's Island.

Typically the same as *H. Solarioides*, but specifically distinct.







972



973



974



975



976 a



976 b



977



978 a



978 b



979

# HELIX.

PLATE CL.

Species 972. (Mus. Cuming.)

**HELIX INCRASSATA.** *Hel. testâ subampliter umbilicatâ, subdepressâ, discoideâ, sordidè cornèâ; anfractibus quatuor, convexis, basi subangulato-productâ; aperturâ subrotundatâ; peristomate simplici, marginibus conniventibus.*

**THE ENCRUSTED HELIX.** Shell rather largely umbilicated, somewhat depressed, discoid, dirty-horny; whorls four, convex, rather angularly produced at the base; aperture subrounded; lip simple, margins approximating.

**POEY,** (Mus. Cuming).

*Hab.* Havana.

The aperture of this little species is scarcely so angularly produced as represented in the figure.

Species 973. (Mus. Cuming.)

**HELIX SPLENDIDULA.** *Hel. testâ umbilicatâ, depressissimâ, pullidè olivaceo-cornèâ, nitidâ, striatulâ, lineis concentricis magis minusve distinctis obsolete reticulatis; spirâ planâ; suturâ profundâ; anfractibus tribus ad quatuor, subplanulatis, veleriter accrescentibus, ultimo lato, anticè non descendente; umbilico lato, perspective; aperturâ obliquâ, lunato-ovali; peristomate simplici, acuto, marginibus conniventibus, dextro obliquè descendente, antrorsum subarcuato.*

**THE SPLENDID HELIX.** Shell umbilicated, very depressed, pale olive-horny, shining, finely striated, obsoletely reticulated with more or less distinct concentric lines; spire flat; suture deep; whorls three to four, slightly flattened, increasing quickly, the last broad, not descending in front; umbilicus broad, perspective; aperture oblique, lunar-oval; lip simple, sharp, margins approximating, right margin obliquely descending, slightly arched in front.

**PREIFFER,** Pro. Zool. Soc. 1845, p. 128.

*Hab.* Torres Strait, Australia.

A subdiscoid shining olive-horny species, hardly splendid enough in appearance to justify its specific name.

Species 974. (Mus. Cuming.)

**HELIX MORBIDA.** *Hel. testâ angustè umbilicatâ, globosâ, tenui, cornèâ; suturâ subimpressâ, rubidâ; anfractibus*

*quatuor, convexis, basi obsolete foveatâ, portâ rotundato-lunari, peristomate simplici, intra rubro-annulato, margine basali dilatato, umbilicum parte tegente.*

**THE DISEASED HELIX.** Shell narrowly umbilicated, globose, thin, horny; suture rather impressed, red, whorls four, convex, the last obsoletely banded. aperture rotundately lunar, lip simple, hood with a red ring within, basal margin dilated, partially covering the umbilicus.

**MORELET,** (Mus. Cuming).

*Hab.* Cuba.

The red colouring noticed above is perhaps the most characteristic feature of this species.

Species 975. (Mus. Cuming.)

**HELIX ALACOSPIRA.** *Hel. testâ ampliter perspective umbilicatâ, depressâ, subdiscoidi, infra convexâ, striis impressis concentricis subtilissimis edipeo-ovatis, vicidè dirivâ, nitentè; anfractibus quatuor, convexo-declivibus; aperturâ rotundato-lunari, intra serrulato-dentatâ; peristomate simplici, acuto.*

**THE FURROWED-SPIRE HELIX.** Shell largely perspective umbilicated, depressed, somewhat discoid, concave beneath, engraved throughout with rather distant concentric impressed striæ, bright cave, shining whorls four, concavely slanting, aperture rotundately lunar, wart-toothed within; lip simple, sharp.

**PREIFFER,** Pro. Zool. Soc. 1852?

*Hab.* New Hebrides.

This belongs to the same peculiar type as *H. lucida* of the preceding Plate from Van Diemen's Land. The wart-like tooth, above noticed, in this species, too far within the shell to appear in the figure.

Species 976. (Fig. a, b, Mus. Cuming.)

**HELIX HELICINOIDIS.** *Hel. testâ longifratâ, ovata, versus aperturam dilatè productâ, eructa striatâ, lutescente, plus minusve punctatâ, punctâ, reflexa, rostrata, spirâ planâ, anfractibus quatuor ad quinque, planis, convexis, basi dilatè dilatata et carinata, aperturâ rotundato-lunari, peristomate expanso-rubro.*

February, 1853.

THE HELICINA HELIX. Shell imperforated, conical, obliquely produced towards the aperture, arcuately striated, yellowish, more or less transparent, or opaque-white, broadly banded with red-chestnut; whorls four to five, flatly convex, sharply dilated and keeled at the base; aperture ovately trapeziform; lip expandedly reflected.

HOMBRON and JACQUINOT, (Mus. Cuming.)

*Hab.* Isle of Tanna, New Caledonia.

A very distinct and characteristic species, resembling the *Helicina*-form kinds of *Cyclostoma*.

Species 977. (Mus. Cuming.)

HELIX EVA. *Hel. testâ imperforatâ, pyramidal-conicâ, tenui, subpellucidâ, obliquè striatâ, livido-carneâ; anfractibus quinque, plano-convexis, basi acutè carinatis; aperturâ ovato-trapeziformi; peristomate subincrassato.*

THE EVA HELIX. Shell imperforated, pyramidally-conical, thin, somewhat transparent, obliquely striated, livid flesh-colour; whorls five, flatly convex, sharply keeled at the base; aperture ovately trapeziform; lip slightly thickened.

PFEIFFER, Pro. Zool. Soc. 1852.

*Hab.* Solomon's Island.

Of a peculiar livid flesh-tint, allied in form to the preceding species.

Fig. 978. (Mus. Cuming.)

The shell here figured proves to be the *H. acuminata* in finer condition than was represented at Pl. CXXIX. Sp. 785.

Species 979. (Mus. Cuming.)

HELIX JENYNSI. *Hel. testâ subumbilicatâ, turbiniformi, striatulâ, tenui, nitidâ, carinatâ, lacteâ, supra carinam unifasciatâ; spirâ brevi, conicâ, acutâ; anfractibus quinque ad sex, vix convexiusculis, ultimo basi convexiore; aperturâ angulato-lunari; peristomate simplici, acuto, margine columellari supernè reflexiusculo, umbilicum fere claudente.*

JENYNS' HELIX. Shell slightly umbilicated, turbiniform, finely striated, thin, shining, keeled, cream-colour, with a single brown band above the keel; spire short, conical, sharp; whorls five to six, scarcely convex, the last more convex at the base; aperture angular-lunar; lip simple, sharp, columellar margin a little reflected at the upper part, almost closing the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1845, p. 131.

*Hab.* Isle of Tanna, New Caledonia.

Of a delicate opal-white, encircled above the periphery by a conspicuous subtransparent brown band.





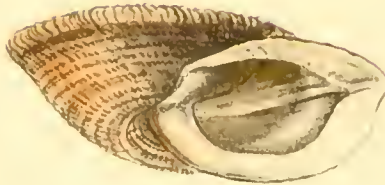
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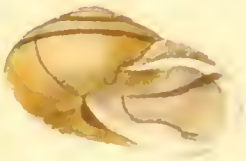
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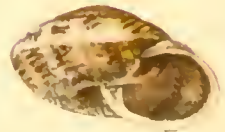
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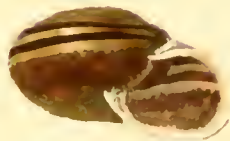
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954



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956

# HELIX.

PLATE CLI.

Species 980. (Mus. Cuming.)

**HELIX LEFEBVRIANA.** *Hel. testâ umbilicatâ, orbiculato-depressâ, planospirâ, tenerâ, pubescente, vix creo-cornâ, unifasciatâ; anfractibus quinque, planatis, ultimo nullo deflexo; aperturâ perobliquâ, rotundato-lunari; peristomate acuto, reflexo, albido-labiato, marginibus conniventibus, curvatis.*

**LEFEBVRI'S HELIX.** Shell umbilicated, orbicularly depressed, flat-spined, thin, hairy, ash-horny, one-banded; whorls five, flattened, last whorl deflected in front; aperture very oblique, rotundately lunar; lip sharp, reflected, white-edged, margins approximating, curved.

FERUSSAC, Hist. Moll. pl. 69. f. 6.

*Helix hirsuta*, Brumati.

*Hab.* Austria.

A subtransparent horny shell, granulately roughened about the upper part, smooth below.

Species 981. (Mus. Cuming.)

**HELIX SETIPILA.** *Hel. testâ umbilicatâ, orbiculato-depressâ, alutaceâ, opacâ, nigro-setulosâ, fusco-cornâ, in albidâ vittâ fusco-unifasciatâ, superius alterâ fuscâ pallidè fuscâ; anfractibus quatuor ad quinque, planatis, ultimo vix descendente; aperturâ rotundato-lunari; peristomate reflexo, albido-labiato, marginibus remotis.*

**THE BRISTLE-HAIRED HELIX.** Shell umbilicated, orbicularly depressed, tanned, opaque, black-bristled, brown-horny, brown-banded within a white fillet, one of the upper bands pale brown; whorls four to five, rather flattened, the last scarcely descending; aperture rotundately lunar; lip reflected, white-edged, margins distant.

ZIEGLER, Rossmâsler, Hist. Moll. vol. ii. p. 2. f. 89.

One of the chief characteristics of this species consists in the brown band being placed on a white fillet. The upper surface of the shell is more strongly bristled than in the preceding.

Species 982. (Mus. Cuming.)

**HELIX BANATICA.** *Hel. testâ apertè umbilicatâ, globoso-depressâ, minutissimè decussatâ, opacâ, olivaceo-fusculâ,*

*rufo-unifasciatâ. anfractibus quinque ad sex, planiusculis, ultimo non descendente, carinato, carinâ antice crasseovente; aperturâ obliquè latè lunari; peristomate acuto, albo-labiato, margine dextro expanso, columellari dilatato, reflexo.*

**THE BANAT HELIX.** Shell openly umbilicated, globosely depressed, very minutely decussated, opaque, olive-brown, encircled with a red band; whorls five to six, rather flat, the last not descending, keeled, keel fading away in front; aperture oblique, broadly lunar; lip sharp, white-edged, right margin expanded, columellar margin dilated and reflected.

PARTSCH, Mus. Cas. Vindob.: Rossmâsler, Hist. Moll. vol. vii. p. 14. f. 457.

*Hab.* Hungary.

A subtransparent species, encircled with a characteristic band at the keel.

Species 983. (Mus. Cuming.)

**HELIX GUALTIERIANA.** *Hel. testâ obtusè umbilicatâ, superiè planâ, sublus turgidâ, compresso-carinatâ, scabrâ, decussatim plicatâ, albidâ; anfractibus quatuor, exsertis, ultimo deflexo; aperturâ angulatâ, lunato-securiformi; peristomate simplici, reflexo, margine columellari appressè dilatato.*

**GUALTIER'S HELIX.** Shell with a covered umbilicus, flat at the upper part, swollen beneath, compressly keeled, rough, decussately plicated, whitish; whorls four, exserted, the last deflected; aperture angled, lunar-hatchet-shaped; lip simple, reflected, columellar margin appressly dilated.

LINNEUS, Syst. Nat. (12th edit.) p. 1243.

*Helix obversa*, Born.

*Hab.* Spain.

Well characterized by its depressed *Carocolla*-like growth and roughened surface.

Species 984. (Mus. Cuming.)

**HELIX HOFFMANNI.** *Hel. testâ subprofundè umbilicatâ, depresso-globosâ, tenerâ, hispida, lutescente, unifasciatè trifasciatâ; anfractibus quinque, concentricis, ultimo antiè vix deflexo; aperturâ perobliquâ, rotundato-orali; peristomate lato, reflexo, sublabiato, marginibus conniventibus, basali dilatato, calloso.*

April, 1853.



HOFFMANN'S HELIX. Shell rather deeply umbilicated, depressly globose, thin, hairy, yellowish, one- or obsoletely three-banded; whorls five, rather convex, the last much deflected in front; aperture very oblique, rotundately oval; lip broad, reflected, slightly edged, margins approximating, basal margin dilated, callous.

PARTSCH, Mus. Cres. Vindob.; Rossmäslcr, Hist. Moll. vol. iv. p. 4. f. 224.

Hab. Dalmatia.

A very delicate straw-coloured subtransparent shell, covered with fine hair.

Species 985. (Mus. Cuming).

HELIX TIGRINA. *Hel. testâ latè umbilicatâ, suborbiculatâ, supernè planiusculâ, sericinâ, subtiliter striatâ, subtus convexâ, fuscule albidoque variegatâ; anfractibus quinque, planiusculis, ultimo carinato, anticè subitò deflexo; aperturâ subcirculari; peristomate intus sublabiato, marginibus conniventibus, supero simplici, basali deflexo.*

THE TIGER-SPOTTED HELIX. Shell broadly umbilicated, suborbicular, rather flat at the upper part, silky, finely striated, convex beneath, variegated with brown and white; whorls five, rather flat, last whorl keeled, suddenly deflected in front; aperture nearly circular; lip slightly edged within, margins approximating, upper margin simple, basal reflected.

CRISTOFORI and JAN, Catal. Mant. p. 2; Rossmäslcr, Hist. Moll. vol. iv. p. 4. f. 226.

Hab. Lombardy.

Of a reddish flesh-tinge, freckled, or rather flaked, with white.

Species 986. (Mus. Cuming.)

HELIX HISPANA. *Hel. testâ apertè umbilicatâ, orbiculatè depressâ, nudâ, nitidâ, corneâ, in albidâ vittâ rufo-angustâ, superius fasciâ alterâ rufâ, dilutâ; anfractibus quinque ad sex, planulatis, ultimo anticè breviter deflexo; aperturâ rotundato-lunari; peristomate reflexo, albo-labiato, marginibus remotis.*

THE SPANISH HELIX. Shell openly umbilicated, orbicularly depressed, naked, shining, horny, encircled with a reddish band within a white tillet, with another reddish band above; whorls five to six, rather flat, the last shortly deflected in front; aperture rotundately lunar; lip reflected, white-edged, with the margins distant.

LINNEUS, Syst. Nat. (10th edit.) p. 772.

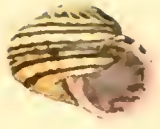
*Helix vittata*, Cristofori and Jan.

*Helix planospira*, Rossmäslcr.

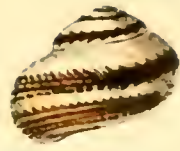
Hab. North Italy.

Of a dark burnt olive-red colour, with a flesh-white lip.

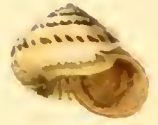




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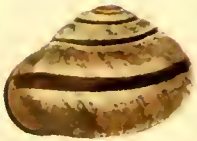
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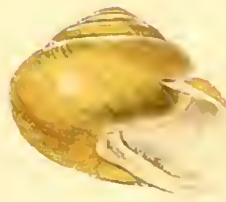
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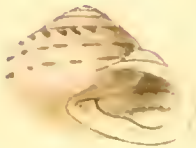
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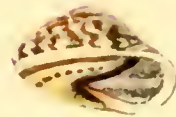
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# HELIX.

PLATE CLII.

Species 987. (Mus. Cuming).

**HELIX PISANA.** *Hel. testâ angustissimè umbilicatâ, subglobosâ, albido-lutescente, spiraliter subtilissimè lineatâ, diversissimè castaneo-fasciatâ et taniatâ; anfractibus quinque, convexis; aperturâ dilatato-lunari; peristomate recto, roseo-labiato, margine columellari reflexo.*

**THE PISA HELIX.** Shell very narrowly umbilicated, somewhat globose, whitish-yellow, spirally finely lineated, diversely chestnut-banded and filleted; whorls five, convex; aperture dilatedly lunar; lip straight, pink-edged, columellar margin reflected.

MULLER, Vermes, vol. ii. p. 60.

*Helix cingenda*, Montagu.

*Helix strigata*, Dillwyn.

*Helix zonaria*, Pennant.

*Helix rhodostoma*, Draparnaud.

*Helix petholata*, Olivier.

*Helix Alboranensis*, Webb and Berthelot.

*Helix sardoa* and *albina*, Ziegler.

*Hab.* Southern Europe and North Africa.

Banded according to various patterns with brown-black, and delicately tinged about the aperture with rose.

Species 988. (Mus. Cuming).

**HELIX VIRGATA.** *Hel. testâ angustè umbilicatâ, depresso-turbinatâ, lavigatâ, albidâ vel sordidè lutescente, fasciis fuscis, sæpè interruptis, multimodè ornatâ; spirâ subelevatâ, apice corned; anfractibus quinque ad sex, convexiusculis, ultimo anticè rix descendente; aperturâ lunato-rotundatâ; peristomate recto, acuto, intus fuscolabiato, marginibus convergentibus, columellari subdilatato.*

**THE STRIPED HELIX.** Shell narrowly umbilicated, depressly turbinated, smooth, whitish or dirty yellow, variously ornamented with brown bands, often interrupted; spire a little raised, horny at the apex; whorls five to six, slightly descending in front; aperture lunar-rounded; lip straight, sharp, edged with brown within, margins approximating, columellar margin dilated, open.

MONTAGU, Test. Brit. p. 415. pl. 24. f. 1.

*Helix variabilis*, Draparnaud.

*Helix striata*, Beard.

*Helix zonaria*, Donovan.

*Helix saballata*, Poiret.

*Helix obsolita*, *agreabilis*, and *maculosa*, Ziegler.

*Helix monilifera*, Meuke.

*Helix meridionalis*, Parreyss.

*Helix Terevri*, Michaud.

*Helix elegans*, Brown.

*Helix disjuncta*, Turton.

*Hab.* Southern Europe and the British Isles.

Somewhat indistinctly encircled with brown bands and lines upon a dirty white ground.

Species 989. (Fig. a to d, Mus. Cuming.)

**HELIX MEMORABILIS.** *Hel. testâ imperforatâ, subglobosa, striatâ, fasciatâ vel concolore; anfractibus quinque convexiusculis, ultimo anticè descendente; aperturâ dilatato-lunari; peristomate reflexo, labiato, roseo, dextro arcuato, columellari strictiusculo, dilatato, fuscoloso, foveâ et peristomate fuscis et nigricantibus.*

**THE GROVE HELIX.** Shell imperforated, subglobose, striated, banded, or of one uniform colour; whorls five, rather convex, the last descending in front; aperture broadly irregularly lunar, lip reflected, edged, right margin arched, columellar margin rather drawn out, dilated and callous, lip and interior of the aperture brown or blackish.

LINNAEUS, Syst. Nat. (12th edit.) p. 1247.

*Helix cincta* and *quadrifasciata*, Sheppard.

*Helix tarturana*, Stewart.

*Helix mutabilis*, Hartmann.

*Helix lucifuga*, Ziegler.

*Helix hirtensis*, Muller.

*Helix hybrida*, Poiret.

*Helix subglobosa*, Buxsey.

*Helix libellula*, Risso.

*Hab.* Northern and Central Europe, and the British Isles.

We have selected four varieties of this well-known species, but they fail adequately to represent its numerous phases and patterns of colouring.

Species 990. (Mus. Cuming.)

For description of this species, see Plate CLIII. Sp. 994.

## Species 991. (Mus. Cuming.)

HELIX SICANA. *Hel. testá imperforatá, conoideo-globosá, albá, rarius fusco-fusciatá, substriatá; anfractibus quinque ad sex, planiusculis, ultimo anticè deflexo; aperturá parvâ, perobliquâ, irregulariter rotundatolunatá; peristomate breviter reflexo, albo-labiato, marginibus approximatis, columellari gibbo.*

THE SICILIAN HELIX. Shell imperforated, conoid-globose, white, faintly brown-banded, substriated; whorls five to six, rather flat, the last deflected in front: aperture small, very oblique, irregularly rotundately lunar; lip shortly reflected, white-edged, margins approximating, columellar margin gibbous.

FERUSSAC, Hist. Moll. pl. 28 B. f. 7.

*Helix soluta*, Ziegler.

*Hab.* Sicily.

Distinguished chiefly by its un-umbilicated conically globose form.

## Species 992. (Mus. Cuming.)

HELIX SERPENTINA. *Hel. testá obtectè umbilicatá, globoso-depressá, glabriusculá, albá, seriatim fusco-maculatá et signatá; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè descendente, maculá umbilicali brunneá; aperturá latè lunari; peristomate patulo, albo-labiato.*

THE SERPENTINE HELIX. Shell with a covered umbilicus, globosely depressed, rather smooth, white, marked with rows of brown spots, whorls four to five, rather convex, the last descending in front, with a brown umbilical blotch; aperture broadly lunar; lip patulate, white-edged.

FERUSSAC, Hist. Moll. pl. 40. f. 7.

*Helix undulata*, Michaud.

*Helix Magnellii*, Cantraine.

*Hab.* Italy and Sardinia.

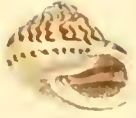
Of a depressed form, profusely blotched and banded, with a dark brown spot in the place of the umbilicus.







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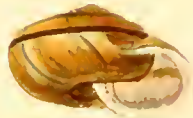
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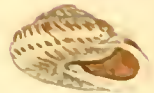
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# HELIX.

PLATE CLIII.

Species 993. (Mus. Cuming.)

**HELIX LAPICIDA.** *Hel. testā apertē umbilicatā, lenticulari, depressā, acutē carinatā, subtilissimē granulatā, lutescente-corneā, fusco-maculatā; anfractibus quinque, medio convexiusculis, ultimo anticē subitō deflexo; aperturā horizontali, transversē ovali; peristomate continuo, soluto, margine columellari reflexo, sublabiato.*

**THE STONE-HEWER HELIX.** Shell openly umbilicated, lenticularly depressed, sharply keeled, very finely granulated, yellowish-horny, brown-spotted; whorls five, rather convex in the middle, the last suddenly deflected in front; aperture horizontal, transversely oval; lip continuous, open, columellar margin reflected, slightly edged.

LINNÆUS, Syst. Nat. (12th edit.) p. 1241

*Helix affinis*, Linnæus.

*Helix acuta*, Da Costa.

*Carocolla lapicida*, Lamarek.

*Helix terebra*, Turton.

*Helix cochlea*, Brown.

*Hab.* Europe and the British Isles.

Widely distributed over the continent from Sweden to Switzerland.

Species 994. (Mus. Cuming.)

**HELIX MELITENSIS.** *Hel. testā imperforatā, depresso-globosā, glabrā, albidā, unicolore vel maculis pallidē fuscis subserialis nubeculatā; anfractibus quatuor, planiusculis, ultimo anticē deflexo; aperturā lunato-ellipticā, intus lividā; peristomate albo, reflexo, marginibus convexiusculis, dextro arcuato, basali stricto, calloso.*

**THE MALTA HELIX.** Shell imperforated, depressly globose, smooth, whitish, one-coloured, or subserially clouded with pale brown spots; whorls four, rather flat, the last deflected in front; aperture lunar-elliptic, livid within; lip white, reflected, margins approximating, right margin arched, basal drawn out, callous.

FERUSSAC, Hist. Moll. pl. 25. f. 11, 12.

*Hab.* Malta.

A delicate, though rather solid species, in which the spots are wave-clouded and have a semitransparent aspect.

Species 995. (Mus. Cuming.)

**HELIX NAXIANA.** *Hel. testā umbilicatā, depresso-globosā,*

*obliquē striatā, albidā, fasciis tribus fuscis angustis supernè cingulatā, interdum fusciorē; spirā subulatā anfractibus quinque, planiusculis, ultimo anticē deflexo strictiusculo; umbilico angusto, aperto; aperturā lunato-circulari; peristomate intus albo-labiato, marginibus approxinatis.*

**THE NAXIA HELIX.** Shell umbilicated, depressly globose, obliquely striated, whitish, encircled at the upper part with three narrow brown bands, sometimes browner; spire a little raised; whorls five, rather flat, the last deflected in front, slightly drawn out; umbilicus narrow, open; aperture lunar-circular; lip white-edged within, reflected, margins approximating.

FERUSSAC, Hist. Moll. pl. 69. f. 1.

*Hab.* Islands of Naxia and Candia, Grecian Archipelago

The specimen here figured is Dr. Pfeiffer's var.  $\beta$ , collected near Suda, in the Island of Candia, by Professor Edward Forbes.

Species 996. (Mus. Cuming.)

**HELIX HIRTA.** *Hel. testā umbilicatā, orbiculato-depressā, planospirā, tenerā, hirtā, cinereo-corneā, obsoletē unifasciatā; anfractibus quatuor ad quinque, planiusculis, ultimo vix descendente; aperturā irregulariter latilunari; peristomate reflexo, flexuoso, candido-labiato, margine columellari recto.*

**THE SHAGGY HELIX.** Shell umbilicated, orbicularly depressed, flat-spined, thin, shaggy, ash-horny, obsoletely one-banded; whorls four to five, rather flat, the last descending a little; aperture irregularly broadly lunar; lip reflected, flexuous, white-edged, columellar margin straight.

MENKE, Synopsis, p. 76; Rossmasler, Hist. Moll. vol. II p. 5. f. 95, and vol. X. p. 12. f. 599

*Hab.* Illyria and Croatia, Austria.

An olive-horny species, faintly one- or two-banded, with a somewhat Indian aspect.

Species 997. (Mus. Cuming.)

**HELIX PYRENAICA.** *Hel. testā angustē umbilicatā, orbiculato-depressā, supernè planiusculā, tenui, pellucidā, olivaceo-corneā; anfractibus quinque, subplanulatis, ultimo non descendente; aperturā lunari; peristomate acuto, reflexo, candido-labiato, margine columellari dilatato.*

April, 1853.

THE PYRENEAN HELIX. Shell narrowly umbilicated, orbicularly depressed, rather flat at the upper part, thin, pellucid, olive-horny; whorls five, rather flat, the last not descending; aperture lunar; lip sharp, reflected, white-edged, columellar margin dilated.

DRAPARNAUD, Hist. Moll. p. 111. pl. 13. f. 7.

*Hab.* Pyrenees.

Of a clear transparent olive texture, allied in form to the preceding species.

Species 998. (Mus. Cuming.)

HELIX FAUSTINA. *Hel. testâ umbilicatâ, orbiculato-convexâ, lævigatâ, nitidâ, supernè luteâ, rufo-unifasciatâ, subtus fuscescente; anfractibus quinque, vix convexiusculis, ultimo anticè non deflexo; aperturâ lunato-rotundatâ; peristomate albo-labiato, angulatim reflexo, marginibus subconvergentibus.*

THE FAVOURED HELIX. Shell umbilicated, orbicularly convex, smooth, shining, yellowish about the upper part, with a single red band, brownish about the lower; whorls five, but little convex, the last not deflected in front; aperture lunar-rounded; lip white-edged, angularly reflected, margins rather approximating.

ZIEGLER, Rossmäsler, Hist. Moll. vol. ii. p. 4. f. 93.

Varieties, *Helix sativa* and *associata*, Ziegler.

*Hab.* Central Europe.

Distinguished by a very characteristic dark red band.

Species 999. (Mus. Cuming.)

HELIX ZONATA. *Hel. testâ umbilicatâ, orbiculato-convexâ, olivaceâ, subpellucidâ, fusco-unifasciatâ; anfractibus quinque ad sex, convexiusculis, ultimo anticè descendente; aperturâ lunato-ovali; peristomate simplici, marginibus subconvergentibus, supero expanso, basali reflexo, columellari dilatato.*

THE ZONED HELIX. Shell umbilicated, orbicularly convex, olive, subtransparent, with a single brown band; whorls five to six, rather convex, the last descending in front; aperture lunar-oval; lip simple, margins rather approximating, upper margin expanded, basal reflected, columellar dilated.

STUDER, Naturwiss. Anzeiger, 1820. Férussac, Hist. Moll. pl. 68. f. 8.

*Zoniles planospirus*, Hartmann.

*Hab.* Piedmontese Alps.

Approximating in general character to the preceding species, but of a different form.

Species 1000. (Mus. Cuming.)

HELIX CARSEOLANA. *Hel. testâ obtectè umbilicatâ, orbiculato-depressâ, albidâ, maculatè quadrifasciatâ, subtili-*

*ter striatâ; anfractibus quatuor ad quinque, convexiusculis; aperturâ perobliquâ, ovali; peristomate apertè reflexo, plerumque fusculo, sublabiato, marginibus approximatis.*

THE CARSEOLI HELIX. Shell with a covered umbilicus, orbicularly depressed, whitish, encircled with four spot-bands finely striated; whorls four to five, rather convex; aperture very oblique, oval; lip openly reflected, generally brownish, slightly edged, margins approximating.

*Helix muralis, var.*, Cantraine.

*Hab.* Environs of Carseoli, Italy.

Allied to *H. Melitensis*, but more probably a variety of the species which follows.

Species 1001. (Mus. Cuming.)

HELIX MURALIS. *Hel. testâ obtectè umbilicatâ, subdepressâ, supernè valdè rugoso-costatâ, striatâ, albidâ, fusco-maculatâ; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè deflexo; aperturâ perobliquâ, transversè subovali, intus fuscâ; peristomate albo-labiato, aculo, marginibus vix convergentibus, dextro expanso, basali lævissimè arcuato, reflexo, appresso.*

THE WALL HELIX. Shell with a covered umbilicus, rather depressed, strongly wrinkle-striated, whitish, brown-spotted; whorls four to five, rather convex, the last deflected in front; aperture very oblique, transversely suboval, brown within; lip white-edged, sharp, margins rather approximating, right margin expanded, basal very smoothly arched, reflected, appressed.

MULLER, Vermees, vol. ii. p. 14.

*Helix rugulosa*, Risso.

*Hab.* Italy and Sicily.

This differs little from the preceding species except in being more depressed, and more strongly wrinkle-striated.

Species 1002. (Mus. Cuming.)

HELIX INCHOATA. *Hel. testâ orbiculato-convexâ, tenui, umbilicatâ, carneo-lutescente vel avellanaceâ, sæpius pellucidâ; spirâ praminulâ; anfractibus septem, subplanis, striatulis, infimo fasciato, subtus turgidulo; aperturâ subrotundâ, labro simplici, fragili.*

THE UNFINISHED HELIX. Shell orbicularly convex, thin, umbilicated, horny yellow or filbert-coloured, often transparent; spire prominent; whorls seven, rather flat, finely striated, the lowest banded, rather swollen beneath; aperture nearly round, lip simple, fragile.

MORELET, Moll. of Portugal, n. 70. pl. 70. f. 1.

*Hab.* Portugal.

A shell of simple globular form, of which the lip scarcely thickened.





1003



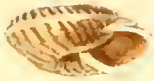
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# HELIX.

PLATE CLIV.

Species 1003. (Mus. Cuming.)

**HELIX LECTA.** *Hel. testā umbilicatā, globoso-depressā, tenui, obliquè confertim costato-plicatā, albā, fasciis angustis fuscis interdum cingulatā; anfractibus quinque, planiusculis, ultimo basi ventroso, anticè dextero; umbilico angusto, pereio; aperturā perobliquā, subcirculari; peristomate intus labiato, albo, undique breviter expanso, marginibus approximatis, callo junctis, columellari dilatato.*

**THE CHOICE HELIX.** Shell umbilicated, globosely depressed, thin, obliquely closely plicately ribbed, white, sometimes encircled with three narrow brown bands; whorls five, rather flat, the last ventricose at the base, deflected in front; umbilicus narrow, open; aperture very oblique, nearly circular; lip edged within, white, shortly expanded throughout, margins approximated, joined by a callosity, columellar margin dilated.

FERUSSAC, Hist. Moll. pl. 69. f. 2.

*Hab.* Island of Candia, Grecian Archipelago.

Beautifully sharply wrinkle-ribbed throughout.

Species 1004. (Mus. Cuming.)

**HELIX BARBULA.** *Hel. testā apertè umbilicatā, lenticulari, carinatā, corneā, arctispirā, confertim subtilissimè costulatā; anfractibus sex, planulatis, ultimo non descendente, anticè constricto; aperturā depressā, angustā, lunato-trisinuatā; peristomate flexuoso, basi replicato, albo-labiato, bidenticulato.*

**THE LITTLE BEARD HELIX.** Shell openly umbilicated, lenticular, keeled, horny, close-spired, closely very finely ribbed; whorls six, rather flat, the last not descending, constricted in front; aperture depressed, narrow, lunately trisinate; lip flexuous, folded back at the base, white-edged, two-toothed.

CHARPENTIER, Rossmäslar, Hist. Moll. vol. vii. p. 11. f. 451.

*Carocolla Guerini*, Anton.

*Hab.* Portugal.

A small light olive-brown species, more or less obscurely keeled.

Species 1005. (Mus. Cuming.)

**HELIX OCCIDENTALIS.** *Hel. testā angustè umbilicatā, globoso-depressā, ruguloso-striatā, epidermide viridè-flavā hispidā indutā, plerumque rufo-bizonatā; anfractibus*

*quatuor ad quinque, convexis, suturā profundā distinctis, ultimo dilatato, basi convexo; aperturā lunato-semiovali, intus lacteā; peristomate acuto, expansiusculo, intus calidè albo-labiato, margine columellari dilatato.*

**THE WESTERN HELIX.** Shell narrowly umbilicated, globosely depressed, roughly striated, covered with a slightly hairy greenish-yellow epidermis, generally two-zoned with red; whorls four to five, convex, distinct at the suture which is deep, last whorl dilated, convex at the base; aperture lunar, semi-oval, milk-white within; lip sharp, rather expanded, strongly white-edged within, columellar margin dilated.

RECLUS, Revue Zool. 1845, p. 311.

*Helix Porrentina*, Morelet.

*Helix Lisbonensis*, Pfeiffer.

*Hab.* Portugal.

A small subtransparent-greenish shell, faintly banded at the periphery.

Species 1006. (Mus. Cuming.)

**HELIX SCHMIDTII.** *Hel. testā umbilicatā, orbiculato-convexiusculā, solidā, fuscā, rugoso-striatā, straminea vel albido variegatā; anfractibus quinque ad sex, convexis, sensim accrescentibus, ultimo anticè vix dextero. umbilico mediocri, pereio; aperturā rotundato-lunari, fauce fuscā; peristomate albo-labiato, marginibus conniventibus, supè vix expanso, basali breviter reflexo, columellari vix dilatato.*

**SCHMIDT'S HELIX.** Shell umbilicated, orbicularly rather convex, solid, brown, wrinkle-striated, variegated with white or straw-colour; whorls five to six, convex, increasing slowly, last whorl a little deflected in front; umbilicus middling, open; aperture rotundately lunar, interior brown; lip white-edged, margins approximating, upper margin a little expanded basal shortly reflected, columellar a little dilated.

ZIEGLER, Rossmäslar, Hist. Moll. vol. iii. p. 5. f. 156.

*Helix colubrina, var.*, Deshayes.

*Hab.* Italy.

Of a subconoidal spiral form, red-brown, profusely mottled with ash-white.

Species 1007. (Mus. Cuming.)

**HELIX ALPINA.** *Hel. testā subapertè umbilicatā, rufi-*

April, 1853.



*culato-convexá, obsolete carinatá, luteolá, epidermide deciduá fasculo-variegatá, striatá, lineis spiralibus subtilissimis undulatis sculptá; anfractibus quinque, convexis; aperturá rotundato-lunari; peristomate simplici, albo-labiato, margine supéro recto, basali breviter, columellari latius reflexo.*

THE ALPINE HELIX. Shell rather largely umbilicated, orbicularly convex, obsolete keeled, yellowish, with a brown-variegated deciduous epidermis, striated, sculptured with very fine waved spiral lines; whorls five, convex; aperture rotundately lunar; lip simple, white-edged, upper margin straight, basal shortly, columellar widely, reflected.

FAURE-BIGNET, Férussac, Hist. Moll. pl. 67. f. 3.

*Helix strigata, var.*, Cantraine.

*Helix phalerata*, Ziegler.

Hab. French Alps.

Very similar in form and general character to the preceding species, and, possibly, a variety only.

Species 1008. (Mus. Cuming.)

HELIX FONTENILLI. *Hel. testá latè et profundè umbilicatá, orbiculato-depressá, pellucidá, albido corneoque marmoratá, longitudinaliter striatá; anfractibus sex, subplanis, ultimo carinato, vix descendente; aperturá subverticali, lunari; peristomate reflexiusculo, albo-labiato, margine columellari subdilatato.*

FONTENILLI'S HELIX. Shell broadly and deeply umbilicated, orbicularly depressed, pellucid, marbled horny and white, longitudinally striated; whorls six, rather flat, the last keeled, a little descending; aperture nearly vertical, lunar; lip a little reflected, white-edged, columellar margin somewhat dilated.

MICHAUD, Bull. Nat. Hist. Soc. Bordeaux, vol. iii. p. 267. f. 13 and 14.

*Helix strigata, var.*, Cantraine.

Hab. France.

It may be doubted whether this is not also a variety of the preceding species.

Fig. 1009. (Mus. Cuming.)

The shell here figured is *H. alpina, var. β*, named by Ziegler *H. phalerata*.

Species 1010. (Mus. Cuming.)

HELIX CORNEA. *Hel. testá umbilicatá, orbiculato-subdepressá, striatulá, supernè albido-corneá, dilutè uniconatá vel castaneá, sublus pallidè fuscá; unfractibus quinque, vix convexiusculis, ultimo anticè subitè deflexo; aperturá perobliquá, transversè ovato-rotundatá; peristomate labiato, angulatim reflexo, marginibus approximatis, basali strictiusculo, introrsum subdilatato.*

THE HORNY HELIX. Shell umbilicated, orbicularly subdepressed, finely striated, whitish-horny, dilutely one-

zoned, or chestnut, light brown beneath; whorls five, rather convex, the last suddenly deflected in front; aperture very oblique, transversely ovately rounded; lip edged, angularly reflected, margins approximating, basal rather drawn out, slightly dilated inwards.

DRAPARNAUD, Hist. Moll. p. 110. pl. 8. f. 1-3.

*Helix Desmoulinsii*, Férussac.

Hab. Germany, France, and North Italy.

In the specimen here figured, which is Dr. Pfeiffer's var. *β*, there is a sharp minute tooth on the expanded basal margin.

Species 1011. (Mus. Cuming.)

HELIX PELLITA. *Hel. testá umbilicatá, orbiculato-convexá, subdepressá, fulvidá, fasciá albá utrinque rufomarginatá ornatá, costulato-striatá, pilis erectis rigidis obsitá; anfractibus quinque, convexiusculis, ultimo anticè deflexo; aperturá subcirculari; peristomate acuto, intus albo-labiato, marginibus approximatis, callo tenui junctis.*

THE SKIN-CLOTHED HELIX. Shell umbilicated, orbicularly convex, rather depressed, fulvous, ornamented with a white, red-edged band, rib-like striated, covered with erect rigid hairs; whorls five, rather convex, the last deflected in front; aperture nearly circular; lip sharp, white-edged within, margins approximated, joined by a thin callosity.

FÉRUSSAC, Hist. Moll. pl. 69. f. 3.

Hab. Grecian Archipelago.

A light subtransparent shell, encircled with a broad white zone, red-banded on both sides, and covered over with a soft bristly epidermis.

Species 1012. (Mus. Cuming.)

HELIX PÆTENS. *Hel. testá latè umbilicatá, depressá, cornéá, albido-cinctá, fusco-subfasciatá et quasi variegatá, anfractibus quinque ad sex, planulatis, ultima anticè deflexo; aperturá perobliquá, subrotundatá; peristomate simplici, expanso, marginibus approximatis, exteriore deflexo.*

THE NAUSEOUS HELIX. Shell broadly umbilicated, depressed, horny, white-encircled, indistinctly brown-banded, and as though variegated; whorls five to six, rather flattened, the last deflected in front; aperture very oblique, somewhat rounded; lip simple, expanded, margins approximated, outer margin deflected.

STUDER, Rossmüsler, Hist. Moll. vol. ii. p. 4. f. 92.

*Helix euzona*, Menke.

*Helix achates*, Ziegler.

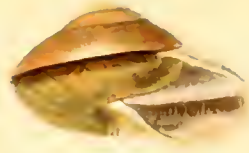
*Helix achutina*, Potiez and Michaud.

*Helix cingulina*, Deshayes.

Hab. Austria.

A rather solid, subobscurely banded species, partaking somewhat of the *Cyclastoma* form.

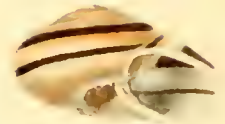




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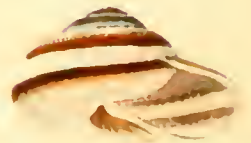
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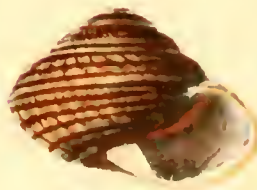
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# HELIX.

PLATE CLV.

Species 1013. (Mus. Cuming.)

**HELIX OWENII.** *Hel. testâ angustè et profundè umbilicatâ, subdepresso-orbiculari, supernè arcuatim corrugulâ et granulâ, aureo-fuscescente, infra lævigatâ, politâ et subtiliter malleatâ, virescente, infra peripheriam fusco-fusciatâ; anfractibus quatuor, ultimo carinato; aperturâ obliquè ovatâ; peristomate simplici, subincrassato, margine columellari breviter revoluta.*

**OWEN'S HELIX.** Shell narrowly and deeply umbilicated, somewhat depressly orbicular, arcuately wrinkled, granulated and golden-brown at the upper part, polished, finely indented and greenish at the lower, with a brown band beneath the periphery; whorls four, the last keeled; aperture obliquely ovate; lip simple, rather thickened, columellar margin shortly rolled back.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippine Islands.

A bright subtransparent shell, granulated and obliquely arch-wrinkled above, and smooth below.

Species 1014. (Mus. Dennison.)

**HELIX MADAGASCARIENSIS.** *Hel. testâ subampliter umbilicatâ, obliquè orbiculari, depressâ, tenuiter striatâ, subpellucido-albâ, castaneo bifasciatâ; spirâ brevi, obtusâ; anfractibus tribus ad quatuor, plano-convexis; aperturâ transversè ovali; peristomate breviter reflexo, marginibus fere junctis.*

**THE MADAGASCAR HELIX.** Shell rather largely umbilicated, obliquely orbicular, depressed, finely striated, subtransparent white, with two chestnut bands; spire short, obtuse; whorls three to four, flatly convex; aperture transversely oval; lip shortly reflected, margins almost joined.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. viii. p. 44.

*Hab.* Madagascar.

Closely resembling *H. sepulchralis*, but of thinner and more transparent substance.

Species 1015. (Mus. Cuming.)

**HELIX MAXIMA.** *Hel. testâ angustè subobtusè umbilicatâ, orbiculari-convexâ, supernè fuscescente, lineis fasciisque*

*flavidis prope peripheriam subirregulariter cingulata infra castaneâ; spirâ subdepressâ, suturâ versus aperturam impressâ; anfractibus sex, convexis, ultimo medio carinatâ; aperturâ obliquè ovatâ; peristomate simplici, incrassato.*

**THE VERY LARGE HELIX.** Shell narrowly and rather deeply umbilicated, orbicularly convex, brownish about the upper part, somewhat irregularly encircled near the periphery with yellowish bands and lines, chestnut beneath; spire rather depressed, suture impressed towards the aperture; whorls six, convex, the last keeled round the middle; aperture obliquely ovate; lip simple, thickened.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippines.

Very closely allied to *H. ovum*, from which species it differs in being of a rounder form, with the spire more depressed, and composed of a whorl more.

Species 1016. (Mus. Cuming.)

**HELIX LAIS.** *Hel. testâ imperforatâ, subglobosâ, tenuiculâ, virescente-albâ, fasciâ vicidè castaneâ ad peripheriam cingulatâ; spirâ subobtusâ; anfractibus quatuor, plano-convexis; aperturâ latè lunari; peristomate tenui, reflexo, margine columellari latè dilatato-appropresso, subincrassato, albo.*

**THE LAIS HELIX.** Shell imperforated, subglobose, rather thin, greenish-white, encircled at the periphery with a rich chestnut band; spire rather obtuse; whorls four, flatly convex; aperture broadly lunar; lip thin, reflected, columellar margin broadly dilately appressed, rather thickened, white.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippines.

Allied to *H. intorta*. An extremely chaste and delicate species, named in honour of a Sicilian courtesan.

Species 1017. (Mus. Cuming.)

**HELIX LUCTUOSA.** *Hel. testâ angustè umbilicatâ, brevè orbiculari, convexo-depressâ, obliquè densè impresso-striatâ, plus minus politâ, supernè livido-fuscescente, infra albâ, fasciis duabus albâ et castaneâ ad peripheriam cingulatâ, nec non vicidè castaneâ, anfractibus*

*quatuor, plano-convexis; aperturâ transversè lunari; peristomate simplici, subincrassato, margine columellari breviter revoluto.*

THE MOURNFUL HELIX. Shell narrowly umbilicated, obliquely orbicular, convexly depressed, obliquely thickly impressly striated, more or less polished, livid-brown at the upper part, white beneath, encircled with two bands, a white and a chestnut one, at the periphery, umbilical area chestnut; whorls four, flatly convex; aperture transversely lunar; lip simple, rather thickened, columellar margin shortly turned back.

BECK, MSS. (Mus. Cuming).

*Hab.* — ?

Of the same typical character as *H. citrina*, from which species it differs in the manner in which it is striated, in its more solid substance, and in its plan of colouring.

Species 1018. (Mus. Cuming.)

HELIX MAGISTER. *Hel. testâ imperforatâ, subpyramidaliglobosâ, obliquè striatâ, purpureo-castaneâ, epidermide tenui hydrophanâ subfasciatâ deciduâ indutâ; spirâ elatâ, obtusâ; anfractibus quinque, convexis; aperturâ lunari; peristomate reflexo, livido-castaneo, margine columellari latè dilatato-appresso, albo.*

THE MASTER HELIX. Shell imperforated, somewhat pyramidally globose, obliquely striated, purple-chestnut, covered with a thin sub-banded deciduous hydrophanous epidermis; spire raised, obtuse; whorls five, convex; aperture lunar; lip reflected, livid-chestnut, columellar margin broadly dilately appressed, white.

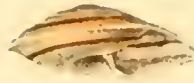
PFEIFFER, Zeitschrift für Malac. 1852.

*Hab.* Philippine Islands.

Very distinct in form from any species hitherto described from the Philippines.







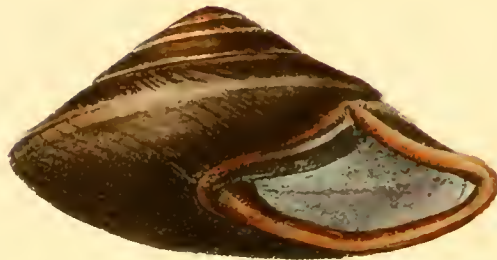
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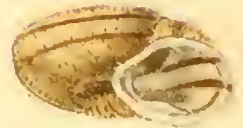
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# HELIX.

PLATE CLVI.

Species 1019. (Mus. Cuming.)

**HELIX CONOMPHALA.** *Hel. testâ subampliter perspectivè umbilicatâ, plano-orbiculari, lenticulari, tenui, acutissimè carinatâ, pellucido-fuscescente, fasciâ angustâ castaneâ supra et infra cingulatâ; anfractibus quatuor, planulatis; aperturâ securiformi; peristomate tenui, simplici.*

**THE CONE-UMBILICATED HELIX.** Shell rather largely perspectivevely umbilicated, flatly orbicular, lens-shaped, thin, very sharply keeled, light transparent-brownish, encircled above and below with a narrow chestnut band; whorls four, flattened; aperture hatchet-shaped; lip thin, simple.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippine Islands.

A thin subtransparent sharply keeled lens-shaped shell, encircled above and below with a characteristic narrow chestnut band.

Species 1020. (Mus. Dennison.)

**HELIX DENNISONI.** *Hel. testâ imperforatâ, globosâ, solidiusculâ, obliquè rugoso-striatâ, opaco-albâ, lineis fuscis et nigris obliquè conspicuè strigatâ; spirâ subobtusâ, suturâ impressâ; anfractibus quinque, subrotundatis; aperturâ ovato-lunari, parviusculâ; peristomate tenui, subreflexo, margine columellari peculiariter latè strictiusculo et dilatato-appresso, fauce intensè castaneâ.*

**DENNISON'S HELIX.** Shell imperforated, globose, rather solid, obliquely roughly striated, opake-white, conspicuously obliquely streaked with black and brown lines; spire rather obtuse, with the suture impressed; whorls five, somewhat rounded; aperture ovately lunar, rather small; lip thin, a little reflected, columellar margin peculiarly drawn out and dilately appressed, interior deep chestnut.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Cuba.

A very striking species, owing mainly to its peculiarity of painting.

Species 1021. (Mus. Cuming.)

**HELIX CERES.** *Hel. testâ subobtectè umbilicatâ, subglo-*

*bosâ, solidâ, lævigatâ, flavescente, rufescente parvè fasciatâ; spirâ obtusè convexâ; anfractibus sex, subangustis, ultimo obtusè carinatâ; aperturâ rotundit-lunari; peristomate reflexo, subexpansa, callosa, virid purpurascens-carneo.*

**THE CERES HELIX.** Shell with a nearly covered umbilicus, subglobose, solid, smooth, yellowish, encircled with faint reddish bands; spire obtusely convex; whorls six, rather narrow, the last obtusely keeled; aperture rotundately lunar; lip reflected, somewhat expanded, callous, bright purplish-flesh.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippine Islands.

A solid obtusely globose species, partaking somewhat of the well-known Jamaica type.

Species 1022. (Mus. Cuming.)

**HELIX EXCELLENS.** *Hel. testâ obtectè umbilicatâ, depresso-pyramidalî, crassiusculâ, obliquè tenuissime striatâ, intensè funco-castaneâ; anfractibus sex, concavo-planatis, ultimo carinato, basi convexo-planis; aperturâ transversè oblongâ, subhorizontali; peristomate incrassato, marginibus lirâ callosâ junctis, supra umbilicum latè appressâ.*

**THE EXCELLENT HELIX.** Shell with a covered umbilicus, depressly pyramidal, rather thick, obliquely very finely striated, very dark smoky-chestnut; whorls six, concavely flattened, last whorl keeled, convexly flat at the base; aperture transversely oblong, nearly horizontal; lip thickened, margins joined by a callous ridge which is broadly appressed over the umbilicus.

PFEIFFER, Zeitschrift für Malac. 1852.

*Hab.* St. Domingo, Sallé.

This is little distinguished from the old Linnean *Helix carocolla*, except in being more depressly sunk and spread into a flattened pyramid.

Species 1023. (Mus. Cuming.)

**HELIX DENDATA.** *Hel. testâ convexâ, turbato-depressâ, molli, lutescente, fasciâ trifasciatâ; anfractibus quinque ad sex, convexiusculis, ultimo anticè subitè reflexo; aperturâ parvâ, rotundâ; peristomate continuo, soluto, reflexo, marginibus medio latè appresso-oblongo-dentato.*

May, 1853.

THE DENTED HELIX. Shell umbilicated, turbinately depressed, nude, yellowish, three-banded with brown; whorls five to six, rather convex, the last suddenly deflected in front; aperture very oblique, rounded; lip continuous, unrolled, reflected, basal margin broadly appressed, oblong-toothed.

ROSSMASLER, Hist. Moll. vol. iv. p. 3. f. 223.

*Hab.* Dalmatia.

Of a subtransparent yellowish sea-green hue, encircled with three rather faint brown bands.

Species 1024. (Mus. Cuming.)

HELIX SETOSA. *Hel. testâ subampliter umbilicatâ, orbiculato-depressâ, setosâ, tenerâ, striatâ, lutescente-corneâ, pallidè trifasciatâ; anfractibus quinque ad sex, convexiusculis, ultimo anticè deflexo; aperturâ perobliquâ, rotundatâ; peristomate continuo, soluto, lato, reflexo, sublabiato, margine basali oblongo-dentato.*

THE BRISTLY HELIX. Shell rather largely umbilicated, orbicularly depressed, bristly, thin, striated, yellowish horny, faintly three-banded; whorls five to six, rather convex, the last suddenly deflected; aperture very oblique, rounded; lip continuous, unrolled, broad, reflected, slightly edged, basal margin oblong-toothed.

ZIEGLER, Rossmäsler, Hist. Moll. vol. iv. f. 3. p. 222.

*Hab.* Dalmatia.

Of a more depressed and broadly orbicular form than the preceding species, covered with an epidermis of bristly hairs.

Species 1025. (Mus. Cuming.)

HELIX CIRCE. *Hel. testû imperforatâ, subglobosâ, spaldiceo-fuscescente, versus apicem lividâ, epidermide hydrophanâ opaco-albâ eleganter trifasciatâ; spirû obtusû; anfractibus quatuor, convexis, ultimo ad aperturam expanso; aperturâ lunato-circulari; peristomate incrassato, latè reflexo, ad columellam latè appresso et calloso.*

THE CIRCE HELIX. Shell imperforated, subglobose, light fawn-brown, livid towards the apex, elegantly three-banded with opaque-white hydrophanous epidermis, spire obtuse; whorls four, convex, last whorl expanded at the aperture; aperture lunar-circular; lip thickened, broadly reflected, broadly appressed and callous at the columella.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Philippine Islands.

This fine species, lately received by Mr. Cuming from the Philippines, partakes chiefly of the characters of *H. pulcherrima*.





1026



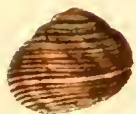
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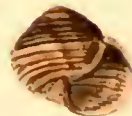
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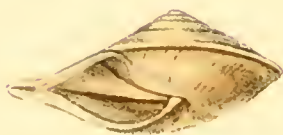
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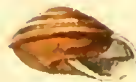
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# HELIX.

PLATE CLVII

Species 1026. (Mus. Cuming.)

**HELIX CLERYI.** *Hel. testâ vix umbilicatâ, pyramidaliconicâ, tenui, subpellucidâ, obliquè densè fortiter striatâ, albidâ, fasciâ angustâ rufo-fuscescente supra peripheriam cingulatâ; spirâ elevatâ, acutâ; anfractibus sex, convexo-planis, ultimo acutè carinato, basi convexo, nilente; aperturâ ovato-securiformi; peristomate tenui, simplici, ad columellam breviter revoluta.*

**CLERY'S HELIX.** Shell scarcely umbilicated, pyramidally conical, thin, somewhat transparent, obliquely strongly densely striated, whitish, encircled above the periphery with a narrow reddish-brown band; spire raised, sharp; whorls six, convexly flattened, the last sharply keeled, convex at the base, shining; aperture ovately hatchet-shaped; lip thin, simple, shortly rolled back at the columella.

RECLUZ, *Revue Zoologique.*

*Hab.* Solomon's Island.

A densely striated pyramidal subtransparent shell, encircled with a light reddish-brown band immediately above the periphery.

Species 1027. (Mus. Cuming.)

**HELIX SHANGHAIENSIS.** *Hel. testâ subampliter umbilicatâ, pyramidaliconicâ, tenui, cornuâ, obliquè peculiariter undulato-striatâ, striâ ad basin interruptâ et corrugatis; anfractibus septem, planulatis, ultimo expanso et carinato; aperturâ circulari; peristomate simplici, vix reflexo, ad columellam dilatato.*

**THE SHANGHAI HELIX.** Shell rather largely umbilicated, pyramidally conical, thin, horny, obliquely peculiarly wave-striated, the striæ being at the base interrupted and wrinkled; whorls seven, flattened, the last expanded and keeled; aperture circular; lip simple, slightly reflected, dilated at the columella.

PFEIFFER, *Pro. Zool. Soc.* 1853.

*Hab.* Shanghai, China; Fortune.

A horny pyramidal species, distinguished by a wrinkled peculiarity in its mode of striation.

Species 1028. (Mus. Cuming.)

**HELIX VERONICA.** *Hel. testâ latè apertè umbilicatâ, plano-discoidèâ, arcuatim striatâ, flavescens-cornuâ, pellucidâ, nilente; spirâ convexo-planâ; anfractibus*

*quatuor, ultimo sublecto, aperturâ obliquè ovato-securiformi, acutè tenui, simplici.*

**THE VERONICA HELIX.** Shell broadly conical umbilicated, flatly discoid, arcuately striated, glossy with horny, transparent, shining, more convexly flattened whorls four, the last rather strongly convexly aperture obliquely linear; lip thin, simple.

PFEIFFER, *Pro. Zool. Soc.* 1853.

*Hab.* Solomon's Island.

A bright yellow-shedive horny shell, converted in a discoid Nautiloid mass.

Species 1029. (Mus. Cuming.)

**HELIX FUCATA.** *Hel. testâ imperforatâ, globuliconicâ, obliquè levè striatâ, striâ spirâ basin supra peripheriam sinuè decussatâ, a spirâ impressâ nigro-punctatâ, postea duabus nigris fasciâ peripheriâ fuscâ, aperturâ apice rufescente, creâ circumscissâ elliptico-ovata, anfractibus quinque, planulatis, ultimo dilatato, carinato; peristomate terribili, reflexo, vix ad columellam percurrente.*

**THE STAINED HELIX.** Shell imperforated, globulically conical, obliquely thinly striated, very finely decorated with impressed spiral striæ, whitish, spirally black-dotted, encircled with two black lines and a broad brownish band, apex reddish, columellar opening black; whorls five, flattened, apertures obliquely ovate, lip rather thin, reflected, peristomial towards the columella.

PFEIFFER, *Pro. Zool. Soc.* 1853.

*Hab.* Wide Bay, east coast of Australia; Strong.

A prettily painted porcelain-like shell.

Species 1030. (Mus. Cuming.)

**HELIX MACANDREWIANA.** *Hel. testâ elliptico-conicâ, vix umbilicatâ, tenui, subpellucidâ, arcuatim striatâ, rufescente-cornuâ, subpellucidâ, nilente; spirâ convexo-planâ, ultimo dilatato, carinato; aperturâ ovato-securiformi, acutè tenui, simplici; peristomate simplici, ad columellam dilatato.*

**MAC ANDREW'S HELIX.** Shell with a covered umbilical notch, thin, solid, slightly very finely wave-striated.

May, 1853.



ated beneath the lens, pinkish-white, very closely profusely encircled with fine black lines, apex and columella deep rose; spire obtuse, apex nude; whorls four, rapidly increasing, rather convex; aperture somewhat squarely lunar; lip simple, thinly rolled back at the columella.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Great Salvages Island, Madeira.

The characters of this species, as may be seen by the description and figures, are peculiarly distinct from any hitherto discovered.

Species 1031. (Mus. Hamilton.)

HELIX NASUTA. *Hel. testā angustissimè umbilicatā, sinistrali, depresso-orbiculari, ad peripheriam acutissimè carinatā, aureo-stramineā, corneā, valdè pellucidā, ad carinam saturatiore, arcuatim striatā, striis ad suturam subplicatis, striis spiralibus impressis sub lente subtilissimè densè decussatā; spirā convexo-obtusā; anfractibus quinque, planulatis, ultimo ad aperturam peculiariter productā et siphonatā; aperturā angustè securiformi; peristomate subreflexo.*

THE NOSED HELIX. Shell very narrowly umbilicated, sinistral, depressly orbicular, very narrowly keeled, golden-straw colour, horny, very transparent, darker at the keel, arcuately striated, striae slightly plicate at the suture, very closely densely decussated beneath the lens with impressed spiral striae; spire convexly obtuse; whorls five, flattened, the last peculiarly produced and siphoned; aperture narrowly hatchet-shaped; lip slightly reflected.

METCALFE, Pro. Zool. Soc. 1852.

*Hab.* Sarawak, Borneo; Rajah Brooke.

An extremely transparent horny shell, of a pure golden-straw colour without pattern or marking, having the keel produced into a curious siphon at the aperture.

Species 1032. (Mus. Cuming.)

HELIX ARMIDA. *Hel. testū angustè umbilicatā, orbiculari-depressā, arcuatim striatū, sordidè fuscéscente, nitente, ad suturam peculiariter carinatū; spirā obtusè convexā; anfractibus sex, angustis, lentè accrescentibus, supra carinam planulatis, infra convexis; aperturā transversè lunari; peristomate simplici.*

THE ARMIDA HELIX. Shell narrowly umbilicated, orbicularly depressed, arcuately striated, dull light brown, shining, peculiarly keeled at the suture; spire obtusely convex; whorls six, narrow, increasing slowly,

flattened above the keel, convex below it; aperture transversely lunar; lip simple.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Mount Isarof, Island of Luzon, Philippines (on bushes).

Characterized by a peculiar cord-like keel at the periphery, which is seen throughout the spire in the place of the suture.

Species 1033. (Mus. Cuming.)

HELIX FRICATA. *Hel. testā umbilicatā, depresso-orbiculari, subdiscoideā, arcuatim plicata-striatā, corneā, lineis duabus rufis remotè cingulatā; spirā obtusè depressā; anfractibus quatuor ad quinque, plano-declivibus; aperturā transversè ovato-lunari; peristomate tenui, simplici.*

THE RUBBED HELIX. Shell umbilicated, depressly orbicular, somewhat discoid, arcuately plicately striated, horny, distantly encircled with two red lines; spire obtusely depressed; whorls four to five, flatly slanting; aperture transversely ovately lunar; lip thin, simple.

GOULD, Expedition Shells, 1851, p. 32.

*Hab.* Australia.

Of the two characteristic red lines which encircle this species, one is at the periphery, and the other at the suture.

Species 1034. (Mus. Cuming.)

HELIX BRIDWILLI. *Hel. testā imperforatā, pyramidaliconicā, lævigatā, albā, ustulato-fusco lineari-maculatā, basi saturatiore maculatā, peristomate et pariete internā intensè nigro-fuscis; spirā elevatā; anfractibus sex, planulatis, ultimo acutè angulato, basi planato; aperturā ovatā, horizontali; peristomate tenuè reflexo, marginibus laminā callosā junctis, margine basali appressā.*

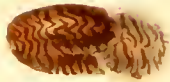
BRIDWILL'S HELIX. Shell imperforated, pyramidally conical, smooth, white, linearly spotted with burnt-brown, darker-spotted at the base, lip and internal wall very dark black-brown; spire raised; whorls six, flattened, last whorl sharply angled, flat at the base; aperture ovate, horizontal; lip thinly reflected, margins joined by a callous lamina, basal margin appressed.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Wide Bay, Australia (on the bark of trees); King.

A rather solid species, peculiarly blotched and lined with light burnt-brown.





# HELIX.

PLATE CLVIII.

Species 1035. (Mus. Cuming.)

**HELIX CEROIDES.** *Hel. testā subampliter umbilicatā, globosā, subdiscoidē, cornēā, obliquē striatā; anfractibus quatuor, convexis, ultimo tumidiusculo; aperturā lunato-circulari; peristomate simplici, ad columellam tenuiter reflexo.*

**THE WAX-LIKE HELIX.** Shell rather largely umbilicated, globose, subdiscoid, horny, obliquely striated; whorls four, convex, the last rather swollen; aperture lunar-circular; lip simple, thinly reflected at the columella.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Juan Fernandez (under stones).

A small horny species, largely and deeply umbilicated.

Species 1036. (Mus. Cuming.)

**HELIX PULCHELLA.** *Hel. testā umbilicatā, subdepressā, albidā, nitidā, glabrā; anfractibus tribus ad quatuor, convexis, ultimo anticē dilatato, non deflexo; aperturā obliquā, subcirculari; peristomate latē reflexo, sublabilato, marginibus fere junctis.*

**THE PRETTY HELIX.** Shell umbilicated, rather depressed, whitish, shining, smooth; whorls three to four, convex, last whorl dilated in front, not deflected; aperture oblique, nearly circular; lip broadly reflected, slightly edged, margins almost joined.

MULLER, Hist. Verm. vol. ii. p. 30.

*Helix paludosa*, Walker.

*Helix minuta*, Say.

*Helix crystallina*, Dillwyn.

*Hab.* Europe, North America, and the Madeiras.

A minute crystalline white shell, with a rounded broadly reflected aperture.

Fig. 1037. (Mus. Cuming.)

This appears, on further examination, to be only a more largely umbilicated variety of the preceding species.

Species 1038. (Mus. Cuming.)

**HELIX RAPIDA.** *Hel. testā ampliter apertē umbilicatā, planospiratā, subdiscoidē, cornēā, pellucidā, rufo-castaneo vicidē profusē undulatā, strigis juxta suturam perpaucis, grandibus, striis spiralibus et obliquis undique*

*subtilissimē decussatā; anfractibus tribus ad quatuor, convexis; aperturā lunato-circulari; peristomate simplici.*

**THE RAPID HELIX.** Shell largely openly umbilicated, flat-spined, subdiscoid, horny, transparent, brightly profusely waved with reddish-chestnut, streaks next the suture few and large, very finely decussated throughout with spiral and oblique striae; whorls three to four, convex; aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* New Zealand.

A gracefully convoluted, vividly marked, horny shell, of subdiscoid growth, and concavely flattened spire.

Species 1039. (Mus. Cuming.)

**HELIX HUAEHINENSIS.** *Hel. testā latissimē apertē umbilicatā, convexo-planā, arcuatim tenuistriatā, fuscescenti-albidā, subcornēā, maculis sordidē rufis tessellatā; anfractibus quinque ad sex, angustis, ultimo acutē carinato; aperturā parvā, lunato-circulari; peristomate simplici, lirā angustā in pariete internā.*

**THE HUAEHINE HELIX.** Shell very broadly openly umbilicated, convexly flattened, arcuately finely striated, brownish-white, rather horny, tessellated with dull reddish spots; whorls five to six, narrow, the last sharply keeled; aperture small, lunar-circular; lip simple, with a narrow ridge on the internal wall.

PFEIFFER, Pro. Zool. Soc. 1853.

*Hab.* Society Islands (under decayed leaves).

Of the same peculiar type as *H. ridicki*, and other species from the Pacific Isles.

Species 1040. (Mus. Cuming.)

**HELIX GUTTULA.** *Hel. testā rix umbilicatā, globoso-turbinatā, cornēā, pellucidā, nitente; spirā obtusē convexā anfractibus quatuor, convexa, ad suturam tenuiusculis aperturā transversē lunari; peristomate simplici.*

**THE LITTLE DROP HELIX.** Shell scarcely umbilicated, globose-turbinated, horny, transparent, shining, spire obtusely convex, whorls four, convex, finely grooved at the suture; aperture transversely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1853.

May, 1853.

*Hab.* New Zealand.

A small, dull brown, shining, glassy-looking shell.

Fig. 1041. (Mus. Cuming.)

The shell here figured proves to be a large unspotted variety of *H. microdonta*, represented at Pl. CXX. Sp. 705.

Species 1042. (Mus. Cuming.)

HELIX NITIDA. *Hel. testā apertè umbilicatā, globoso-depressā, striatā, corneā, pellucidū, nitente; anfractibus quinque, convexiusculis, ultimo tereti, circa umbilicem excavato; aperturā lunato-circulari; peristomate tenui, acuto, margine basali, arcuato.*

THE SHINING HELIX. Shell openly umbilicated, globosely depressed, striated, horny, transparent, shining; whorls five, rather convex, the last terete, excavated around the umbilicus; aperture lunar-circular; lip thin, sharp, basal margin arched.

MULLER, Hist. Nat. Verm. vol. ii. p. 32.

*Helix lucida*, Draparnaud.

*Zonites lucidus*, Gray.

*Hab.* Europe and the British Isles.

A small subdepressed horny species, rather excavated about the umbilicus.

Species 1043. (Mus. Cuming.)

HELIX TRIARIA. *Hel. testā perspectivè umbilicatā, parvā, depressā, corneā, eleganter costulatā; spirā convexā, oblusiusculā; anfractibus sex, convexiusculis, lentè uc-*

*crescentibus, ultimo supernè angulato, subtus attenuato; aperturā perobliquā, sinuosā; peristomate reflexo, labiato, margine exteriorè expanso, intus unidentat.*

THE RESERVE HELIX. Shell perspectivevely umbilicated, small, depressed, horny, elegantly fine-ribbed; spire convex, rather obtuse; whorls six, rather convex, slowly increasing, the last angled at the upper part, attenuated beneath; aperture very oblique, sinuous; lip reflected, edged, outer margin expanded, one-toothed within.

FRIVALDSKY, Rossmäsler, vol. x. p. 13. f. 611

*Hab.* Banat, Hungary.

The riblets of this species are thin and distant, and have the appearance of being merely epidermal.

Species 1044. (Mus. Cuming.)

HELIX EXCAVATA. *Hel. testā latè apertè umbilicatā, depressā, tenui, striatā, pellucido-corneā, nitente. spirā parum elevatā; anfractibus quinque, convexiusculis, lentè accrescentibus, ultimo non descendente; aperturā obliquā, subcirculari; peristomate tenui, simplici.*

THE EXCAVATED HELIX. Shell broadly openly umbilicated, depressed, thin, striated, transparent horny, shining; spire but little raised; whorls five, rather convex, increasing slowly, the last not descending; aperture oblique, nearly circular; lip thin, simple.

BEAN, Alder. Mag. Zool. and Bot. vol. ii. p. 107.

*Zonites excavatus*, Gray.

*Hab.* British Isles.

Closely allied to *H. lucida*, but more broadly and largely umbilicated.







1045



1046



1047



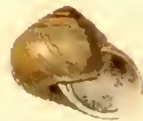
1048



1049



1050



1051



1052. a



1052 b



1053

# HELIX.

PLATE CLIX.

Species 1045. (Mus. Cuming.)

**HELIX NAUTILIFORMIS.** *Hel. testâ umbilicatâ, depressâ, suborbiculatâ, arelè obcolutâ, corneâ, hispidâ; spirâ immersâ; anfractibus quinque, supernè vix conspicuis, ultimo magno, reliquos involvente; umbilico perspectiveo; aperturâ subverticali, angustè lunari; peristomate rubello-fusco, reflexo, margine dextro supernè dilatato.*

**THE NAUTILUS-SHAPED HELIX.** Shell umbilicated, depressed, nearly orbicular, very obvolute, horny, hairy; spire immersed; whorls five, but little conspicuous at the upper part, the last large, involving the rest; umbilicus perspective; aperture nearly vertical, narrowly lunar; lip reddish-brown, reflected, right margin arcuately dilated at the upper part.

*Drepanostoma Nautiliforme*, Porro, Malae. p. 23. pl. 1. f. 3.  
*Helix Nautiliformis*, Cantraine.

*Hab.* Lombardy.

A small discoid horny shell, with the spire completely immersed, as in *Nautilus*.

Species 1046. (Mus. Cuming.)

**HELIX DIODONTA.** *Hel. testâ latè umbilicatâ, discoideâ, minutim granulato-striatâ, corneo-fuscâ; anfractibus quatuor ad quinque, convexiusculis, ultimo vix subcarinato, anticè deflexo, ad aperturam constricto, supernè impresso; aperturâ subhorizontali, panduraformi; peristomate acuto, reflexo, rubicundo, dentibus oppositis in margine supero et infero munito.*

**THE OPPOSITE-TOOTHED HELIX.** Shell umbilicated, discoid, minutely granulated striated, horny-brown; whorls four to five, scarcely convex, the last slightly keeled, deflected in front, constricted at the aperture, impressed at the upper part; aperture nearly horizontal, pan-pipe-shaped; lip sharp, reflected, ruddy, furnished with two opposite teeth, one on the upper, the other on the lower margin.

*Muhlfeldt*, Mus. Cæs. Vind. Férussac, Hist. Moll. pl. 51 A. f. 1.

*Hab.* Banat, Hungary.

A rather flat perspective umbilicated shell, with the aperture very horizontal and peculiar, contracted in the middle by two opposite teeth.

Species 1047. (Mus. Cuming.)

**HELIX ANGIGYRA.** *Hel. testâ apertè umbilicatâ, discoideâ, supernè concavâ, subtilis planâ, pallidè corneâ, supernè*

*minutissimè punctulatâ et striolatâ; anfractibus sex, convexis, ultimo compresso, anticè gibbo, subitè deflexo; aperturâ perobliquâ, subtriangulato-lunari; peristomate reflexo, albido-labiato.*

**THE NARROW-WHORLED HELIX.** Shell openly umbilicated, discoid, concave at the upper part, flat underneath, pale horny, minutely punctured and striated about the upper part; whorls six, convex, the last compressed, gibbous in front, suddenly deflected, aperture very oblique, subtriangularly lunar; lip reflected, white-edged.

*Ziegler*, Rossmäster, Hist. Moll. vol. i. p. 70. f. 21\*.

*Hab.* North Italy and Switzerland.

A shell of *Planorbis*-like growth, all the whorls being convoluted on a plane, and more or less immersed in the last whorl.

Species 1048. (Mus. Cuming.)

**HELIX CORCYRENSIS.** *Hel. testâ apertè umbilicatâ, orbiculato-depressâ, arelispirâ, supra costulato-striatâ, corneâ, hispidâ; anfractibus septem, convexiusculis, ultimo supernè obtusè angulato, subtilis concavè, anticè gibbo, deflexo; aperturâ parum obliquâ, angustâ, lunari; peristomate flexuoso, albo-labiato, reflexo.*

**THE CORFU HELIX.** Shell openly umbilicated, orbicularly depressed, close-spined, rib-like striated above, horny, hairy; whorls seven, rather convex, the last obtusely angled at the upper part, convex underneath, gibbous in front, deflected; aperture a little oblique, narrow, lunar; lip flexuous, white-edged reflected.

*Partsch*, Mus. Cæs. Vind. Férussac, Hist. Moll. (Deshayes' edit.) p. 21. pl. 69 E. f. 1-5.

*Helix contorta*, Ziegler (not of Férussac).

*Hab.* Corfu.

Allied to the preceding species, but closer and more swollen.

Species 1049. (Mus. Cuming.)

**HELIX OBVOLUTA.** *Hel. testâ apertè umbilicatâ, orbiculatâ, utrinque planâ, bruniâ, hispidâ, punctulato-striatâ, utroque medio concavâ; anfractibus sex, angustis, convexiusculis, penultimo proxiimo, ultimo compresso, anticè vix descendente, serbicolato; aperturâ obtusè triangulari, peristomate reflexo, intus hincino, margine dextro et basali obtusè unilobato.*

May, 1853.

THE OBVOLUTE HELIX. Shell openly umbilicated, orbicular, flat on both sides, brown, opaque, hairy; spire concave in the middle; whorls six, narrow, rather convex, the penultimate whorl little prominent, last whorl compressed, slightly descending in front, furrowed; aperture obtusely triangular; lip reflected, lilac-tinged within, right and basal margins obtusely one-toothed.

MULLER, Hist. Verm. vol. ii. p. 27.

*Helix trigonophora*, Lamarck.

*Helix bilabiata*, Lamarck.

*Helix holosericea*, Gmelin.

Hab. Northern and Central Europe.

The original type, of which the two preceding and following species are also forms.

Species 1050. (Mus. Cuming.)

HELIX HOLOSERICA. *Hel. testá apertè umbilicatá, orbiculatá, depressá, subtus convexá, corneá, tenui, holosericá; anfractibus quatuor ad quinque, planulatis, ultimo anticè constricto, scrobiculato; aperturá trisinuatá; peristomate lato, angulatim reflexo, labiato, validè bilentato.*

THE VELVET HELIX. Shell openly umbilicated, orbicular, depressed, convex underneath, horny, thin, silky; whorls four to five, rather flat, the last constricted in front, furrowed; aperture trisinuous; lip broad, angularly reflected, edged, strongly two-toothed.

STUDER, Verz. p. 16. Ferrussac, Hist. Moll. pl. 51. f. 5.

Hab. Central and Southern Europe.

The teeth are more strongly developed in this than in the preceding species of the same type.

Species 1051. (Mus. Cuming.)

HELIX INCARNATA. *Hel. testá umbilicatá, depresso-globosá, leviter carinatá, tenui, opacá, rufescente, pellucidè unifasciatá, minutissimè granulatá; anfractibus sex, convexiusculis, ultimo anticè deflexo; aperturá lunari; peristomate acuto, subreflexo, extus rufescente, intus labio incarnato.*

THE FLESH-TINGED HELIX. Shell umbilicated, depressly globose, faintly keeled, thin, opaque, reddish, transparently one-banded, very minutely granulated; whorls six, rather convex, the last deflected in front; aperture lunar; lip sharp, slightly reflected, reddish without, flesh-tinged along the edge within.

MULLER, Hist. Verm. vol. ii. p. 63.

*Helix sericea*, Müller.

*Helix sylvestris*, Hartmann.

*Helix tecta*, Ziegler.

Hab. Germany, France, etc.

Rather globosely inflated, dark-tinged next the suture.

Species 1052. (Mus. Cuming.)

HELIX RANGIANA. *Hel. testá apertè umbilicatá, lentuculari, acutè carinatá, corneá, confertim radiato-striatá; anfractibus sex ad septem, convexiusculis; aperturá depressè lunari; peristomate supernè simplici, sinuato, ad carinam uncinatim recurvato, margine basali incrassato, reflexo, unidentato, extus scrobiculato.*

RANG'S HELIX. Shell openly umbilicated, lens-shaped, sharply keeled, horny, closely radiately striated; whorls six to seven, rather convex; aperture depressly lunar; lip simple at the upper part, sinuated, uncinately recurved at the keel, basal margin thickened, reflected, one-toothed, furrowed without.

FERRUSSAC, Hist. Moll. pl. 65. f. 1.

*Helix Rangii*, Deshayes.

Hab. Pyrenees.

Peculiarly characterized by the sinuated and uncinately recurved growth of the lip next the keel.

Species 1053. (Mus. Cuming.)

HELIX PERSONATA. *Hel. testá subobtectè umbilicatá, depresso-globosá, corneá, opacá, pubescente; spirá vix elevatá; anfractibus quinque, convexiusculis, ultimo anticè constricto; aperturá coarctatá, angulato-trisinuatá; peristomate latè replicato, intus calloso, bidentato, marginibus dente linguiformi transversè fere junctis.*

THE MASKED HELIX. Shell with a partially covered epidermis, depressly globose, horny, opaque, pubescent; spire a little raised; whorls five, rather convex, the last constricted in front; aperture contracted, angularly trisinuous; lip broadly folded back, callous and two-toothed within, margins almost joined by a transverse tongue-shaped tooth.

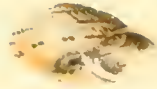
LAMARCK, Journ. d'Hist. Nat. pl. 42. f. 1.

*Helix isoguomostomos, pars*, Gmelin.

Hab. Germany, France, etc.

The aperture of this species is unusually contracted by the prominent tongue-shaped tooth across the body-whorl, and the broad folding back of the lip.





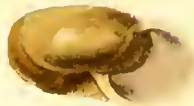
1054



1055 a



1055 b



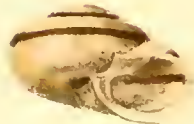
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1058



1059



1060



1061



# HELIX.

PLATE CLX.

Species 1054. (Mus. Cuming.)

**HELIX STRIGATA.** *Hel. testā angustè umbilicatā, orbiculato-depressiusculā, albā, fuscescente interruptè quadrifasciatā, supernè costato-plicatā; anfractibus quatuor ad quinque, planiusculis, ultimo anticè dextero; aperturā rotundato-ovalī; peristomate reflexo, sublabiato, marginibus approximatis.*

**THE STREAKED HELIX.** Shell narrowly umbilicated, orbicularly rather depressed, white, interruptedly four-banded with light brown, rib-like plicated at the upper part; whorls four to five, rather flat, the last deflected in front; aperture rotundately oval; lip reflected, slightly edged, margins approximated.

MULLER, Hist. Verm. vol. ii. p. 61.

*Helix umbrica*, Charpentier.

*Hab.* Italy and Sicily.

The four interrupted light brown bands are but faintly indicated in the specimen here figured, and are sometimes altogether wanting.

Species 1055. (Mus. Cuming.)

**HELIX TURRIPLANA.** *Hel. testā subangustè perspectivè umbilicatā, crassiusculā, opaco-albā, pallidè ferrugineo tinctā, depressā, carinatā, punctis eminentibus scabriusculā, apice lævi, planissimo; anfractibus sex, marginalis, ultimo subtus turgido, circumsulcato; aperturā depressā, angustā, subtetragonā; peristomate flexuoso, replicato, calloso, albo-labiato, bidenticulato, extus plicis geminis impressis signato.*

**THE TOWER-FLATTENED HELIX.** Shell rather narrowly perspectively umbilicated, rather thick, opaque-white, stained with light rust, depressed, keeled, roughened with conspicuous granules, apex smooth, very flat; whorls six, margined, the last swollen beneath, grooved around; aperture depressed, narrow, subtetragonal; lip flexuous, folded back, callous, white-edged, two-toothed, marked outwardly by two impressed folds.

MORELET, Moll. du Portugal, p. 59. pl. 6. f. 3.

*Hab.* Portugal.

Peculiarly characterized by the raised turreted periphery of the whorls, and flattened spire.

Species 1056. (Mus. Cuming.)

**HELIX QUIMPERIANA.** *Hel. testā apertè umbilicatā, de-*

*pressā, striatā, tenui, diaphanā, olivaceo-cornuā, strigis lutescentibus irregulariter radiatā; spirā concavusculā; anfractibus quinque, concavis, ultimo inflato; umbilico angusto, percio; aperturā subverticali, lunari; peristomate acuto, reflexo, intus albo-labiato, marginibus distantibus, columellari brevi, dilatato.*

**THE QUIMPER HELIX.** Shell openly umbilicated, depressed, striated, thin, diaphanous, olive-horny, irregularly rayed with yellowish streaks; spire rather concave; whorls five, convex, the last inflated, umbilicus narrow, open; aperture subvertical, lunar lip sharp, reflected, white-edged within, margins distant, columellar margin short, dilated.

FERRISSAC, Hist. Moll. pl. 75 B. f. 1-3, and pl. 76. f. 2

*Helix Corisopilexis*, Deshayes.

*Helix Kermocani*, Michaud.

*Hab.* France.

A thin *Planorbis*-like shell, of large turgid growth.

Species 1057. (Mus. Cuming.)

**HELIX CERULANS.** *Hel. testā umbilicatā, depressā, subtus turgidā, cærulescente-lividā, striatā; spirā apice mammillatā; anfractibus quinque, concavis, ultimo anticè dextero; umbilico mediocri, semioblecto; aperturā perobliquā, circulari, intus fuscescente; peristomate simplici, marginibus continuis, basali labiato, subreflexo.*

**THE BLuish HELIX.** Shell umbilicated, depressed, turgid underneath, bluish-livid, striated; spire mammillated at the apex; whorls five, convex, the last deflected in front; umbilicus middling, half-covered; aperture very oblique, circular, brownish within; lip simple, margins continuous, basal margin edged, slightly reflected.

MUHLFELDT, Mus. Cæs. Viind., C. Pfeiffer, Naturg. vol. iii. pl. 6. f. 17 and 18.

*Helix lacticina*, Ziegler.

*Hab.* Croatia.

A small thin livid-white species, pale brownish in the interior, with the margins of the aperture almost circularly joined.

Species 1058. (Mus. Cuming.)

**HELIX LUSITANICA.** *Hel. testā umbilicatā, discolori, olivaceo-fuscā, subobliquè confertim costulatā, spirā*



*planā; anfractibus quinque ad sex, exterioribus præcedentibus duplo latioribus, ultimo anticè non descendente; umbilico mediocri, pervio; aperturā lunari; peristomate albo, angulatim reflexo, margine dextro sinuoso, columellari arcuato.*

THE LUSITANIAN HELIX. Shell umbilicated, discoid, olive-brown, rather obliquely closely ribbed; spire flat; whorls five to six, the outer whorls twice the width of the preceding, last whorl not descending in front; umbilicus middling, open; aperture lunar; lip white, angularly reflected, right margin sinuous, columellar margin arched.

PFEIFFER, *Symbolæ*, vol. i. p. 41.

*Hab.* Portugal.

Of simple discoid form, very closely and regularly ribbed over the upper surface.

Species 1059. (Mus. Cuming.)

HELIX CINGULATA. *Hel. testā profundè umbilicatā, orbiculato-convexā, griseo-carneā, fusco-unifasciatā; anfractibus quinque, vix convexiusculis, ultimo deflexo; aperturā perobliquā, subrotundā; peristomate simplici, acuto, intus sublabiato, marginibus approximalis, supero expanso, basali reflexo, columellari dilatato.*

THE GIRDLED HELIX. Shell deeply umbilicated, orbicularly convex, grey flesh-tinged, encircled with a brown band; whorls five, slightly convex, the last deflected; aperture very oblique, nearly round; lip simple, sharp, slightly edged within, margins approximated, upper margin expanded, basal reflected, columellar dilated.

STUDER, *Verz.* p. 14. Férussac, *Hist. Moll.* pl. 68. f. 5 and 6.

*Helix Baldensis*, Villa.

*Helix colubrina*, Jan.

*Hab.* Lombardy and the Tyrol.

A bold *Cyclostoma*-like species, encircled at the periphery with a single conspicuous bright brown band.

Species 1060. (Mus. Cuming.)

HELIX INTERMEDIA. *Hel. testā apertè umbilicatā, depressā, suborbiculatā, striatā, lutescente-albidā vel rufotrifasciatā, fasciis lateralibus interruptis; anfractibus quinque, planiusculis, ultimo anticè deflexo; aperturā subhorizontali, ovato-rotundā; peristomate reflexo, marginibus fere contiguis, basali introrsum dilatato.*

THE INTERMEDIATE HELIX. Shell openly umbilicated, depressed, nearly orbicular, striated, yellowish-white, or encircled with three red bands, the lateral bands being interrupted; whorls five, rather flat, the last deflected in front; aperture subhorizontal, ovately rounded; lip reflected, margins almost continuous, basal margin dilated inwardly.

FÉRUSSAC, *Hist. Moll.* pl. 68. f. 1 and 2.

*Helix catenulata*, Muhlfeldt.

*Helix tetrazona*, Jan.

*Hab.* Austria and Lombardy.

Mostly encircled with three bands, of which the central is the strongest.

Species 1061. (Mus. Cuming.)

HELIX GLACIALIS. *Hel. testā umbilicatā, orbiculato-convexiusculā, apice obtusā, leviter corinatā, lutescente, sordidè variegatā, supernè plicato-striatā, subtilissimè spiraliter lineatā, rufo-unifasciatā; anfractibus quinque, convexiusculis, ultimo vix deflexo; umbilico mediocri, pervio; aperturā lunato-rotundatā; peristomate leviter albo-labiato, margine supero vix expanso, basali breviter reflexo.*

THE GLACIAL HELIX. Shell umbilicated, orbicularly slightly convex, obtuse at the apex, faintly keeled, yellowish, dirtily variegated, plicately striated at the upper part, very finely spirally lineated, encircled with a single red band; whorls five, rather convex, the last slightly deflected; umbilicus middling, open; aperture lunar-rounded; lip faintly white-edged, upper margin a little expanded, basal shortly reflected.

THOMAS, Férussac, *Hist. Moll.* pl. 67. f. 2.

*Hab.* Piedmont.

Plicately striated and grooved, encircled at the periphery with a narrow band, and obscurely stained throughout.

Species 1062. (Mus. Cuming.)

HELIX ZIEGLERI. *Hel. testā latè umbilicatā, depressā, suborbiculatā, obtusè subcarinatā, albido-casiā, interruptè subtrifasciatā, supernè costulato-plicatā; anfractibus quinque, planiusculis, ultimo anticè subitè deflexo; aperturā subcirculari; peristomate labiato, marginibus fere connexis, supero expanso, basali strictiusculo, reflexo.*

ZIEGLER'S HELIX. Shell broadly umbilicated, depressed, nearly orbicular, obtusely faintly keeled, whitish-grey, interruptedly three-banded, rib-plicated at the upper part; whorls five, rather flat, the last suddenly deflected in front; aperture nearly circular; lip edged, margins almost connected, upper margin expanded, basal rather drawn out, reflected.

SCHMIDT, Rossmäslcr, *Hist. Moll.* vol. iii. p. 4. f. 154

*Helix strigata*, var., Cantraine.

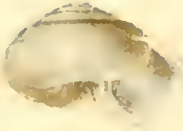
*Hab.* Venetian Alps.

Although closely approximating to *H. strigata* both in form and sculpture, the whorls of this species are more widely convoluted, and form in consequence a larger umbilicus.

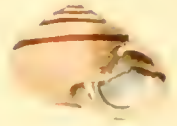




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# HELIX.

PLATE CLXI.

Species 1063. (Mus. Cuming.)

**HELIX APERTA.** *Hel. testâ imperforatâ, ovato-globosâ, inflatâ, tenui, plicato-striatâ, olivaceo-fuscâ; anfractibus quatuor, convexiusculis, rapidè accrescentibus; aperturâ obovali; peristomate simplici, acuto, albo-limbato.*

**THE OPEN HELIX.** Shell imperforated, ovately globose, inflated, thin, plicately striated, olive-brown; whorls four, rather convex, increasing rapidly; aperture obovate; lip simple, acute, white-edged.

BORN, Mus. Cæs. Vind. p. 387. pl. 15. f. 19 and 20.

*Helix Neritoides*, Chemnitz.

*Helix Naticoides*, Draparnaud.

*Helix Karalitana*, Sowerby

*Hab.* Southern Europe.

An extremely inflated globose species, of horny, vesicular substance.

Species 1064. (Mus. Cuming.)

**HELIX OLIVETORUM.** *Hel. testâ apertè umbilicatâ, globoso-depressâ, nitidâ, glabriusculâ, supra corneo-rufâ, sublus virente-albidâ; anfractibus quinque ad sex, planiusculis, ultimo anticè non descendente; aperturâ lunato-rotundatâ; peristomate simplici, acuto, recto, margine columellari vix reflexiusculo.*

**THE OLIVEYARD HELIX.** Shell openly umbilicated, globose-depressed, shining, smooth, horny-red above, greenish-white beneath; whorls five to six, rather flat, the last not descending in front; aperture lunar-rounded; lip simple, sharp, straight, columellar margin slightly reflected.

GMELIN, Syst. Nat. p. 3639.

*Helix incerta*, Draparnaud.

*Helix cespitum, var.*, Cantraine.

*Helix Leopoldina*, Charpentier.

*Helix filicina*, Krynicki.

*Hab.* France and Italy.

The *H. Leopoldina*, Charpentier, is a large-sized variety of this species.

Species 1065 (Mus. Cuming.)

**HELIX FRUTICUM.** *Hel. testâ apertè umbilicatâ, globosâ, semipellucidâ, rufescente aut albido-lutescente, rarè castaneo unifasciatâ; anfractibus quinque ad sex, con-*

*vezis, concentricè obsolete striolatis, ultimo basi inflatè circa umbilicum excavato; aperturâ lunato-rotundatâ peristomate subpatulo, sublabiato.*

**THE SHRUB HELIX.** Shell openly umbilicated, globose, semitransparent, reddish or yellowish-white, with rarely, a light chestnut band; whorls five to six, convex, concentrically obsolete finely striated, last whorl inflated at the base, excavated around the umbilicus; aperture lunar-rounded; lip subpatulate slightly edged.

MULLER, Hist. Verm. vol. ii. p. 71.

*Helix terrestris*, Gmelin.

*Helix cinerea*, Poiret.

*Hab.* Germany, France, and Switzerland.

The aperture is nearly circular, and the columellar margin is somewhat broadly dilated over towards the umbilicus.

Species 1066. (Mus. Cuming.)

**HELIX ALGIRA.** *Hel. testâ latè umbilicatâ, orbiculari-convexâ, obsolete angulatâ, supra minutissimè granulari-decussatâ, epidermide corneo-lutescente deciduâ, nitidâ, sublus nitidâ; anfractibus sex, supremo plano, ultimo convexo; aperturâ latè obliquè lunari; peristomate recto, intus calloso.*

**THE WHORLED HELIX.** Shell broadly umbilicated, orbicularly convex, obsolete angled, very minutely granularly decussated above, rayed with a yellowish-horny deciduous epidermis, shining beneath, whorls six, uppermost flat, the last convex; aperture broadly obliquely lunar; lip straight, callous within.

LINNEUS, Syst. Nat. (12th edit.) p. 1242.

*Helix oculus-capri*, Muller.

*Helix apyphthalma*, Gmelin

*Hab.* South of France, Sicily, Sardinia, Corsica

This fine large species may be readily distinguished by its orbicularly convoluted form, and deep perspective umbilicus.

Species 1067. (Mus. Cuming.)

**HELIX VERTICILLUS.** *Hel. testâ latè umbilicatâ, orbiculari-globosâ, supernè minutè decussatâ, latè fasciâ, strigulatis relictis luteis or rufis, sublus glabri, nitidi, rufescenti-lutei; anfractibus septem, omnium concent-*

*aperturâ lunato-subcirculari; peristomate acuto, simplici, intus albo-callosa.*

THE WHORL HELIX. Shell broadly umbilicated, subsemiglobose, minutely decussated at the upper part, yellowish-brown, ornamented with distant broad yellow streaks, smooth and shining beneath, greenish-yellow; whorls seven, all convex; aperture lunar-subcircular; lip sharp, simple, white-callous within.

FERUSSAC, Hist. Moll. pl. 80. f. 8 and 9.

*Hab.* Austria.

Smaller and more closely convoluted than the preceding species, and of darker colour.

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Species 1068. (Mus. Cuming.)

HELIX ACIES. *Hel. testâ latè umbilicatâ, convexo-lenticulari, carinatâ, supernè rufo-corneâ, subopacâ, costato-striatâ, subtilissimè decussatâ, sublus albidâ, nitidâ, infra carinam compressam albidam dilutè corneâ; anfractibus sex ad septem, contabulatis; aperturâ lunato-securiiformi; peristomate recto, acuto, intus tenuissimè labiato.*

THE SHARP-EDGED HELIX. Shell broadly umbilicated, convexly lens-shaped, keeled, reddish-horny at the upper part, subopaque, rib-striated, very finely decussated, whitish and shining beneath, dilutely horny between a white compressed keel; whorls six to

seven, planked; aperture lunately wedge-shaped; lip straight, very finely edged within.

PARTSCH, Mus. Cæs. Vind. Ferussac, Hist. Moll. pl. 80. f. 7.

*Hab.* Dalmatia?

Chiefly characterized by a prominent compressed white keel at the periphery, which is slightly raised throughout the spire.

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Species 1069. (Mus. Cuming.)

HELIX ALBANICA. *Hel. testâ latè umbilicatâ, discoideâ, obsolete carinatâ, supernè granulato-decussatâ, corneo-fuscâ, albido-cinctâ, sublus lutescente, fasciâ latâ corneo-fuscâ ornatâ, nitidâ; anfractibus sex, convexiusculis; umbilico magno, pervio; aperturâ obliquè lunari; peristomate simplici, acuto, intus callosa, marginibus subapproximatis.*

THE ALBANIAN HELIX. Shell broadly umbilicated, discoid, obsolete keeled, granulately decussated at the upper part, horny-brown, white-zoned, yellowish beneath, ornamented with a broad horny-brown band, shining; whorls six, rather convex; umbilicus large, open; aperture obliquely lunar; lip simple, sharp, callous within, margins approximated.

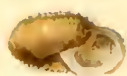
ZIEGLER, Rossmäsler, Hist. Moll. vol. iii. p. 1. f. 145.

*Hab.* Dalmatia and Albania.

The nearest allied species to the Linnæan *H. algera*.







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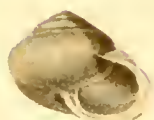
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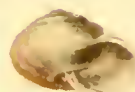
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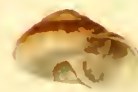
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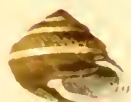
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# HELIX.

PLATE CLXII.

Species 1070. (Mus. Cuming.)

**HELIX VILLOSA.** *Hel. testâ apertè umbilicatâ, orbiculato-depressâ, villosâ, lutescente-corneâ, opucâ, striatâ, subalutaceâ, tenerâ; anfractibus quinque ad sex, convexis, ultimo non deflexo; aperturâ ovato-lunari; peristomate subpatulo, intus labro tenui, lato, candido munito, margine columellari reflexiusculo, subincrassato.*

**THE HAIRY HELIX.** Shell openly umbilicated, orbicularly depressed, hairy, yellowish-horny, opaque, striated, somewhat leathery, thin; whorls five to six, convex, the last not deflected; aperture ovately lunar; lip subpatulate, with a thin broad white ring within, columellar margin somewhat reflected, rather thickened.

DRAPARNAUD, Hist. Moll. p. 104. pl. 7. f. 18.

*Hab.* Bavaria, France, Switzerland.

A small circular horny shell, covered with fine shaggy hair.

Species 1071. (Mus. Cuming.)

**HELIX OLIVIERI.** *Hel. testâ oblectè umbilicatâ, subglobosâ, tenerâ, pellucidâ, albidâ, dilutè fuscâ-fasciatâ; anfractibus quinque ad sex, convexiusculis; aperturâ lunato-rotundatâ; peristomate recto, intus albedo-labiato.*

**OLIVIER'S HELIX.** Shell with a covered umbilicus, subglobose, thin, transparent, whitish, dilutely brown-banded; whorls five to six, rather convex; aperture lunar-rounded; lip straight, white-edged within.

FERUSSAC, Rossmâsler, Hist. Moll. vol. vi. p. 37. f. 365.

*Helix dilucida*, Ziegler.

*Hab.* Dalmatia, Corfu, Sicily.

The columellar margin is, in adult specimens, thinly callously rolled back over the umbilicus.

Species 1072. (Mus. Cuming.)

**HELIX STRIGELLA.** *Hel. testâ apertè umbilicatâ, depresso-globosâ, striatâ, corneâ, albedo-cingulatâ, fugacissimè pubescente; anfractibus quinque ad sex, planiusculis, ultimo anticè descendente; aperturâ lunato-rotundatâ; peristomate reflexiusculo, remotè labiato, marginibus approximatis, columellari dilatato.*

**THE FINELY STRIATED HELIX.** Shell openly umbilicated, depressly globose, striated, horny, white-zoned, most fugaciously downy; whorls five to six, rather flat, the last descending in front; aperture lunar-rounded; lip a little reflected, remotely edged, margins approximated, columellar margin dilated.

DRAPARNAUD, Hist. Moll. p. 84. pl. 7. f. 1 and 2.

*Helix sylvestris*, Alten.

*Helix Altenana*, Gärtner.

*Helix plebeja*, Krynicki.

*Helix cornea*, Hartmann.

*Hab.* Europe and East Indies.

A bright silken transparent species, distributed over nearly the whole of Europe and in India.

Species 1073. (Mus. Cuming.)

**HELIX RISSOANA.** *Hel. testâ umbilicatâ, globosâ, tenui, striatâ, diaphanâ, eix nitidâ, rufâ; spirâ conoideâ, obtusiusculâ; anfractibus sex, convexiusculis, ultimo subangulato, medio pallidè cingulato, anticè breviter descendente, basi ventroso; aperturâ magnâ, semicirculari; peristomate intus rubello-labiato, breviter expanso, margine columellari in laminam brerem, umbilicum semioccultantem, reflexo.*

**RISSE'S HELIX.** Shell umbilicated, globose, thin, striated, diaphanous, scarcely shining, red; spire conoid, rather obtuse; whorls six, rather convex, last whorl slightly angled, faintly zoned in the middle, shortly descending in front, ventricose at the base; aperture large, semicircular; lip red-edged within, shortly expanded, columellar margin reflected into a short lamina, half-covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1846, p. 110.

*Hab.* Greece.

Quite distinct from any of the hitherto described European species.

Species 1074. (Mus. Cuming.)

**HELIX FRUTICOLA.** *Hel. testâ angustè umbilicatâ, orbiculato-convexâ, tenuiusculâ, striatâ, albidâ; spirâ prominulâ, acutiusculâ; anfractibus septem, convexiusculis, ultimo anticè callè deflexo; aperturâ obliquâ, rotundato-lunari; peristomate recto, acuto, intus angustè albo-labiato, marginibus subnuculentibus, columellari supernè dilatato, fornicatim reflexo, umbilicum semioccultantem.*

**THE SHRUB-INHABITING HELIX.** Shell narrowly umbilicated, orbicularly convex, rather thin, striated, whitish; spire a little prominent, rather sharp; whorls seven, rather convex, the last much deflected in front; aperture oblique, rotundately lunar; lip straight, sharp, narrowly white-edged within, margins approximated, columellar margin dilated at the upper part, arch-reflected, half-covering the umbilicus.

KRYNICKI, Bull. Moscow, vol. vi. p. 429, and vol. ix. p. 181.

*Hab.* South Tartary.

A delicate subtransparent straw-coloured shell, globosely subinflated.

Species 1075. (Mus. Cuming.)

HELIX ORSINI. *Hel. testā subangustè umbilicatā, duriusculā, depressā, leviter striatā, supra albā, fasciā unicā corneā aut coffeā ornatā, subtus omnino corneā vel coffeā; anfractibus sex; umbilico infundibuliformi; aperturā ovalā, oblongiusculā; peristomate reflexiusculo, leviter labiato, marginibus approximatis.*

ORSINI'S HELIX. Shell somewhat narrowly umbilicated, rather rough, depressed, slightly striated, white above, ornamented with a single horny or coffee-coloured band, beneath altogether horny or coffee-coloured; whorls six; umbilicus funnel-shaped; aperture ovate, rather oblong; lip slightly reflected, faintly edged, margins approximated.

PORRO, Villa disp. syst. p. 54.

*Hab.* South Italy and Sicily.

Distinguished, among other characters, by its peculiar coffee-brown tinge of colouring.

Species 1076. (Mus. Cuming.)

HELIX TRISTIS. *Hel. testā imperforatā, ovato-globosā, tenui, striatā, lineis concentricis obsolete decussatā, olivaceo-fuscā, rufo-fasciatā; spirā parvulā, conoideā; anfractibus quatuor, convexiusculis, ultimo inflato; aperturā lunato-ovalī, intus nitidā; peristomate simplici, recto, margine columellari dilatato, reflexo, appresso.*

THE SAD HELIX. Shell imperforated, ovately globose, thin, striated, obsolete decussated with concentric lines, olive-brown, five-banded with red; spire rather small, conoid; whorls four, rather convex, the last inflated; aperture lunar-oval, shining within; lip simple, straight, columellar margin dilated, reflected, appressed.

PFEIFFER, Pro. Zool. Soc. 1845, p. 66.

*Helix ceratina*, Shuttleworth.

*Hab.* Corsica.

A characteristic subtransparent banded species, inflated after the manner of *H. aperta*.

Species 1077. (Mus. Cuming.)

HELIX CANTIANA. *Hel. testā umbilicatā, globoso-depressā, tenui, pellucidā, striatā, corneo-lutescente; spirā vix elatā; anfractibus quinque ad sex, convexiusculis, ru-*

*pidè accrescentibus, ultimo inflato, non deflexo; aperturā lunari; peristomate acuto, intus labiato, margine columellari dilatato, umbilicum angustum, pericium non tegente.*

CANT'S HELIX. Shell umbilicated, globosely depressed, thin, pellucid, striated, horny-yellow; spire scarcely raised; whorls five to six, rather convex, increasing rapidly, the last inflated, not deflected; aperture lunar; lip sharp, edged within, columellar margin dilated, not covering the umbilicus, which is narrow and open.

MONTAGU, Test. Brit. p. 422. pl. 23. f. 1.

*Helix Carthusiana*, Draparnaud.

*Helix pallida*, Jeffreys.

*Hab.* Britain and the South of France.

A light rust-tinged shell, simply turbiated, with a nearly circular aperture.

Species 1078. (Mus. Cuming.)

HELIX FUSCOSA. *Hel. testā apertè umbilicatā, subdepressā, decussato-plicatulā, subtus lævi, nitidissimā, pallidā, anfractibus quinque ad sex, angustis; aperturā rotundato-lunari; peristomate recto, simplici, acuto.*

THE DINGY HELIX. Shell openly umbilicated, rather depressed, decussately finely plicated, smooth beneath, very shining, pale; whorls five to six, narrow; aperture rotundately lunar; lip straight, simple, sharp

ZIEGLER, Rossmäslar, vol. viii. p. 35. f. 523.

*Hab.* Sicily, Corsica.

Of a shining brown-red above and yellowish-green beneath, with an open subperspective umbilicus.

Species 1079. (Mus. Cuming.)

HELIX LIMBATA. *Hel. testā subobtectè umbilicatā, depresso-globosā, subtilissimè striatā, pellucidè cornulutescente, ad peripheriam subearinatā, orinā albā, opacā; anfractibus sex, planiusculis, ultimo anticæ non descendente; aperturā lunari; peristomate reflexiusculo, leviter labiato, margine columellari breviter dilatato, umbilicum semitegente.*

THE LIMBED HELIX. Shell with a nearly covered umbilicus, depressly globose, very finely striated, transparent horny-yellow, slightly keeled at the periphery, keel white, opaque; whorls six, rather flat, last whorl not descending in front; aperture lunar; lip a little reflected, slightly edged, columellar margin shortly dilated, half-covering the umbilicus.

DRAPARNAUD, Hist. Moll. p. 100. pl. 6. f. 29

*Hab.* Britain.

Encircled throughout the periphery with a very characteristic white keel.

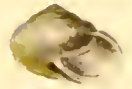




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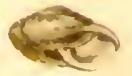
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# HELIX.

PLATE CLXIII.

Species 1050. (Mus. Cuming.)

**HELIX CYPRIA.** *Hel. testâ umbilicatâ, depressâ, solidiusculâ, superne costulato-striatâ, sericiâ, fulvâ, basi lævigatâ, pallidiore; spirâ vix ebruatâ, obtusissimâ; anfractibus quinque ad sex, planiusculis, lentè accrescentibus, ultimo anticè non descendente, basi subplanulato, circa umbilicum mediocrem impresso; aperturâ obliquâ, rotundato-lunari; peristomate simplici, acuto.*

**THE CYPRUS HELIX.** Shell umbilicated, depressed, rather solid, finely rib-like striated at the upper part, silky, fulvous, smooth and paler at the base; spire scarcely raised, very obtuse; whorls five to six, rather flat, increasing slowly, last whorl not descending in front, rather flattened at the base, impressed around the middling umbilicus; aperture oblique, rotundately lunar; lip simple, sharp.

PFEIFFER, Zeitschrift für Malac. 1847. p. 12.

*Hab.* Island of Cyprus.

A dull light fulvous shell, shining around the umbilicus.

Species 1081. (Mus. Cuming.)

**HELIX UMBROSA.** *Hel. testâ umbilicatâ, suborbiculato-depressâ, obtusè carinatâ, tenui, pelluculâ, corneâ vel albido-lutescente, subtilissimè granulatâ; anfractibus quinque, convexiusculis, ultimo vix deflexo; umbilico infundibuliformi; aperturâ transversè ovali; peristomate intus tenuissimè labiato, simplici, expanso, marginibus approximatis.*

**THE SHADY HELIX.** Shell umbilicated, somewhat orbicularly depressed, obtusely keeled, thin, transparent, horny or whitish-yellow, very finely granulated; whorls five, rather convex, the last deflected in front; umbilicus funnel-shaped; aperture transversely oval; lip very thinly edged within, simple, expanded, with the margins approximated.

PARTSCH, Mus. Cæs. Vindobonensis; Rossmäslcr, Hist. Moll. vol. i. p. 64. f. 13, and vol. vii. p. 1. f. 424.

*Hab.* Austria, Bavaria, Saxony.

A light transparent subdiscoid species.

Species 1082. (Mus. Cuming.)

**HELIX LANUGINOSA.** *Hel. testâ umbilicatâ, globosid-depressâ, lutescente-corneâ, hispidiâ, opacâ, lævissimè subcarinatâ; anfractibus quinque ad sex, planiusculis; aperturâ rotundato-lunari; peristomate subrotundato, acuto, intus lævissimè calloso, roseo, margine columbellari reflexo.*

**THE DOWNY HELIX.** Shell umbilicated, globosely depressed, yellowish-horny, hairy, opaque, very faintly obsolete keeled; whorls five to six, rather flat; aperture rotundately lunar; lip subguttulate, sharp, very smooth within, callous, rose-tinted, columbellar margin reflected.

BOISSY, Mém. de Zool. 1: 35, Moll. pl. 69.

*Helix rosacea*, Forbes.

*Hab.* Island of Majorca, Oran, Constantinæ.

A light thin shell, of a delicate blush-rose tint about the lip, covered with a slight down.

Species 1083. (Mus. Cuming.)

**HELIX NEGLECTA.** *Hel. testâ aperte umbilicatâ, suborbiculato-depressâ, albidi, fusco fasciatâ; anfractibus quinque, convexis, ultimo non deflexo; aperturâ rotundato-lunari; peristomate recto, intus sursum flexo, marginibus subopproximatis.*

**THE NEGLECTED HELIX.** Shell openly umbilicated, somewhat turbinate depressed, whitish, brown-banded whorls five, convex, the last not deflected; aperture lunar-rounded; lip straight, faintly red-edged within; margins rather approximated.

DRAPARNAUD, Hist. Moll. p. 108. pl. 6. f. 12, 13.

*Hab.* France, Spain, North Italy.

A prettily banded species, with a pink-tinted rounded aperture.

Species 1084. (Mus. Cuming.)

**HELIX ALLIARIA.** *Hel. testâ angustè umbilicatâ, convexè depressâ, politâ, nitidâ, diaphanâ, spirâ fuscâ, subtili albidi; anfractibus quinque, vix convexiusculis, regulariter accrescentibus; aperturâ deflexâ, suborbiculato-lunari; peristomate recto, acuto, simplici.*

**THE GARLICK HELIX.** Shell narrowly umbilicated, convexly depressed, polished, very shining, depauperate, fulvous at the upper part, whitish beneath, whorls five, scarcely convex, regularly increasing; aperture depressed, obliquely lunar; lip straight, simple.

MILLER, Annals of Philosophy, vol. vii. p. 374.

*Helix alliarum*, Jeffreys.

*Helix glabra*, Studer.

*Helix barota*, Studer.

*Helix nitens*, Sheppard.

*Helix fetida*, Stark.

*Helix turra*, Hartmann.

*Zonites alliarum*, Gray.



*Hab.* Germany, France, Britain.

A depressed glossy horny species, with a rather small open umbilicus.

Species 1085. (Mus. Cuming.)

HELIX CARTHUSIANA. *Hel. testā umbilicatā, globoso-depressā, minutè striatā, corneo-albidā, subpellucidā; spirā parum elatā, plerumque mammillatā; anfractibus quinque ad sex, vix convexiusculis, ultimo anticè subdeflexo; aperturā latè lunari, intus labiatā; peristomate acuto, subexpanso, rubello, margine basali subrecto, columellari umbilicum semitegente.*

THE CARTHUSIAN HELIX. Shell umbilicated, globosely depressed, minutely striated, horny-white, rather transparent; spire but little raised, generally mammillated; whorls five to six, rather convex, the last a little deflected in front; aperture broadly lunar, edged within; lip sharp, a little expanded, reddish, basal margin nearly straight, columellar margin half-covering the umbilicus.

MULLER, Hist. Verm. vol. ii. p. 15.

*Helix nitida*, Chemnitz.

*Helix Carthusianella*, Draparnaud.

*Helix Olivieri*, var., Férussac.

*Helix Gibbsii*, Leach.

*Helix rufilabris*, Jeffreys.

*Hab.* Southern Europe and the British Isles.

Chiefly characterized by its inner-thickened red-edged lip.

Species 1086. (Mus. Cuming.)

HELIX GEMONENSIS. *Hel. testā latè umbilicatā, orbiculato-convexā, carinatā, lutescente, supernè striatā, subdecussatā, sericinā, subtus glabrā; anfractibus sex, planiusculis; aperturā angulato-lunatā; peristomate recto, acuto, sublabiato.*

THE GEMONA HELIX. Shell broadly umbilicated, orbicularly convex, keeled, yellowish, striated at the upper part, slightly decussated, silky, smooth beneath; whorls six, rather flat; aperture angularly lunar; lip straight, sharp, a little edged.

FERUSSAC, Hist. Moll. pl. 80. f. 6.

*Helix isodoma*, Jan.

*Hab.* Environs of Gemona, Italy.

A pale silky horny species, depressed and keeled, with an open subperspective umbilicus.

Species 1087. (Mus. Cuming.)

HELIX RUFESCENS. *Hel. testā perspectivè umbilicatā, subgloboso-depressā, subcarinatā, striatulā, pallidè rufescente; spirā parum elatā; anfractibus sex, convexiusculis, ultimo obscurè albido-cingulato, anticè non deflexo; aperturā ovato-lunari; peristomate patulo, remotè albo-labiato, margine columellari reflexiusculo.*

THE REDDISH HELIX. Shell perspectively umbilicated, somewhat globosely depressed, slightly keeled, finely striated, pale reddish; spire but little raised; whorls six, rather convex, the last obscurely white-girt, not deflected in front; aperture ovately lunar; lip patulate, remotely white-edged, columellar margin a little reflected.

PENNANT, British Zoology (4th edit.) vol. iv. p. 134. pl. 85. f. 127.

*Helix turturum*, Gmelin.

*Helix corrugata* and *clandestina*, Hartmann.

*Helix circinata*, Studer.

*Helix montana* and *striolata*, C. Pfeiffer.

*Hab.* France, Britain, Germany.

A reddish subtransparent silky species, largely perspectively umbilicated.

Species 1088. (Mus. Cuming.)

HELIX SUDENSIS. *Hel. testā subampliter umbilicatā, depressā, regulariter et confertim costulatā, tenui, diaphanā, rubello-corneā; spirā vix elevatā; anfractibus sex, convexis; aperturā rotundato-lunari; peristomate simplici, acuto, margine columellari vix dilatato.*

THE SUDA HELIX. Shell rather largely umbilicated, depressed, regularly and closely fine-ribbed, thin, diaphanous, reddish-horny; spire but little raised; whorls six, convex; aperture rotundately lunar; lip simple, sharp, columellar edge scarcely dilated.

PFEIFFER, Symbolæ, vol. iii. p. 67.

*Hab.* Suda, Island of Candia; Forbes.

Allied to the preceding species, but somewhat rougher in growth, and less broadly depressed.

Species 1089. (Mus. Cuming.)

HELIX CANDICANS. *Hel. testā umbilicatā, convexo-depressā, striatulā, nitidā, candidā, interdum lineis pallidè rufis circumdatā; spirā vix elatā, apice fuscā; anfractibus quinque, convexis, ultimo non descendente; umbilico mediocri, pervio; aperturā magnā, lunato-rotundatā; peristomate simplici, intus subtiliter labiato, marginibus approximatis.*

THE WHITISH HELIX. Shell umbilicated, convexly depressed, finely striated, shining, whitish, sometimes encircled with faint red lines; spire scarcely raised, brown at the apex; whorls five, convex, the last not descending; umbilicus middling, open; aperture large, lunar-rounded; lip simple, finely edged within, margins approximated.

ZIEGLER, Pfeiffer, in Wiegman's Archives, 1841, p. 220.

Varieties, *Helix arenosa*, Ziegler.

*Helix dejecta*, Jan.

*Hab.* Hungary.

Of a *Cyclostoma*-like form, with an open funnel-shaped umbilicus.





1090.



1091



1092



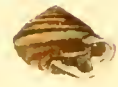
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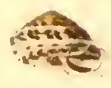
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# HELIX.

PLATE CLXIV.

Species 1090. (Mus. Cuming.)

HELIX CAPERATA. *Hel. testâ umbilicatâ, depresso-globosâ, costulato-striatâ, albidâ vel lutescente, fasciis strigisque fuscis plerumque interruptis ornatâ; spirâ acutè convexâ; anfractibus quinque, convexis, ultimo non deflexo; umbilico mediocri, aperto; aperturâ lunato-rotundâ; peristomate recto, acuto, intus fulvo- vel rufolabiato.*

THE WRINKLED HELIX. Shell umbilicated, depressly globose, fine rib-like striated, whitish or yellowish, ornamented with brown streaks and bands, generally interrupted; spire sharply convex; whorls five, convex, the last not deflected; umbilicus middling, open; aperture lunar-rounded; lip straight, sharp, fulvous or red-edged in the interior.

MONTAGU, Test. Brit. p. 430. pl. 11. f. 11.

*Helix striata*, Draparnaud.

*Helix intersecta*, Poirêt.

*Helix crenulata*, Dillwyn.

*Hab.* Britain and Southern Europe.

A small concentrically banded species, rouge-tinted in the aperture.

Species 1091. (Mus. Cuming.)

HELIX GLABELLA. *Hel. testâ umbilicatâ, subdepressâ, glabrâ, nitidâ, corneâ; anfractibus quinque ad sex, planiusculis, sensim accrescentibus, ultimo obsoletè angulato, lineâ pallidâ circumdato, anticè subdeflexo; umbilico angusto, pervio; aperturâ rotundato-lunari; peristomate recto, acuto, intus sublabiato, margine columellari reflexiusculo.*

THE SMOOTH HELIX. Shell umbilicated, rather depressed, smooth, shining, horny; whorls five to six, rather flat, increasing gradually, the last obsoletely angled, encircled with a faint line, a little deflected in front; umbilicus narrow, open; aperture rotundately lunar; lip straight, sharp, slightly edged within, columellar margin slightly reflected.

DRAPARNAUD, Hist. Moll. p. 102. pl. 7. f. 6.

*Helix sericea, var.*, Rossmâsler.

*Hab.* France.

A slightly depressed semitransparent horny shell, obtusely keeled at the periphery.

Species 1092. (Mus. Cuming.)

HELIX CELLARIA. *Hel. testâ operetè umbilicatâ, depressâ, planiusculâ, nitidâ, subpellucidâ, striatulâ, pallidè vi-*

*rente-corneâ, subtus albidâ; anfractibus sex, planulatis, ultimo depresso; aperturâ rix obliquâ, depressâ, obliquè lunari; peristomate simplici, acuto, margine columellari non reflexo.*

THE CELLAR HELIX. Shell openly umbilicated, depressed, rather flat, shining, semitransparent, finely striated, pale greenish-horny, whitish beneath; whorls six, rather flat, the last depressed; aperture a little oblique, depressed, obliquely lunar; lip simple, acute, columellar margin not reflected.

MULLER, Hist. Verm. vol. ii. p. 28.

*Helix lucida*, Pulteney.

*Helix nitens*, Maton and Raekett.

*Hab.* Central Europe.

A pale straw-coloured, subtransparent, but rather solid shining shell.

Species 1093. (Mus. Cuming.)

HELIX BALMEI. *Hel. testâ aperetè umbilicatâ, orbiculatâ, convexiusculâ, striatâ, corneo-fulvâ, subtus lactescente, striis longitudinaliter regulariter dispositis; anfractibus sex, convexis; suturâ impressâ; aperturâ ovali, compressâ, labro simplici, acuto, apice obtuso.*

BALME'S HELIX. Shell openly umbilicated, orbicular, rather convex, striated, horny-fulvous, whitish beneath, with longitudinally regularly disposed striae, whorls six, convex; suture impressed; aperture oval, compressed, lip simple, sharp, apex obtuse.

POTIEZ and MICHAUD, Moll. Galerie de Douai, vol. i. p. 120.

*Hab.* Sardinia.

Closely allied to the preceding species, but more compressed and of darker colour.

Species 1094. (Mus. Cuming.)

HELIX TURBINATA. *Hel. testâ umbilicatâ, conico-globosâ, solidiusculâ, minutè striatâ, albâ, fasciis et flammulis fuscis variegatâ; anfractibus quinque ad sex, convexiusculis, ultimo inflato; aperturâ lunato-rotundatâ; peristomate simplici, intus labiato, margine columellari subreflexo, umbilico angustissimo semidegato.*

THE TURBINATED HELIX. Shell umbilicated, conically globose, rather solid, minutely striated, white, variegated with brown bands and flames; whorls five to six, rather convex, the last inflated; aperture lunar-rounded; lip simple, edged within, columellar margin a little reflected, half-covering a very narrow umbilicus.



JAN, Mantissa, p. 2.

*Hab.* Sicily, Jan.

The identification with this species of the shell, represented in the accompanying plate, is not so satisfactory as could be wished.

Species 1095. (Mus. Cuming.)

HELIX PELLUCENS. *Hel. testâ umbilicatâ, conoideo-globosâ, tenui, obliquè confertissimè striatâ, diaphanâ, pallidè fulvescente, lineis et fasciis saturatioribus sæpe interruptis ornâtâ; spirâ conoideâ, acutiusculâ; anfractibus sex, convexiusculis, ultimo anticè non descendente, basi ventroso; aperturâ lunato-circulari; peristomate aculo, intus sublabiato, margine columellari membranaceo, breviter reflexo.*

THE SUBTRANSPARENT HELIX. Shell umbilicated, conoidly globose, thin, obliquely very closely striated, diaphanous, pale fulvous, ornamented with darker lines and bands, which are often interrupted; spire conoid, rather sharp; whorls six, rather convex, the last not descending in front, ventricose at the base; aperture lunar-circular; lip sharp, slightly edged within, columellar margin membranaceous, shortly reflected.

SHUTTLEWORTH (Mus. Cuming).

*Hab.* Corsica.

A very prettily banded half-opaque half-diaphanous shell.

Species 1096. (Mus. Cuming.)

HELIX BIDENS. *Hel. testâ oblectè umbilicatâ, turbinato-globosâ, cornéâ, pellucidè cingulatâ, supernè eleganter costulato-striatâ; anfractibus septem, vix convexiusculis; aperturâ depressâ, trisinuato-lunari; peristomate subreflexo, albo-vel rufo-labiato, basi intus bidentato, extus scrobiculato.*

THE TWO-TOOTHED HELIX. Shell with a covered umbilicus, turbinately globose, horny, transparently belted, elegantly rib-like striated about the upper part; whorls seven, rather convex; aperture depressed, trisinuately lunar; lip a little reflected, white or red-edged, two-toothed at the base within, pitted without.

*Trochus bidens*, Chemnitz, *Conch. Cab.* vol. xi. part 2. p. 50. pl. 122. f. 1052.

*Helix bidentata*, Gmelin.

*Helix pyramidea*, Hartmann.

*Hab.* Germany, France, Sweden.

A characteristically two-toothed shell, with somewhat of a *Neritina* aspect.

Species 1097. (Mus. Cuming.)

HELIX PYRAMIDATA. *Hel. testâ orbiculato-pyramidatâ, striatulatâ, albidi, unicolore vel variè fusco-fusciulatâ et*

*variegatâ; spirâ conicâ, obtusâ; anfractibus sex, convexis, ultimo basi planiusculo, anticè non descendente; aperturâ depressâ, latè lunari; peristomate recto, intus labiato.*

THE PYRAMIDAL HELIX. Shell orbicularly pyramidal, finely striated, whitish, of one colour, or variously brown-banded and variegated; spire conical, obtuse; whorls six, convex, the last rather flat at the base, not descending in front; aperture depressed, broadly lunar; lip straight, edged within.

DRAPARNAUD, *Hist. Moll.* p. 80. pl. 5. f. 6.

*Hab.* France, Italy, Greece, Sicily.

Of a somewhat depressed pyramidal form.

Species 1098. (Mus. Cuming.)

HELIX SYRIACA. *Hel. testâ oblectè umbilicatâ, globoso-depressâ, griseâ, pellucidulatâ, plerumque fasciis calcaris opacis ornâtâ, parva nilidâ, minutissimè rugulosâ; spirâ convexiusculâ; anfractibus quinque, planiusculis, ultimo anticè vix descendente; aperturâ latè lunari; peristomate subpatulo, rufo, albo-labiato.*

THE SYRIAN HELIX. Shell with a covered umbilicus, globosely depressed, grey, transparent, generally ornamented with two opaque chalk-like bands, but little shining, very minutely rugulose; spire rather convex; whorls five, rather flat, the last a little descending in front; aperture broadly lunar; lip rather patulate, red, white-edged.

EHRENBERG, *Synb. phys. moll.* Pfeiffer, *Monog. Helic.* viv. vol. i. p. 131.

*Helix onychina*, Rossmäsler.

*Helix gregaria*, Ziegler.

*Hab.* Syria, Egypt, Algeria.

A semitransparent shell, encircled with two very characteristic opaque chalk-like bands.

Species 1099. (Mus. Cuming.)

HELIX CILIATA. *Hel. testâ umbilicatâ, globoso-depressâ, carinatâ, conicâ, opacâ, squamulis membranaceis transversim dispositis asperâ, carinâ membranaceo-ciliatâ; anfractibus quatuor ad quinque, planiusculis; aperturâ lunato-ovali; peristomate reflexiusculo, fusco-sublabiato.*

THE CILIATED HELIX. Shell umbilicated, globosely depressed, keeled, horny, opaque, roughened with membranaceous scales arranged transversely, keel membrane-ciliated; whorls four to five, rather flat; aperture lunar-oval; lip somewhat reflected, brownish sub-edged.

VINETZ, *Studer, Syst. Verz.* p. 86.

*Helix hirsuta*, Jan.

*Hab.* Switzerland and the Tyrol.

Readily distinguished by its ciliated surface and keel.







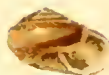
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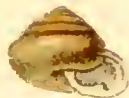
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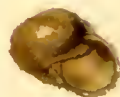
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# HELIX.

PLATE CLXV.

Species 1100. (Mus. Cuming.)

**HELIX EXCAVATA.** *Hel. testā latè umbilicatā, depressā, tenui, striatā, nitidā, pellucidā, corneā; spirā subelevatā; anfractibus quinque, convexiusculis, lentè accrescentibus, ultimo non descendente; aperturā obliquā, subcirculari; peristomate simplici, tenui.*

**THE EXCAVATED HELIX.** Shell broadly umbilicated, depressed, thin, striated, shining, transparent, horny; spire scarcely raised; whorls five, rather convex, increasing slowly, the last not descending; aperture oblique, nearly circular; lip simple, thin.

BEAN, Alder, Mag. Zool. and Bot. vol. ii. p. 107.

*Helix nitida, var.*, Jeffreys.

*Hab.* Britain and Ireland.

A horny circular shell, with a broad, open, perspective umbilicus.

Species 1101. (Mus. Cuming.)

**HELIX RUDERATA.** *Hel. testā perspectivè umbilicatā, depressā, lutescente-corneā, concolore, subtilissimè costulato-striatā; spirā convexā; anfractibus quinque, convexis, ultimo basi rotundato; aperturā perobliquā, lunato-ovali; peristomate simplici, acuto, marginibus conniventibus.*

**THE RUBBISH HELIX.** Shell perspectivevely umbilicated, depressed, yellowish-horny, of one colour, very finely rib-like striated; spire convex; whorls five, convex, the last rounded at the base; aperture very oblique, lunar-oval; lip simple, sharp, with the margins approximating.

STUDER, Verz. p. 12; Férussac, Hist. Moll. pl. 79. f. 6.

*Helix rotundata, var.*, Nilsson.

*Hab.* Europe.

Distributed throughout the continent, from Switzerland to Sweden.

Species 1102. (Mus. Cuming.)

**HELIX NITIDA.** *Hel. testā apertè umbilicatā, globoso-depressā, striatā, pellucidā, fulco-fuscā, concolore, nitidā; anfractibus quinque, convexiusculis, ultimo tereti, circa umbilicum excavato; aperturā lunato-circulari; peristomate tenui, acuto, margine basali arcuato.*

**THE SHINING HELIX.** Shell openly umbilicated, globosely depressed, striated, transparent, fulvous-brown, of one colour, shining; whorls five, rather convex, the last slender, excavated around the umbi-

licus; aperture lunar-circular; lip thin, sharp, basal margin arched.

MULLER, Hist. Verm. vol. ii. p. 32.

*Helix lucida*, Draparnaud.

*Hab.* Europe.

Of a peculiar reddish fulvous-brown colour.

Species 1103. (Mus. Cuming.)

**HELIX HISPIDA.** *Hel. testā apertè umbilicatā, suborbiculato-depressā, corneā, pilis brevibus hispidā, nitidā, spirā convexā; anfractibus quinque ad sex, convexiusculis, angustis; aperturā latè lunari; peristomate patulo, intus albo-labiato, labio in margine basali strictiusculo, acutè prominente.*

**THE HAIRY HELIX.** Shell openly umbilicated, rather orbicularly depressed, horny, downy with short hairs, shining; spire convex; whorls five to six, rather convex, narrow; aperture broadly lunar; lip patulate, white-edged within, lip at the basal margin a little drawn out, sharply prominent.

LINNÆUS, Syst. Nat. (12th edit.) p. 1244.

*Helix sericea*, C. Pfeiffer.

*Helix concinna*, Jeffreys.

*Helix hispidula*, Jan.

*Hab.* Germany, France, Austria.

Somewhat globosely convoluted, with a rather narrow, though open, umbilicus.

Species 1104. (Mus. Cuming.)

**HELIX FUSCA.** *Hel. testā imperforatā, depressā, tenuissimā, pellucidā, corneā, nitidā, supernè rugoso-plicatulā, basi convexiusculā, lævigatā; spirā vix elevatā; anfractibus quinque, convexiusculis, ultimo obsolete angulato; columellā brevissimā, subverticali; aperturā lunari; peristomate simplici, acuto, margine columellari reflexiusculo.*

**THE BROWN HELIX.** Shell imperforated, depressed, very thin, transparent, horny, shining, finely rugosely plicated about the upper part, rather convex and smooth at the base; spire scarcely raised; whorls five, rather convex, the last obsolete angled; columella very short, subvertical; aperture lunar; lip simple, sharp, columellar margin rather reflected.

MONTAGU, Testacea Britannica, p. 124, pl. 13. f. 1

*Helix subrufescens*, Miller.

*Hab.* Britain and Ireland.

This species would hardly be recognized by its name, being a delicate wrinkled shell, of a light transparent yellowish horny substance.

Species 1105. (Mus. Cuming.)

HELIX NITIDULA. *Hel. testâ latè umbilicatâ, globoso-depressâ, sublevi, superne rufescente, sublus albidâ; spirâ subelevatâ; anfractibus quatuor ad quinque, vix converiusculis, ultimo anticè dilatato; aperturâ perobliquâ, lunato-oblongâ; peristomate simplici, acuto, margine supero antrorsum dilatato, columellari breviter arcuato.*

THE SHINING HELIX. Shell broadly umbilicated, globosely depressed, rather smooth, reddish about the upper part, whitish beneath; spire scarcely raised; whorls four to five, but little convex, the last dilated in front; aperture very oblique, lunar-oblong; lip simple, sharp, upper margin dilated in front, columellar shortly arched.

DRAPARNAUD, Hist. Moll. p. 117.

*Zonites nitidulus*, Gray.

Hab. Europe.

More or less shining in some specimens than others, and more or less flatly convoluted.

Species 1106. (Mus. Cuming.)

HELIX COBRESIANA. *Hel. testâ umbilicatâ, conoideo-globosâ, corneâ, multispirâ, pubescente; anfractibus sex, ultimo albido-cingulatâ; aperturâ depressâ, lunari; peristomate patulo, intus labiato, margine basali unidentato.*

THE COBRESIAN HELIX. Shell umbilicated, conoidly globose, horny, many-spined, pubescent; whorls six, the last white-encircled; aperture depressed, lunar; lip patulate, edged within, basal margin one-toothed.

ALTEN, Moll. p. 79. pl. 9. f. 18.

*Helix unidentata*, Draparnaud.

*Helix monodon*, Ferrussac.

Toothless variety.

*Helix edentula*, Draparnaud.

Hab. Germany, France.

Of a peculiar globosely conoid form, with a characteristic oblong tooth, which is sometimes obsolete.

Species 1107. (Mus. Cuming.)

HELIX DEPILATA. *Hel. testâ umbilicatâ, subgloboso-depressâ, striatâ, nitidâ, corneâ; anfractibus sex, angustis, convexis, ultimo obsolete angulato, lineâ pallidâ circumdato; umbilico majusculo, pervio; aperturâ depressâ, lunari; peristomate recto, acuto, intus albo-*

*labiato, margine basali stricto, cum columellari brevissimo angulum formante.*

THE BALD HELIX. Shell umbilicated, somewhat globosely depressed, striated, shining, horny; whorls six, narrow, convex, the last obsolete angled, encircled by a faint line; umbilicus rather large, open. aperture depressed, lunar; lip straight, sharp, white-edged within, basal margin drawn out, forming an angle with the very short columellar margin.

C. PFEIFFER, Moll. vol. i. p. 35. pl. 2. f. 18.

Hab. Germany.

A light yellowish horny shell of globose form, deeply umbilicated.

Species 1108. (Mus. Cuming.)

HELIX REVELATA. *Hel. testâ umbilicatâ, depresso-globosâ, tenui, diaphanâ, nitidâ, virente-corneâ, subtilissimè striatâ et corrugatulâ, hispidâ, pilis sparsis, brevibus, rigidulis; anfractibus quatuor, convexis, rapidè accrescentibus, ultimo inflato; aperturâ lunato-circulari; peristomate simplici, acuto, margine columellari subdilato, patente.*

THE DISCOVERED HELIX. Shell umbilicated, depressly globose, thin, diaphanous, shining, greenish-horny, very finely striated and wrinkled, hairy, hairs few, short, and rather rigid; whorls four, convex, increasing rapidly, the last inflated; aperture lunar-circular; lip simple, sharp, columellar margin a little dilated, patent.

FERRUSSAC, Prodrôme, p. 273.

Hab. France, Guernsey, Jersey.

Of a delicate greenish *Vitrina*-like aspect.

Species 1109. (Mus. Cuming.)

HELIX SERICEA. *Hel. testâ umbilicatâ, subglobosâ, corneâ, pilis minutis densis hirtâ; anfractibus quinque, convexiusculis, celeriter accrescentibus; aperturâ latè lunari; peristomate vix patulo, acuto, intus sublabiato, margine columellari reflexiusculo, umbilicum semitegente.*

THE SILKY HELIX. Shell umbilicated, subglobose, horny, densely covered with minute hairs; whorls five, rather convex, increasing rapidly; aperture broadly lunar. lip scarcely patulate, sharp, slightly edged within, columellar margin a little reflected, half-covering the umbilicus.

DRAPARNAUD, Hist. Moll. p. 103. pl. 7. f. 16, 17.

*Helix pallescens* and *rubiginosa*, Ziegler.

*Helix granulata*, Alder.

Hab. Europe.

Very transparent, covered with short hairs, sometimes tinged with red at the apex.





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# HELIX.

PLATE CLXVI.

Fig. 1110. (Mus. Cuming.)

The shell here figured proves to be *H. pura*, Alder, described in Pl. CXXI. Fig. 715.

Species 1111. (Mus. Cuming.)

**HELIX ACCELERATA.** *Hel. testâ umbilicatâ, pusillâ, globoso-turbinatâ, corneo-lutescente, lamellicostatâ, costis in cilia elongatis; anfractibus quatuor, convexis; aperturâ rotundatâ; peristomate membranaceo, subexpando, marginibus approximatis.*

**THE PRICKLY HELIX.** Shell umbilicated, small, globosely turbinated, horny-yellow, lamella-ribbed, ribs elongated into lashes; whorls four, convex; aperture rounded; lip membranaceous, a little expanded, with the margins approximated.

MULLER, Hist. Verm. vol. ii. p. 51.

*Helix spinulosa*, Lightfoot.

*Trochus terrestris*, Pennant.

*Hab.* Central and Southern Europe.

A minute prickly haired shell, with somewhat the form of a *Paludina*.

Fig. 1112. (Mus. Cuming.)

A variety of *H. occidentalis*, described in Pl. CLIV. Sp. 1005.

Species 1113. (Mus. Cuming.)

**HELIX SOLARIA.** *Hel. testâ latissimè umbilicatâ, lenticulari, supernè planiusculâ, subtus excavatâ, tenui, costulato-striatâ, corneâ, rufo-maculatâ, aculè carinatâ; anfractibus sex ad septem, planulatis, lentè accrescentibus; aperturâ securiformi; peristomate simplici, acuto.*

**THE SUN-LIKE HELIX.** Shell very broadly umbilicated, rather flat at the upper part, excavated beneath, thin, rib-like striated, horny, red-spotted, sharply keeled; whorls six to seven, flat, increasing slowly; aperture wedge-shaped; lip simple, sharp.

MENKE, Synopsis (2nd edit.), p. 19. Rossmäsler, Hist. Moll. vol. vii. p. 12. f. 453.

*Helix perspectiva*, Mühlfeldt.

*Helix Megerlei*, Jan.

*Helix rotundata*, var., Férussac.

*Hab.* Austria.

Very widely convoluted, almost on a sharp discoid plane.

Species 1114. (Mus. Cuming.)

**HELIX CRYSTALLINA.** *Hel. testâ umbilicatâ, depressâ, vitreâ, diaphanâ, glabrâ, nitidissimâ; anfractibus quatuor ad quinque, planiusculis; aperturâ lunari; peristomate recto, simplici.*

**THE CRYSTALLINE HELIX.** Shell umbilicated, depressed, glassy, diaphanous, smooth, very shining. whorls four to five, rather flat; aperture lunar; lip straight simple.

MULLER, Hist. Verm. vol. ii. p. 23.

*Helix pellucida*, Pennant.

*Helix eburnea*, Hartmann

*Helix vitrea*, Brown.

*Hab.* Europe.

A minute pale glassy shell, of rounded form.

Species 1115. (Mus. Cuming.)

**HELIX UMBILICATA.** *Hel. testâ umbilicatâ, depresso-turbinatâ, minutè striatâ, sericinâ, fusco-corneâ; anfractibus quinque, convexis, ultimè anticè non descendente umbilico mediocri, perris; aperturâ rotundatâ, peristomate simplici, acuto, recto.*

**THE UMBILICATED HELIX.** Shell umbilicated, depressly turbinated, minutely striated, silky, brown-horny, whorls five, convex, the last not descending in front; umbilicus middling, open; aperture rounded, lip simple, sharp, straight.

MONTAGU, Testacea Britannica, p. 431. pl. 13. t. 2

*Helix rupestris*, Férussac.

*Helix aliena*, Ziegler.

*Helix spiruæ*, Villa.

*Zonites umbilicatus*, Gray.

*Hab.* Central and Southern Europe.

A minute brown-horny species, deeply umbilicated.

Species 1116. (Mus. Cuming.)

**HELIX ROTUNDATA.** *Hel. testâ perspectivè umbilicatâ, depressâ, arcispirâ, corneo-lutescente, rufo-maculatâ, subtiliter costulato-striatâ; spirâ corneâ, anfractibus sex ad septem, planiusculis, ultimè angulatis, aperturâ*



*turā depressā, lunari; peristomate recto, simplici, acuto.*

THE ROUNDED HELIX. Shell perspectivevely umbilicated, depressed, close-spired, horny-yellow, red-spotted, finely rib-like striated; spire convex; whorls six to seven, flattened, the last angled; aperture depressed, lunar; lip straight, simple, sharp.

MULLER, Hist. Verm. vol. ii. p. 29.

*Helix radiata*, Da Costa.

*Helix Turtoni*, Fleming.

*Zonites rotundatus*, Gray.

*Hab.* Britain, Germany, France, Sweden.

A flattened subdiscoid shell, with an open perspective umbilicus, spotted and streaked with red.

Species 1117. (Mus. Cuming.)

HELIX FULVA. *Hel. testā imperforatā, turbinato-globosā, corneā, minutissimè striatulā, nitidā; anfractibus sex, convexis, angustissimis, ultimo basi convexiusculo; aperturā depressā, lunari; peristomate recto, simplici, acuto.*

THE FULVOUS HELIX. Shell imperforated, turbinately globose, horny, very minutely finely striated, shining; whorls six, convex, very narrow, the last rather convex at the base; aperture depressed, lunar; lip straight, simple, sharp.

MULLER, Hist. Verm. vol. ii. p. 56?

*Helix trochiformis*, Montagna.

*Helix trochulus*, Dillwyn.

*Helix chersina*, Say.

*Helix Mandralisci*, Bivon.

*Helix Mortoni*, Jeffreys.

*Hab.* Europe and North America.

A small glassy trochus-shaped species, not umbilicated.

Species 1118. (Mus. Cuming.)

HELIX LAMELLATA. *Hel. testā umbilicatā, conoideo-globosā, membranaceo-costulatā, sericinā, corneā; anfractibus quinque, subæqualibus; aperturā depressā, lunari; peristomate simplici, recto, acuto.*

THE LAMELLATED HELIX. Shell umbilicated, conoidly globose, membranaceously fine-ribbed, silky, horny; whorls five, nearly equal; aperture depressed, lunar; lip simple, straight, sharp.

JEFFREYS, Trans. Linn. Soc. vol. xvi. p. 333.

*Helix Scarburgensis*, Turton.

*Helix seminulum*, Rossmäsler.

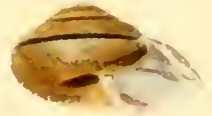
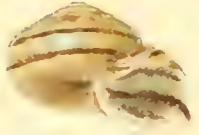
*Hab.* Britain and Ireland.

A small, delicately transparent, globosely turbinated shell, encircled throughout with very fine membranaceous lamellæ.

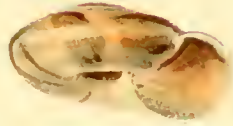
Species 1119. (Mus. Cuming.)

The shell here figured is the *H. radiatula*, Alder (*Zonites radiatulus*, Gray), but Dr. Pfeiffer considers it to be only a more distinctly striated variety of *H. pura*.

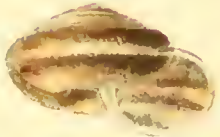




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# HELIX.

PLATE CLXVII.

Species 1120. (Mus. Cuning.)

**HELIX KOCHI.** *Hel. testâ umbilicatâ, globoso-depressâ, solidulâ, obliquè distinctè striatâ, albidâ, fasciis pluribus rufis ad peripheriam ornatâ; spirâ parum elevatâ, obtusiusculâ; anfractibus sex, convexis, sensim accrescentibus, ultimo subcylindraceo; umbilico magno, pervio; aperturâ lunato-circulari; peristomate simplici, acuto, marginibus conniventibus, dextro antrorsum arcuato, columellari dilatato.*

**KOCH'S HELIX.** Shell umbilicated, globosely depressed, rather solid, obliquely distinctly striated, whitish, ornamented at the periphery with several red bands; spire but little raised, rather obtuse; whorls six, convex, increasing gradually, the last subcylindrical; umbilicus large, open; aperture lunar-circular; lip simple, sharp, margins approximating, right margin arched in front, columellar dilated.

PFEIFFER, Pro. Zool. Soc. 1845, p. 127.

*Hab.* — ?

Partaking very much of the form of *Cyclostoma*.

Species 1121. (Mus. Cuning.)

**HELIX INSOLIDA.** *Hel. testâ umbilicatâ, globoso-depressâ, nudâ, corneo-lutescente, angustè trifasciatâ, striatâ; anfractibus quinque, convexis, ultimo anticè subitò deflecto; aperturâ obliquâ, transversè ovali; peristomate reflexo, sublabiato, marginibus conniventibus, subconvexis, columellari basi dilatato, tuberculifero.*

**THE LIGHT HELIX.** Shell umbilicated, globosely depressed, nude, horny-yellow, narrowly three-banded, striated; whorls five, convex, the last suddenly deflected in front; aperture oblique, transversely oval; lip reflected, slightly edged, margins approximating, almost connected, columellar margin rather dilated and tuberculiferous at the base.

ZIEGLER, Rossmâsler, Hist. Moll. vol. viii. p. 31. f. 506.

*Helix pratextata*, Parreyss.

*Hab.* Albania.

A light transparent species, with a rather large and deep umbilicus.

Species 1122. (Mus. Cuning.)

**HELIX ZONITES.** *Hel. testâ umbilicatâ, depressâ, tenui,*

*diaphanâ, confertim costulato-striatâ, lutescente, corneâ spirâ vix elatâ; anfractibus sex, convexiusculis, regulariter accrescentibus, ultimo supra medium lineâ rufâ ad apicem usque conspicuâ ornato, basi latiore, subpinnulato; umbilico mediocri, pervio; aperturâ depressâ, obliquè lunato-oculi, intus margaritaceâ; peristomate simplici, recto, margine columellari breviter patente.*

**THE ZONITES HELIX.** Shell umbilicated, depressed, thin, diaphanous, closely rib-like striated, yellowish-horny, spire but little raised; whorls six, rather convex, increasing regularly, last whorl conspicuously ornamented with a red line above the middle as far as the spire, smoother and rather flattened at the base, umbilicus middling, open; aperture depressed, obliquely lunar-oval, inclined to pearl within; lip simple, straight, columellar margin shortly patent.

PFEIFFER, Pro. Zool. Soc. 1845, p. 127.

*Hab.* — ?

Well characterized by its densely rib-striated surface.

Species 1123. (Mus. Cuning.)

**HELIX COMPRESSA.** *Hel. testâ latè umbilicatâ, depressè orbiculatâ, obtusè angulatâ, supernè rufescente, sericinâ, minutissimè clathratâ, subtus nitidâ, albedo-cinctâ, cinereo albidoque radiatâ, infra angulum interruptè rufescente-cittatâ; anfractibus sex, convexiusculis; aperturâ obliquè lunari; peristomate recto, acuto, intus sublabiato.*

**THE COMPRESSED HELIX.** Shell umbilicated, depressely orbicular, obtusely angled, reddish at the upper part, silky, very minutely cancellated, shining beneath, white-encircled, rayed with ash and white, interruptedly red-filleted beneath the angle; whorls six, rather convex; aperture obliquely lunar; lip straight, sharp, slightly edged within.

ZIEGLER, Rossmâsler, Hist. Moll. vol. iii. p. 2. f. 150.

*Hab.* Fiume.

A broad subdiscoid shell, more or less compressly flattened.

Species 1124. (Mus. Pfeiffer.)

**HELIX CROATICA.** *Hel. testâ latè umbilicatâ, orbiculatè convexâ, supernè confertim costulato-striatâ, subtus nitidè decussatâ, sericinâ, corneâ, obtusè angulatâ, albidâ,*

*cinctâ, subtus nitidâ, lutescente-albidâ, infra angulum corneo-fasciatâ; anfractibus septem, supremis acutè carinatis, reliquis convexiusculis; aperturâ obliquè lunari; peristomate recto, acuta, intus vix albo-callosa.*

THE CROATIAN HELIX. Shell broadly umbilicated, orbicularly convex, closely rib-like striated about the upper part, very finely decussated, silky, horny, obtusely angled, white-encircled, shining and yellowish-white beneath, horn-banded below the angle; whorls seven, the uppermost sharply keeled, the rest rather convex; aperture obliquely lunar; lip straight, acute, a little white-callous within.

PARTSCH, Rossmäsler, Hist. Moll. vol. iii. p. 3. f. 151.

*Helix acies, var.,* Cantraine.

*Hab.* Croatia.

A dull olive species, shining and largely umbilicated beneath.

Species 1125. (Mus. Cuming.)

HELIX SADLERIANA. *Hel. testâ latè et apertè umbilicatâ, orbiculato-depressâ, supernè pilis brevissimis rigidis densè obsitâ, tenui, diaphanâ, lutescente-corneâ, rufo unifasciatâ, in albidâ vittâ utrinque fasciis dilutissimis terminatâ; anfractibus quinque, planulatis; aperturâ rotundato-lunari; peristomate reflexo, albo-labiato, marginibus distantibus.*

SADLER'S HELIX. Shell broadly and deeply umbilicated, orbicularly depressed, densely beset with very short,

rigid hairs, thin, diaphanous, yellowish-bony, red-banded, terminated in a whitish fillet, with very faint bands on each side; whorls five, rather flattened, aperture rotundately lunar; lip reflected, white-edged, with the margins distant.

ZIEGLER, Rossmäsler, Hist. Moll. vol. vii. p. 29. f. 502.  
*Hab.* Croatia.

A light, semitransparent, straw-coloured shell, faintly banded, beset with minute bristles.

Species 1126. (Mus. Cuming.)

HELIX DILLWYNIANA. *Hel. testâ subprofundè umbilicatâ, orbiculatâ, crassiusculâ, opaco-albâ, subrugosâ, apice livido-fuscâ; spirâ impresso-planâ; anfractibus quatuor ad quinque, subrotundatis; aperturâ oblongo-lunari; peristomate latè reflexo, appresso, marginibus subapproximatis.*

DILLWYN'S HELIX. Shell rather deeply umbilicated, orbicular, rather thick, opaque-white, rather rough, livid-brown at the apex; spire impressly flattened; whorls four to five, somewhat rounded; aperture oblongo-lunar; lip broadly reflected, appressed, margins rather approximated.

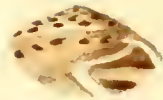
PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* —?

A characteristic solid opaque-white shell, stained with bright livid-brown at the extreme apex.







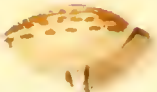
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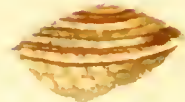
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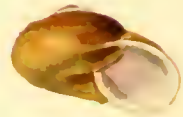
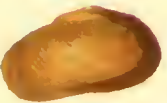
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# HELIX.

PLATE CLXVIII.

Species 1127. (Mus. Pfeiffer.)

**HELIX GROHMANNI.** *Hel. testâ obtectè umbilicatâ, orbiculato-depressâ, carinatâ, subtiliter striatâ, albâ, serialim fusco-maculatâ; anfractibus quatuor ad quinque, subplanulatis, ultimo anticè subdeflexo; aperturâ securiformi, lunatâ, intus saturatè fuscâ; peristomate simplici, margine supero subexpanso, basali apressè reflexo, ad columellam subdilato, carneo.*

**GROHMANN'S HELIX.** Shell with a covered umbilicus, orbicularly depressed, keeled, finely striated, whitish, with three or four brown-blotched bands, whorls four to five, rather flattened, the last a little deflected in front; aperture wedge-lunar, darkly banded within; lip simple, upper margin a little expanded, basal appressly reflected, slightly dilated and flesh-tinged at the columella.

**PHILIPPI**, Enum. Moll. Sicil. p. 128. pl. 5. f. 3.  
*Hab.* Sicily.

Rather roughly rib-striated, with the red-brown band much interrupted and blotched.

Species 1128. (Mus. Cuming.)

**HELIX DECORATA.** *Hel. testâ angustè umbilicatâ, depresso-globosâ, tenui, striatâ, albâ, lenis rariis interruptis castaneis interdum confluentibus decoratâ; spirâ brevi, obtusâ; anfractibus quatuor ad quinque, convexis, ultimo descendente; aperturâ rotundato-lunari, intus livido-fuscâ; peristomate acuto, intus rix labiato, margine columellari membranaceo, dilatato, fornicatim reflexo.*

**THE ADORNED HELIX.** Shell narrowly umbilicated, depressly globose, thin, finely striated, whitish, adorned with various interrupted chestnut bands, sometimes flowing into one another; spire short, obtuse; whorls four to five, convex, the last descending; aperture rotundately lunar, livid-brown within; lip sharp, slightly edged within, columellar margin membranaceous, dilated, archly reflected.

**PFEIFFER**, Symboke, vol. iii. p. 69.  
*Hab.* —?

A light subglobose shell, very neatly conspicuously banded.

Fig. 1129. (Mus. Cuming.)

The shell here figured proves to be the colourless subfossil variety of *H. punctulata* (see Pl. CXXXV. f. 855) named by De Férussac *H. Boneditchiana*.

Species 1130. (Mus. Cuming.)

**HELIX VARIOLOSA.** *Hel. testâ umbilicatâ, depressâ, acutecarinatâ, solidâ, opacâ, lutescente, supernè confertissimè plicatâ, lineisque concentricis regulariter decussatâ, pustulis albis subsclatim obsitâ; spirâ planiusculâ; anfractibus tribus ad quatuor, rix convexiusculis, rapidè accrescentibus, ultimo basi convexo, infra carinam impresso; columellâ brevi, verticali; aperturâ latè securiformi; peristomate simplici, acuto, margine columellari breviter reflexo, umbilicum fere occultante.*

**THE MEASLED HELIX.** Shell umbilicated, depressed, sharply keeled, rather solid, opaque, yellowish, very closely plicated at the upper part, and regularly decussated with concentric lines, thick-set with bands of white pustules; spire rather flat; whorls three to four, slightly convex, increasing rapidly, last whorl convex, impressed beneath the keel; columella short, vertical; aperture broadly wedge-shaped; lip simple, sharp, columellar margin shortly reflected, almost covering the umbilicus.

**PFEIFFER**, Pro. Zool. Soc. 1845, p. 128.  
*Hab.* —?

The character termed pustules in the description of this curious species is merely an arrangement of superficial white blotches.

Species 1131. (Mus. Cuming.)

**HELIX LITTURATA.** *Hel. testâ imperforatâ, depresso-globosâ, lævigatâ vel subtilissimè plicato-striatâ, sâctus tenuè nublâ, roseo-lutescente, basi nigrâ centrali, punctis fuscis utrinque bifasciatis cingitâ; spirâ convexâ; anfractibus quinque, convexis, ultimo anticè paululum descendente; aperturâ subquadrato-lunari, peristomate simplici, intus labiato, margine columellari calloso, roseo-lucidâ.*

**THE STREAKED HELIX.** Shell imperforated, depressly globose, smooth or very finely plicately-striated, finely indented beneath, pinkish-yellow, encircled with a

central blackish line, with two bands of brown dots on each side; spire convex; whorls five, convex, the last whorl a little descending in front; aperture somewhat squarely lunar; lip simple, edged within, columellar margin callous, rose-tinged.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* — ?

Very characteristic, both in respect of colour and marking.

Species 1132. (Mus. Cuming.)

HELIX STURMIANA. *Hel. testá subampliter et profundè umbilicatá, depresso-globosá, subobliquá, olivaceo-corneá, solidiusculá, supernè densè costutato-striatá, infra lævigatá, nilente; spirá obtusá; anfractibus quatuor, supernè declivibus, deinde rotundatis; aperturá circulari; peristomate subreflexo, marginibus fere junctis, columellari albo-callosa.*

STURM'S HELIX. Shell rather largely and deeply umbilicated, depressly globose, rather oblique, olive-horny, rather solid, thickly rib-like striated at the upper part, smooth and shining beneath; spire obtuse; whorls four, slanting at the upper part, then rounded; aperture circular; lip a little reflected, margins almost joined, columellar margin white-callous.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* — ?

A rotundately convoluted olive species, densely finely rib-like striated at the upper part, smooth and shining below.

Species 1133. (Mus. Cuming.)

HELIX INDUTA. *Hel. testá umbilicatá, lenticulari, carinatá, solidá, supernè confertim plicato-striatá, lineis concentricis confertis decussatá, subtus striatá, spadiceá, basi pallescente, circa umbilicum castaneá, epidermide tenuissimá corneá griseá undique indutá; anfractibus quinque, planis, sensim accrescentibus; aperturá subrhombéa; peristomate simplici, margine columellari vir reflexiusculo.*

THE CLOTHED HELIX. Shell umbilicated, lens-shaped, sharply keeled, solid, closely plicately striated about the upper part, decussated with close-set concentric lines, striated beneath, fawn-coloured, pale at the base, chestnut around the umbilicus, covered everywhere with a very thin horny grey epidermis; whorls five, flat, increasing slowly; aperture subrhomboid; lip simple, columellar margin a little reflected.

PFEIFFER, Pro. Zool. Soc. 1845, p. 128.

*Hab.* — ?

An interesting species, belonging apparently to the section *Nanina*.

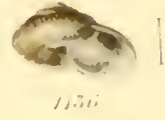




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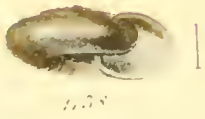
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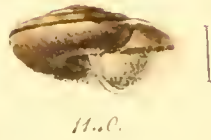
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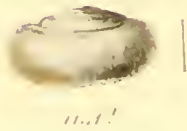
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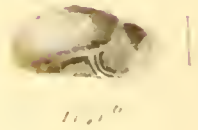
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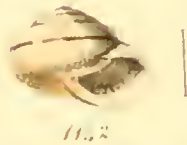
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# HELIX.

## PLATE CLXIX.

Species 1134. (Mus. Cuming.)

**HELIX CARASCALENSIS.** *Hel. testá angustè umbilicatá, globoso-depressá, striatá, lutescente, corneo-variegatá et subfasciolatá; spirá convexiusculá; anfractibus quinque ad sex, convexiusculis; aperturá transversè rotundato-lunari; peristomate patulo, acuto, intus leviter labiato, margine columellari latè reflexo.*

**THE CARASCAL HELIX.** Shell narrowly umbilicated, globosely depressed, striated, yellowish, horn-variegated and faintly banded; spire rather convex; whorls five to six, rather convex; aperture transversely rotundately lunar; lip patulate, sharp, slightly edged within, columellar margin broadly reflected.

FERUSSAC, Hist. Moll. pl. 67. f. 1.

*Hab.* Arragonia.

A small light yellowish-white shell, with intervals of horny pattern.

Species 1135. (Mus. Cuming.)

**HELIX TESTÆ.** *Hel. testá umbilicatá, orbiculato-convexiusculá, minutim striatá, nitidá, glabrá, supernè corneá, basi pallidiore; spirá subelevatá; anfractibus sex, planiusculis, lentè accrescentibus, último basi planulato; umbilico medioeri, pervio; aperturá subtriangulari-lunari; peristomate simplici, acuto, margine supero antorsum arcuato.*

**TESTÆ'S HELIX.** Shell umbilicated, orbicularly convex, minutely striated, shining, horny at the upper part, paler at the base; spire slightly raised; whorls six, rather flat, increasing slowly, the last flattened at the base; umbilicus middling, open; aperture somewhat triangularly lunar; lip simple, sharp, upper margin arched in front.

PHILIPPI, Zeitschrift für Malac. 1844, p. 104.

*Helix Philippi, Testa.*

*Hab.* Sicily.

A depressed subdiscoid species, of a pale livid horn-colour.

Species 1136. (Mus. Cuming.)

**HELIX NITENS.** *Hel. testá umbilicatá, convexo-depressá, tenerá, glabriusculá, diaphaná, supra lutescente, sublus albidá; anfractibus quatuor ad quinque, planulatis,*

*último antè dilatato et subflexo; aperturá obliquá, lunato-orali; peristomate recto, repando, simplici, acuto.*

**THE SHINING HELIX.** Shell umbilicated, convexly depressed, thin, rather smooth, diaphanous, yellowish above, whitish beneath, whorls four to five, rather flattened, the last dilated and a little deflexed in front; aperture oblique, lunar-oval; lip straight spread, simple, acute.

MICHAUD, Complément, p. 44, pl. 15, f. 1-3.

*Helix cellaria, etc., Porro.*

*Hab.* Austria, France, Italy, Portugal.

Of a peculiar transparent reddish hue at the upper part

Species 1137. (Mus. Philippi.)

**HELIX CONSONA.** *Hel. testá obtusè umbilicatá, depresso-globosá, lutescente-corneá, fasciá interaxiali pallidá, leviter striatá, nitidá, pellucidá, anfractibus quinque ad sex, convexiusculis, último antè ex decedente; aperturá latè lunari; peristomate recto, acuto, intus albo-labiato, margine supero dilatato, umbilicum angustè fere obtegente.*

**THE AGREEABLE HELIX.** Shell with a covered umbilicus, depressly globose, yellowish-horny, with an interaxial pellucid band, slightly striated, shining, pallid; whorls five to six, rather convex, the last a little descending in front; aperture broadly lunar, lip straight, sharp, white-edged within, margins distant, columellar margin dilated, almost covering the narrow umbilicus.

ZIEGLER, Rossin'sler, Hist. Moll. vol. ix, pl. 8, f. 572-3.

*Hab.* Sicily.

A rather firm delicate straw-coloured species, without pattern or marking.

Species 1138. (Mus. Cuming.)

**HELIX OBSCURATA.** *Hel. testá apertè umbilicatá, depresso-planusculá, corneá depresso-oratá, nitidá, duriusculá, corneo-brunneá, substriatá; aperturá rotundato-depressá, obliquè lunatá; peristomate simplici, recto, repando.*

**THE FORGOTTEN HELIX.** Shell openly umbilicated, depressly rather flattened, keel depressly ovate, shining,



rather hard, horn-brown, faintly striated; aperture ovately depressed, obliquely lunar; lip simple, sharp, spread.

PORRO, Villa Disp. syst. p. 56.

*Hab.* Corsica and Sardinia.

A transparent subdiscoid shell, faintly red-tinged about the upper part.

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Species 1139. (Mus. Pfeiffer.)

HELIX PACINIANA. *Hel. testá oblectè umbilicatá, depressá, carinatá, rugosá, rugis albis, interstitiis lividis; anfractibus quinque, vix planiusculis, ultimo anticè deflexo; aperturá angulato-lunari; peristomate reflexo, albo-labiato, marginibus approximalis, columellari dilatato, appresso.*

PACINI'S HELIX. Shell with a covered umbilicus, depressed, keeled, rough, wrinkles white, interstices livid; whorls five, a little flattened, the last deflected in front; aperture angularly lunar; lip reflected, white-edged, margins approximated, columellar margin dilated, appressed.

PHILIPPI, Enum. Moll. Sicil. p. 127. pl. 8. f. 9.

*Helix muralis, var.*, Férussac.

*Helix viola*, Rossmäsler.

*Hab.* Sicily.

A rather solid roughly wrinkled shell, with the spire more or less impressed.

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Species 1140. (Mus. Cuming.)

HELIX CINGULELLA. *Hel. testá latè umbilicatá, depressá, tenuiusculá, striatá, nitidulá, sordidè albá, livido-radialá, lineá fuscá supra peripheriam cinctá; spirá subplaná; anfractibus quinque, depressis, ultimo superne obsolete angulato, anticè breviter descendente; aperturá perobliquá, transversè ovali, subcirculari; peristomate subsimplici, tenuè expansiusculo, marginibus approximalis, columellari subdilatato, patente.*

THE LITTLE BELTED HELIX. Shell umbilicated, depressed, rather thin, striated, shining, dead white, livid-rayed, encircled with a brown line above the periphery; spire rather flat; whorls five, depressed, the last obsoletely angled at the upper part, shortly descending in front; aperture very oblique, transversely oval-subcircular; lip rather simple, thin, a little expanded, margins approximating, columellar margin subdilatately patent.

ZIEGLER, Rossmäsler, Hist. Moll. vol. vi. p. 40. f. 373.

*Hab.* Mountains of Volhynia.

Of a delicate livid-white, encircled above the periphery with a conspicuous red band.

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Species 1141. (Mus. Cuming.)

HELIX INSTABILIS. *Hel. testá latè umbilicatá, depressá, striato-rugosá, solidá, albidá; anfractibus quinque, convexis, lentè accrescentibus, ultimo tereti, vix descendente; aperturá fere circulari; peristomate simplici, acuto, marginibus fere contiguis.*

THE CHANGEABLE HELIX. Shell umbilicated, depressed, striately rugose, solid, whitish; whorls five, convex, increasing slowly, the last slender, but little descending; aperture nearly circular; lip simple, sharp, margins almost contiguous.

ZIEGLER, Pfeiffer, Symbolæ, vol. ii. p. 31.

*Helix ericetorum, var.*, Rossmäsler.

*Hab.* Galicia.

A blue-white shell, with a rather contracted rounded aperture.

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Species 1142. (Mus. Cuming.)

HELIX STENOSTOMA. *Hel. testá imperforatá, globuloso-depressá, solidá, sublævigatá, nitidá, albá, fasciá unicá fuscá ad peripheriam et macularum aurantiarum seriebus duabus ornatá, punctisque griseis obsolete aspersá; anfractibus quatuor ad quinque, vix convexiusculis, ultimo ventroso, anticè abruptè deflexo; aperturá subhorizontali, ellipticá; peristomate labiato, albo, marginibus approximalis, supero breviter expanso, basali arcuato, appressè reflexo.*

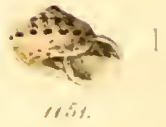
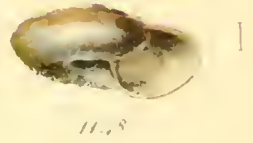
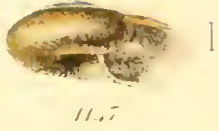
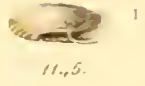
THE CONTRACTED-MOUTH HELIX. Shell imperforated, globulosely depressed, solid, rather smooth, shining, white, ornamented at the periphery with a single brown band, and two rows of orange spots, obsoletely sprinkled with grey dots; whorls four to five, slightly convex, the last ventricose, abruptly deflected in front; aperture nearly horizontal, elliptic; lip edged, white, margins approximating, upper margin shortly expanded, basal arched, appressly reflected.

PFEIFFER, Pro. Zool. Soc. 1846, p. 28.

*Hab.* — ?

A rather solid compact form, more or less indistinctly marked.





# HELIX.

PLATE CLXX.

Species 1143. (Mus. Cuming.)

**HELIX HYALINA.** *Hel. testā vix subumbilicatā, suborbiculatā, arctispirā, vitreā, diaphanā, glabrā, nitidissimā; anfractibus sex, planulatis; aperturā angustissimè lunari; peristomate recto, simplici.*

**THE HYALINE HELIX.** Shell very slightly umbilicated, suborbicular, close-spined, glassy, diaphanous, smooth, very shining; whorls six, rather flattened; aperture very narrow, lunar; lip straight, simple.

FERUSSAC, Prodrôme, p. 224.

*Helix contorta*, Held.

*Vitrea diaphana*, Fitzing.

*Hab.* Germany, France.

A minute straw-coloured glassy shell.

Species 1144. (Mus. Cuming.)

**HELIX HYDATINA.** *Hel. testā umbilicatā, depressā, albidā, pellucidā, striatulā; suturā marginatā; anfractibus quinque, planiusculis, ultimo non descendente, basi subplanulato; aperturā depressā, obliquè lunari; peristomate recto, acuto, simplici, margine dextro antrorsum subarcuato, columellari vix reflexiusculo.*

**THE WATERY HELIX.** Shell umbilicated, depressed, whitish, transparent, finely striated; suture margined; whorls five, rather flat, the last not descending, rather flat at the base; aperture depressed, obliquely lunar; lip straight, sharp, simple, right margin arched in front, columellar a little reflected.

ROSSMASLER, Hist. Moll. vol. viii. p. 36. f. 529.

*Hab.* Corfu.

Allied to the preceding species, but more opaque, and more distinctly umbilicated.

Species 1145. (Mus. Cuming.)

**HELIX CIRCUMLINEATA.** *Hel. testā umbilicatā, depressā, subdiscoidē, tenerā, hyalinā, superne lineis confertis spiralibus sculptā; suturā impressā, marginatā; anfractibus quinque, angustis, vix convexiusculis; umbilico lato, perspectivo; aperturā verticali, latè lunari; peristomate simplici, acuto, margini superno antrorsum arcuato, columellari brevi, subsinuato, non dilatato.*

**THE CIRCUMLINEATED HELIX.** Shell umbilicated, depressed, subdiscoid, light, hyaline, engraved round the upper part with close-set spiral lines; suture

impressed, margined; whorls five, narrow, slightly convex; umbilicus broad, perspective; aperture vertical, broadly lunar; lip simple, sharp, upper margin arched in front, columellar margin short, sub-sinuated, not dilated.

KUSTER, Pfeiffer, Symbolæ, vol. iii. p. 65.

*Hab.* Dalmatia.

Remarkably characterized on the upper part by a number of fine spiral linear grooves.

Species 1146. (Mus. Cuming.)

**HELIX FILICINA.** *Hel. testā umbilicatā, depresso-globosā, pellucidā, purpurascente-roseā, pilis brevissimis sparsis obsitā; anfractibus sex, lente accrescentibus, ultimo albedo-cingulato; umbilico angusto, aperto; aperturā lunari; peristomate intus roseo-labiato, margine columellari reflexiusculo.*

**THE FERN HELIX.** Shell umbilicated, depressly globose, pellucid, purple-horny, beset with very short scattered hairs; whorls six, increasing slowly, the last white-ringed; umbilicus narrow, open; aperture lunar; lip rose-edged within, columellar margin a little reflected.

SCHMIDT, Pfeiffer, Symbole, vol. i. p. 39.

*Hab.* Carniola.

Of a rich subtransparent purple-horn colour.

Fig. 1147. (Mus. Cuming.)

The shell here figured on a magnified scale, proves to be *H. alliaria*, described at Pl. CLXIII. Sp. 1084.

Species 1148. (Mus. Cuming.)

**HELIX COMPLANATA.** *Hel. testā subtilè umbilicatā, discoidē, depressā, tenui, diaphanā, fuscocentē, superne planā, subtilis umbilico excavatā, a fructibus quatuor, convexiusculis, longitudinaliter striatis, striis ad peripheriam evanescentibus; aperturā rotundato-semilunari, labro simplici, tenuissimo.*

**THE SMOOTH HELIX.** Shell rather broadly umbilicated, discoid, depressed, thin, diaphanous, brownish, flat at the upper part, excavated about the umbilicus, whorls four, rather convex, longitudinally striated, striae becoming faint at the periphery; aperture rotundately semilunar, lip simple, very thin.

DESHAYES, Férussac, Hist. Moll. p. 9. pl. 69 B. f. 2.

*Hab.* — ?

A transparent horny shell, light reddish about the upper part, paler beneath.

Species 1149. (Mus. Pfeiffer.)

HELIX FLAVIDA. *Hel. testá apertè umbilicatá, depressá, suborbiculatá, arctispirá, flavidá, eleganter striato-costulatá; anfractibus sex, convexis, lentè accrescentibus; aperturá subverticali, lunari; peristomate recto, acuto, intus lævissimè calloso.*

THE YELLOWISH HELIX. Shell openly umbilicated, depressed, suborbicular, close-spined, yellowish, elegantly striately ribbed; whorls six, convex, increasing slowly; aperture subvertical, lunar; lip straight, acute, very smoothly callous within.

ZIEGLER, Rossmäsler, Hist. Moll. vol. 10. p. 13. f. 610.

*Hab.* Sicily.

A yellowish subtransparent shell, obliquely thread-ribbed throughout.

Species 1150. (Mus. Pfeiffer.)

HELIX PARLATORIS. *Hel. testá umbilicatá, depressá, carinatá, supra planá, subtilis convexá, corneá, pilis longis villosá; anfractibus quatuor, planiusculis, ultimo descendente; aperturá subangulatá, rotundato-lunari; peristomate recto, simplici, acuto, marginibus approximatis.*

PARLATORE'S HELIX. Shell umbilicated, depressed, keeled, flat at the upper part, convex beneath, horny, villous with long hairs; whorls four, rather flat, the last descending; aperture slightly angled, rotundately lunar; lip straight, simple, sharp, margins approximating.

BIVON, l'Oechio, 1839, No. 9. f. 1.

*Hab.* Sicily.

Peculiarly flat-angled about the upper part.

Species 1151. (Mus. Pfeiffer.)

HELIX CYPARISSIAS. *Hel. testá umbilicatá, depressusculá, subtiliter et confertim costulatá, albá, corneo-punctatá vel fusco irregulariter maculatá et subsfasciatá, spirá planè elevatá, vertice acutiusculo, corneo; anfractibus quinque, convexis, ultimo tereti, anticè non descendente; aperturá subcirculari; peristomate recto, acuto, tenuiter fulvo-labiato, marginibus approximatis, columellari vix dilatato.*

THE CYPRUS HELIX. Shell umbilicated, rather depressed, finely closely ribbed, white, horn-dotted, irregularly spotted and indistinctly banded with brown; spire flatly elevated, rather sharp and horny at the apex; whorls five, convex, the last terete, not descending in front; aperture nearly circular; lip straight, sharp, thinly fulvous-edged, margin approximating, columellar margin but little dilated.

PARREYSS, Pfeiffer, Zeitschrift für Malac. 1847, p. 32.

*Hab.* Island of Cyprus.

A subturbinated greyish-white shell, mottled with dots and faint interrupted hand-marks.

Species 1152. (Mus. Pfeiffer.)

HELIX SIMPLICULA. *Hel. testá latè umbilicatá, lenticulari, tenuissimè striatá, pallidè corneá; anfractibus quinque, ultimo subangulato, sublus convexiusculo; aperturá depressá; peristomate simplici.*

THE SIMPLE HELIX. Shell broadly umbilicated, lens-shaped, very thinly striated, pale horny; whorls five, the last slightly angled, rather convex beneath; aperture depressed; lip simple.

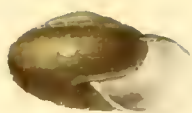
MORELET, Moll. du Portugal, p. 56. pl. 6. f. 2.

*Hab.* Portugal, between Mertola and Castro Verde.

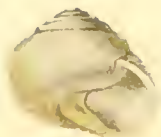
A small discoid species of very simple character.



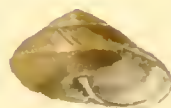




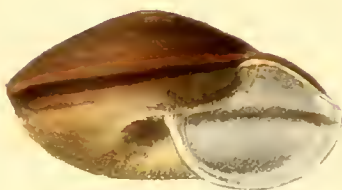
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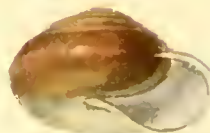
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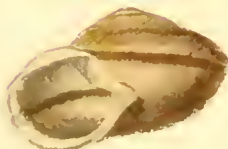
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# HELIX.

PLATE CLXXI.

Species 1153. (Mus. Benson.)

**HELIX LUBRICA.** *Hel. testâ umbilicatâ, depressâ, obsolete radiatâ, politissimâ, luteo-fulvescente vel olivaceâ; spirâ planiusculâ, apice vix prominulâ, obtusâ; suturâ leviter canaliculatâ; anfractibus quinque, ultimo rotundato, basi convexo; aperturâ latè lunari, vix obliquâ; peristomate acuto, intus interdum subremotè albido-labiato, marginæ columellari obliquè descendente, subsinuato, leviter incrussato, superiè reflexiusculo.*

**THE SLIMY HELIX.** Shell umbilicated, depressed, obsolete rayed, very polished, yellowish-fulvous or olive; spire rather flat, slightly prominent and obtuse at the apex; suture a little channelled; whorls five, the last rounded, convex at the base; aperture broadly lunar, a little oblique; lip sharp, sometimes rather distantly white-edged within, columellar margin obliquely descending, rather sinuous, slightly thickened, a little reflected at the upper part.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. x. p. 349.  
*Hab.* Darjeeling, Sikkim Himalaya; Dr. Chapman.

A smooth polished horny species, rather depressly discoidly convoluted.

Species 1154. (Mus. Benson.)

**HELIX TESCORUM.** *Hel. testâ imperforatâ, globosâ, solidiusculâ; spirâ convexâ; suturâ peculiariter canaliculatâ; anfractibus quinque, rotundatis, obliquè subplicato-striatis, ultimo anticè descendente; aperturâ rotundato-lunari; peristomate subexpanso, marginæ columellari reflexo, ad aream umbilicalem latè calloso-dilatato.*

**THE WILDS HELIX.** Shell imperforated, globose, rather solid; spire convex; suture peculiarly channelled; whorls five, rounded, obliquely subplicately striated, last whorl descending in front; aperture rotundately lunar; lip a little expanded, columellar margin reflected, broadly callously dilated over the umbilical area.

BENSON, Ann. and Mag. Nat. Hist. vol. xi. p. 30.  
*Hab.* Shark's Bay, Australia.

The shell here represented has a worn opaque-white aspect, but it has some faint traces of rusty brown, so that the species in fine condition may probably be coloured.

Species 1155. (Mus. Benson.)

**HELIX TUGURIUM.** *Hel. testâ minutè umbilicatâ, tenui, virente-cornuâ, pellucidâ, subpyramidalè-depressâ; spirâ plano-declivi, apice mucronatâ; anfractibus quinque ad sex, superiè densè subtilissimè costulato-striatis, strus spiralibus decussatis; subtus politâ; aperturâ obliquè lunari; peristomate simplici, marginæ ad umbilicum brevissimè reflexo.*

**THE SHED HELIX.** Shell minutely umbilicated, thin, greenish-horny, transparent, somewhat pyramidally depressed; spire flatly slanting, pointed at the apex; whorls five to six, densely very finely rib-like striated, decussated with spiral striae; polished beneath; aperture obliquely lunar; lip simple, margin very shortly reflected at the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. x. p. 348.  
*Hab.* Darjeeling, Sikkim Himalaya; Trotter.

The spire of this species, which is densely decussately striated, has somewhat a pyramidally raised form.

Species 1156. (Mus. Benson.)

**HELIX CYCLOPLAX.** *Hel. testâ latè profundè umbilicatâ, orbiculato-depressâ, supra conferti et in latere radiato-striatâ, striis spiralibus decussatâ, granulatâ; rufescente-corneâ, subtus lævire, pallidâ, foveâ medianâ castaneâ circumdatâ; spirâ convexiusculâ, apice planatâ; suturâ primariè adboletâ, deinceps impressâ; anfractibus quinque, ultimo carinato; aperturâ subquadrato-lunari, obliquâ, intus interdum adboletâ; peristomate simplici, acuto.*

**THE ROUND-TABLE HELIX.** Shell broadly deeply umbilicated, orbicularly depressed, closely radiately wave-striated above, decussated with spiral striae, granulated; reddish-horny, smoother beneath, pale, surrounded with a central chestnut band, spire rather convex, flattened at the apex, suture at first rather obsolete, at last impressed; whorls five, the last keeled; aperture somewhat squately lunar, oblique, slightly white-edged within, lip simple, acute.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. x. p. 348.  
*Hab.* Darjeeling, Sikkim Himalaya, Trotter.

A broad chestnut-banded species, flattened down, as it were, at the apex.

## Species 1157. (Mus. Benson.)

HELIX NICOBARICA. *Hel. testá umbilicatá, sinistrali, solidá, globulosá, obliquè striatá, castaneo-rufá, ad peripheriam, suturam, et basin albo-zonatá; spirá brevi, obtusá; anfractibus quinque ad sex, convexiusculis, ultimo anticè descendente, basi inflato; aperturá rotundato-lunari; peristomate simplici, obtuso, albo, margine columellari reflexiusculo, umbilicum fere tegente.*

THE NICOBAR HELIX. Shell umbilicated, sinistral, solid, globular, obliquely striated, chestnut-red, white-zoned at the periphery, the suture, and the base; spire short, obtuse; whorls five to six, rather convex, the last descending in front, inflated at the base; aperture rotundately lunar; lip simple, obtuse, white, columellar margin rather reflected, almost covering the umbilicus.

CHEMNITZ, Conch. Cab. vol. xi. p. 79. pl. 108. f. 911–12.  
*Hab.* Cuddapah, near Madras; Wilson.

A reversed banded species, of light texture.

## Species 1158. (Mus. Benson.)

HELIX NANINOIDES. *Hel. testá angustè umbilicatá, orbiculato-convexá, solidiusculá, pallidè fulvâ, supernè rufescente, distinctè et confertim striatá, lineis concentricis, sæpè obsolete, decussatá, basi sublaevigatá, distanter striatulá; spirá depresso-conoideá, apice obtusá; anfractibus sex, viz convexiusculis, ultimo subangulato, medio impresso; aperturá transversè lunari; peristomate recto, obtuso, subincrassato, ad umbilicum brevisimè reflexo.*

THE NANINA-LIKE HELIX. Shell narrowly umbilicated, orbicularly convex, rather solid, light fulvous, reddish at the upper part, distinctly and closely striated, decussated with concentric lines, which are often obsolete,

rather smooth at the base, and distantly faintly striated; spire depressly conoid, obtuse at the apex; whorls six, slightly convex, the last a little angled, impressed in the middle; aperture transversely lunar; lip straight, obtuse, rather thickened, very shortly reflected at the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1842, vol. ix. p. 486.  
*Hab.* Singapore; Dr. Cantor.

The finely decussated sculpture is less prominent towards the lower part, leaving off at the periphery somewhat abruptly in places.

## Species 1159. (Mus. Benson.)

HELIX INTERRUPTA. *Hel. testá umbilicatá, sinistrali, orbiculato-convexá, tumidiusculá, ad peripheriam obtusè angulatá, supernè arcuatim plicato-striatá, striis spirilibus tenuicancellatis, fulvo-stramineá, semipellucidá, zoná pallidè castaneá ad peripheriam cingulatá; spirá convexá, apice obtusá; anfractibus quatuor, ultimo carinato; aperturá orbiculato-lunari; peristomate simplici, subincrassato, fuscato, ad umbilicum subdilato-reflexo.*

THE INTERRUPTED HELIX. Shell umbilicated, sinistral, orbicularly convex, rather swollen, obtusely angled at the periphery, arcuately plicately striated at the upper part, finely cancellated with spiral striae, fulvous straw-colour, semitransparent, encircled at the periphery by a faint chestnut zone; spire convex, obtuse at the apex; whorls four, the last keeled; aperture orbicularly lunar; lip simple, rather thickened, browned, subdilately reflected at the umbilicus.

BENSON, Zool. Journ. vol. v. p. 461.

*Hab.* Botanic Garden, Calcutta; Benson.

Allied to *H. Himalayana*, Lea, but differing in form and sculpture.





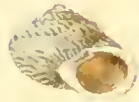
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1161.<sup>a</sup>



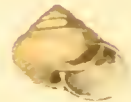
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1163.



1164.



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1166.<sup>a</sup>



1166.<sup>b</sup>



1167.

# HELIX.

PLATE CLXXII.

Species 1160. (Mus. Benson.)

**HELIX CASTRA.** *Hel. testâ subampliter umbilicatâ, depressissimo-conicâ, tenui, exiliter obliquè acuto-striatâ, cornâ; spirâ ad apicem obtusâ; suturis marginatis; anfractibus quinque ad sex, planulatis, ultimo ad peripheriam acutissimè carinato, subtus planiusculo; aperturâ obliquè subquadratâ, margine acuto.*

**THE CAMP HELIX.** Shell rather largely umbilicated, very depressly conical, thin, finely obliquely sharply striated, horny; spire obtuse at the apex: sutures margined; whorls five to six, a little flattened, the last very sharply keeled at the periphery, rather flattened beneath; aperture obliquely subquadrate, margin acute.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. x. p. 349.  
*Hab.* Darjeeling, Sikkim Himalaya; Trotter.

A flattened horny *Solarium*-like species, rather largely umbilicated.

Species 1161. (Fig. a, b, Mus. Benson.)

**HELIX LYCHNIA.** *Hel. testâ imperforatâ, valdè depresso-conicâ, tenui, translucente, politâ, fuscâ; spirâ conicâ, obtusiusculâ; suturis marginatis; anfractibus sex ad septem, angustis, planiusculis, ultimo vix latiore, ad peripheriam acutè compresso-carinato, subtus convexiusculo, medio excavato; aperturâ vix obliquâ, angustâ, securiformi; peristomate simplici, acuto, margine inferiore arcuato, versus periomphalum leçiter incrassato.*

**THE CANDLESTICK HELIX.** Shell imperforated, very depressly conic, thin, translucent, polished, brown; spire conical, rather obtuse; sutures margined; whorls six to seven, narrow, rather flat, the last scarcely broader than the rest, sharply compressly keeled at the periphery, rather convex beneath, excavated in the middle; aperture a little oblique, narrow, hatchet-shaped; lip simple, sharp, lower margin arched, slightly thickened towards the seat of the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1852, vol. x. p. 349.  
*Hab.* Singapore; Dr. Bacon.

Of the same typical form as the preceding species, but not umbilicated.

Species 1162. (Mus. Benson.)

**HELIX PLECTILIS.** *Hel. testâ oblectè umbilicatâ, tenuiculâ, globosâ, cærulescente-albâ, opacâ, undique peculiariter crispato-corrugatâ; spirâ convexâ; anfractibus quatuor, subrotundatis; aperturâ circulari; peristomate expanso, super umbilicum plus minus dilatato, marginibus callositate planatâ junctis.*

**THE CRUMPLED HELIX.** Shell with a covered umbilicus, rather thin, globose, bluish-white, opaque, peculiarly crisply puckered throughout; spire convex; whorls four, rather rounded; aperture circular; lip expanded, more or less dilated over the umbilicus, margins joined by a flattened callosity.

BENSON, Ann. and Mag. 1853, vol. xi. p. 29.

*Hab.* Shark's Bay, West Australia.

The crumpled sculpture of this species is quite distinct from anything previously known.

Species 1163. (Mus. Benson.)

**HELIX YESICULA.** *Hel. testâ umbilicatâ, conoideo-depressâ, tenui, sublevigatâ, nitidâ, translucente, pallidè cornâ; spirâ brevi, conoideâ, apice acuminatâ; suturâ profundâ; anfractibus sex, ultimo rotundato, non descendente, basi convexo; aperturâ subverticali, lunato-rotundatâ; peristomate simplici, acuto, margine columellari verticali, ad umbilicum in lamina brevem triangularem reflexo.*

**THE LITTLE BLADDER HELIX.** Shell umbilicated, conoidly depressed, thin, rather smooth, shining, translucent, pale horny; spire short, conoid, acuminate at the apex; suture deep; whorls six, the last rounded, not descending, convex at the base; aperture subvertical, lunar-rounded; lip simple, sharp, columellar margin vertical, reflected at the umbilicus into a short triangular lamina.

BENSON, Journ. Asiatic Soc. vol. vii. p. 216.

*Hab.* Sotee-Durga and Rajmahal, Bengal; Benson.

The apex is sometimes dark brown, with a little brown in the suture.

Species 1164. (Mus. Benson.)

**HELIX LEGYTHIS.** *Hel. testâ subumbilicatâ, conoideo-de-*



*pressā, tenui, subærigatā, nitidā, translucente, pallidè rubello-corneā; spirā brevi, conoideā, acuminatiusculā; anfractibus sex, viz convexiusculis, ultimo latiore, non descendente, basi subplanulato; aperturā subverticali, latè lunari; peristomate simplici, acuto, margine columellari arcuato, subdeclivi, supernè brevissimè reflexo.*

THE VASE HELIX. Shell slightly umbilicated, conoidly depressed, thin, rather smooth, shining, translucent, pale reddish-horny; spire short, conoid, rather acuminated; whorls six, slightly convex, the last broader, not descending, rather flattened at the base; aperture subvertical, broadly lunar; lip simple, sharp, columellar margin arched, rather slanting, very shortly reflected at the upper part.

BENSON, Ann. and Mag. Nat. Hist. 1852, p. 406.

*Hab.* Rajmahal Hills, India; Benson.

Very like the preceding species, but less umbilicated and rather more acuminated.

Species 1165. (Mus. Benson.)

HELIX SUBJECTA. *Hel. testā umbilicatā, conoideo-depressā, tenui, striatā, corneā, oleosā; spirā breviter conoideā, acutiussculā; suturā lævi, albido-marginalā; anfractibus sex ad septem, viz convexiusculis, ultimo lato, subdepresso, non descendente, basi parum convexo; aperturā parum obliquā, rotundato-lunari; peristomate simplici, recto, margine columellari subecedente, arcuato, supernè brevissimè reflexo.*

THE SUBJECT HELIX. Shell umbilicated, conoidly depressed, thin, striated, horny, oily; spire shortly conoid, rather sharp; suture smooth, white-edged; whorls six to seven, slightly convex, the last broad, a little depressed, not descending, but little convex at the base; aperture rather oblique, rotundately lunar; lip simple, straight, columellar margin slightly reeding, arched, very shortly reflected at the upper part.

BENSON, Ann. and Mag. Nat. Hist. 1852, p. 407.

*Hab.* Rajmahal Hills, India; Benson.

Of flatter and more discoid growth than the preceding species, from the same locality.

Species 1166. (Fig. a, b, Mus. Benson.)

HELIX BACONI. *Hel. testā angustè umbilicatā, depresso-turbinatā, tenuissimā, pellucidā, pallidè corneā, supernè elonganter decussatim corrugato-striatā, sericeā, subtilis*

*politā, radiato-striatā; spirā conoideā, apice acutiussculā, fuscata; suturā impressā; anfractibus quinque, subconvexis, lentè accrescentibus, superioribus supernè fasciā rufo-fuscā angustā, demum obsoletā, marginatis, ultimo non descendente, carinato; aperturā subverticali, angulato-lunari; peristomate acuto, marginibus convergentibus, columellari verticali, cum basali angulum rotundatum formante, supernè brevissimè reflexo.*

BACON'S HELIX. Shell narrowly umbilicated, depressly turbinated, very thin, pellucid, pale horny, elegantly decussately wrinkle-striated at the upper part, silky, polished beneath, radiately striated; spire conoid, rather sharp and brown at the apex; suture impressed; whorls five, rather convex, increasing slowly, upper whorls margined at the upper part with a red-brown band, which becomes obsolete, last whorl not descending, keeled; aperture nearly vertical, angularly lunar; lip sharp, margins converging, columellar margin vertical, forming, with the basal margin, a rounded angle, very shortly reflected at the upper part.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. vi. p. 251.

*Hab.* Banks of the river Gungun, near Moradabad, India; Dr. Bacon.

The specimen here figured is the only one that has been at present found of this species.

Species 1167. (Mus. Benson.)

HELIX ALBIDENS. *Hel. testā imperforatā, subdepresso-conoideā, basi depresso-rotundatā; spirā gradatim elevatā, rufo-fuscescente, lineā medianā castaneā cingulatā; anfractibus sex ad septem, convexis, subobsoletè arcuatim plicato-striatis; aperturā angustè lunari; peristomate tenui, margine columellari dente incrassato calloso albo conspicuè munito.*

THE WHITE-TOOTH HELIX. Shell imperforated, somewhat depressly conoid, depressly rounded at the base: spire gradually raised, reddish-brown, eneiored round the middle by a chestnut line: whorls six to seven, convex, rather obsoletely arcuately plicately striated; aperture narrowly lunar; lip thin, columellar margin conspicuously furnished with a thickened white callous tooth.

BENSON, Ann. and Mag. Nat. Hist. 1853, vol. xi. p. 31.

*Helix monodonta*, Grateloup (not of Lea).

*Hab.* Mauritius; Sir David Barclay.

Well distinguished by its callous *Monodonta*-like tooth





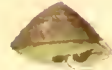
1168.



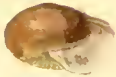
1169<sup>a</sup>



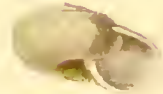
1169<sup>b</sup>



1170.



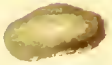
1171.



1172.



1173.



1174<sup>a</sup>



1174<sup>b</sup>



1175.

# HELIX.

## PLATE CLXXIII

Figures numbered 1 to about 171, in the Catalogue.

Species 1168. (Mus. Benson.)

**HELIX REMOTA.** *Hel. testâ umbilicatâ, depressâ, subtili-  
volutâ, tenui, sublaevigatâ, parâ umbilicâ, dilatâ,  
cornu-lutescenti; spirâ plumbeâ; suturâ impressâ,  
marginatâ, infractâ quâ ad quatuor, convexi-  
usculis, ultimo latiore, depressâ, non descendente, basi-  
ris convexiore; umbilico medio, aperto; apertura  
parâ obliquâ, latè lunari; peristoma simplici, recto,  
marginibus rix convergentibus, columellari arcuato-d-  
clivi.*

**THE DISTANT HELIX.** Shell umbilicated, depressed,  
rather discoid, thin, smooth, but little shining, dia-  
phanous, horny-yellow, spire rather fat; suture im-  
pressed, margined; whorls four to five, rather con-  
vex, the last broader, depressed, not descending,  
scarcely more convex at the base; umbilicus mid-  
dling, open; aperture but little oblique, broadly lun-  
ar; lip simple, straight, margins rather approximat-  
ing, columellar margin arcuately slanting.

BENSON, Ann. and Mag. Nat. Hist. 1851, vol. vi. p. 263.

*Hab.* St. Helena (under stones in elevated places); Benson.

A light thin horny discoid shell, rather deeply um-  
bilicated.

Species 1169. (Mus. Benson.)

**HELIX PETROBIA.** *Hel. testâ subangustè sed profunde um-  
bilicatâ, globoso-discoidâ, undique dense subtiliter es-  
tulatâ-striatâ, fulvo-fuscâ, subtili olivacea, viridâ;  
spirâ convexâ; suturâ impressâ; a fraclines quatuor  
ad quinque, rotundatis; apertura lunari; peristomate  
simplici, ad umbilicum breviter reflexo.*

**THE STONE-DWELLING HELIX.** Shell rather narrowly  
but deeply umbilicated, globosely discoid, densely  
finely rib-like striated throughout, fulvous-brown,  
olive underneath, silky, spire convex, suture im-  
pressed; whorls four to five, rounded; aperture lun-  
ar, lip simple, shortly reflected at the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1851.

*Hab.* High Constantia, Cape of Good Hope; Benson.

A small silky brown globosely discoid species, densely  
finely rib-like striated.

Species 1170. (Mus. Benson.)

**HELIX RETIERA.** *Hel. testâ umbilicatâ, tenui, discoidi,*

*tristylâ, rotundâ, basi rumbâ, concavâ, parâ  
rotundâ, crassa, dilatâ, depressâ, parâ convexâ  
spirâ convexâ, et sâ infractâ quâ ad quatuor, p-  
rivois, ultimo latè subovo, oridâ; umbilico me-  
diali, parâ, apertura depressâ, non descendente,  
basi rix simplici, arcuâ, marginibus rix  
plurimè approx.*

**THE NET-PLATING HELIX.** Shell umbilicated, obtusely  
trichostylous, strongly plicated, reflected with sinu-  
ous concentric lines, keeled, double-ribbed, silky, pale  
horny; spire clavate, obtuse, whole six to seven-  
rator flat, the last rather flat at the base, strongly  
umbilicus midling, open; aperture depressed, wide-  
slipped, lip simple, acute, upper margin short, basal  
teeth keeled.

PHILLIPS, Proc. Zool Soc. 1845, p. 73.

*Hab.* Nidderries, India; Johnston.

Of a distinct *Trichostylus* growth, keeled at the basal  
periphery.

Species 1171. (Mus. Benson.)

**HELIX BISCULATA.** *Hel. testâ umbilicatâ, profunde um-  
bilicatâ, trisulcatâ, parâ rotundâ, albâ crassa, tenui  
reflexâ, utrinque distinctè angulato-striatâ  
p-â, plurimè rotundatis, concavâ, a fraclines  
ultra striatâ, viridâ, apertura depressâ, non  
descendente, basi rix simplici, arcuâ, marginibus  
rivois, ultimo latè subovo, oridâ; umbilico me-  
diali, parâ, apertura depressâ, non descendente,  
basi rix simplici, arcuâ, marginibus rix  
plurimè approx.*

**THE DOUBLE-SCULPTURED HELIX.** Shell umbilicated,  
oblongly depressed, transparent, but with obscure  
horny beauty, reddish above, elegantly very closely  
placally striated on each side, inferior of the ver-  
tical line a much striated, deussately with open  
strongly depressed convex, smooth and shining at  
the apex, suture deep, whorls four to five, convex,  
narrowly sawy, the last not exceeding, rounded,  
more convex basally; aperture vertical, lower lip  
acute, acute, columellar margin gradually shorting  
under the strongly rounded above, forming  
a transverse band.

BENSON, Ann. and Mag. Nat. Hist. 1851, vol. vi. p. 198.

*Hab.* Camps Bay, Cape of Good Hope (under stones); Benson.

Distinguished by a delicate cancellated sculpture in the interstices between the rib-like striae.

Species 1172. (Mus. Benson.)

HELIX DUMETICOLA. *Hel. testā umbilicatā, depressā, tenui, supernè costulato-striatā, subtilis læviore, corneo-albidā, epidermide luteā, quasi lubricā, indutā; spirā convexiusculā, apice obtusā; suturā impressā; anfractibus tribus ad quatuor, convexiusculis, ultimo rapidè accrescentibus, subdepresso, basi convexo; umbilico latiusculo, profundo; aperturā magnā, parum obliquā, lunato-ovali; peristomate simplici, tenui, acuto, marginibus subapproximatis, columellari supernè dilatato, patente.*

THE COPPICE HELIX. Shell umbilicated, depressed, thin, rib-like striated at the upper part, smoother beneath, horny-white, covered with a yellowish smooth epidermis; spire rather convex, obtuse at the apex; suture impressed; whorls three to four, rather convex, the last increasing rapidly, a little depressed, convex at the base; umbilicus rather broad and deep; aperture large, but little oblique, lunar-oval; lip simple, thin, acute, margins rather approximating, columellar margin dilated at the upper part, patent.

BENSON, Ann. and Mag. Nat. Hist. 1851, vol. vii. p. 106.

*Hab.* Cape of Good Hope (among thickets on the shores of False and Table Bays); Benson.

Partaking rather of the form of *Cyclostoma*.

Species 1173. (Mus. Benson.)

HELIX PERPLICATA. *Hel. testā angustè umbilicatā, conoideo-semiglobosā, tenui, corneā, subdiaphanā, utrinque obliquè plicatā, plicis subdistantibus, interstitiis longitudinaliter striatis; spirā elevatiusculā, subconoidē, apice lævi, acutiusculo, lutescente; suturā impressā; unfractibus quinque ad sex, convexiusculis, lentè accrescentibus, ultimo leviter depresso, non descendente, subtilis convexiore; aperturā rotundato-lunatā, vix obliquā; peristomate simplici, acuto, margine columellari tenui, supernè breviter reflexo.*

THE MANY-PLAIED HELIX. Shell narrowly umbilicated, conoidly-semiglobose, thin, horny, subdiaphanous, obliquely plicated on both sides, plaits rather distant, striated longitudinally in the interstices; spire rather raised, subconoid, apex smooth, rather sharp, yellowish; suture impressed; whorls five to six, rather convex, increasing slowly, the last slightly depressed, not descending, more convex beneath; aperture rotundately lunar, a little oblique; lip simple, acute, columellar margin thin, shortly reflected at the upper part.

BENSON, Ann. and Mag. Nat. Hist. 1851, vol. vii. p. 104.

*Hab.* Cape of Good Hope (in stumps and putrid fungi under the Devil's Mountain); Benson.

Of the same typical character as *H. petrobia*, but more acuminate in the spire.

Species 1174. (Mus. Benson.)

HELIX COSMIA. *Hel. testā apertè profundè umbilicatā, depressā, tenui, rugoso-plicatulā, translucēte, nitidiusculā, cereā, virenti-corneā; spirā vix elevatā, apice obtusā; anfractibus quatuor, subplanatis, rapidè accrescentibus, ultimo anticè dilatato, non descendente; aperturā obliquā, lunato-rotundatā; peristomate tenui, margine dextro supernè arcuato, columellari breviter reflexiusculo.*

THE ADORNED HELIX. Shell openly deeply umbilicated, depressed, thin, rugosely plicated, transparent, rather shining, wax-like, greenish-horny; spire scarcely raised, obtuse at the apex; whorls four, rather flattened, increasing rapidly, the last dilated in front, not descending; aperture oblique, lunar-rounded; lip thin, right margin arched at the upper part, columellar margin slightly reflected.

PFEIFFER, Zeitschrift für Malac. 1852, p. 112.

*Helix munda*, Benson (not of Adams).

*Helix cerea*, Pfeiffer (not of Gould).

*Hab.* Cape of Good Hope (at the foot of Lion's Head, Camps Bay, among fallen leaves); Benson.

A light transparent waxen horny shell, openly flatly convoluted.

Species 1175. (Mus. Benson.)

HELIX SUFFULTA. *Hel. testā vix umbilicatā, depresso-conicā, subtilis medio subexcavatā, stramineo-corneā, sub lente subtilissimè obliquè densè striatā; spirā convexā; suturā impressā; anfractibus sex, subrotundatis; aperturā lunari; peristomate tenui, paululum reflexo, ad columellam contorto, dente prominente calloso-albo intus munito.*

THE UNDER-PROPPED HELIX. Shell scarcely umbilicated, depressly conical, slightly excavated in the middle underneath, straw-horny, beneath the lens very finely densely obliquely striated; spire convex; suture impressed; whorls six, rather rounded; aperture lunar, lip thin, a little reflected, twisted at the columella, and furnished inwardly with a prominent white callosous tooth.

BENSON, Ann. and Mag. Nat. Hist. vol. xi. p. 31.

*Hab.* Mauritius; Sir David Barclay.

Distinguished by the same typical characteristic twisted columellar tooth as *H. albidens* from the same locality.









1176.



1177.



1178.



1179.



1180a.



1180b.



1181.



1182.



1183.



1184.

Species 1176. (Mus. Benson.)

**HELIX ORCULA.** *Hel. testâ umbilicatâ, conico-globosâ, tenui, irregulariter costulato-striatâ, scabrâ, corneâ, translucente; spirâ obtusè conicâ, suturâ profundâ; anfractibus tribus ad quatuor, rotundatis, ultimo eix descendente; aperturâ perobliquâ, lunato-rotundatâ; peristomate simplici, recto, marginibus subconvergentibus, columellari reflexiusculo, umbilicum serratigente.*

**THE LITTLE TUN HELIX.** Shell umbilicated, conically globose, thin, irregularly rib-like striated, rough, horny, transparent; spire obtusely conical; suture deep; whorls three to four, rounded, the last scarcely descending; aperture very oblique, lunar-rounded; lip simple, straight, margins rather approximating, columellar margin a little reflected, half-covering the umbilicus.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. vi. p. 251.  
*Hab.* Bahar and Bengal, India (on trunks of trees); Dr. Bacon.

A very minute species, partaking somewhat of the form of *Paludina*.

Fig. 1177. (Mus. Benson.)

The shell here figured is the *Helix sublesta* of Benson, lately described in Ann. and Mag. Nat. Hist. 1853, vol. xi. p. 30. On examination, however, it proves to be operculated, and should be referred to the genus *Cyclostoma*. It is from Freemantle, West Australia.

Species 1178. (Mus. Benson.)

**HELIX BARCLAYI.** *Hel. testâ minutè umbilicatâ, parvâ, turbinatâ, corneâ, scabrâ, rudè obliquè leviterque striatâ; spirâ conicoideâ, apice obtusiusculâ; suturâ leviter impressâ, marginalâ; anfractibus quinque ad sex, lentè crescentibus, convexiusculis, ultimo subtili convexiore, nitidulo impresso, peripheriâ leviter carinato, carinâ anticè evanescente; aperturâ parum obliquâ, subangulato-lunari; peristomate tenui, acuto, margine columellari brevi, reflexiusculo.*

**BARCLAY'S HELIX.** Shell minutely umbilicated, rather small, turbinated, horny, rough, rudely obliquely lightly striated; spire conoid, rather obtuse at the apex; suture lightly impressed, margined; whorls five to six, increasing slowly, rather convex, the last more convex underneath, shining, impressed in the middle, periphery slightly keeled, keel disappearing in front; aperture but little oblique, subangularly lunar; lip thin, sharp, columellar margin short, a little reflected.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. vi. p. 252  
*Hab.* Moka, Mauritius (under stones); Dr. Bacon.

A minute, depressly-aenimated, horny shell, a little excavated underneath.

Species 1179. (Mus. Benson.)

**HELIX PALUDICOLA.** *Hel. testâ umbilicatâ, subdepressâ, tenui, striatâ, operculis abâ, punctis transversantibus fasciisve strigose purpureo-fuscis ornatâ, spirâ elevatiusculâ, fuso-rubente, apice obtusiusculo, corneo; anfractibus quinque ad sex, convexis, ultimo inflato, interdum conico vel versis aperturâ purpureo-fuscis; aperturâ rotundato-lunari, inclusâ; peristomate simplici, margine columellari dilatato, reflexo.*

**THE MARSH HELIX.** Shell umbilicated, somewhat globose, depressed, thin, finely striated, opaque-white, ornamented with transparent dots and purple-brown bands and streaks; spire rather elevated, brown-red, apex rather obtuse and horny; whorls five to six, the last inflated, sometimes purple-brown altogether or towards the aperture; aperture rotundately lunar-brown within; lip simple, columellar margin dilated and reflected.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. vi. p. 253  
*Hab.* Cape of Good Hope (in flowers of *Zantedeschia Ethiopica*, in a marsh at Baszaarms Kraal); Benson.

This little characteristic species is opaque-white in places, owing to the epidermis being deciduous, and liable to peel off.

Species 1180. (Mus. Benson.)

**HELIX SABULETORUM.** *Hel. testâ umbilicatâ, orbiculatè depressâ, solidâ, utriusque confertissime striatâ, jlicisve arcuatis distinctioribus titâ, corneo, parvè levè conicâ; spirâ convexiusculâ, apice obtusè; suturâ profundâ; anfractibus quatuor ad quinque, lentè crescentibus, convexis, ultimo rotundato, nitidulo subconvexiusculo, profundi; aperturâ eix obliquâ, lunato-rotundatâ; peristomate simplici, marginibus convergentibus, columellari breviter reflexo.*

**THE SANDS HELIX.** Shell umbilicated, orbicularly depressed, rather solid, very closely striated on both sides, marked with arched distant platts, not shining, pale horny, spire rather convex, obtuse at the apex; suture deep; whorls four to five, increasing slowly, convex, the last rounded, umbilicus rather broad and deep; aperture slightly oblique, lunar-rounded; lip simple, with the margins approximating, columellar margin shortly slightly reflected.

BENSON, Ann. and Mag. Nat. Hist. 1851, vol. vii. p. 105.  
*Hab.* Cape of Good Hope (in sandy tracts, in Hunt and False Bays); Benson.

A minute *Cyclostoma*-like species, of a dull straw-colour.

Species 1181. (Mus. Benson.)

HELIX VORTICALIS. *Hel. testā umbilicatā, subdiscoidē, superne depresso-plunatā, tenui, rufescente-corneā; spirā concaviusculā; suturā profundā; anfractibus quatuor, unguistis, convexis, confertim radiato-plicatis, penultima prominente, ultimo non descendente, a latere subcompresso, subtus raldē convexo; umbilico lato, profundo, margine subangulato; aperturā verticali, rotundato-lunari, altiore quam latā; peristomate simplici, recto, marginibus vix convergentibus, callo tenuissimo junctis.*

THE WHIRLPOOL HELIX. Shell umbilicated, subdiscoid, depressly flattened at the upper part, thin, reddish-horny; spire rather concave; suture deep; whorls four, narrow, convex, closely radiately plicated, last whorl but one prominent, the last not descending, a little compressed from the side, very convex beneath; umbilicus broad, deep, rather angled at the edge; aperture vertical, rotundately lunar, higher than broad; lip simple, straight, margins rather approximating, joined by a very thin callosity.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. v. p. 216.  
*Hab.* Cape of Good Hope (under stones near Green Point, and on Camp-Ground); Benson.

An interesting delicate *Planorbis*-like species, broadly openly umbilicated.

Species 1182. (Mus. Benson.)

HELIX CYGNEA. *Hel. testā late ampliter umbilicatā, orbiculato-depressā, subdiscoidē, tenui, fusco-corneā, undique crinice annulato-costellatā, striis spirales in interstitiis sub lente minutissimè decussatā; spirā convexā; suturā subanniculatā; anfractibus quatuor, convexis, subangustis; aperturā subcirculari; peristomate simplici, marginibus conniventibus, columellari breviter reflexo.*

THE SWAN HELIX. Shell broadly largely umbilicated, orbicularly-depressed, subdiscoid, thin, brown-horny, delicately finely ring-ribbed throughout, decussated beneath the lens in the interstices with very minute spiral striæ; spire convex; suture slightly channelled; whorls four, convex, rather narrow; aperture nearly circular, lip simple, margins approximating, columellar margin shortly reflected.

BENSON, Ann. and Mag. Nat. Hist. 1853, vol. xi. p. 30.  
*Hab.* Both West Australia. Dr. Baron.

A light horny species, delicately encircled throughout with fine ring-like riblets.

Species 1183. (Mus. Benson.)

HELIX RARIPLICATA. *Hel. testā umbilicatā, depressā tenui, cornē, plicis arcuatis subdistans a umbilicā spirā parvā elevatā; suturā profundā; anfractibus quatuor, convexis, ultimo tereti, non descendente; umbilico angusto, pervio; aperturā parvā obliquā, lunari-circulari; peristomate simplici, recto, marginibus conniventibus.*

THE FEW-PLAITED HELIX. Shell umbilicated, depressed thin, horny, furnished with rather distant arched plaits; spire but little raised; suture deep; whorls four, convex, the last tapering, not descending; umbilicus narrow, open; aperture a little oblique, lunar-circular; lip simple, straight, with the margins approximating.

BENSON, Ann. and Mag. Nat. Hist. 1850, vol. vi. p. 254.  
*Hab.* Cape of Good Hope (under stones at Green Point); Benson.

Allied to the preceding species, but more faintly and irregularly ring-sculptured.

Species 1184. (Mus. Benson.)

HELIX BIDENTICULATA. *Hel. testā umbilicatā, depresso-conicā, obsolete radiato-striatā, albidā (decorticatā), spirā subconicā, apice obtuso; suturā impressā; anfractibus sex, arcuè convolutis, convexis, omnibus superne lineis æquidistantibus elevatiusculis instructis, ultimo carinato, subtus convexo; aperturā arcuè securiformi, verticali; peristomate margine superiore brevissimo, columellari obliquè descendente, expanso, superne reflexo, basali arcuato, dentibus minutis, distantibus, submarginalibus, dextro prominentiore, unito; umbilico pervio.*

THE TWO-TOOTHED HELIX. Shell umbilicated, depressly conic, obsolete radiately striated, whitish (decorticated); spire subconic, obtuse at the apex; suture impressed, whorls six, closely convoluted, convex, all furnished at the upper part with two equidistant raised lines, last whorl keeled, convex beneath, aperture closely wedge-shaped, vertical, lip with the upper margin very short, the columellar obliquely descending, expanded, reflected above, the basal arched, furnished with two minute distant submarginal teeth, of which the right is the more prominent, umbilicus open.

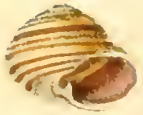
BENSON, Ann. and Mag. Nat. Hist. 1852, vol. ix. p. 405.  
*Hab.* Nilgherry Mountains, south of India, Jerdon.

A small trochiform species, encircled with two very characteristic raised spiral lines, and furnished with two small teeth in the mouth.





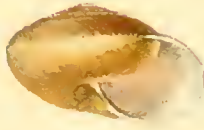
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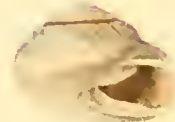
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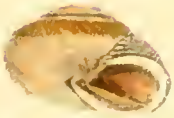
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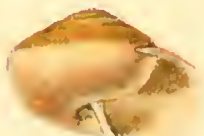
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# HELIX.

PLATE CLXXV.

Species 1185. (Mus. Pfeiffer.)

**HELIX SCHRENKII.** *Hel. testâ mediocriter umbilicatâ, conoideo-semiglobosâ, tenuiusculâ, striatâ et sub lente decussatâ, diaphanâ, corneo-albidâ, fasciâ unicâ saturatâ castaneâ, ad suturam ascendente, ornatâ; spirâ conoideâ, obtusulâ; anfractibus sex ad septem, convexis, ultimo non descendente; aperturâ lunato-rotundatâ, labro intus leviter labiato, margine columellari dilatato.*

**SCHRENK'S HELIX.** Shell moderately umbilicated, conoid, semiglobose, rather thin, striated, and, beneath the lens, finely decussated, diaphanous, horny-white, ornamented with a single dark chestnut band, rising from the suture; spire conoid, rather obtuse; whorls six to seven, convex, the last not descending; aperture lunar-rounded, lip slightly edged within, columellar margin dilated.

MIDDENDORF, *Reise Sibir.* vol. ii. p. 302. pl. 30. f. 20-26.  
*Hab.* Siberia.

A simple horn-white *Cyclostoma*-like species, encircled by a dark chestnut band.

Species 1186. (Mus. Pfeiffer.)

**HELIX DEHNEI.** *Hel. testâ imperforatâ, subglobosâ, solidâ, subtilissimè reticulatâ, albâ, supernè fasciâ latiusculâ, subtilioribus pluribus luteo-fuscis ornatâ; spirâ brevi; anfractibus quinque, ploniusculis, ultimo ad peripheriam obtusè angulato, anticè paululum descendente, basi inflato; aperturâ subverticali, depressâ, lunari, fauce rosâ, labro recto, intus rubello-labiato, margine columellari reflexo-appresso.*

**DEHNE'S HELIX.** Shell imperforated, subglobose, rather solid, very finely reticulated, white, ornamented with a rather broad yellowish-brown band at the upper part, and several smaller ones beneath; spire short; whorls five, rather flat, the last obtusely angled at the periphery, a little descending in front, inflated at the base; aperture subvertical, depressed, lunar, rose in the interior, lip straight, red-edged within, columellar margin reflexly appressed.

ROSSMASLER, *Zeitschrift für Malac.* 1846, p. 173.

*Hab.* Africa?

A globose faintly banded opaque-white shell, with a pink mouth, found by Dr. Dehne, among some Arabic gum.

Species 1187. (Mus. Pfeiffer.)

**HELIX CRETICA.** *Hel. testâ umbilicatâ, depresso-globosâ, obliquè striatâ, sordidè albâ, fasciis fuscis interruptis variè pictâ; anfractibus sex, convexiusculis, sensim accrescentibus; umbilico mediocri, perrio; aperturâ lunato-rotundatâ, labro acuto, recto, intus tenuissimè labiato.*

**THE CRETAN HELIX.** Shell umbilicated, depressly globose, obliquely finely striated, dirty-white, variously painted with interrupted dirty-brown bands; whorls six, rather convex, increasing slowly; umbilicus middling, open; aperture lunar-rounded, lip sharp, straight, very finely edged within.

FERUSSAC, *Prodrome*, No. 258. Pfeiffer, *Symbolæ*, vol. i. p. 40.

*Hab.* Islands of Candia, Rhodes, and Naxos.

Very like the British *H. eirgata*, with rather larger umbilicus.

Species 1188. (Mus. Pfeiffer.)

**HELIX THEODORI.** *Hel. testâ umbilicatâ, depressâ, tenui, subdiaphanâ, corneo-lutescente, supernè confertissimè costulatâ, lineis concentricis impressis decussatâ, basi læviore, excentricè striatâ, lineis concentricis versus umbilicum sensim evanescentibus; spirâ parum elevatâ, oblusiusculâ; suturâ impressâ, rufo obsolete marginatâ, anfractibus sex ad septem, eix convexiusculis, lente accrescentibus, ultimo obsolete angulato; aperturâ depressâ, lunari, labro simplici, recto, margine columellari perobliquè descendente, supernè brevissimè reflexo.*

**THEODORE'S HELIX.** Shell umbilicated, depressed, thin, subdiaphanous, horny-yellow, very closely finely ribbed at the upper part, decussated with depressed concentric lines, smoother at the base, excentrically finely striated, the concentric lines gradually fading away towards the umbilicus; spire but little raised, rather obtuse; suture impressed, obsolete edged with red; whorls six to seven, slightly convex, increasing slowly, the last obsolete angled; aperture depressed, lunar, lip simple, straight, columellar margin very obliquely descending, very shortly reflected at the upper part.

PHILIPPI, *Zeitschrift für Malac.* 1846, p. 191.

*Hab.* Mergui, East Indies; Philippi.



A subtransparent olive-horny species, but little umbilicated, with a thin simple lip.

Species 1189. (Mus. Pfeiffer.)

**HELIX TRENQUELLEONIS.** *Hel. testā angustè umbilicatā, depressā, rudè striatā, sub epidermide olivaceo-fasciā, albidā, fasciā rufā cingulatā; anfractibus quatuor ad quinque, planiusculis, celeriter accrescentibus, ultimo depresso, anticè deflexo, basi paulo convexiore, levigatā; aperturā perobliquā, subcirculari, labro breviter expanso, intus rufo-labiato, marginibus perapproximatis, callo tenui junctis, columellari dilatato, reflexo.*

**THE TRENQUELEON HELIX.** Shell narrowly umbilicated, depressed, rudely striated, white, encircled with a red band, beneath an olive-brown epidermis; whorls four to five, rather flat, increasing quickly, the last depressed, deflected in front, a little more convex at the base, smooth; aperture very oblique, nearly circular, lip shortly expanded, red-edged within, margins very approximated, joined by a thin callosity, columellar margin dilated and reflected.

GRATELOUP, Pfeiffer, Zeitschrift für Malac. 1850, p. 13.

*Hab.* Cordova, Argentine Republic.

A European form, but distinguished by characteristic detail.

Species 1190. (Mus. Pfeiffer.)

**HELIX ALABASTRITES.** *Hel. testā imperforatā, depresso-globosā, subtiliter striatā, nitidā, albā, fasciis quinque pallidè cinctā; spirā convexā, obtusā; anfractibus quinque, planulatis, lentè accrescentibus, ultimo compresso, obsoletè angulato, anticè subito valdè deflexo; aperturā ferè horizontali, angustā, lunato-ovali, labro intus labiato, marginibus approximatis, callo tenui junctis, dextro arcuato, expanso, columellari strictiusculo, introrsum vix dilatato.*

**THE ALABASTER HELIX.** Shell imperforated, depressly globose, finely striated, shining, white, sometimes encircled with five pale brown bands; spire convex, obtuse; whorls five, rather flat, increasing slowly, the last compressed, obsoletely angled, suddenly much deflected in front; aperture nearly horizontal, narrow, lunar, lip edged within, margin approximated, joined by a thin callosity, right margin arched, expanded, columellar margin rather drawn out, a little dilated inwards.

MICHAUD, Cat. Moll. d'Alger. Pfeiffer, Mon. Helic. viv. vol. i. p. 279.

*Hab.* North Africa.

A species of simple character, allied in form to the European *H. nemoralis*.

Species 1191. (Mus. Pfeiffer.)

**HELIX MINA.** *Hel. testā subobtectè umbilicatā, conoideo-depressā, solidā, obliquè striatā, fulcā, supernè fasciis duabus latiusculis nigricantibus tertiatūque angustā ad carinam cinctā; spirā convexo-conoideā, obtusā; anfractibus quinque, vix convexis, ultimo carinato, anticè vix deflexo, basi subplanato, luvā, fasciā unicā migrante; aperturā perobliquā, subrhombico-lunari, labro candido, incrassato, reflexo.*

**THE TEAT HELIX.** Shell with a nearly covered umbilicus, conoidly depressed, solid, obliquely striated, fulvous, encircled at the upper part with two rather broad blackish bands, and a third narrow one at the keel; spire convexly conoid, obtuse; whorls five, scarcely convex, the last keeled, slightly deflected in front, rather flattened at the base, which is yellow, with one black band; aperture very oblique, subrhomboid, lunar, lip white, thickened, reflected.

PFEIFFER, Zeitschrift für Malac. 1852, p. 92.

*Hab.* Cuba.

It is extremely doubtful whether this is anything more than a variety of *H. Bornii*.

Species 1192. (Mus. Pfeiffer.)

**HELIX DEFLEXA.** *Hel. testā angustè umbilicatā, depresso-globosā, solidiusculā, oblique striatā, albidi, fusco obsoletè cingulatā et maculatā; spirā brevi; anfractibus quatuor ad quinque, planiusculis, ultimo anticè valdè deflexo, basi planulato; aperturā lunato-oculi, coarctatā, labro expanso, marginibus approximatis, callo junctis, columellari recto, elevato, umbilicum ferè tegente.*

**THE DEFLECTED HELIX.** Shell narrowly umbilicated, depressly globose, rather solid, obliquely striated, whitish, obsoletely encircled and spotted with brown, spire short; whorls four to five, rather flat, the last very much deflected in front, rather flat at the base, aperture lunar-oval, contracted, lip expanded, margins approximated, joined by a callosity, columellar margin straight, erect, almost covering the umbilicus.

PFEIFFER, Zeitschrift für Malac. 1845, p. 153.

*Hab.* Cuba.

The lip of this species is unusually deflected on the body-whorl, causing the aperture to be contracted and the margins approximated.

Species 1193. (Mus. Pfeiffer.)

HELIX SUBROSTRATA. *Hel. testā umbilicata, conoideo-globosā, depresso-turbinatā, lævigatā, albidā aut sordidē lutescente, fasciis fuscis interruptis saepe cingulatā; spirā subelevatā, apice cornū, anfractibus quinque ad sex, convexis, ultimo anticē eix descendente; aperturā lunato-rotundatā, labro recto, acuto, intus fusco-labiato, marginibus approximatis, columellari dilatato*

THE SLIGHTLY-BEAKED HELIX. Shell umbilicated, conoidly globose, depressly turbinated, smooth, white or dirty-yellow, frequently encircled with interrupted brown bands; spire rather raised, horny at the apex, whorls five to six, convex, the last scarcely descending in front; aperture lunar-rounded, lip straight, sharp, brown-edged within, margins approximat d. columellar margin dilated.

FERUSSAC, Prodrôme, No. 287.

*Hab.* Spain, Algiers.

A rounded thin-lipped opaque-white shell, frequently encircled with interrupted brown bands.

Species 1194. (Mus. Pfeiffer.)

HELIX BOMBAYANA. *Hel. testā umbilicata, subglobo, paululum depressā, subdiaphanā, nitidā, pallidē rosei. longitudinaliter subtilissimè striatā; anfractibus quinque, convexis, umbilico parvo, aperturā semicirculari, labro acuto, leviter reflexo, albimarginato*

THE BOMBAY HELIX. Shell umbilicated, subglobose, a little depressed, subdiaphanous, shining, pale rose, longitudinally very finely striated. whorls five, convex, umbilicus small, aperture semicircular lip sharp, slightly reflected, white-edged

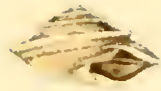
GRATELOUP, Act. Soc. Nat. Hist. Bordeaux vol. xi. p. 400. pl. 1. f. 1.

*Hab.* Bombay.

A light subtransparent fulvous-rose shell, very smooth on the under surface.







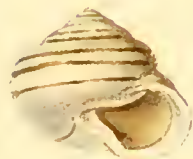
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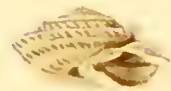
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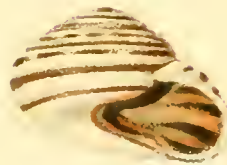
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# HELIX.

PLATE CLXXVI.

Species 1195. (Mus. Pfeiffer.)

**HELIX SCABRIUSCULA.** *Hel. testâ obtusè umbilicatâ, depressâ, compressè curvatâ, striato-rugosâ, albidâ; anfractibus quatuor ad quinque, exsertis, supra planulatis, fusco-maculatis, ultimo basi turgido, anticè descendente; aperturâ angulatâ, lunato-securiformi, labro tenui, marginibus approximatis, supere recto, basali sublabiato, angulatim reflexo, columellari dilatato, appresso.*

**THE ROUGHISH HELIX.** Shell with a covered umbilicus, depressed, compressly keeled, striately rugose, white; whorls four to five, exserted, flattened above, brown-spotted, the last swollen at the base, descending in front; aperture angular, lunately hatchet-shaped, lip thin, margins approximated, upper margin straight, basal slightly edged, angularly reflected, columellar margin dilated and appressed.

DESHAYES, Enc. Méth. vol. ii. p. 130.

*Helix erycina*, Jan.

*Helix selinuntina*, Philippi.

*Hab.* Sicily.

The upper surface of the whorls is peculiarly concavely flattened, rendering them keeled and exserted at the edge.

Species 1196. (Mus. Pfeiffer.)

**HELIX LUDOVICI.** *Hel. testâ perspectivè umbilicatâ, sub-lenticulari, opacâ, calcureâ; spirâ convexâ, obtusâ; anfractibus septem, superis planiusculis, sequentibus convexiusculis, omnibus acutè et subexsertè carinatis, ultimo infra carinam compressam convexo, radiatim sulcato et rudè granulato; aperturâ fere diagonali, rotundato-lunari, labro subexpanso, marginè basali arcuato, breviter reflexo.*

**LOUIS' HELIX.** Shell perspectivevly umbilicated, somewhat lens-shaped, opaque, chalky; spire convex, obtuse; whorls seven, uppermost rather flat, the following rather convex, all sharply and rather exsertly keeled, the last convex beneath the compressed keel, radiately grooved and rudely granuled; aperture almost diagonal, rotundately lunar, lip a little expanded, basal margin arched, shortly reflected.

ALBERS, Zeitschrift für Malac. 1852, p. 157.

*Hab.* Island of Porto Santo.

A wrinkle-grained opaque chalky shell, of the form of a *Solarium*.

Species 1197. (Mus. Pfeiffer.)

**HELIX DEPRESSULA.** *Hel. testâ umbilicatâ, lenticulari, rugoso-striatâ, lutescente-albidâ, compresso-carinatâ, anfractibus sex, prope aulis, subplanulatis, ultimo basi convexo, anticè rix descendente; umbilico lato, perspective; aperturâ securiformi, labro recto, angulato, intus labiato, marginibus approximatis.*

**THE DEPRESSED HELIX.** Shell umbilicated, lens-shaped, roughly striated, yellowish-white, compressly keeled, whorls six, rather prominent, rather flattened, the last convex at the base, a little descending in front; umbilicus broad, perspective; aperture hatchet-shaped, lip straight, angled, edged within, margins approximated.

PARREYS, Rossmäsler, Hist. Moll. vol. ix. p. 6. f. 562

*Hab.* Oran, Algeria.

Peculiarly convex at the base, the overhanging keel of the periphery being unusually prominent.

Species 1198. (Mus. Pfeiffer.)

**HELIX PLATYCHELA.** *Hel. testâ imperforatâ, subglobosâ, caesio-albâ, fasciis quatuor maculatis, striato-cinctâ, subtiliter striatâ; spirâ convexâ; anfractibus quinque ad sex, convexis, ultimo anticè subglobosè, aperturâ perobliquâ, truncato-rotundatâ, labro subexpanso-reflexo, alba sublucida, marginè columellari calloso, gibboso.*

**THE BROAD-LIPPED HELIX.** Shell imperforated, subglobose, bluish-white, sometimes encircled with four spotted bands, finely striated; spire convex, whorls five to six, convex, the last very much deflected in front; aperture very oblique, truncately rounded, lip broadly expandedly reflected, slightly edged with white, columellar margin callous, gibbous.

MENKE, Syn. 2nd edit. p. 125. Rossmäsler, Hist. Nat. vol. vii. p. 7. f. 443-445, and vol. x. p. 12. f. 593.

*Helix perrhoti*, Jan.

*Helix Sicula*, var., Philippi.

*Helix spheeroides*, Philippi.

*Hab.* Sicily.



A globose shell, faintly marked with interrupted brown bands, with a lip rotundately obliquely expanded.

Species 1199. (Mus. Pfeiffer.)

**HELIX CARIOSULA.** *Hel. testā obtectè umbilicatā, subsemiglobosā, carinatā, supernè globoso-convexā, cariosā, subtilis planiusculā, sordidè albā, carinā filiformi, suturāque tuberculato-erosis; anfractibus quinque, planiusculis; aperturā lunari, labro simplici, sublobiata, angulato, margine superno subdeflexo, basali subincrassato, columellari dilatato, reflexo, umbilicum tegente.*

**THE SLIGHTLY WORM-EATEN HELIX.** Shell with a covered umbilicus, subsemiglobose, keeled, globosely convex at the upper part, worm-eaten, rather flat, beneath dirty-white, with a thread-like keel, and with a suture tubercularly eroded; whorls five, rather flat; aperture lunar, lip simple, slightly edged, angled, upper margin a little deflected, basal rather thickened, columellar dilated, reflected, covering the umbilicus.

**MICHAUD,** Moll. Algérie, p. 5. pl. 1. f. 11 and 12.

*Hab.* Algeria.

Closely allied to *H. Ludorici*, but with a contracted covered umbilicus.

Species 1200. (Mus. Pfeiffer.)

**HELIX SEGESTANA.** *Hel. testā umbilicatā, depressā, acutè carinatā, plicatā, supernè planiusculā, albido et corneo variegatā, seriatim fusco-maculatā, sub carinā interruptè fasciatā; anfractibus quatuor ad quinque, planis, ultimo anticè deflexo; aperturā angulato-lunari, labro simplici, marginibus subapproximatis, columellari reflexo.*

**THE MATTED HELIX.** Shell umbilicated, depressed, sharply keeled, plaited, rather flat at the upper part, variegated with white and horn, marked with rosy-brown stripes, interruptedly banded beneath the keel; whorls four to five, flat, the last deflected in front; aperture angularly lunar, lip simple, margins nearly approximated, columellar reflected.

*Carocolla segestana*, Philippi, Moll. Sicil. p. 136. pl. 8. f. 6.

*Hab.* Sicily.

Distinguished by a surface of fine irregularly wrinkled-plaited ridges.

Species 1201. (Mus. Pfeiffer.)

**HELIX JUILLETI.** *Hel. testā imperforatā, subgloboso-de-*

*pressā, albīdā, fasciis quinque fuscis cingulatā; spirā convexā; anfractibus quinque ad sex, sensim accrescentibus, summis planis, ultimo anticè valdè deflexo; aperturā ovato-lunari, transversali, perobliquā, columellā et aperturæ fauce castaneis, labro subexpanso, margine columellari stricto, calloso, gibbo.*

**JUILLET'S HELIX.** Shell imperforated, subglobosely depressed, whitish, encircled with five bands of light brown; spire convex; whorls five to six, increasing slowly, the uppermost flat, the last very much deflected in front; aperture ovately lunar, transverse, very oblique, columella and interior of the aperture chestnut, lip a little expanded, columellar margin drawn out, callous, gibbous.

**TERVER,** Cat. p. 17. pl. 2. f. 3 and 4.

*Helix Wagneri*, Rossmäslcr.

*Hab.* Algeria; Wagner.

It is doubtful whether this is anything more than a variety of *H. lactea*.

Species 1202. (Mus. Pfeiffer.)

**HELIX CARIOSA.** *Hel. testā umbilicatā, orbiculari, carinatā, utrinque convexā, albā, crispato-rugellosā, rudī; spirā depresso-hemisphæricā; anfractibus quinque, medio convexis, ultimo anticè vix deflexo, circa umbilicum abruptè angulato; aperturā angulato-subcirculari, labro simplici, marginibus callo junctis, columellari crasso, reflexo.*

**THE WORM-EATEN HELIX.** Shell umbilicated, orbicular, keeled, convex on both sides, white, crisply finely wrinkled, rude; spire depressly hemispherical; whorls five, convex in the middle, last whorl a little deflected in front, abruptly angled round the umbilicus; aperture angularly subcircular, lip simple, margins joined by a callosity, columellar margin thick and reflected.

**OLIVIER,** Voyage, vol. ii. pl. 221. pl. 31. f. 1.

*Hab.* Syria.

An opaque chalk-white shell, chiefly distinguished by the compressly angled growth of the whorl around the wall of the umbilicus.

Species 1203. (Mus. Pfeiffer.)

**HELIX OTTHIANA.** *Hel. testā umbilicatā, depressā, sublenticulari, carinatā, albā, striatā; spirā convexā, suturā subcrenulatā; anfractibus quinque, planulatis, sensim accrescentibus, ultimo anticè vix deflexo; aperturā perobliquā, rotundato-lunari, subangulatā, labro simplici, umbilicum partim tegente.*

OTTI's HELIX. Shell umbilicated, depressed, somewhat lens-shaped, keeled, white, striated; spire convex, slightly crenulated at the suture; whorls five, rather flat, increasing slowly, the last a little deflected in front; aperture very oblique, rotundately lunar, slightly angled, lip simple, partially covering the umbilicus.

FORBES, Ann. and Mag. Nat. Hist. vol. II. p. 250.

*Helix Jeannotiana*, Terver.

*Hab.* Bugia, North Africa.

A comparatively smooth chalk-white shell, with a delicate sutural keel throughout.

Species 1204. (Mus. Pfeiffer.)

HELIX ARIETINA. *Hel. testâ angustè umbilicatâ, depressâ, solidulâ, obliquè striatâ, lineis confertis impressis spiralibus subtiliter reticulatâ, opaco-albâ, calcareâ, fasciis luteis latis lineisque fuscis nonnullis ornatâ acutè*

*carinatâ, carinâ compressâ; spirâ parum elevatâ, anfractibus quinque, supernè subplanulatis, exsertis, ultimo anticè descendente, basi convexo; aperturâ lunato-securiformi, labro recto, acuto, intus validè labiato marginè columellari latè reflexo.*

THE RAM-HEAD HELIX. Shell narrowly umbilicated, depressed, rather solid, obliquely striated, finely reticulated with close-set impressed spiral lines, opaque-white, chalky, ornamented with a few broad yellow bands and brown lines, sharply keeled, keel compressed; spire but little raised; whorls five, rather flat at the upper part, exserted, the last descending in front, convex at the base; aperture lunar hatchet-shaped, lip straight, sharp, strongly edged within; columellar margin broadly reflected.

ROSSMASLER, Zeitschrift für Malac. 1846, p. 172.

*Hab.* Sierra of St. Cristoval, Spain; Dr. Willkomm

Chiefly distinguished by its flatly-raised spiral sutural keel and minute umbilicus.







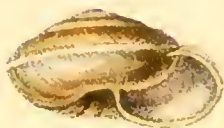
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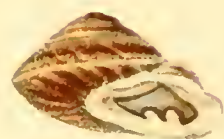
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# HELIX.

PLATE CLXXVII.

Species 1205. (Mus. Pfeiffer.)

**HELIX MERGUIENSIS.** *Hel. testâ latè perspectivè umbilicatâ, depressâ, utrinque convexâ, carinatâ, tenui, subtilissimè granulato-striatâ, pilis sparsis brevibus obsitâ, pallidè fusciscentè, carinâ subcompressâ, linâ castaneâ notatâ; spirâ vix elevatâ, obtusâ; anfractibus quatuor ad quinque, convexiusculis, ultimo anticè deflexo, circa umbilicum angulato-compresso; aperturâ perobliquâ, labro late reflexo, appresso, marginibus fere continuis.*

**THE MERGUI HELIX.** Shell broadly perspectively umbilicated, depressed, convex on both sides, keeled, thin, very finely granularly striated, covered with a few short hairs, light-brownish, keeled, rather compressed, marked with a chestnut line; spire scarcely raised, obtuse; whorls four to five, rather convex, the last deflected in front, angularly compressed about the umbilicus; aperture very oblique, lip broadly reflected, appressed, margins almost continuous.

PHILIPPI, Zeitschrift für Malac. 1846. p. 192.

*Hab.* Mergui, Burmah.

A subtransparent shell, with a rather broad obtusely angled umbilicus.

Species 1206. (Mus. Pfeiffer.)

**HELIX SERRULATA.** *Hel. testâ angustissimè umbilicatâ, trochiformi, corrugato-striatâ, sordidè albâ, carinatâ, carinâ obscurè tuberculatâ; anfractibus sex, convexiusculis, supremis subcarinatis; aperturâ rotundato-lunari, labro simplici, acuto, intus subtiliter labiato.*

**THE SERRULATED HELIX.** Shell very narrowly umbilicated, trochus-shaped, wrinkle-striated, dull white, keeled, obscurely tuberculated; whorls six, rather convex, the uppermost slightly two-keeled; aperture rotundately lunar, lip simple, sharp, slightly edged within.

*Turriculu serrulatu*, Beek, Index, p. 10.

*Helix crenulata*, Olivier.

*Hab.* Alexandria.

A rough-wrinkled trochus-shaped shell, peculiarly slantingly tubercled at the periphery of each whorl.

Species 1207. (Mus. Pfeiffer.)

**HELIX GALLOPAVONIS.** *Hel. testâ vix umbilicatâ, subglobosâ, tenui, rugulosâ, albidâ, fasciis latis fascis cir-*

*cumulatâ et fusco-marmoratâ; spirâ conicâ; anfractibus quatuor ad quinque, convexiusculis; aperturâ lunato-rotundatâ, intus roseo-labiâtâ; columellâ latiusculâ, expansâ, roseâ, labro simplici, subreflexo.*

**THE PEACOCK'S-CREST HELIX.** Shell scarcely umbilicated, subglobose, thin, rugulose, whitish, surrounded with broad brown bands, and marbled with brown; spire conical; whorls four to five, rather convex; aperture lunar-rounded, edged with rose within; columella rather broad, expanded, rose, lip simple, a little reflected.

VALENCIENNES, Pfeiffer, Symbolæ, vol. ii. p. 28.

*Hab.* Turk's Island, near San Domingo.

Chiefly distinguished by the pink colouring of the columella and inner edge of the lip.

Species 1208. (Mus. Pfeiffer.)

**HELIX SMYRNENSIS.** *Hel. testâ latè umbilicatâ, convolato-convexâ, obtusè carinatâ, lutescente-cornéâ, superius subtiliter granulato-decussatâ, subtus lævi, nitidi, remotè labro-radiatâ; anfractibus sex, convexo-depressibus; aperturâ obliquè lunari, labro recto, simplici, acuto, intus remotè labiato.*

**THE SMYRNA HELIX.** Shell broadly umbilicated, orbicularly convex, obtusely keeled, yellowish horny, finely granularly decussated at the upper part, smooth and shining beneath, distantly yellow-ripled; whorls six, convexly slanting; aperture obliquely lunar, lip straight, simple, sharp, remotely edged within.

ROTH, Diss. p. 16. pl. 1. f. 8, 9.

*Hab.* Smyrna.

An orbicularly depressed olive-horny shell, rather absolutely keeled at the periphery and broadly deeply tubercled.

Species 1209. (Mus. Pfeiffer.)

**HELIX GLOBULOIDEA.** *Hel. testâ subrugosè conoidè conoidè-depressâ, solidâ, irregulariter striatâ, albâ, interdum multifasciatâ; spirâ brevissimâ, subsaculatâ; anfractibus sex, convexo-depressibus; aperturâ lunato-rotundatâ, labro simplici, acuto, et spirâ latè carneo-labiato, marginibus subapplanatis.*

**THE GLOBULOID HELIX.** Shell rather narrowly umbilicated, conoidly depressed, rather solid, irregularly



triated, shining white, sometimes many-banded; spire short, rather sharp at the apex; whorls six, convexly slanting; aperture lunar rounded, lip simple, sharp, faintly flesh-edged within, margin rather approximated.

TERVER, Catalogue, p. 26. pl. 3. f. 5, 7.

*Hab.* Algeria.

A shining white species, sometimes encircled with numerous bands.

Fig. 1210. (Mus. Pfeiffer.)

*Helix perplexa*, Férussac, synonymous with *H. granifera*, Gray, described and figured in Plate LI. Sp. 252.

Species 1211. (Mus. Pfeiffer.)

HELIX STENOMPHALA. *Hel. testá angustè umbilicatá, globoso-depressá, subtiliter striatá, lutescente, castaneo trifasciatá, fasciis extimis dilatatis et dilatis; anfractibus quinque ad sex, convexiusculis, ultimo inflato, antivé eix descendente; aperturá latè lunari, labro reflexiusculo, latè albo-labiato, margine columellari reflexo, appresso, umbilicem fere tegente.*

THE NARROWLY UMBILICATED HELIX. Shell narrowly umbilicated, globosely depressed, finely striated, yellowish, encircled with three chestnut bands, the outer of which are dilated and diluted; whorls five to six, rather convex, the last inflated, scarcely descending in front; aperture broadly lunar, lip slightly reflected, broadly white-edged, columellar margin reflected, appressed, nearly covering the umbilicus.

MENKE, Synopsis (2nd edit.), p. 126.

*Hab.* Croatia.

Distinguished chiefly by the character of its three encircling bands, the outer of which are faintly marked and spread, whilst the centre is dark and determined.

Species 1212. (Mus. Pfeiffer.)

HELIX OCHROLEUCA. *Hel. testá angustè umbilicatá, globuloso-depressá, leviter striatá, albidá, supernè ochraceo variegatá, et fasciis aurantiis rarè cingulatá; spirá brevi, obtusá; suturá lineari; anfractibus septem, planis, ultimo medio carinato; columellá brevissimá, verticali; aperturá latè lunari, labro simplici, margine columellari reflexo, umbilicem partim tegente.*

THE YELLOW-WHITE HELIX. Shell narrowly umbilicated, globulously depressed, slightly striated, whitish, variegated at the upper part with ochre, and variously encircled with orange bands; spire short, obtuse; suture linear; whorls seven, flat, the last keeled in

the middle; columella very short, vertical; aperture broad, lunar, lip simple, columellar margin reflected, partially covering the umbilicus.

*Helix (Helicostyla) ochroleuca*, Férussac, Prodrome, p. 308.

Hist. Moll. pl. 30. f. 1

*Helix albella*, Chemnitz.

*Hab.* Bermuda; Menke.

A delicately painted shell, with somewhat the aspect of a *Helicina*.

Species 1213. (Mus. Pfeiffer.)

HELIX EXPLANATA. *Hel. testá umbilicatá, depressá, plano-spiratá, opaco-albá, densè corrugato-striatá; anfractibus quinque, ad peripheriam cariná compressá inflatis; aperturá securiformi, labro acuto, intus labiato.*

THE FLATTENED HELIX. Shell umbilicated, depressed, flatly spired, opaque-white, densely wrinkle-striated; whorls five, inflated at the periphery with a compressed keel; aperture hatchet-shaped, lip sharp, edged within.

MULLER, Verm. vol. ii. p. 26.

*Helix planorbis marginata*, Chemnitz.

*Helix albella*, Draparnaud.

*Carocolla albella*, Lamarek.

*Hab.* Algeria and South of France.

The whorls of the species are pinched out at the periphery into a compressed keel, which is seen throughout the spire in the place of the suture.

Species 1214. (Mus. Pfeiffer.)

HELIX LEVIS. *Hel. testá eix umbilicatá, globosá, tenui, lævi, obliquè striatá, obsolete granulatá, albidá, punctis seriatis vel fasciis pellucidè corneis rarè ornatá; spirá brevi, acutiusculá; anfractibus quinque, convexis, ultimo inflato; aperturá rotundato-lunari, labro acuto, intus sublabiato, margine columellari supernè dilatato et reflexo, umbilicem fere tegente.*

THE LIGHT HELIX. Shell scarcely umbilicated, globose, thin, light, obliquely striated, obsoletely granulated, whitish, variously ornamented with rows of transparent horny dots or bands; spire short, rather sharp, whorls five, convex, the last inflated; aperture rotundately lunar, lip sharp, slightly edged within, columellar margin dilated and reflected at the upper part, almost covering the umbilicus.

PFEIFFER, Zeitschrift für Malac. 1845, p. 152

*Hab.* Banks of the Columbia River, California

A light inflated shell, extremely delicately pencilled with semitransparent horny lines and rows of dots





121.



1216.



1218.



1219.



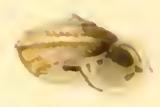
1220.



1221.



1222.



1223.



1224.

*Chamaea pulex*

(Enlarged 1/2 diam.)

*Chamaea pulex*

# HELIX.

PLATE CLXXVIII.

Species 1215. (Mus. Pfeiffer.)

**HELIX SPRATTI.** *Hel. testâ latè perspectivè umbilicatâ, depressâ, confertim costulatâ, sordidè albâ, vel fuscâ, saturatius fusco-carinatâ, carinâ compressâ, prominente, denticulatâ; spirâ vix elevatâ; anfractibus quinque, supra carinam valdè turgidis, subangulatim elevatis, ultimo basi convexo, anticè non descendente; aperturâ parvâ, angulato-subrotundatâ, labro recto, acuto, intus albo-labiato.*

**SPRATT'S HELIX.** Shell broadly perspectivevely umbilicated, depressed, closely finely ribbed, dull white or brown, darker-banded, keeled, keel compressed, prominent, denticulated; spire scarcely raised: whorls five, much swollen above the keel, rather angularly raised, the last convex at the base, not descending in front; aperture rather small, angularly sub-rounded, lip straight, sharp, white-edged within.

**PFEIFFER,** *Symbote*, vol. iii. p. 69.

*Hab.* Malta; Capt. Spratt.

Of very peculiar growth, the whorls being swollen above the keel and then sunk into a hollow round the suture.

Species 1216. (Mus. Pfeiffer.)

**HELIX COSTULATA.** *Hel. testâ umbilicatâ, globoso-depressâ, confertim costulatâ, albidâ vel fusco-fusciatâ et radiatâ, vel nigricante, basi albo-cinctâ; anfractibus quinque, convexiusculis; aperturâ dilatatâ, lunato-circulari, labro tenui.*

**THE FINELY-RIBBED HELIX.** Shell umbilicated, globosely depressed, closely finely ribbed, whitish or brown-banded and rayed, or blackish, encircled with white at the base; whorls five, rather convex; aperture dilated, lunar-circular, lip thin.

**ZIEGLER,** *Mus. C. Pfeiffer, Naturg.* vol. iii. p. 32. pl. 6. f. 21, 22.

*Helix candidula, var.*, Rossmâler.

*Helix striatula*, Müll. *Verm.* vol. ii. p. 24.

*Helix intersecta*, Michaud.

*Hab.* Germany.

Generally banded or lined conspicuously with dark brown.

Species 1217. (Mus. Pfeiffer.)

**HELIX BICALLOSA.** *Hel. suboblectè umbilicatâ, semiglobosâ, tenui, striatulâ, rufo-cornuâ, ovato-nucula, spirâ convexo-conoidrâ; anfractibus octo, emicis sensim, ultimo subcarinato, albedo-fusciato, anticè descendente, basi subplanulato; aperturâ subquadrato-circariâ, intus cinctibus duobus callosis armatâ, labro tenui reflexo.*

**THE BICALLOUS HELIX.** Shell with a nearly covered umbilicus, semiglobose, thin, finely striated, reddish-horny, oil-shining; spire convexly conoid; whorls eight, rather convex, last whorl slightly keeled, white-banded, descending in front, rather flat at the base; aperture subquadrately lunar, armed within with two callous teeth, lip thinly reflected.

**FRIVALDSZKY,** *MSS.* Pfeiffer, *Mon. Helic.* vi. vol. iii. p. 638.

*Hab.* Siberia.

A shortly conical globose species, of shining horny substance, composed of numerous narrow whorls.

Species 1218. (Mus. Pfeiffer.)

**HELIX TERRESTRIS.** *Hel. testâ angustè profundè umbilicatâ, pyramidalè-conicâ, densè obliquè levatè-striatâ, opaco-albâ, fusco spiratè fasciatâ, infra fasciatâ; anfractibus sex, ultimo basi acutè carinato; aperturâ securiformi, labro recto, acuto, intus albo-labiato.*

**THE TERRESTRIAL HELIX.** Shell narrowly deeply umbilicated, pyramidally conical, densely obliquely levately-striated, opaque white, spirally banded with brown, flat beneath; whorls six, the last sharply keeled at the base; aperture hatchet-shaped, lip straight, sharp, white-edged within.

*Trochus terrestris*, Chemnitz, *Conch. Cab.* vol. ii. part 2. p. 17. pl. 122. f. 1045.

*Helix terrestris*, Fleming.

*Helix obgans*, Gmelin.

*Helix trachelus*, Hartmann.

*Carocola obgans*, Lamarck.

*Hab.* South of France, Italy, Sicily, and North Africa.

Though included by some authors in the British fauna it is not a native of our isles.

Species 1219. (Mus. Pfeiffer.)

**HELIX NOVICEA.** *Hel. testâ umbilicatâ, conoidè-subrotundâ, levatè-striatâ, fœtidè-ovatoâ, rufo-albo-cinctâ, zoniâ rufo-argenteâ, spirâ alto-nuculâ; anfractibus quinque profundis, convexiusculis, ultimo antè descendente, aperturâ diagonitè rotundâ, intus impresso-angulâ, callosâ, rufâ, labro parvè armatâ.*

**THE STEP HELIX.** Shell umbilicated, conoidly depressed, obliquely striated fulvous olive, white-zoned to the middle, zone red-edged, suture white-edged, whorls five to six, rather convex, the last shortly descending in front, aperture diagonally rounded, lip apically expanded, white, margins very appressedly

FRIVALDSZKY, MSS. Pfeiffer, Mon. Helic. iv. vol. iii. p. 648.  
*Hab.* Island of Crete.

A dull olive shell, encircled round the middle with a characteristic white zone, bordered on each side by a red line.

Species 1220. (Mus. Pfeiffer.)

HELIX EMULA. *Hel. testâ subangustè umbilicatâ, depressâ, tenuiculâ, striatâ, opaco-albâ, fasciis angustis nonnullis rufis cinctâ; spirâ rix elevatâ; anfractibus quatuor ad quinque, planiusculis, ultimo anticè breviter deflexo; aperturâ obliquâ, lunato-circulari, labro tenui, subexpanso.*

THE RIVAL HELIX. Shell rather narrowly umbilicated, depressed, rather thin, striated, opaque white, encircled with a few narrow red bands; spire scarcely raised; whorls four to five, rather flat, the last shortly deflected in front; aperture oblique, lunar-circular, lip thin, a little expanded.

ROSSMASLER, MSS. Pfeiffer Mon. Helic. iv. vol. iii. p. 235.  
*Hab.* Istria.

A small rather flatly depressed shell, obliquely rugosely striated, encircled more or less with red-brown lines.

Species 1221. (Mus. Pfeiffer.)

HELIX LENS. *Hel. testâ apertè umbilicatâ, lenticulari, aretispirâ, acutè carinatâ, supernè costulato-striatâ, rarissimè pilosâ, fusco-cornuâ; anfractibus septem, subaequalibus, planulatis; aperturâ depresso-lunari, labro reflexo, appresso-expanso, subcalloso, albo, marginibus subapproximatis.*

THE LENS HELIX. Shell openly umbilicated, lens-shaped, close-spired, sharply keeled, rib-like striated at the upper part, very rarely hairy, brown-horny; whorls seven, nearly equal, flat; aperture depressly lunar, lip reflected, appressly expanded, rather callous, white, margins approximating.

FÉRUSAC, Hist. Moll. pl. 66. f. 21.

*Helix barbata*, Deshayes.

*Hab.* Morea and Grecian Archipelago.

A flat closely convoluted dull horny shell, closely elevatedly striated on the upper part.

Species 1222. (Mus. Pfeiffer.)

HELIX PISIFORMIS. *Hel. testâ angustè umbilicatâ, globosâ, tenui, obliquè striatâ, striis ad suturas subplicatis, cornu-tuberosante, fasciâ opaco-albâ cingulatâ; anfractibus quinque ad sex, convexis; aperturâ obliquè lunari, labro tenui, intus remotè albo-labiato.*

THE PEA-SHAPED HELIX. Shell narrowly umbilicated, globose, thin, obliquely striated, striae subpleated at

the suture, horny-yellow, encircled with an opaque-white band; whorls five to six, convex; aperture obliquely lunar, lip thin, distantly white-edged within.

PELITTE, Symbote, vol. iii. p. 95.

*Hab.* The Caucasus.

A light globose species of a horny-yellowish colour, encircled round the middle with a characteristic opaque-white band.

Species 1223. (Mus. Pfeiffer.)

HELIX RUGOSA. *Hel. testâ latè perspectivè umbilicata, orbiculato-depressâ, subtus convexâ, costato-plicatâ, albidâ, subtus obscurè rufo-fasciolatâ; spirâ rix elevatâ, suturâ tenuimarginatâ; anfractibus quatuor ad quinque, planulatis, ultimo convexo, carinâ fâfâren crenulatâ cinctâ; aperturâ lunato-rotundatâ, labro acuto, intus labiato, marginibus approximatis.*

THE WRINKLED HELIX. Shell broadly perspectivevly umbilicated, orbicularly depressed, convex beneath, rib-plaited, whitish, obscurely red-banded beneath, spire scarcely raised, suture thinly margined; whorls four to five, rather flat, the last convex, encircled with a crenulated thread-like keel; aperture lunar-rounded, lip sharp, edged within, margins approximated.

CHEMNITZ, Conch. Cab. vol. ix. part 2. p. 172. pl. 133 f. 1208.

*Helix corrugata*, Gmelin.

*Helix Gargotta*, Rossmasler.

*Helix Grogana*, Férussac.

*Hab.* Italy, Sicily.

An opaque stone-coloured thread-keeled shell, densely wrinkled throughout.

Species 1224. (Mus. Pfeiffer.)

HELIX TENUICOSTATA. *Hel. testâ rix umbilicatâ, depresso-globosâ, solidiusculâ, obliquè costato-striatâ, albidâ, rufo plus minus cinctâ; anfractibus quatuor ad quinque, convexiusculis, ultimo tenui, anticè deflexa. aperturâ lunato-ovali, labro tenui-reflexo, appresso-expanso, umbilicem fere tegente.*

THE FINELY RIBBED HELIX. Shell scarcely umbilicated, depressly globose, rather solid, obliquely rib-striated, whitish, more or less encircled with red; whorls four to five, rather convex, the last swollen and deflected in front; aperture lunar-oval, lip thinly reflected, appressly expanded, nearly covering the umbilicus.

DÜNKER, Philippi, Abbild. und Besch. Conch. Helix pl. 6 f. 13.

*Hab.* Mexico?

Finely rib-striated throughout, of a light stone-colour, more or less faintly encircled with red lines.







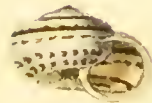
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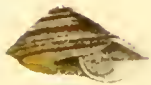
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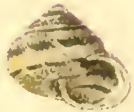
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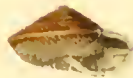
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1234

Enlarged. P. de m.

# HELIX.

PLATE CLXXIX.

Species 1225. (Mus. Pfeiffer.)

**HELIX CINCTELLA.** *Hel. testâ rixæ umbilicatâ, subopaculo depressâ, luteo-oculo, crysallâ vel rubrâ, subtilissimè striatâ, zonulâ opaco-albâ carinatâ; anfractibus quinque ad sex, plurimis; aperturâ lunari, labro sperâ simplici, acuto, margine basali reflecto.*

**THE GIRDLED HELIX.** Shell scarcely umbilicated, subglobose depressed, yellowish crystalline or reddish, very finely striated, keeled with an opake-white zone; whorls five to six, rather flat; aperture lunar, lip simple at the upper part, sharp, basal margin slightly reflected.

DRAPARNAUD, Hist. Moll. p. 99. pl. 6. f. 28.

*Hab.* Southern Europe.

A horny subtransparent shell, encircled at the periphery by a narrow opake-white zone.

Species 1226. (Mus. Pfeiffer.)

**HELIX ROTHII.** *Hel. testâ subobtectè umbilicatâ, depressoglobosâ, opacâ, sordidè albâ, zonulâ lunari rubrâ cingulatâ, subtus subpellucidâ; anfractibus sex, convexiusculis, ultimo rixæ descendente; aperturâ lunari, labro acuto, intus albo-labiato.*

**ROTH'S HELIX.** Shell with a nearly covered umbilicus, depressly globose, opake, dull white, encircled with a linear red zone, subpellucid beneath; whorls six, rather convex, the last scarcely descending; aperture lunar, lip sharp, white-edged within.

PFEIFFER, in Wiegman's Archives, 1841, p. 218.

*Helix Olivieri, var., Roth.*

*Hab.* Island of Syra; Forbes.

A horny shell of rather solid growth, subpellucid below, opake above, encircled with a red linear zone.

Species 1227. (Mus. Pfeiffer.)

**HELIX NATALENSIS.** *Hel. testâ imperforatâ, subgloboseâ, tenui, larigatâ, sublinphatâ, cornu-albidâ, lavis fuscis irregulariter radiatâ; spirâ cœculinâ, obtusâ; anfractibus quatuor, leviter convexis; columbellâ subverticali, filiformi, profundè intrate; aperturâ lunato-rundatâ, intus fulvâ, nitidâ, labro simplici, acuto.*

**THE NATAL HELIX.** Shell imperforated, subglobose, thin, smooth, subdiaphanous, horny-whitish, irregularly

rayed with brown lines; spire slightly raised, obtuse; whorls four, slightly convex; columella subvertical, thread-like, entering deeply; aperture lunar-rounded fulvous, and shining within, lip simple, sharp.

PFEIFFER, Symbolæ, vol. iii. p. 65.

*Hab.* Natal, South Africa.

A very light subglobose shell, obliquely streaked with pale brown.

Species 1228. (Mus. Pfeiffer.)

**HELIX KRYNICKII.** *Hel. testâ angustè umbilicatâ, depressâ, striatâ, subtili, albâ, concoloratâ, fuscioribus nigris, et lavis fuscis, interruptè ornatâ, anfractibus quinque ad sex, sordidè plumbeis; aperturâ lunato-subrectâ, labro acuto, intus albo-labiato, margine basali convexo.*

**KRYNICKI'S HELIX.** Shell narrowly umbilicated, depressed, finely striated, shining, white, horny at the apex, ornamented with various interrupted black bands, brownish at the base; whorls five to six, flattish at the upper part; aperture lunar-subrectular, lip sharp, white-edged within, margins approximating.

ANDRZEJOWSKI, Bull. Nat. Hist. Soc. Moscow, vol. vi. p. 431.

*Helix angustata, var., Yrussie.*

*Helix Blandinii, Parr. yss.*

*Hab.* Croatia, Russia.

The bands below the periphery are interrupted and of lighter colour.

Species 1229. (Mus. Pfeiffer.)

**HELIX EXCLUSA.** *Hel. testâ leviter umbilicatâ, depressâ, striatâ, corollâ subverticali, concoloratâ, fuscioribus rubris angustâ, interruptè ornatâ, anfractibus quinque ad sex, sordidè plumbeis; aperturâ rhombicâ, labro simplici, acuto, intus albo-labiato, margine basali convexo.*

**THE EXCLUDED HELIX.** Shell umbilicated, dorsal depressed, striated, very sharply keeled, yellowish, encircled with two red bands, whorls five, convexly flattened, last whorl excavated round the umbilicus; aperture rhombical, lip simple, sharp, basal margin slightly arched.

*Hab.* Islands of New Guinea and Vankoro

A very depressed hard horny species, encircled above and below the periphery with a conspicuous red band.

Species 1230. (Mus. Pfeiffer.)

HELIX BINNEYANA. *Hel. testā latè apertè umbilicatā, depressā, subdiscoideā, corneo-lutescente, strigis castaneis obliquè undatis subtus dilutis pictā, striis longitudinalibus et spiralibus minutis sub lente decussatā; spirā planā, suturā impressā; anfractibus quinque, convexis; aperturā perobliquè lunari, labro acuto, margine basali reflexiusculo.*

BINNEY'S HELIX. Shell broadly openly umbilicated, depressed, subdiscoid, painted with obliquely waved chestnut streaks, diluted beneath, decussated beneath the lens with minute longitudinal and spiral striæ; spire flat, suture impressed; whorls five, convex; aperture very obliquely lunar, lip sharp, basal margin a little reflected.

PFEIFFER, Zeitschrift für Malac. 1847, p. 13.

*Hab.* Island of Chiloe; E. B. Philippi.

A discoid *Cyclostoma*-like species, richly painted on the spire with obliquely waved chestnut streaks.

Species 1231. (Mus. Pfeiffer.)

HELIX CALAMECHROA. *Hel. testā angustè umbilicatā, globoso-depressā, tenui, nitidā, pellucidā, stramineā, transversim regulariter striatā, lineis spiralibus tenuissimis sub lente decussatā; anfractibus quinque ad sex, sensim accrescentibus; aperturā lunari, labro simplici, acuto.*

THE STRAW-COLOURED HELIX. Shell narrowly umbilicated, globosely depressed, thin, shining, pellucid, straw-coloured, transversely regularly striated, decussated beneath the lens with very fine spiral lines; whorls five to six, increasing gradually; aperture lunar, lip simple, sharp.

JONAS, Philippi Abbild. und Besch. Conch. vol. i. p. 47. pl. 3. f. 2.

*Hab.* Guinea.

A delicate straw-coloured species of simple form.

Species 1232. (Mus. Pfeiffer.)

HELIX SIMULATA. *Hel. testā angustè umbilicatā, globoso-turbinatā, regulariter costulato-striatā, albūā vel griseā, fusco vel spadiceo interruptè fasciatā; spirā conoidā; anfractibus quinque, convexiusculis; aper-*

*turā lunato-subcirculari, labro acuto, intus labiato, marginibus approximatis.*

THE ALLIED HELIX. Shell narrowly umbilicated, globosely turbinated, regularly rib-like striated, whitish or grey, encircled with interrupted brown or fawn bands; spire conoid; whorls five, rather convex; aperture lunar-subcircular, lip sharp, edged within, margins approximating.

FERUSSAC, Prodrôme, p. 289.

*Hab.* Syria, Egypt, Canary Islands.

Of an opaque bluish-white, interruptedly banded and finely rib-striated throughout.

Species 1233. (Mus. Pfeiffer.)

HELIX FILIMARGO. *Hel. testā perspectivè umbilicatā, depressā, supra planiusculā, calcareo-albā, rarè fasciatā, carinā filosā cingulatā; anfractibus quinque, convexiusculis; aperturā rotundatā, labro recto, acuto, intus remotè sublabiato, marginibus subapproximatis.*

THE THREAD-EDGED HELIX. Shell perspectively umbilicated, depressed, flat above, chalk-white, rarely banded, encircled with a thread-like keel; whorls five, rather convex; aperture rounded, lip straight, sharp, distantly slightly edged within, margins rather approximating.

ZIEGLER, Rossmäslers Hist. Moll. vol. vi. p. 33. f. 358.

*Helix Taurica*, Partsch.

*Hab.* Tauria.

A chalk-white shell, encircled with a thread-like keel running through the groove of the suture.

Species 1234. (Mus. Pfeiffer.)

HELIX DETECTA. *Hel. testā imperforatā, lenticulari, carinatā, fuscā, minutè elevato-striatā; anfractibus quinque ad sex, carinā latè prominente, in omnibus anfractibus suture appressā; aperturā securiformi, labro superè simplici, margine basali subincrassato.*

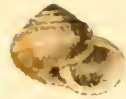
THE DETECTED HELIX. Shell imperforated, lens-shaped, keeled, brown, minutely elevately striated; whorls five to six, keel broadly prominent, in all the whorls appressed to the suture; aperture hatchet-shaped, lip simple above, basal margin slightly thickened.

FERUSSAC MSS. Pfeiffer Symbole, vol. ii. p. 27.

*Hab.* Island of Bourbon.

A hard depressed dull olive species, with the periphery peculiarly pressed out into a keel which passes through the spire in the place of the suture.





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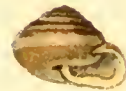
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Enlarged  $\frac{1}{2}$  size

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# HELIX.

PLATE CLXXX.

Species 1235. (Mus. Pfeiffer.)

**HELIX PARVA.** *Hel. testâ angustissimè umbilicatâ, depresso-turbinatâ, striatulâ, nitide, sorridè lutescente; spirâ conoidâ, apice acutiusculâ, cornuâ; anfractibus quinque ad sex, vix convexiusculâ, ultimo ad peripheriam albo-subearinato; aperturâ lunato-circulari, labro acuto, margine columellari reflexo.*

**THE SMALL HELIX.** Shell very narrowly umbilicated, depressly turbinated, finely striated, shining, dull yellow; spire conoid, rather sharp and horny at the apex; whorls five to six, scarcely convex, last whorl faintly white-keeled at the periphery; aperture lunar-circular, lip sharp, columellar margin reflected.

PARRYSS, Pfeiffer, Mon. Helic. viv. vol. i. p. 411.

*Hab.* Sardinia.

A small dull yellowish species, encircled round the periphery with a narrow whitish zone.

Species 1236. (Mus. Pfeiffer.)

**HELIX INSCULPTA.** *Hel. testâ imperforatâ, depressâ, lenticulari, utrinque aequaliter convexâ, acule cinctâ, solutâ, castaneâ, supremè costulis confertis et lineâ spirali carinâ parallelâ insculptâ; anfractibus quinque, planis, ultimo basi lævigato, sublus carinam impressâ; columellâ dente brevi avato albo mucosâ; aperturâ depresso-securiformi, labro simplici.*

**THE ENGRAVED HELIX.** Shell imperforated, depressed, lens-shaped, equally convex on both sides, sharply keeled, rather solid, chestnut, engraved on the upper part with fine close-set ribs, and a spiral line parallel to the keel; whorls five, flat, the last smooth at the base, and impressed beneath the keel; columella furnished with a short sharp white tooth; aperture depressly hatchet-shaped, lip simple.

PFEIFFER, Pro. Zool. Soc. 1845, p. 129.

*Hab.* —?

A small dark *Rotella*-shaped shell, encircled with a faintly impressed line above the keel, which is sharply pressed out at the periphery.

Species 1237. (Mus. Pfeiffer.)

**HELIX VOLVAGIS.** *Hel. testâ apertè umbilicatâ, conicè-lunari-discoidâ, rufescente-cornuâ, rugulâ costata-striatâ; spirâ convexo-planatâ, solutâ impressâ; anfractibus septem, rotundatis, testè apresso lutes, ultimo angulato, infra angulum declivi-inflato; aperturâ*

*reniformi, labro callo reflexo, margines callo brevi triangulari dentifera junctis.*

**THE WORM-LIKE HELIX.** Shell openly umbilicated, orbicularly discoid, reddish-horny, regularly rib-like striated; spire convexly flattened, suture impressed; whorls seven, rounded, increasing slowly, the last angled, below the angle slantingly inflated; aperture kidney-shaped, lip callous, reflected, margins joined by a short, angular, tooth-like callosity.

PARRYSS, Pfeiffer, Symbole, vol. iii. p. 80.

*Hab.* Georgia, Florida, North America.

A horny discoid shell, so convoluted that the umbilicus is unusually broader in the centre of the last whorl than of the rest.

Species 1238. (Mus. Pfeiffer.)

**HELIX HIPPOCREPIS.** *Hel. testâ subapertè umbilicatâ, depressâ, confertis costato-striatâ, albâ et fuscâ, spirâ convexo-planatâ; anfractibus quinque ad sex, carinatis, supra planis-convexis, infra declivibus, ultimo subitè diffluo, pone aperturam securiformi; aperturâ horizontali, subreniformi, labro reflexo, anfractus penultimi pariete lunari avato-que dronghari mucosâ.*

**THE HORSE-SHOE HELIX.** Shell rather openly umbilicated, depressed, closely rib-like striated, whitish or brownish; spire convexly flattened, whorls five to six, keeled, flatly convex above, slantingly swollen beneath, last whorl suddenly detached, pitted behind the aperture; aperture horizontal, somewhat ear-shaped, lip reflected, wall of the penultimate whorl furnished with an ovately quadrangular lamina.

PFEIFFER, Zeitschrift für Malac. 1848, p. 119.

*Hab.* Texas, North America; Dr. Roemer.

Distinguished by a very peculiarly developed aperture, the wall of the penultimate whorl being furnished with a lamina of the shape of a horse-shoe.

Species 1239. (Mus. Pfeiffer.)

**HELIX VIRGINALIS.** *Hel. testâ angustè umbilicatâ, subdepresso-umbilicatè, mucosâ, luteâ et fuscâ, striatâ, spirâ conicè-lunari, sublus subcarinâ, supra planis-convexis, infra declivibus, ultimo angulato, supra angulum declivi-inflato; aperturâ reniformi, labro reflexo, margines callo brevi triangulari dentifera junctis.*

**THE MAIDEN HELIX.** Shell narrowly umbilicated, six-



depressly orbicular, chalk-white, finely wrinkle-striated; spire short, suture rather impressed; whorls five, rounded; aperture lunar-rounded, lip sharp, thickly callous-edged within, margins approximating.

JAN, Pfeiffer, Mon. Hel. viv. vol. iii. p. 132.

*Hab.* Texas?

This shell, quoted erroneously by Dr. Pfeiffer in the first edition of his monograph as a variety of *H. Berlameriana*, is more opaque and solid than that species, and more likely to be a native of the locality quoted.

Species 1240. (Mus. Pfeiffer.)

HELIX HARTUNGI. *Hel. testá angustè umbilicatá, subdepressá, tenuissimè striatá, nitente-albá, apice cornéa; anfractibus quinque ad sex, convexis, ultimo sublátè rotundato; aperturá lunato-circulari, labro acuto, intus albo-labiato, marginibus approximatis.*

HARTUNG'S HELIX. Shell narrowly umbilicated, rather depressed, very finely striated, shining white, horny at the apex; whorls five to six, convex, the last rather broadly rounded; aperture lunar-circular, lip sharp, white-edged within, margins approximating.

ALBERS, Zeitschrift für Malac. 1852, p. 30.

*Hab.* Island of Porto Sancto; Hartung.

A thin, delicate, shining white shell, of simple spiral form.

Species 1241. (Mus. Pfeiffer.)

HELIX LEUCOZONA. *Hel. testá rix umbilicatá, orbiculari-convexá, dilutè rufescente, subpellucidá, zonulá pellucidá albá medio cingulatá, subtiliter striatá; anfractibus quinque ad sex, convexis; aperturá transversim lunari, labro plano-reflexo, albo-labiato, margine basali stricto.*

THE WHITE-ZONED HELIX. Shell scarcely umbilicated, orbicularly convex, dilutely reddish, subpellucid, encircled round the middle with a white transparent zone, finely striated; whorls five to six, convex; aperture transversely lunar, lip flatly reflected, white-edged, basal margin drawn out.

ZIEGLER, C. Pfeiffer, Moll. vol. iii. p. 34. pl. 6. f. 19, 20.

*Helix delopida*, Jan.

*Hab.* Austria and North Italy.

The transparent white zone which encircles this shell at the periphery is seen throughout the spire.

Species 1242. (Mus. Pfeiffer.)

HELIX CANDIDULA. *Hel. testá umbilicatá, globoso-de-*

*pressá, minutè striatá, albidá, interdum fusco fasciatá, anfractibus quatuor ad quinque, convexiusculis, ultimo anticè rix deflexo; aperturá lunari-rotundatá, labro simplici, intus validè albo-labiato.*

THE WHITISH HELIX. Shell umbilicated, globosely depressed, minutely striated, whitish, sometimes banded with brown; whorls four to five, rather convex, the last a little deflected in front; aperture lunar-rounded, lip simple, strongly white-edged within.

STUDER, Syst. Verz. p. 87.

*Helix bidentata*, Draparnaud.

*Helix thymorum*, Krynicki.

*Helix striatula*, Hartmann.

*Hab.* Southern Europe.

A simple dull whitish shell, sometimes faintly banded or streaked with light-brown.

Species 1243. (Mus. Pfeiffer.)

HELIX AUBERI. *Hel. testá angustè umbilicatá, globoso-depressá, tenuiculá, subtilissimè striatá, cerreo-albidá aut stramineá; spirá conoidá, subobtusá; anfractibus quaque, convexiusculis, ultimo latiore, tumidiusculo; aperturá obliquè lunari, labro simplici.*

AUBER'S HELIX. Shell narrowly umbilicated, globosely depressed, rather thin, very finely striated, wax-white or straw-colour; spire conoid, rather obtuse; whorls five, rather convex, the last broader, rather swollen: aperture obliquely lunar, lip simple.

ORBIGNY, Moll. Cuba, vol. i. p. 157. pl. 7. f. 13, 16.

*Hab.* Cuba.

A light straw-coloured waxen shell, without marking.

Species 1244. (Mus. Pfeiffer.)

HELIX PROTEA. *Hel. testá umbilicatá, depresso-globosá, albidá, fusco interdum maculatá aut fasciatá; spirá conoidé, apice cornéa; anfractibus quinque ad sex, convexis, ultimo rotundato; aperturá circulari, labro simplici, paululum expanso.*

THE PROTEAN HELIX. Shell umbilicated, depressly globose, whitish, sometimes spotted or banded with brown; spire conoid, horny at the apex; whorls five to six, convex, the last rounded; aperture circular, lip simple, a little expanded.

ZIEGLER, Rossmäslar, Hist. Moll. vol. viii. p. 34. f. 521.

*Hab.* Corfu.

A chalk-white shell, with rounded whorls more or less interruptedly banded.





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# HELIX.

PLATE CLXXXI.

Species 1245. (Mus. Pfeiffer.)

HELIX ZIEBETRULI. *Hel. testā conoidēā, trochiformi, minutē umbilicatā, sordidē albā, apice corneā; spirā turratā; anfractibus quinque, densē tenuē plicato-annulatis, ultimo basi plano-convexā; aperturā parvā, intus carneā, labro simplici.*

ZIEBETRUL'S HELIX. Shell conoid, trochus-shaped, minutely umbilicated, dead white, horny at the apex; spire turreted; whorls five, rounded, densely finely plicately ringed, the last flatly convex at the base; aperture small, flesh-tinged within, lip simple.

ALBERS, Pfeiffer, MSS.

*Hab.* —?

A small *Scalaria*-like shell, with a turreted pyramidal spire, annulated throughout with fine plait-like rings.

Species 1246. (Mus. Pfeiffer.)

HELIX AMMONITOIDES. *Hel. testā involutā, utrinque umbilicatā, confertissimē filoso-plicatā, corneā, rufa obsolete strigatā; spirā immersā; anfractibus quatuor, rotundatis; aperturā subverticali, lunari, labro simplici, marginibus remotis.*

THE AMMONITE-LIKE HELIX. Shell involute, umbilicated on both sides, very closely thread-plaited, horny, obsolete red-streaked; spire immersed; whorls four, rounded; aperture subvertical, lunar, lip simple, margins distant.

*Helix omicron*, Pfeiffer, *Zeitschrift für Malac.* 1851, p. 128.

*Hab.* Australia.

A small nautiloid species, the spire being completely immersed, making the shell to be umbilicated on both sides.

Species 1247. (Mus. Pfeiffer.)

HELIX TROCHILIONIDES. *Hel. testā sublatē umbilicatā, orbiculato-convexiusculā, tenuistriatā, pellucido-albā; spirā rix elevatā; anfractibus sex, planiusculis; aperturā subverticali, lunato-subcirculari, labro recto, acuto, marginibus convergentibus.*

THE LITTLE TROCHOID HELIX. Shell rather broadly umbilicated, orbicularly slightly convex, finely striated, transparent white; spire scarcely raised; whorls six, rather flat; aperture subvertical, lunar-subcircular, lip straight, sharp, margins approximating.

D'ORBIGNY, *Voy. dans l'Amér. Mérid.* p. 251. p. 27 f. 12, 15.

*Hab.* Bolivia and near Lima, Peru; D'Orbigny.

Of simple flatly-h growth, somewhat perspectively umbilicated.

Species 1248. (Mus. Pfeiffer.)

HELIX ELATA. *Hel. testā minutē umbilicatā, conicā, basi planulatā, sordidē albā; spirā pyramidalī; anfractibus octo, planis-declivibus, obliquē costato-striatis, ad peripheriam acutē filo-carinatis; aperturā securiformi, labro simplici, acuto.*

THE RAISED HELIX. Shell minutely umbilicated, conical, flat at the base, dead white; spire pyramidal. whorls eight, flatly slanting, obliquely rib-striated, sharply thread-keeled at the periphery; aperture hatchet-shaped, lip simple, sharp.

FAURE-BIGLET, *Férussac, Prodrôme*, No. 304.

*Hab.* Capri, Sicily; Philippi.

Of a sharply conical pyramid form, obliquely rib-striated throughout.

Species 1249. (Mus. Pfeiffer.)

HELIX COMPAR. *Hel. testā ampliter umbilicatā, depressā, sordidē olivaceā, fasciis rufis duabus spiralibus, spirā subannulicatā; anfractibus sex ad septem, superne obtusē angulatis, infra rotundatis, stris plicatis a bidis conspicuis elegantē annulatis; aperturā per obliqui, subcirculari, margine continuo, albido, subexpanso.*

THE LIKE HELIX. Shell largely umbilicated, depressed, dull olive, with two red spiral bands; spire slightly channelled; whorls six to seven, obtusely angled at the upper part, rounded below, elegantly ringed throughout with conspicuous whitish plait-like striae. aperture very oblique, nearly circular, margin continuous, whitish, subexpanded.

LOWE, *Faun. Madér.* p. 48 pl. 5. f. 23

*Hab.* Madeira.

Exquisitely sculptured throughout with prominently raised plait-like rings.

Species 1250. (Mus. Pfeiffer.)

HELIX SCHOMBRII. *Hel. testā umbilicatā, subdepressā,*

*densissimè elevato-striatá, albidá, fasciis corvino-fuscis supra infraque cingulatá; anfractibus quinque, ad suturam impressis, medio carinatis; aperturá securiformi, labro simplici.*

SCHOMBRI'S HELIX. Shell umbilicated, rather depressed, very densely elevately striated, whitish, encircled above and below with horn-brown bands; whorls five, impressed at the suture, keeled in the middle; aperture hatchet-shaped, lip simple.

SCACCHI, Pfeiffer, Mon. Helic. vol. i. p. 444.

Hab. Sicily.

An opaque white shell, encircled with light horn-brown bands, with a cord-like keel round the periphery.

Species 1251. (Mus. Pfeiffer.)

HELIX CARONI. *Hel. testá minutè umbilicatá, pyramidal-conicá, basi planulatá, sordidè albá; anfractibus decem, plano-declivibus, densè obliquè plicato-striatis, ad peripheriam conspicuè serrato-carinatis; aperturá depresso-securiformi.*

CARON'S HELIX. Shell minutely umbilicated, pyramidally conical, flat at the base, dead white; whorls ten, flatly slanting, densely obliquely plicately striated, conspicuously serrately keeled at the periphery; aperture depressly hatchet-shaped.

DESHAYES, Encyclopédie Méthodique, vol. ii. p. 262.

*Helix turrita*, Rossmasler.

Hab. Sicily.

A sharply conoid pyramid, like *H. elata*, but more serrately striated over the keel.

Species 1252. (Mus. Pfeiffer.)

HELIX RUGOSIUSCULA. *Hel. testá umbilicatá, subdepressá, undique confertim et quantissimè costulato-striatá, pallidè griseá, apice corvíná; anfractibus quinque, convexis; aperturá obliquè lunari, labro simplici.*

THE SLIGHTLY WRINKLED HELIX. Shell umbilicated, rather depressed, very elegantly closely rib-like striated throughout, light grey, horny at the apex; whorls five, convex; aperture obliquely lunar, lip simple.

MICHAUD, Complement, p. 14. pl. 15. f. 11-14

Hab. Central Pyrenees.

Of simple form, elegantly sculptured throughout with fine raised striae.

Species 1253. (Mus. Pfeiffer.)

HELIX TROCHOIDES. *Hel. testá umbilicatá, globoso-pyramidalí, basi plano-convexi, albidá, interdum pallidè fasciatá; spirá subobtusá, apice corvíná; anfractibus quinque ad sex, convexis, cariná filiformi internè cinctis; aperturá latè lunari.*

THE TROCHOID HELIX. Shell umbilicated, flatly convex at the base, globosely pyramidal, whitish, sometimes faintly banded; spire rather obtuse, horny at the apex; whorls five to six, convex, encircled at the lower part with a thread-like keel; aperture broadly lunar.

POIRET, It. Barbad. vol. ii. p. 29.

*Helix conica*, Draparnaud.

*Helicella solaris*, Risso.

Hab. Southern Europe.

Of a more globosely conoid form than the preceding pyramidal species of this plate, the whorls being more convex, and the cord-like keel round the basal periphery of each less prominent.

Species 1254. (Mus. Pfeiffer.)

HELIX SYRENSIS. *Hel. testá umbilicatá, orbiculato-conoidé, confertim obliquè costulato-striatá, carinatá, albidá, spadicè varioratá; spirá subdepressá, apice acutá, corvíná; anfractibus quinque, convexis; aperturá rotundato-lunari, labro simplici.*

THE SYRA HELIX. Shell umbilicated, orbicularly conoid, closely obliquely rib-like striated, keeled, whitish, marbled with fawn; spire rather depressed, sharp and horny at the apex; whorls five, flat; aperture rotundately lunar, lip simple.

PFEIFFER, Symbole, vol. iii. p. 69.

Hab. Island of SYRA. Forbes.

A rather flatly depressed sharply-angled conoid shell, obliquely rib-striated throughout.







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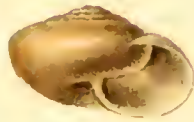
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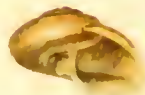
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# HELIX.

PLATE CLXXXII.

Species 1255. (Mus. Pfeiffer.)

**HELIX BESCKE.** *Hel. testâ angustè umbilicatâ, orbiculato-convexâ, lævigatâ, corneo-luteâ, nitidissimâ; spirâ subconoideâ; anfractibus quinque ad sex, convexis, regulariter accrescentibus; aperturâ latè lunari, labro simplici.*

**BESCKE'S HELIX.** Shell narrowly umbilicated, orbicularly convex, smooth, horny-yellow, very shining; spire subconoid; whorls five to six, convex, increasing regularly; aperture broadly lunar, lip simple.

**DUNKER,** Zeitschrift für Malac. 1847, p. 81.

*Hab.* Brazil; Bescke.

A small depressly conoid subglassy species, with a bright glossy surface.

Species 1256. (Mus. Cuming.)

**HELIX KAWAIENSIS.** *Hel. testâ latè spirally umbilicatâ, orbiculato-convexâ, fusciscenti-corneâ; spirâ subdepressâ, suturâ distinctâ; anfractibus quatuor, subrotundatis; aperturâ lunato-circulari, labro simplici.*

**THE KAWAI HELIX.** Shell broadly spirally umbilicated, orbicularly convex, brownish-horny; spire rather depressed, suture distinct; whorls four, somewhat rounded; aperture lunar-circular, lip simple.

**PFEIFFER,** Pro. Zool. Soc. 1854.

*Hab.* Kawai, Sandwich Islands; Newcomb.

A minute conoidly spiral shell, with only slight increase in the whorls, which coil around a broad open umbilicus.

Species 1257. (Mus. Cuming.)

**HELIX SUBAQUILA.** *Hel. testâ angustè et profundè umbilicatâ, orbiculato-convexâ, corneo-stramineâ, tenui, semipellucidâ, lævigatâ; spirâ subobtusâ, suturâ impressâ; anfractibus quatuor, convexis; aperturâ latè lunari, labro simplici.*

**THE SEN-BURNT HELIX.** Shell narrowly and deeply umbilicated, orbicularly convex, horny straw-colour, thin, semitransparent, smooth; spire rather obtuse, with the suture impressed; whorls four, convex; aperture broadly lunar, lip simple.

**SHUTTLEWORTH,** Mus. Cuming.

*Hab.* Island of Porto Rico, West Indies; Blauner.

Mr. Cuming's specimen of this species is of a light semitransparent straw-colour.

Species 1258. (Mus. Pfeiffer.)

**HELIX TABELLATA.** *Hel. testâ subperspectivè umbilicata, perdepressâ, tenuiculâ, superne minutè rugosâ et granulatâ, fusculo et albido marmoratâ; spirâ concavo-planatâ, versus apicem elevatiusculâ; anfractibus quinque, ad peripheriam acutè unguatis, infra convexis, fusco-fasciatis; aperturâ obliquè rotundato-lunari, labro subexpanso.*

**THE TABLE HELIX.** Shell somewhat perspective-umbilicated, very depressed, rather thin, minutely wrinkled and granulated at the upper part, marbled brown and white; spire concavely flattened, a little raised towards the apex; whorls five, very sharply angled at the periphery, convex beneath, brown-banded; aperture obliquely rotundately lunar, lip slightly expanded.

**LOWE,** Ann. and Mag. Nat. Hist. Second Series, vol. ix. p. 116.

*Hab.* Madeira.

A very characteristic species, distinguished chiefly by its broadly convoluted concavely depressed spire.

Species 1259. (Mus. Cuming.)

**HELIX REGULARIS.** *Hel. testâ rix umbilicatâ, pyramidal-conicâ, beeriusculâ, basi convexo-planâ, trochiformi pellucido-corneâ; anfractibus quinque, convexo-planis, ultimo angulato-carinato; aperturâ depress-lunari, labro tenui, simplici.*

**THE REGULAR HELIX.** Shell scarcely umbilicated, pyramidally conical, rather short, convexly flattened at the base, trochus-shaped, transparent horny; whorls five, convexly flattened, the last angularly keeled, aperture depressly lunar, lip thin, simple.

**PFEIFFER,** Pro. Zool. Soc. 1854.

*Hab.* New Zealand.

A somewhat obtuse trochiform horny species, sharply angularly keeled round the basal periphery.

Species 1260. (Mus. Cuming.)

**HELIX EXCISA.** *Hel. testâ latissimè apertè umbilicatâ*

*orbiculato-depressâ, subdiscoulâ, tenuissimâ, pellucido-cornâ, undique striato-annulatâ; spirâ depressâ, suturâ canaliculatâ; anfractibus tribus ad quatuor; aperturâ parvâ, subcirculari, labro simplici.*

THE CUT HELIX. Shell very broadly openly umbilicated, orbicularly depressed, subdiscoid, very thin, transparent horny, striately ringed throughout; spire depressed, suture channelled; whorls three to four; aperture small, nearly circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1851.

A very widely coiled transparent horny shell, the whorls very little increasing.

Species 1261. (Mus. Pfeiffer.)

HELIX PALLIDULA. *Hel. testâ angustè umbilicatâ, convexo-depressâ, tenui, pellucidâ, confertim obliquè striatâ; anfractibus quinque ad sex, convexiusculis; aperturâ obliquâ, latè lunari, labro simplici.*

THE PALE HELIX. Shell narrowly umbilicated, convexly depressed, thin, transparent, closely obliquely striated; whorls five to six, rather convex; aperture oblique, broadly lunar, lip simple.

PFEIFFER, Zeitschrift für Malac. 1846. p. 128.

Hab. Chili?

Of transparent horny substance, simply convoluted, marked with oblique striae and a very small umbilicus.

Species 1262. (Mus. Cuming.)

HELIX PLAGUPTYCHA. *Hel. testâ angustè et profundè umbilicatâ, obliquè turbinatâ, subtrochiformi, tenui, cornâ; anfractibus quatuor ad quinque, convexis; aperturâ parvâ, subcirculari, labro simplici.*

THE OBLIQUELY-COILED HELIX. Shell narrowly and deeply umbilicated, obliquely turbinated, somewhat trochus-shaped, thin, horny; whorls four to five, convex; aperture small, nearly circular, lip simple.

SHUTTLEWORTH, Mus. Cuming.

Hab. Island of Porto Rico, West Indies; Blauer.

A small horny species of a short trochiform shape, with the suture rather impressed.

Species 1263. (Mus. Pfeiffer.)

HELIX EGENA. *Hel. testâ imperforatâ, semigloboso-turbinatâ, glabrâ, nitidissimâ, citerrâ; spirâ conoideo-obsculatâ; anfractibus quinque ad sex, convexis, lentè accrescentibus, ultimo basi convexo, medio impresso-puncturato; aperturâ depresso-lunari, labro simplici.*

THE DISTRESSED HELIX. Shell imperforated, semiglobosely turbinated, smooth, very shining, glassy; spire conoidly raised; whorls five to six, convex, increasing slowly, the last convex at the base, impressly punctured in the middle; aperture depressly lunar, lip simple.

SAY, Journ. Acad. Nat. Sci. Philadelphia, vol. v. p. 120.

Hab. Philadelphia; Say.

A minute semiglobose glassy shell, semipunctured in the place of the umbilicus.

Species 1264. (Mus. Pfeiffer.)

HELIX PROBLEMATICA. *Hel. testâ umbilicatâ, convexo-depressâ, tenuissimâ, striatâ, pellucidâ, nitente, pallidè stramineâ; spirâ convexâ, apice subprominulo, obtuso, suturâ submarginatâ; anfractibus quatuor ad quinque, convexiusculis, rapidè accrescentibus, infra peripheriam subangulatis, basi planiusculis; aperturâ obliquâ, subtrapezoidè, labro simplici, margine columellari sub umbilicum interdum expanso.*

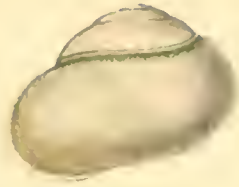
THE PROBLEMATIC HELIX. Shell umbilicated, convexly depressed, very thin, finely striated, transparent, shining, light straw-colour; spire convex, apex rather prominent, obtuse, suture faintly margined; whorls four to five, rather convex, increasing rapidly, slightly angled below the periphery, rather flat at the base; aperture oblique, subtrapezoid, lip simple, columellar margin sometimes expanded over the umbilicus.

PFEIFFER, Zeitschrift für Malac. 1852. p. 91.

Hab. —?

A light transparent straw-coloured shell, of extremely thin texture.





1265



1266 a



1266 b



1267



1268 a



1268 b



1269



# HELIX.

## PLATE CLXXXIII.

### Species 1265. (Mus. Cuming.)

**HELIX ERUGINOSA.** *Hel. testá imperforatá, subdepresso-globosá, tenuistriatá, nitente, subpellucido-albá, cirente versus suturas tinctá; spirá tumidiusculá, apice obtusá; anfractibus quatuor, convexis; aperturá obliquè lunari, labro tenuè reflexo; columellá strictá, callosopressá.*

**THE CANKERED HELIX.** Shell imperforated, subdepressly globose, finely striated, shining, subpellucid-white, tinged with green towards the sutures; spire rather swollen, obtuse at the apex; whorls four, convex; aperture obliquely lunar, lip thinly reflected; columella drawn out, callously appressed.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Philippine Islands.

A thin shining ivory-white shell, tinged with canker-green, more especially next the suture.

### Species 1266. (Mus. Cuming.)

**HELIX LACERA.** *Hel. testá imperforatá, oblongo-globosá, solidiusculá, obliquè tenuistriatá, fulvo-brunneá, epidermide hydrophaná obliquè strigatá; spirá tumidá, perobtusá; anfractibus quatuor, convexiusculis, ad suturas minutè marginatis; aperturá obliquè ovatá, labro reflexo; columellá latissimè callosopressá.*

**THE TORN HELIX.** Shell imperforated, oblong-globose, rather solid, obliquely finely striated, fulvous-brown, obliquely streaked with a hydrophanous epidermis; spire swollen, very obtuse; whorls four, slightly convex, minutely margined at the suture; aperture obliquely ovate, lip reflected; columella very broadly callously appressed.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Philippine Islands.

Of a peculiar oblong-globose form, very broadly callous, appressed at the columella, differing characteristically in form from any of the species collected in the same locality by Mr. Cuming.

### Species 1267. (Mus. Cuming.)

**HELIX GANOMA.** *Hel. testá angustè umbilicatá, depresso-orbiculari, circa umbilicum excavatá, olivaceo-fuscescente, infra peripheriam et circa umbilicum castaneo latifasciatá; spirá convexá, suturá subimpressá; anfractibus quinque, convexis, spiraliter minutè sulcatis, arcuatis striatis, striis ad suturas subplicatis; aperturá obliquè lunari, labro simplici.*

**THE BEAUTIFUL HELIX.** Shell narrowly umbilicated, depressly orbicular, excavated around the umbilicus, olive-brown, broadly chestnut-banded below the periphery and around the umbilicus; spire convex, spirally minutely grooved, arcuately striated, the striae being faintly plicated at the suture; suture rather impressed; whorls five, convex; aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; F. Layard.

Very closely allied to *H. Juliana*

### Species 1268. (Mus. Cuming.)

**HELIX MICROSPIRA.** *Hel. testá imperforatá, globosá, inflatá, lævigatá, albidá, fasciis duabus purpureo-nigris cinctá, epidermide corneá nitente indutá; spirá parvâ, obtusá; anfractibus quatuor, convexis, ultimo maximo, tumido; aperturá amplâ, latè lunari, labro reflexo; columellá latè callosopressá.*

**THE SMALL SPIRED HELIX.** Shell imperforated, globose, inflated, smooth, whitish, encircled with two purple-black bands, covered with a shining horny epidermis; spire small, obtuse; whorls four, convex, the last very large, swollen; aperture large, broadly lunar, lip reflected; columella broadly callously appressed.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Philippine Islands.

This species is closely allied to *H. coccomelos*, but the last whorl is much larger and more inflated.

### Species 1269. (Mus. Cuming.)

**HELIX DIFFICILIS.** *Hel. testá imperforatá, orbiculari-depressá, subinflatá, albidá, fulvescente tinctá, zona brunneis tribus distantibus cingulatá; spirá brevi, obtusá; anfractibus quatuor, plano-convexis; aperturá subamplâ, subquadrato-lunari, labro reflexo; columella latissimè callosopressá.*

**THE DIFFICULT HELIX.** Shell imperforated, orbicularly depressed, rather inflated, whitish, stained with fulvous and encircled with three distant brown zones; spire short, obtuse; whorls four, flatly convex; aperture rather large, somewhat squarely lunar, lip reflected; columella very broadly callously appressed.

PFEIFFER, Pro. Zool. Soc. 1854.

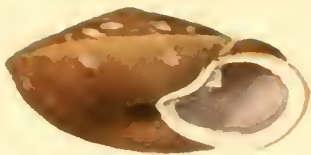
*Hab.* Philippine Islands.

Of the same typical character as the preceding species, but more depressly convoluted.









1371



1372



1373



1374



1375



1376



1377

# HELIX.

PLATE CLXXXIV.

Species 1270. (Mus. Cuming.)

**HELIX CONTINUA.** *Hel. testâ ampliter et profundè umbilicatâ, depresso-orbiculari, lentiformi, rufo-castaneâ; spirâ plano-convexâ; anfractibus quinque, obliquè arcuato-striatis, ad peripheriam angulato-carinatis, ultimâ antirè descendente; aperturâ subquadrato-lunari, horizontali, dente parvo in anfractu penultimo, labro reflexo, marginibus laminâ callosâ junctis.*

**THE CONTINUOUS HELIX.** Shell largely and deeply umbilicated, depressly orbicular, lens-shaped, reddish-chestnut; spire flatly convex; whorls five, obliquely arcuately striated, angularly keeled at the periphery, the last descending in front; aperture subquadrately lunar, horizontal, with a small tooth on the penultimate whorl, lip reflected, margins joined by a callous lamina.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Province of Ocaña, Ecuador; Schlim.

Chiefly distinguished from its allies already figured, by the presence of a single small tooth upon the body-whorl.

Species 1271. (Mus. Cuming.)

**HELIX SANNIO.** *Hel. testâ sinistrali, angustè umbilicatâ, orbiculato-convexâ, densè arcuato-elevato-striatâ, supra pallidâ, infra olivaceo-castaneâ; spirâ subconoidâ; anfractibus sex ad septem, plano-convexis, ad peripheriam obtusè carinatis; aperturâ subquadrato-lunari, labro subreflexo, albido, nitente.*

**THE MIMIC HELIX.** Shell sinistral, narrowly umbilicated, orbicularly convex, densely arcuately elevately striated, pale above, olive-chestnut beneath; spire subconoid; whorls six to seven, flatly convex, obtusely keeled at the periphery; aperture subquadrately lunar, lip a little reflected, white and shining.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

A reversed species, densely sculptured throughout with arched raised striae, with a marked distinction between the colouring of the upper and lower halves of the shell.

Species 1272. (Mus. Cuming.)

**HELIX FOVEATA.** *Hel. testâ sinistrali, angustè umbilicatâ, orbiculari, supra depresso-convexâ, et superficialiter corrugato-indentatâ, arcuatim striatâ et sub lente mi-*

*nutissimè granulatâ, infra rotundatâ et lente levè rufescente-castaneâ, subpallidâ, circa umbilicum late olivaceâ; anfractibus quinque, ad peripheriam acute carinatis et albidis; aperturâ obliquè lunari, labro tenui, subreflexo.*

**THE PITTED HELIX.** Shell sinistral, narrowly umbilicated, orbicular, depressly convex above, and superficially wrinkle-indentated, arcuately striated, and beneath the lens very minutely granuled, rounded and smooth beneath; reddish-chestnut, subconoid, yellowish-olive round the umbilicus, whorls five, sharply keeled and whitish at the periphery; aperture obliquely lunar, lip thin, slightly reflected.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* India.

A reversed species of rather thin texture, particularly characterized on the upper surface by numerous somewhat corrugated indentations.

Species 1273. (Mus. Cuming.)

**HELIX PROCERA.** *Hel. testâ subprofundè umbilicatâ, convexo-orbiculari, solutusculâ, intus castaneâ, et externe minute granulatâ, spirâ levè obsolete groovatâ et dentatâ, ad peripheriam carinatâ; anfractibus quinque, ad aperturâ triangulo-subquadratâ, labro calloso, rotundatilibus duobus parvis antè oppositis, marginibus laminâ callosâ junctis.*

**THE TALL HELIX.** Shell somewhat deeply umbilicated, convexly orbicular, rather solid, dark chestnut, everywhere minutely granulated, spirally obsolete grooved and indented, keeled at the periphery, whorls five; aperture triangularly subquadrate; lip callous, reflected, with two small sharp opposite teeth, margins joined by a callous lamina.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Province of Antioquia, Ecuador; Schlim.

A fine large species, allied to *H. procera*, having the same small tooth on the body-whorl with one of similar form opposite to it on the lip.

Species 1274. (Mus. Cuming.)

**HELIX LUQUELENSIS.** *Hel. testâ convexo-orbiculari, solidâ, ad aperturam obliquè reflectâ, intus brunnè*

*obliquè arcuato-striatâ; spirâ tumidâ, apice obtusâ; anfractibus quinque, ad suturas obsolete marginatis, ultimo carinâ purâ fere obsolete cingulato; aperturâ oblongo-quadratâ, labro latè reflexo, albo, margine basali late calloso, strictiusculo, subangulato.*

**THE LUQUILLO HELIX.** Shell imperforated, globose, solid, obliquely produced at the aperture, dark brown, obliquely arcuately striated; spire swollen, obtuse at the apex; whorls five, obsolete margined at the sutures, the last encircled with a single small, nearly obsolete keel; aperture oblong-quadrate, lip broadly reflected, white, basal margin broadly callous, drawn out, and slightly angled.

SHUTTLEWORTH, Mus. Cuming.

*Hab.* Luquillo, Island of Porto Rico, West Indies.

A very characteristic species, of solid globose *Pupa*-like form.

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Species 1275. (Mus. Cuming.)

**HELIX ABNORMIS.** *Hel. testâ imperforatâ, orbiculato-conoideâ, basi planulatâ, solidâ, castaneo-rufâ, arcuato-striatâ et granulatâ; spirâ elevatâ, apice obtusâ; anfractibus quinque ad sex, plano-concavis; aperturâ subquadrato-lunari, horizontali, labro expanso, margine basali calloso-reflexo, dente unico acuto.*

**THE ABNORMAL HELIX.** Shell imperforated, orbicularly conoid, flat at the base, solid, chestnut-red, arenately

striated and granuled; spire raised, obtuse at the apex; whorls five to six, flatly convex; aperture subquadrately lunar, horizontal, lip expanded, basal margin callously reflected, with a small sharp tooth.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Jamaica.

A somewhat doubtful ill-conditioned specimen.

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Species 1276. (Mus. Cuming.)

**HELIX PRESTANS.** *Hel. testâ imperforatâ, orbiculari-concavâ, tumidiusculâ, obliquè tenuistriatâ, nitente, spaldicâ, castaneo supra strigato-marmoratâ, infra interruptè zonatâ; spirâ obtusè concavâ; anfractibus quatuor, concavis; aperturâ latè lunari, labro reflexo, livido.*

**THE EXCELLING HELIX.** Shell imperforated, orbicularly convex, rather tumid, obliquely finely striated, shining, fawn-colour, mottled with chestnut above, interruptedly zoned beneath; spire obtusely convex; whorls four, convex; aperture broadly lunar, lip reflected, livid.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Province of Oeana, Ecuador; Schlim.

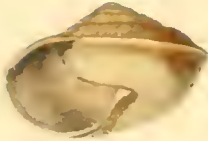
A fine richly coloured species, belonging to the group of which *H. pellis-serpentis* is the typical species.







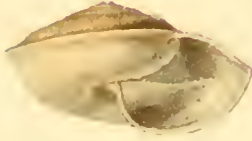
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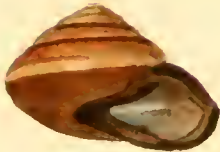
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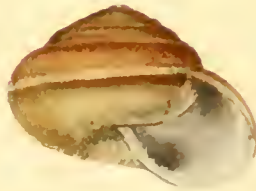
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1281



1282



1283



1284



1285



1286

# HELIX.

## PLATE CLXXXV.

Species 1277. (Mus. Cuming.)

**HELIX EUSPIRA.** *Hel. testâ latissimè apertè umbilicatâ, discoideâ, sericeo-olivaceâ; spirâ plano-depressâ; anfractibus quinque, subtiliter densè corrugato-striatis, lineis spiralibus decussatis; aperturâ obliquè lunari, labro tenui, marginibus subapproximatis.*

**THE PRETTY-SPIRED HELIX.** Shell very broadly openly umbilicated, discoid, silky olive; spire flatly depressed; whorls five, finely densely wrinkle-striated, decussated with spiral lines; aperture obliquely lunar, lip thin, margins rather approximating.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Brazil.

A silky-olive discoid shell, of nearly transparent substance.

Species 1278. (Mus. Cuming.)

**HELIX SACCATA.** *Hel. testâ sinistrati, vir umbilicatâ, albidocorneâ, pellucidâ, obliquè arcuato-striatâ, striis numerosis spiralibus tenuicorrugatis conspicuè decussatâ; spirâ convexâ; anfractibus quinque, plano-concavis, ad peripheriam acutè carinatâ; aperturâ rotundato-lunari, subobliquâ, labro simplici, marginibus subapproximatis.*

**THE BAGGED HELIX.** Shell sinistral, scarcely umbilicated, whitish-horny, transparent, obliquely arcuately striated, conspicuously decussated with numerous finely wrinkled spiral striae; spire convex; whorls five, flatly convex, sharply keeled at the periphery; aperture rotundately lunar, rather oblique, lip thin, margins rather approximated.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* India.

A very characteristic transparent shell, closely decussated over the surface, and sharply pressed out into a keel at the periphery.

Species 1279. (Mus. Cuming.)

**HELIX CAPITANEA.** *Hel. testâ vir umbilicatâ, convexo-orbiculari, polito-corneâ, nitente, substriatâ, ad suturam marginatâ; anfractibus quinque, convexo-dextribus, ad peripheriam carinatis, ultimo supra carinam zonulâ rufescente-fuscâ cingulato; aperturâ subsecuriformi, labro simplici.*

**THE CAPTAIN HELIX.** Shell scarcely umbilicated, convexly orbicular, polished-horny, shining, faintly striated, marginated at the suture; whorls five, convexly slanting, keeled at the periphery, last whorl encircled with a red-brown zone above the keel; aperture somewhat hatchet-shaped, lip thin.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Island of St. Christoval, Solomon's Group; Captain Keppell.

Of a peculiar polished horny substance, looking as if covered with a shiny cuticle.

Species 1280. (Mus. Cuming.)

**HELIX ISABELLINA.** *Hel. testâ vir umbilicatâ, depresso-orbiculari, subtilis concavâ, pellucido-corneâ, lutescenti-albâ, nitente, obliquè arcuatum striatâ, striis minutissimis spiralibus decussatâ; spirâ plano-concavâ; anfractibus quinque, ad peripheriam acutè carinatis; aperturâ ovato-securiformi, labro simplici.*

**THE ISABELLINE HELIX.** Shell scarcely umbilicated, depressly orbicular, convex beneath, transparent horny, yellowish-white, shining, obliquely arcuately striated, decussated with very minute spiral striae; spire flatly convex; whorls five, sharply keeled at the periphery; aperture ovately hatchet-shaped.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A delicate *Carocolla*-formed species, of a shining submetallic transparent texture, which becomes more solid and opaque with age.

Species 1281. (Mus. Cuming.)

**HELIX PURPURASCENS.** *Hel. testâ imperforatâ, depresso-conoidèâ, solidiusculâ, obliquè plicato-striatâ, undique minutè granulatâ, purpurascente-castaneâ, fasciâ albâ cingulatâ; spirâ obtusâ; anfractibus sex, concavis, ultimo obtusè carinato; aperturâ lunari-oblongâ, horizontali, labro reflexo, saturatè colorato, ad columellam callosa-diffusa.*

**THE PURPLISH HELIX.** Shell imperforated, depressly conoid, rather solid, obliquely plicately striated, everywhere minutely granuled, purplish-chestnut, encircled with a white band; spire obtuse; whorls six, convex.

the last obtusely keeled; aperture lunar-oblong, horizontal, lip reflected, darker-coloured, callously diffused at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Korea.

A rather solid purplish-chestnut conoid species, encircled with a narrow white band at the periphery.

Species 1282. (Mus. Cuming.)

HELIX PFEIFFERI. *Hel. testá subumbilicatá, orbiculato-converá, solidá, lævigatá, nitente, ad suturam submarginatá et tenuissimè plicatá, livido-castaneá, apice fulvidá; spirá subelevatá; anfractibus sex ad septem, convexis, angustis, ultimo subtilis subdepresso; aperturá rotundato-lunari, labro simplici, ad columellam callosoreflexo.*

PFEIFFER'S HELIX. Shell slightly umbilicated, orbicularly convex, solid, smooth, shining, slightly margined and very finely plicated at the suture, livid chestnut, fulvous at the apex; spire rather raised; whorls six to seven, convex, narrow, the last rather depressed beneath; aperture rotundately lunar, lip simple, callously reflected at the columella.

PHILIPPI, Arch. für Nat. 1845, p. 62.

*Hab.* China.

A solid species, of a peculiarly shining livid hue.

Species 1283. (Mus. Cuming.)

HELIX GRATELOUPI. *Hel. testá angustè umbilicatá, semiglobosá, superne regulariter et confertim striatá, lineis spiralibus irregulariter decussatá, pallidè livido-castaneá, obscure albifasciatá, subtilis lævigatá; anfractibus sex, convexiusculis, ultimo basi subplanulato; suturá submarginatá; apertura lunari, labra simplici, acuto, ad columellam reflexo.*

GRATELOUP'S HELIX. Shell narrowly umbilicated, semiglobose, regularly and closely striated at the upper part, irregularly decussated with spiral lines, pale livid chestnut, obscurely white-banded, smooth beneath; whorls six, rather convex, the last rather flattened at the base; suture slightly margined; aperture lunar, lip simple, sharp, reflected at the columella.

PFEIFFER, Symbolæ, vol. ii. p. 99.

*Helix rufescens*, Grateloup.

*Hab.* Madagascar?

Peculiarly tinged with livid chestnut-red about the upper surface of the whorls.

Fig. 1284. (Mus. Cuming.)

The shell here figured comes from Dr. Pfeiffer as the type of *H. Rivolii*, and he proposes to name the shell already figured in Plate LXXXIII Fig. 113, under that title, *H. erronva*. The specific difference between them is slight, and, it may be, unimportant. In the present specimen the aperture is more horizontal, and the lip more conspicuously reflected, and there is a slight variation in the general contour of the shell.

Species 1285. (Mus. Cuming.)

HELIX CHARPENTIERI. *Hel. testá latissimè aperte umbilicatá, discoidéa, undique cristat-striatá, solidiusculá, epidermide olivaceo-cornéa tecté undatá, spirá concavo-planatá; anfractibus sex, angustis, rotundatis, aperturá subcirculari, horizontali, labro callosoreflexo, marginibus approximatiss.*

CHARPENTIER'S HELIX. Shell very broadly openly umbilicated, discoid, rib-like striated throughout, rather solid, covered with a shining olive-horny epidermis; spire concavely flattened; whorls six, narrow, rounded; aperture nearly circular, horizontal, lip callous white, very broadly reflected, margins approximating.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; F. Layard.

Of the same peculiar type as *H. Rivolii*, rounder and more regular in convolution, without any lamellar ridge in the aperture.

Species 1286. (Mus. Cuming.)

HELIX CAMPESINA. *Hel. testá umbilicatá, subglobose-depressá, obliquè striatá, striis spiralibus decussatá, griseo-albidá, fusciscente intertè fasciatá et maculatá, spirá brevi, obtusá; anfractibus quatuor ad quinque, convexiusculis, ultimo inflato, obliquè producto, antè subito deflexo; aperturá lunato-circulari, latè expansoreflexo, marginibus callo approximatiss.*

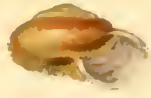
THE FIELD HELIX. Shell umbilicated, subglobose-depressed, obliquely striated, decussated with spiral striae, greyish-white, interruptedly banded and blotched with light brown; spire short, obtuse; whorls four to five, slightly convex, the last inflated, obliquely produced, suddenly deflected in front; aperture lunar circular, broadly expandedly reflected, margins approaching by a callosity.

EZQUERRA, Bronn. Cat. 1845

*Hab.* Spain.

A greyish species, mottled with interrupted light brown bands, having the aperture obliquely produced and broadly expanded at the lip, with the margins nearly approximating

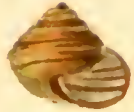




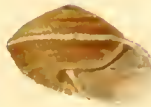
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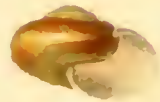
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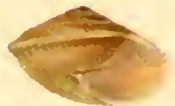
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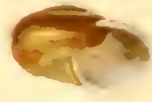
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# HELIX.

PLATE CLXXXVI.

Species 1287. (Mus. Cuming.)

**HELIX LUTEO-CORNEA.** *Hel. testá subampliter et profundè umbilicatá, depresso-orbiculari, luteo-corneá, supra striis arcuatis et spiralibus decussatá, infra lævigatá, nitente; spirá plano-convexá, suturá subimpresá; anfractibus quinque, rotundatis; aperturá lunato-circulari, labro simplici.*

**THE YELLOW-HORNY HELIX.** Shell rather largely and deeply umbilicated, depressly orbicular, yellowish-horny, decussated above with spiral and arched striae, smooth and shining below; spire flatly convex, with the sutures rather impressed; whorls five, rounded: aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Navigators' Islands.

A rather solid yellowish-horny species, of *Cyclostoma*-like form, smooth and shining below, silky, decussated above.

Species 1288. (Mus. Cuming.)

**HELIX BULLACEA.** *Hel. testá subampliter et profundè umbilicatá, subdepresso-orbiculari, cinerascens-corneá, supra costellis arcuatis striisque spiralibus decussatá, infra lævigatá, nitente; spirá declivi-convexá; anfractibus quatuor, convexis, ad peripheriam obsolete rotundato-carinatis; aperturá lunato-circulari, labro simplici.*

**THE BUBBLE-LIKE HELIX.** Shell rather largely and deeply umbilicated, rather depressly orbicular, ash-horny, above decussated with fine arched ribs and spiral striae, below smooth and shining; spire slantingly convex; whorls four, convex, obsoletely rotundately keeled at the periphery; aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Moreton Bay, Australia; Strange.

Very like the preceding, though well distinguished by the more slanting-convex form of the spire and its rib-like sculpture.

Species 1289. (Mus. Cuming.)

**HELIX DERMATINA.** *Hel. testá imperforatá, subconoidéa, semipellucido-corneá, obliquè subirregulariter plicato-striatá, liris tenuibus spiralibus decussatá, sordidè oli-*

*vacá, zonulis duabus castaneis angustis, quarum inferiore latiore cingulatá; spirá conicá; anfractibus quinque, inflatis, ultimo ad peripheriam carinato; aperturá fere circulari, subverticali, labro tenuè reflexo, castaneo-marginato.*

**THE LEATHER HELIX.** Shell imperforated, subconoid, semitransparent horny, obliquely somewhat irregularly plicately striated, decussated with thin spiral ridges, dull olive, encircled with two narrow chestnut zones, of which the lower is the broader; spire conical; whorls five, inflated, the last keeled at the periphery; aperture nearly circular, subvertical, lip thinly reflected, chestnut-edged.

SHUTTLEWORTH (Mus. Cuming).

*Hab.* Island of Porto Rico, West Indies; Blauner.

A very characteristic subtransparent trochiform *Helix*, encircled with two thread-like zones, of which the lower is the broader.

Fig. 1290. (Mus. Cuming.)

This shell, collected by Mr. Strange at Moreton Bay, Australia, appears to be identical with *H. Indica*, described at Plate LXXXIII. Fig. 448.

Species 1291. (Mus. Cuming.)

**HELIX CERARIA.** *Hel. testá rix umbilicatá, depresso-orbiculari, luteo-corneá, supra striis pliciformibus arcuatis subisque spiralibus decussatá, infra nitente; anfractibus quatuor, plano-convexis, ultimo ad peripheriam carinato; aperturá obliquè lunato-circulari, labro simplici.*

**THE WAXY HELIX.** Shell scarcely umbilicated, depressly orbicular, yellowish-horny, decussated with arched plait-like striae and spiral grooves, below shining, whorls four, flatly convex, the last keeled at the periphery; aperture obliquely lunar-circular, lip simple.

BENSON (Mus. Cuming).

*Hab.* Ceylon; Thwaites.

Resembling *H. luteo-cornea* and *bullacea* in general form and texture, but the shell is more indented and the sculpture has a more wrinkled character.

Species 1292. (Mus. Cuming.)

**HELIX POLITISSIMA.** *Hel. testá umbilicatá, depress-*

July, 1854.



*biculiari, cornuâ, subpellucidâ, nitidissimè olivaceâ, arcuatim minutè striatâ; spirâ subdepressâ, suturâ distinctâ; anfractibus quatuor ad quinque, rotundatis; aperturâ obliquè lunato-circulari, labro simplici.*

THE VERY POLISHED HELIX. Shell scarcely umbilicated, depressly orbicular, horny, subtransparent, very shining olive, arcuately minutely striated; spire subdepressed, suture distinct; whorls four to five, rounded; aperture obliquely lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. Ceylon; Thwaites.

Of a very polished olive-horny texture, like a *Vitrina*.

Species 1293. (Mus. Cuming.)

HELIX SCEPASMA. *Hel. testâ ampliter et profundè umbilicatâ, depresso-orbiculari, crassiusculâ, subpellucido-albâ, undique tenuè corrugato-striatâ; spirâ depresso-conoideâ; anfractibus septem, rapidè accrescentibus, ultimo ad peripheriam carinato; aperturâ subcirculari, leviter securiformi, labro latè reflexo.*

THE VEIL HELIX. Shell largely and deeply umbilicated, depressly orbicular, rather thick, subtransparent white, everywhere finely wrinkle-striated; spire depressly conoid; whorls seven, increasing rapidly, the last keeled at the periphery; aperture nearly circular, slightly hatchet-shaped, lip broadly reflected.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. —?

A white alabaster-like species, peculiarly finely wrinkle-striated throughout.

Species 1294. (Mus. Cuming.)

HELIX NOVELLA. *Hel. testâ rix umbilicatâ, depresso-orbiculari, tenuiculâ, olivaceo-cornuâ, leviter plicato-striatâ; spirâ declivi-conexâ, suturâ subindistinctâ; anfractibus quinque, planiusculis, ultimo ad peripheriam carinato; aperturâ transversim lunari, labro simplici, ad umbilicum subreflexo.*

THE TENDER HELIX. Shell scarcely umbilicated, depressly orbicular, rather thin, olive-horny, faintly plicately striated; spire slantingly convex, suture rather indistinct; whorls five, rather flat, the last keeled at the periphery; transversely lunar, lip simple, slightly reflected at the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. Ceylon; Thwaites.

Of a slanting-conoid depressed form, with a minute umbilicus.

Species 1295. (Mus. Cuming.)

HELIX LAMPRA. *Hel. testâ subprofundè umbilicatâ, orbiculari, tenuiculâ, cornuâ, politissimâ, supra rufo-castaneâ, subtiliter arcuatim costellato-striatâ, infra rufescente, lævigatâ; spirâ parviusculâ, depressâ; anfractibus quatuor, convexis; aperturâ lunari-rotundatâ, subamplâ, labro simplici.*

THE GLITTERING HELIX. Shell rather deeply umbilicated, orbicular, rather thin, horny, very polished, above reddish-chestnut, finely arcuately rib-like striated, below greenish and smooth; spire rather small, whorls four, convex; aperture lunar-rounded, rather large, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. Launceston, Van Diemen's Land; R. C. Gunn.

A very shining firm horny shell, finely rib-like striated about the upper part, smooth beneath; collected by Mr. Ronald C. Gunn, F.R.S.

Species 1296. (Mus. Cuming.)

HELIX STRONGYLODES. *Hel. testâ latissimè perspectivè umbilicatâ, depresso-orbiculari, albâ, rufo-fusco strigatâ et maculatâ, undique obliquè costellatâ; spirâ suturâ multo impressâ; anfractibus sex, plano-rotundatis, ultimo anticè descendente; aperturâ circulari, parviusculâ, labro simplici, marginibus approximatis.*

THE ROUND HELIX. Shell very broadly perspectively umbilicated, depressly orbicular, white, streaked and spotted with red-brown, obliquely finely ribbed throughout; suture of the spire much impressed; whorls six, flatly rounded, the last descending in front; aperture circular, rather small, lip simple, margins approximating.

PFEIFFER, Pro. Zool. Soc. 1854.

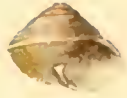
Hab. Texas.

A shell of somewhat discoid growth, with a peculiarly impressly sutured spire, obliquely finely ribbed, white, streaked and spotted with red-brown.





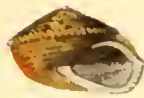
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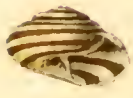
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# HELIX.

PLATE CLXXXVII.

Species 1297. (Mus. Cuming.)

**HELIX HYPHASMA.** *Hel. testâ eix umbilicatâ, acutè conicâ, basi concavâ, semipellucido-albâ, subcorvâ, striis obliquè arcuatis et spiralibus decussatâ; spirâ elevatâ; anfractibus sex, concavo-planis, ultimo ad peripheriam acutissimè carinato; aperturâ securiformi, labro simplici, ad umbilicum breviter reflexo.*

**THE WEB HELIX.** Shell scarcely umbilicated, sharply conical, convex at the base, semipellucid-white, rather horny, decussated with obliquely arched and spiral striae; spire raised; whorls six, concavely flattened, the last very sharply keeled at the periphery; aperture hatchet-shaped, lip simple, shortly reflected at the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A subtransparent horny-white concavely conoid species, swollen and convex at the base, and scarcely umbilicated.

Species 1298. (Mus. Cuming.)

**HELIX EUCHARIS.** *Hel. testâ eix umbilicatâ, subgloboso-conoideâ, tenui, pellucido-albâ, lutescente, supernè minutè granoso-decussatâ, infra lævigatâ; spirâ subobtusè conoideâ; anfractibus sex, convexis, ultimo acutè carinato, basi convexo; aperturâ subamplâ, lunato-subtrigonâ, obliquâ, labro simplici, acuto.*

**THE GRACEFUL HELIX.** Shell scarcely umbilicated, subglobose conoid, thin, pellucid-white, yellowish, minutely granosely decussated at the upper part, smooth beneath; spire rather obtusely conoid; whorls six, convex, last whorl sharply keeled, convex at the base; aperture rather large, lunar-subtriangular, oblique, lip simple, sharp.

DESHAYES, Férussac, Hist. Moll. pl. 64 A. f. 7, 8.

*Hab.* Solomon's Island.

Somewhat like the preceding, but more globose, with the whorls convex instead of concave.

Species 1299. (Mus. Cuming.)

**HELIX VELUTINA.** *Hel. testâ angustè umbilicatâ, subgloboso-discoideâ, minutissimè striatâ, epidermide lutescente velutinâ indulâ; spiræ suturâ canaliculatâ; anfractibus quinque, angustis, rotundatis, ultimo infra excavato; aperturâ lunari, labro simplici.*

**THE VELVETY HELIX.** Shell narrowly umbilicated, subglobose discoid, very minutely striated, covered with a yellow velvety epidermis; suture of the spire channelled; whorls five, narrow, rounded, the last excavated beneath; aperture lunar, lip simple.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. viii. p. 63.

*Hab.* Island of Porto Rico, West Indies; Blauner.

A swollen species, of a somewhat discoid growth, covered with a fine yellowish velvety epidermis.

Species 1300. (Mus. Cuming.)

**HELIX SQUAMOSA.** *Hel. testâ obtectè umbilicatâ, globoso-depressâ, ad peripheriam carinatâ, transversim longitudinaliterque striatâ, luteo-fulvâ, fusco irregulariter maculatâ, carinatâ, carinâ squamosâ; anfractibus quinque; aperturâ obliquè lunari, labro reflexo, rubescente.*

**THE SCALY HELIX.** Shell with a covered umbilicus, globose depressed, keeled at the periphery, transversely and longitudinally striated, yellowish-fulvous, irregularly spotted with brown, keeled, keel scaly; whorls five; aperture obliquely lunar, lip reflected, reddish.

FÉRUSAC, Hist. Moll. pl. 41. f. 3.

*Hab.* Island of Porto Rico, West Indies; Blauner.

A very characteristic brown-spotted shell, with the lip red-tinged.

Species 1301. (Mus. Cuming.)

**HELIX SUBANGULATA.** *Hel. testâ profundè umbilicatâ, depresso-orbiculari, obsolete plicato-striatâ, cornuolutescente, fasciâ costatâ supra et duabus infra cingulatâ; anfractibus quatuor ad quinque, supernè declivi-angulatis, obtusè carinatis; aperturâ lunato-circulari, labro simplici.*

**THE SLIGHTLY ANGLED HELIX.** Shell deeply umbilicated, rather depressly orbicular, above obsolete plicately striated, horny-yellow, encircled with a single chestnut band above and two below; whorls four to five, slantingly angled at the upper part, obtusely keeled; aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Van Diemen's Land; Ronald C. Gunn.

A simple yellowish-horny species, encircled with three chestnut bands, one above the periphery and two below it.

Species 1302. (Mus. Cuming.)

HELIX SUBOPACA. *Hel. testā vix umbilicatā, orbiculari, opaco-lutescente, nitente, undique arcuatim costato-striatā, infra politissimā; spirā suturā subcanaliculatā; anfractibus sex, concavis; aperturā obliquē lunari, labro simplici.*

THE SUBOPAKE HELIX. Shell scarcely umbilicated, orbicular, opaque-yellow, shining, arcuately rib-striated throughout, very polished beneath; suture of the spire slightly channelled; whorls six, convex; aperture obliquely lunar, lip simple.

*Hab.* Ceylon; Thwaites.

A very shining opaque-yellow shell, strongly rib-striated throughout.

Species 1303. (Mus. Cuming.)

HELIX NAVIGATORUM. *Hel. testā subampliter profundē umbilicatā, depresso-orbiculari, lenticulari, irregulariter plicato-striatā, castaneo-fuscā, nitente; spirā obtusā; anfractibus quinque, plano-declivibus, ad suturas filo-marginatis, ultimo ad peripheriam filo-carinato; aperturā subsecuriformi, labro simplici.*

THE NAVIGATORS' HELIX. Shell rather largely deeply umbilicated, depressly orbicular, lens-shaped, irregularly plicately striated, shining chestnut-brown; spire obtuse; whorls five, flatly slanting, thread-margined at the sutures, last whorl thread-keeled at the periphery; aperture subhatchet-shaped, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Navigators' Islands.

Chiefly distinguished by a thread-like keel, which leaves an edge on the whorls of the spire immediately below the suture.

Species 1304. (Mus. Cuming.)

HELIX MANSUTA. *Hel. testā subprofundē umbilicatā, orbiculari, tumidiusculā, rufescente-fulvā, sub lente minutissimē granulatā, obsolete plicato-striatā; spirā obtusā; anfractibus quinque ad sex, plano-concavis, ultimo obtusē carinato, circa umbilicum pallidē fasciatā; aperturā subquadrato-lunari, labro reflexo, ex-*

*pauso.*

THE MILD HELIX. Shell rather deeply umbilicated, orbicular, rather swollen, reddish-fulvous, beneath the lens very minutely granulated, obsolete plicately striated; spire obtuse; whorls five to six, flatly convex, the last obtusely keeled, faintly lined round the umbilicus; aperture somewhat squarely lunar, lip reflected, expanded.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Moreton Bay; Strange.

A fulvous ruddy-tinged species, with a rather broadly reflected lip, very minutely granulated throughout.

Species 1305. (Mus. Cuming.)

HELIX KEPPELLI. *Hel. testā imperforatā, depresso-orbiculari, tenui, pellucido-corneā, viridescente, nitente, anfractibus quinque, concavis, obsolete striatis, ultimo obtusē carinato; aperturā latē lunari, labro simplici.*

KEPPEL'S HELIX. Shell imperforated, depressly orbicular, thin, transparent horny, greenish, shining; whorls five, rather convex, obsolete striated, last whorl obtusely keeled; aperture broadly lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Island of St. Christoval, Solomou's Group; Hon. Capt. Keppell.

A very thin transparent highly polished greenish-horny shell.

Species 1306. (Mus. Cuming.)

HELIX URNULA. *Hel. testā vix umbilicatā, naticoidē, inflatā, tenui, corneo-cuticulari, obliquē crenulati, nigro-olivaceā; spirā parvā; anfractibus tribus, concavis, ultimo perinflato; aperturā quadrato-lunari, labro paululum reflexo.*

THE LITTLE PITCHER HELIX. Shell scarcely umbilicated, naticoid, inflated, thin, horny-cuticular, obliquely wrinkled, blackish-olive; spire small; whorls three, convex, the last much inflated; aperture squarely lunar, lip a little reflected.

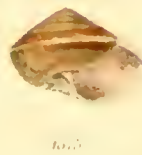
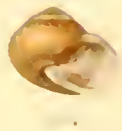
PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* New Zealand.

An inflated *Natica*-shaped species, of a peculiar dark olive-horny texture, cuticular and wrinkled.







# HELIX.

PLATE CLXXXVIII.

Species 1307. (Mus. Cuming.)

**HELIX ZELEBORI.** *Hel. testā subanguste umbilicatā, orbiculari, irregulariter subplicate-striatā, carulescente-albā, zonulis duabus purpurascens-fuscis cingulatā; anfractibus quinque, superne planis, deinde rotundatis; aperturā fere circulari, labro subexpanso, marginibus approximatis.*

**ZELEBORI'S HELIX.** Shell rather narrowly umbilicated, orbicular, irregularly subplicate striated, bluish-white, encircled with two purple-brown zones; whorls five, flat at the upper part, then rounded; aperture almost circular, lip rather expanded, margins approximating.

PFEIFFER, Zeitschrift für Malac. 1853. p. 186.

*Hab.* Servia.

A simple blue-white shell, encircled with two narrow purple-brown zones, one above the periphery, and the other immediately below it.

Species 1308. (Mus. Cuming.)

**HELIX MARMATENSIS.** *Hel. testā subprofundè umbilicatā, globoso-discoidē, tenui, sub lente minutissimè granulatā, opaco-albidā, maculis parvis rotis quadratis nitidè seriatim tessellatā; spirā planatā, suturā canaliculato-impresā; aperturā lunato-circulari, labro levi, paululum expanso.*

**THE MARMATO HELIX.** Shell rather deeply umbilicated, globosely discoid, thin, beneath the lens very minutely granulated, opaque white, neatly tessellated with rows of small red square spots; spire flattened, suture impressly channelled: aperture lunar-circular, lip thin, a little expanded.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Marmato, New Granada.

A thin subdiscoid shell, neatly tessellated about the upper part with rows of small red spots.

Species 1309. (Mus. Cuming.)

**HELIX RECEDENS.** *Hel. testā obtusè umbilicatā, depresso-globosā, arcuatim costellato-striatā, lutescente-albā, flos fuscescens ad peripheriam cingulatā; spirā obtusè depressā; anfractibus sex, plano-compressis, deinde angulato-carinatis, ultimo antice peculiariter deflexo; aperturā parvā, transversè ovalā, labro simplici, subincrassato.*

**THE RETIRING HELIX.** Shell with a covered umbilicus depressly globose, arcuately rib-like striated, yellowish-white, encircled at the periphery with a light brown thread; spire obtusely depressed; whorls six, flatly compressed, angularly keeled, last whorl peculiarly deflected in front; aperture small, transversely ovate, lip simple, rather thick.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* —?

A compact closely convoluted species, of a yellowish-white tint, encircled at the periphery with a thread of light brown.

Species 1310. (Mus. Cuming.)

**HELIX SCYTODEN.** *Hel. testā subapertè et profunde umbilicatā, conoidè-depressā, tenui, corneā, obsolete striatā, pallide ustulato-fusciscente, versus apicem lutescente; anfractibus sex, simplicibus, angustis, ultimo carinato; aperturā parvā, subtransversè lunari, labro paululum expanso.*

**THE TANNED HELIX.** Shell rather largely and deeply umbilicated, conoidly depressed, thin, horny, obsolete striated, pale burnt brown, livid towards the apex; whorls six, rather flat, narrow, the last keeled; aperture small, somewhat transversely lunar. Lip a little expanded.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Solomon's Island.

A thin horny shell, of a *Sclerium*-like firm, clad in a delicate burnt-brown epidermis.

Species 1311. (Mus. Cuming.)

**HELIX PARTITA.** *Hel. testā umbilicatā, orbiculari, sub-ravio-corneā, nitidè, supra lunari-statā, infra ferrugatā; spirā brevi, suturā impressā; anfractibus quinque, rotundatis; aperturā transversè lunari, labro simplici.*

**THE DIVIDED HELIX.** Shell scarcely umbilicated, orbicular, olive-horny, shining, finely ribbed above, smooth beneath; suture impressed; whorls five rounded; aperture transversely lunar, lip simple.

*Hab.* Ceylon, F. Layard.

Distinguished by its impressed suture and ribbed sculpture.

## Species 1312. (Mus. Cuming.)

*HELIX DIAPHANA.* *Hel. testâ imperforatâ, semiglobosâ, tenui, sublucigatâ, nitente, fulcilo-corneâ, pellucidâ; spirâ obtusâ; anfractibus quatuor, concavisculis, ultimo circa columellam excavato; columellâ profundè intrante, concavè callosò-dilatatâ; aperturâ lunato-oculi, labro simplici.*

THE DIAPHANOUS HELIX. Shell imperforated, semiglobose, thin, nearly smooth, shining, fulvous horny, transparent; spire obtuse; whorls four, rather convex, the last excavated round the columella; columella entering deeply, concavely callously dilated; aperture lunar-oval, lip simple.

LAMARCK, Anim. sans. vert. (Deshayes' edit.) vol. viii. p. 62.

*Hab.* Island of Porto Rico, West Indies; Blauner.

Chiefly characterized by the concave callously dilated structure of the columella.

## Species 1313. (Mus. Cuming.)

*HELIX MORETONENSIS.* *Hel. testâ viz umbilicatâ, subgloboso-conoideâ, olivaceo-corneâ, infra lutescente, subpellucidâ, supernè arcuatim plicato-striatâ, lineis impressis spiralibus decussatâ; spirâ convexo-planatâ; anfractibus quinque ad sex, ultimo carinato; aperturâ latè lunari, labro simplici.*

THE MORETON HELIX. Shell scarcely umbilicated, somewhat globosely conoid, olive-horny, yellowish beneath, arcuately plicately striated at the upper part, decussated with impressed spiral lines; spire convexly flattened; whorls five to six, the last keeled; aperture broadly lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Moreton Bay, Australia; Strange.

An olive-horny species, of simple structure, scarcely umbilicated.

## Species 1314. (Mus. Cuming.)

*HELIX BOMBYCINA.* *Hel. testâ subtilè perspectivè umbilicatâ, depresso-orbiculari, subdiscoideâ, obliquè densè costellato-striatâ, corneâ, nigricante-viridi, vittis rufis interruptis nitidè tessellatim cingulatâ; spirâ plano-depressâ; anfractibus tribus ad quatuor, ultimo rotundato; aperturâ circulari, labro simplici, marginibus approximatis.*

THE BOMBASINE HELIX. Shell rather broadly perspectivevly umbilicated, depressly orbicular, subdiscoïd, obliquely densely rib-like striated, horny, blackish-green, neatly tessellately encircled with interrupted red fillets; whorls three to four, the last rounded; aperture circular, lip simple, margins approximated.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Van Diemen's Land; Ronald C. Gunn.

A neatly-marked characteristic species, of silky aspect, though of thin hard horny texture.

## Species 1315. (Mus. Cuming.)

*HELIX CONCAVO-SPIRA.* *Hel. testâ minutissimè umbilicatâ, acutè conoideâ, basi concavâ, pellucido-âbulâ supra densè costellato-striatâ et decussatim granulatâ, infra lævigatâ et tumido-concavâ; spirâ erectâ, ad latus subconcavâ; anfractibus sex, ad suturas minutè filo-marginatis, supernè concavis, deinde concavis, ultimo ad peripheriam acutè filo-carinato; aperturâ securiformi, labro simplici.*

THE HOLLOW-SPIRED HELIX. Shell very minutely umbilicated, sharply conoid, convex at the base, transparent whitish, densely rib-striated and decussately granulated above, smooth and tumidly convex beneath; spire erect, subconcave at the side; whorls six, minutely thread-margined at the sutures, convex at the upper part, then concave, the last sharply thread-keeled at the periphery; aperture hatchet-shaped, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A delicate pagoda-like shell, closely allied to *H. hypnum* from the same locality, of transparent-whitish texture, minutely granulately rib-striated, and made concave next the periphery by a sharp subreflected keel.

## Species 1316. (Mus. Cuming.)

*HELIX SEMICONVEXA.* *Hel. testâ sublucè umbilicatâ, depresso-orbiculari, castaneo-corneâ, zonulâ castaneâ cingulatâ, eximie corrugato-striatâ, cæcis apicem læscente; anfractibus quatuor ad quinque, plano-concavis, ad suturas tenuimarginatis, ultimo ad peripheriam filo-carinato; aperturâ transeersè lunari, labro simplici.*

THE SEMICONVEX HELIX. Shell rather broadly umbilicated, depressly orbicular, chestnut-horny, encircled with a chestnut zone, faintly wrinkle-striated, rather livid towards the apex; whorls four to five, flatly convex, finely margined at the suture, the last thread-keeled at the periphery; aperture transversely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Solomon's Island.

A subtransparent chestnut-brown shell, encircled with a fine thread-like keel at the suture of each whorl.





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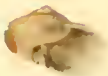
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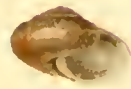
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# HELIX.

PLATE CLXXXIX.

Species 1317. (Mus. Cuming.)

**HELIX GLABERRIMA.** *Hel. testâ subprofundè umbilicatâ, orbiculari-depressâ, lutescente-cornâ, politissimâ, nitente; spirâ plano-convexâ; anfractibus quinque, subangustis, convexis; aperturâ lunato-circulari, labro simplici.*

**THE VERY SMOOTH HELIX.** Shell rather deeply umbilicated, orbicularly depressed, yellowish-horny, very polished, shining; spire flatly convex: whorls five, rather narrow, convex; aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Solomon's Island.

A very shining yellowish-horny species, rather deeply umbilicated.

Species 1318. (Mus. Cuming.)

**HELIX MEMBRANICOSTA.** *Hel. testâ subprofundè umbilicatâ, subglobose-conicâ, cornâ, epidermide tenui fuscâ indutâ, obscurè costellato-striatâ; spirâ sublevatâ; suturâ impressâ; anfractibus sex, convexis, ultimo angulato-curinato; aperturâ lunari, labro simplici.*

**THE MEMBRANE-RIBBED HELIX.** Shell rather deeply umbilicated, subglobose conical, horny, covered with a thin brown epidermis, obscurely rib-like striated; spire rather raised; suture impressed; whorls six, convex, the last angularly keeled; aperture lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1855.

*Hab.* Solomon's Island.

A light globosely conoid shell, covered with a thin brown membranous epidermis.

Species 1319. (Mus. Cuming.)

**HELIX CIRCUMFIRMATA.** *Hel. testâ subprofundè umbilicatâ, conoidâ, arcuatim striatâ, lutescente-cornâ, maculis rufis parvis numerosis tessellatâ; spirâ subobtusâ; anfractibus septem, angustis, convexis; aperturâ parvisculâ, lunari, labro simplici.*

**THE CLOSE-BOUND HELIX.** Shell rather deeply umbilicated, conoid, arcuately striated, yellowish-horny, tessellated with numerous small red spots; spire rather obtuse; whorls seven, narrow, convex; aperture rather small, lunar, lip simple.

REDFIELD, Annals Lyceum Nat. Hist. New York.

*Hab.* Bermuda.

A closely convoluted conoid horny shell, densely tessellated about the spire with small red spots.

Species 1320. (Mus. Cuming.)

**HELIX FNEA.** *Hel. testâ angustè umbilicatâ, subgloboâ, tenui, inflatâ, confertissimè minutè costellato-striatâ, fusco-cornâ, subdiaphanâ; spirâ parvâ; suturâ impressâ; anfractibus quatuor, plano-convexis; aperturâ subamplâ, obliquè lunari, labro simplici, ad umbilicum breviter dilatato.*

**THE BRAZEN HELIX.** Shell narrowly umbilicated, subglobose, thin, inflated, very closely minutely rib-striated, brown-horny, subdiaphanous; spire small; suture impressed; whorls four, flatly convex; aperture rather large, obliquely lunar, lip simple, shortly dilated at the umbilicus.

KRAUSS, Moll. Südafric. p. 75. pl. 4. f. 18.

*Hab.* Natal, South Africa; Plant.

A light inflated shell, of only four whorls, of which the outer surface is unusually minutely rib-striated.

Species 1321. (Mus. Cuming.)

**HELIX NEWCOMBI.** *Hel. testâ minutè umbilicatâ, obliquè turbinatâ, depressâ, pellucido-cornâ, tenuissimâ, arcuatim striatâ, ad suturas radiatim plicatâ; spirâ parvâ; anfractibus tribus ad quatuor, ultimo inflato, aperturâ subamplâ, fere circulari, labro simplici.*

**NEWCOMBE'S HELIX.** Shell minutely umbilicated, obliquely turbinated, depressed, transparent horny, very thin, arcuately striated, radiately plicated at the sutures; spire small; whorls three to four, the last inflated; aperture rather large, nearly circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Oahu, Sandwich Islands; Newcombe.

A very delicate *Vitriina*-like shell, composed of scarcely more than three whorls.

Species 1322. (Mus. Cuming.)

**HELIX RADIARIA.** *Hel. testâ minute obtusè umbilicatâ, globose-cornâ, tenuissimâ, obliquè striatâ, granulâ, maculis nigricante-fuscis paucis radiata.*

July, 1854.



*spirā subobtusā; suturā impressā; anfractibus quinque, declivi-rotundatis; aperturā obliquè lunari, labro simplici, cersus columellam subcalloso.*

THE RAYLD HELIX. Shell with a minute covered umbilicus, globosely conoid, rather thin, obliquely striated, grayish-white, rayed with a few black-brown blotches; spire rather obtuse; suture impressed; whorls five, slantingly rounded; aperture obliquely lunar, lip simple, rather callous towards the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. Solomon's Island.

A rather firm, grey, tessellated, obtusely conic shell.

Species 1323. (Mus. Cuming.)

HELIX EUCLASTA. *Hel. testā angustè umbilicatā, orbiculari, fusco-corneā, densè costellato-striatā; spirā convexā; suturā impressā; anfractibus quatuor ad quinque; aperturā transversim lunari, labro simplici, ad umbilicum sublatè dilatatā.*

THE SEATLY RIBBED HELIX. Shell narrowly umbilicated, orbicular, brown-horny, densely rib-like striated; spire convex; suture impressed; whorls four to five; aperture transversely lunar, lip simple, rather broadly dilated at the umbilicus.

SHUTTLEWORTH (Mus. Cuming.)

Hab. Island of St. Thomas, West Indies: Blauner.

A simple brown-horny species, densely rib-like striated throughout.

Species 1324. (Mus. Cuming.)

HELIX SUBFUSCA. *Hel. testā eix umbilicatā, depressā, tenui, subinflatā, aurantiu-fuscā, lorigatā, nitente; spirā obtusè planatā; suturā indistinctā, leviter marginatā; anfractibus quatuor, rix convexis, celeriter accrescentibus; aperturā latè lunari, subobliquā, labro simplici, ad umbilicum breviter dilatato.*

THE BROWNISH HELIX. Shell scarcely umbilicated, depressed, thin, rather inflated, orange-brown, smooth, shining; spire obtusely flattened; suture indistinct, slightly margined; whorls four, scarcely convex, increasing quickly; aperture broadly lunar, rather oblique, lip simple, shortly dilated at the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1848, p. 109

Hab. Sorsogon, Island of Luzon, Philippines, Cuming

A light orange-horny transparent shell, partaking of the characters of *Udrina*

Species 1325. (Mus. Cuming.)

HELIX PLANTI. *Hel. testā angustè umbilicatā, depressè-globosā, sordidè olivaceo-corneā, epidermide subpilosā, obliquè tenuistriatā; spirā depressā, apice subacutā, anfractibus quinque, planis-convexis, testā ut se carinato; aperturā transversè lunari, labro simplici, ad umbilicum breviter latè dilatato.*

PLANT'S HELIX. Shell narrowly umbilicated, depressly globose, dirty olive-horny, with a subpilose epidermis, obliquely finely striated; spire depressed, apex rather sharp; whorls five, flatly convex, the last obtusely keeled; aperture transversely lunar, lip simple, shortly broadly dilated at the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. Cape Natal, South Africa.

A dull horny shell, with a slightly hairy epidermis

Species 1326. (Mus. Cuming.)

HELIX SUBCONOIDEA. *Hel. testā rix umbilicatā, depresso-orbiculari, tenui, plicato-corneā, nitente, supra densè plicato-costellatā, infra leviter; spirā subconoidè; anfractibus quinque, superne plicatis, deinde obtusè angulatis; aperturā obliquè lunari, labro simplici.*

THE SUBCONOID HELIX. Shell umbilicated, depressly orbicular, thin, transparent horny, shining, densely plicately fine-ribbed above, smoother below; spire subconoid; whorls five, rather flat at the upper part, then obtusely angled, aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

Hab. — ?

A bright olive-horny shell, of almost glassy texture, densely fine-ribbed on the spire, obtusely angled at the periphery





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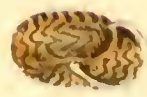
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# HELIX.

PLATE CXC.

Species 1327. (Mus. Cuming.)

**HELIX VERRUCULA.** *Hel. testā eix umbilicatā, depresso-conoidē, pellucido-citrēā, nitente-olivaceā, superiōe confertim tenuissimē costulato-striatā, striis salvis spirālibus decussatis, medio acutē carinatā, infra variamā impressā, lavigatā; spirā brevi, acutā; anfractibus quatuor, declivibus; aperturā subsecuriformi, labro simplici.*

**THE WARTY HELIX.** Shell scarcely umbilicated, depressly conoid, transparent glassy, shining olive, closely very finely rib-like striated at the upper part, striæ decussated with spiral grooves, sharply keeled in the middle, beneath the keel impressed, smooth; spire short, sharp; whorls four, slanting; aperture somewhat hatchet-shaped, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A small transparent bronze-like glassy species, having the spiral half of the shell curiously sculptured with raised striæ, cut, as it were, by decussating grooves into minute warts.

Species 1328. (Mus. Cuming.)

**HELIX BELCHERI.** *Hel. testā latē profundē umbilicatā, depresso-orbiculari, subdiscoidē, virescente-corneā, supra arcuatim costulato-striatā, infra lavigatā, nitente; spirā obtusē convexā; anfractibus quatuor ad quinque, convexis; aperturā subcirculari, labro simplici.*

**BELCHER'S HELIX.** Shell broadly deeply umbilicated, depressly orbicular, subdiscoid, greenish-horny, arcuately rib-like striated above, smooth and shining below; spire obtusely convex; whorls four to five, convex; aperture nearly circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* —?

A greenish-horny shell, arcuately rib-like striated on the spiral surface, smooth below, found among the stores remaining from the specimens collected during the voyage of the Sulphur. Locality not preserved.

Species 1329. (Mus. Cuming.)

**HELIX HONDANA.** *Hel. testā late perspectivē umbilicatā, depresso-orbiculari, subdiscoidē, corneā, obscurē ru-*

*goso-striatā; spirā plano-convexā; anfractibus quinque ad sex, lentē accrescentibus, circa umbilicū obtusē angulatis; aperturā lunato-circulari, labro acuto.*

**THE HONDA HELIX.** Shell broadly perspectivevely umbilicated, depressly orbicular, subdiscoid, horny, obscurely roughly striated; spire flatly convex; whorls five to six, increasing slowly, obtusely angled round the umbilicus; aperture lunar-circular, lip sharp.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Honda, New Granada; Bland.

Of more discoid growth than the preceding species, not rib-striated, with a more widely open perspective umbilicus.

Species 1330. (Mus. Cuming.)

**HELIX MUSICOLA.** *Hel. testā minutē profundē umbilicatā, depresso-conoidē, tenuissimā, olivaceo-brunneā, arcuatim plicato-striatā; spirā subobtusā; suturā impressā; anfractibus quatuor, convexo-declivibus, ultimo subinflato; aperturā lunato-circulari, labro simplici.*

**THE MYSTIA HELIX.** Shell minutely deeply umbilicated, depressly conoid, very thin, olive-brown, arcuately plicately striated; spire rather obtuse; suture impressed; whorls four, convexly slanting, the last a little inflated, aperture lunar-circular, lip simple.

SHUTTLWORTH, MS. (Mus. Cuming.)

*Hab.* Luquillo, Porto Rico. Blauer.

A very light subinflated olive-brown shell, radially plicately striated throughout.

Species 1331. (Mus. Cuming.)

**HELIX RADIUSCULA.** *Hel. testā profunde perspectivē umbilicatā, plano-depressā, lentiorā, corneā, arcuatim striatā, carinā peripheriā ad peripheriam cingentē; anfractibus quinque, plicato-convexis, aperturā subcirculari, labro simplici.*

**THE FINELY-RAYED HELIX.** Shell deeply perspectivevely umbilicated, flatly depressed, lens-shaped, horny, arcuately striated, encircled at the periphery with a thread-like keel, whorls five, flatly convex, aperture hatchet-shaped, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* —?

Another small horny species from the remaining stores of the voyage of the Sulphur.

Species 1332. (Mus. Cuming.)

HELIX THOMASI. *Hel. testâ latè perspectivè umbilicatâ, depresso-planâ, subdiscoidèâ, pellucido-citrèâ, pallidè olivaceâ, obsolete arcuato-striatâ; anfractibus quatuor ad quinque, lentè accrescentibus, ultimo rotundato; aperturâ lunato-circulari, labro acuto.*

THOMAS'S HELIX. Shell broadly perspectively umbilicated, depressly flattened, subdiscoid, transparent glassy, pale olive, obsolete arcuately striated; whorls four to five, increasing slowly, the last rounded; aperture lunar-circular, lip sharp.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Marmata, New Granada; Bland.

A simple olive-glassy discoid shell, obsolete striated and rather largely umbilicated.

Species 1333. (Fig. a, b, Mus. Cuming.)

HELIX NEMATOPHORA. *Hel. testâ obtectè umbilicatâ, globoso-discoidèâ, undique densè filo-striatâ, subcornèâ, rufo nitidè strigatâ et tessellatâ; spirâ obtusè planatâ; anfractibus quatuor ad quinque, ultimo tumidiusculo; aperturâ latè lunari, labro simplici, ad umbilicum in laminam dilatatam appresso.*

THE THREADED HELIX. Shell with a deeply covered umbilicus, globosely discoid, densely thread-striated throughout, subhorny, neatly streaked and tessellated with red; spire obtusely flattened; whorls four to five, the last rather swollen; aperture broadly lunar, lip simple, appressed at the umbilicus into a dilated lamina.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Solomon's Island.

An interesting species, of a new and peculiar type of form.

Species 1334. (Mus. Cuming.)

HELIX PUTIOLUS. *Hel. testâ latè profunde umbilicatâ, depresso-discoidèâ, rirescente-cornèâ, radiatè striatâ, ad peripheriam eximè bicarinatâ; spirâ obtusè planatâ; anfractibus sex, supernè angulatis, infra convexo-declivibus; aperturâ compresso-lunari, labro acuto.*

THE LITTLE WELL HELIX. Shell broadly deeply umbilicated, depressly discoid, greenish-horny, radiately striated, delicately two-keeled at the periphery, spire obtusely flattened, whorls six, angled at the upper part, convexly slanting beneath; aperture compressly lunar, lip sharp.

BENSON, MS. (Mus. Cuming.)

*Hab.* Ceylon; Cuming.

Characterized by a fine double keel which runs throughout the spire, and a broad well-like umbilicus.

Species 1335. (Mus. Cuming.)

HELIX UMBRINA. *Hel. testâ rix umbilicatâ, depresso-orbiculari, fusco-citrèâ, lævigatâ, politâ; anfractibus quatuor, plano-convexis, ad suturam submarginatis, aperturâ latè lunari, labro simplici.*

THE SHADY HELIX. Shell scarcely umbilicated, depressly orbicular, brown, glassy, smooth, polished; whorls four, flatly convex, faintly margined at the suture, aperture broadly lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A red-brown transparent glassy shell, smooth and shining throughout.







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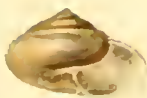
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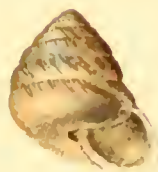
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# HELIX.

PLATE CXCI.

Shell considerably magnified.

Species 1336. (Mus. Cuming.)

**HELIX THWAITESII.** *Hel. testâ subprofundè umbilicatâ, orbiculari-depressâ, subdiscoideâ, pellucido-vitrâ, lutescente; spirâ suturis impressis; anfractibus quinque, angustis, convexis, lentè accrescentibus, infernè contractis; aperturâ verticali-lunari, subangustâ, labro simplici.*

**THWAITES'S HELIX.** Shell rather deeply umbilicated, orbicularly depressed, somewhat discoid, transparent glassy, yellowish; sutures of the spire impressed; whorls five, narrow, convex, increasing slowly, contracted at the lower part; aperture vertically lunar, rather narrow, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

An interesting little glassy shell, of somewhat discoid growth.

Species 1337. (Mus. Cuming.)

**HELIX MEDIOCRIS.** *Hel. testâ angustè umbilicatâ, orbiculari-planatâ, discoideâ, ad peripheriam tumidâ, tenui, corneâ, pallidè luteâ; spirâ suturis impressis; anfractibus tribus ad quatuor; aperturâ transversè ocatâ, labro simplici.*

**THE MIDDLING HELIX.** Shell narrowly umbilicated, orbicularly flattened, discoid, swollen at the periphery, thin, horny, pale yellow; sutures of the spire impressed; whorls three to four; aperture transversely ovate, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Santa Anna, New Granada; Bland.

A flatly convoluted pale yellow-horny shell, of somewhat Nautiloid growth, the body-whorl being more than usually immersed within the porch of the aperture.

Species 1338. (Mus. Cuming.)

**HELIX AMMONOCERAS.** *Hel. testâ latissimè apertè umbilicatâ, discoideâ, pellucido-vitrâ, lutescente; spirâ parvâ, concavâ; anfractibus tribus, ultimo transversè tumido; aperturâ transversè ovali, labro simplici.*

**THE AMMON-HORN HELIX.** Shell very broadly openly umbilicated, discoid, transparent glassy, yellowish,

spire small, concave; whorls three, last transversely swollen; aperture transversely oval, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Santa Anna, New Granada; Bland.

Of still more Nautiloid growth than the preceding, from the same locality, the spire being pressed concavely in

Species 1339. (Mus. Cuming.)

**HELIX MONONEMA.** *Hel. testâ subobtectè umbilicatâ, globoso-pyramidali, corneo-albâ, subopacâ; spirâ elevatâ, anfractibus septem ad octo, convexis, obscure plicato-striatis, carinâ tenui filiformi ad peripheriam cingulatis; aperturâ transversè lunari, labro simplici, ad columellam reflexo.*

**THE ONE-THREAD HELIX.** Shell with a nearly covered umbilicus, globosely pyramidal, horny-white, rather opaque; spire raised; whorls seven to eight, convex, obscurely plicately striated, encircled at the periphery with a fine thread-like keel; aperture transversely lunar, lip simple, reflected at the columella.

BENSON, MS. (Mus. Cuming.)

*Hab.* Ceylon.

Chiefly distinguished by a very minute thread-like keel encircling the periphery.

Species 1340. (Mus. Cuming.)

**HELIX QUITENSIS.** *Hel. testâ eix umbilicatâ, globoso-conoideâ, pellucido-vitrâ, laviatâ; spirâ concavâ, anfractibus quatuor ad quinque, rotundatis; aperturâ lunato-circulari, labro simplici, ad columellam reflexo.*

**THE QUITO HELIX.** Shell scarcely umbilicated, globosely conoid, transparent glassy, smooth; spire convex, whorls four to five, rounded; aperture lunar-circular, lip simple, a little reflected at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Quito.

A little glassy species, of simple conoid structure, scarcely umbilicated.

Species 1341. (Mus. Cuming.)

**HELIX PIRREANA.** *Hel. testâ globoso-pyramidali, p-*

*lucido-corneâ, oblique minutè plicato-striatâ; spirâ subobtusè elevatâ; anfractibus septem ad octo, angustis, convexis, ultimo ad peripheriam eximè angulato; aperturâ transversè lunari, labro tenui, versus columellam paululum reflexo, dentibus parvis duobus internis.*

**PIRRIE'S HELIX.** Shell globosely pyramidal, transparent glassy, obliquely minutely plicately striated; spire rather obtusely raised; whorls seven to eight, narrow, convex, the last delicately angled at the periphery; aperture transversely lunar, lip thin, a little reflected towards the columella, with two small internal teeth.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Walaghat, Koondah Mountains, near Calicut, India; Pirrie.

Allied to *H. mononema*, with two delicate small teeth in the aperture.

Species 1342. (Mus. Cuming.)

**HELIX CONTERMINA.** *Hel. testâ angustè umbilicatâ, conico-globosâ, pupaformi, subpellucido-corneâ, albidâ, obliquè densè costellato-striatâ; spirâ obtusè elevatâ; anfractibus sex ad septem, convexis, ultimo basi convexiusculo; aperturâ obliquè lunari, labro latè reflexo, intus sublabiato.*

**THE CLOSE-WHORLED HELIX.** Shell narrowly umbilicated, conically globose, pupa-shaped, subtransparent horny, whitish, obliquely densely rib-like striated; spire obtusely raised; whorls six to seven, convex, the last rather convex at the base; aperture obliquely lunar, lip broadly reflected, slightly edged within.

SHUTTLEWORTH, MS. (Mus. Cuming.)

*Hab.* — ?

A small subtransparent-white shell, partaking of the characters of *Streptaxis* and *Pupa*.

Species 1343. (Mus. Cuming.)

**HELIX CYGNEA.** *Hel. testâ latè apertè umbilicatâ, depresso-orbiculari, subdiscoidè, castaneo-corneâ, obliquè densè costato-striatâ; spirâ impressâ, saturâ subprofundâ; anfractibus quatuor, convexis; aperturâ lunato-circulari, labro tenui, rix reflexo.*

**THE SWAN-LIKE HELIX.** Shell broadly openly umbilicated, depressly orbicular, subdiscoid, chestnut-horny, obliquely densely rib-like striated. spire impressed, with the suture rather deep; whorls four, convex, aperture lunar-circular, lip thin, scarcely reflected.

BENSON, MS. (Mus. Cuming.)

*Hab.* Freemantle, Swan River, Australia.

A very characteristic circular shell, of a chestnut-horny substance, densely rib-like striated throughout.

Species 1344. (Mus. Cuming.)

**HELIX SANTANNALENSIS.** *Hel. testâ latè apertè umbilicatâ, orbiculari-depressâ, pellucido-corneâ, lutescente, obliquè leviter striatâ; spirâ planulatâ, anfractibus quinque, rotundatis; aperturâ circulari, labro simplici.*

**THE SANTA ANNA HELIX.** Shell broadly openly umbilicated, orbicularly depressed, transparent horny, yellowish, obliquely lightly striated; spire flattened, whorls five, rounded; aperture circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Santa Anna, New Granada.

A small yellowish glassy shell, of rapid convolution, largely umbilicated.

Species 1345. (Mus. Cuming.)

**HELIX OPHELIA.** *Hel. testâ subangustè umbilicatâ, orbiculari, subdepressâ, fulco-corneâ, flammis parvis rubro-fuscis pallidè notatâ; spirâ planulatâ; anfractibus quatuor, convexis, ad peripheriam obsolete obtusè carinatis; aperturâ lunato-circulari, labro simplici, ad columellam paulo dilatato.*

**THE OPHELIA HELIX.** Shell rather narrowly umbilicated, orbicular, subdepressed, fulvous-horny, faintly marked with small red-brown flames. spire flattened, whorls four, convex, obsolete obtusely keeled at the periphery; aperture lunar-circular, lip simple, a little dilated at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Australia.

A rather dull horny shell, marked about the spire with faint reddish-brown flames.





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# HELIX.

PLATE CXCL.

Species 1346. (Mus. Grüner.)

**HELIX EUCHROES.** *Hel. testā oblectè umbilicatā, pyramidal-conicā, lævigatā, vel tenuissimè obliquè striatā, ustulato-aurantiā, zonis duabus castaneis cingulatā, quarum superiore dilatā, fasciāque opaco-albā juxta suturam; spirā pyramidal-obscatā; anfractibus septem, convexo-planis, ultimo anticè subdescendente; aperturā transversè ovalā, horizontali, obliquè productā; labro latè expanso-reflexo, violascente tincto, ad columellam callosio-dilatato, umbilicam partim tegente.*

**THE HEALTHY HELIX.** Shell with a covered umbilicus, pyramidally conic, smooth, or very finely obliquely striated, burnt-orange, encircled with two chestnut zones, of which the upper is faint, and with an opaque-white band next the suture; spire pyramidally raised; whorls seven, convexly flattened, the last slightly descending in front; aperture transversely ovate, horizontal, obliquely produced; lip broadly expandedly reflected, tinged with violet, callously dilated at the columella, partially covering the umbilicus.

PFIEFFER, Zeitschrift für Malac. 1854, p. 57.

*Hab.* Island of Celebes.

A fine new species, allied to *H. pileus*, from the collection of Mr. Grüner.

Species 1347. (Mus. Cuming.)

**HELIX ATROPOS.** *Hel. testā subampliter et profundè umbilicatā, orbiculato-depressā, apice obtusā, obliquè irregulariter striatā, rufescente-castaneā, zonis tribus albidis cingulatā; anfractibus quinque, medio convexis, supra infraque planulatis, ultimo anticè abruptè descendente; aperturā transversè ovali, labro reflexo, marginibus approximatis.*

**THE ATROPOS HELIX.** Shell rather largely and deeply umbilicated, orbicularly depressed, obtuse at the apex, obliquely irregularly striated, reddish-chestnut, encircled with three whitish zones; whorls five, convex in the middle, flattened above and below, last whorl abruptly descending in front; aperture transversely oval, lip reflected, margins approximated.

FERUSSAC, Hist. Moll. (Deshayes' edit.) vol. i. p. 56. pl. 69 H. f. 13, 15.

*Hab.* Madagascar.

A subtransparent solid species, alternately spirally

banded with reddish-chestnut and white, the coloured bands being the broader.

Species 1348. (Mus. Cuming.)

**HELIX SEMICASTANEA.** *Hel. testā subprofundè umbilicatā, turbinato-globosā, obliquè striatā, et sub lente minutè granulatā, supra fulvā, infra olivaceo-castaneā, zonulā albidā medio cingulatā; spirā obtusā; anfractibus sex, vix convexis, ultimo anticè subdescendente, aperturā lunato-circulari, labro albo, reflexo.*

**THE HALF-CHESTNUT HELIX.** Shell rather deeply umbilicated, turbinately globose, obliquely striated, and beneath the lens minutely granulated, fulvous above, olive-chestnut beneath, encircled round the middle with a narrow whitish zone; spire obtuse; whorls six, scarcely convex, the last a little descending in front; aperture lunar-circular, lip white, reflected

PFIEFFER, Zeitschrift für Malac. 1849, p. 77.

*Hab.* —?

Chiefly distinguished by its peculiarity of colouring, the under half being a dark olive-chestnut, whilst the upper half is of a lighter fulvous.

Species 1349. (Mus. Cuming.)

**HELIX GENERALIS.** *Hel. testā imperforatā, subgloboso-conoidē, tenuiculā, tumidā, obliquè productā, undique decussatim striatā, epidermide pallidè olivaceo-flavicante indatā, medio obscure tenuizonatā, ad apicem albicante; spirā subobtusā; anfractibus quatuor, declivi-convexis, rapidè accrescentibus, aperturā perobliquā, subquadratā, labro tenuireflexo, ad columellam callosio-dilatatā, appressā.*

**THE GENERAL HELIX.** Shell imperforated, subglobosely conoid, rather thin, swollen, obliquely produced, decussately striated throughout, covered with a pale olive-yellow epidermis, obscurely thinly zoned about the middle, whitish at the apex; spire rather obtuse, whorls four, slantingly convex, increasing rapidly; aperture very oblique, rather square, lip thinly reflected, callously dilated and appressed at the columella.

PFIEFFER, Pro Zool. Soc. 1854

*Hab.* Philippines.

August, 1854.



A very characteristic new species, of the same peculiar type as *H. melanotragus*.

Species 1350. (Mus. Gruner.)

**HELIX SULCOSA.** *Hel. testâ subampliter et profundè umbilicatâ, depresso-globosâ, subdiscoidèâ, intus extusque intensè castaneo-rubrâ, obliquè spiraliter corrugato-sulcatâ et indentatâ; spirâ convexo-planâ; anfractibus quinque, convexis; aperturâ transversè lunari, labro latè expanso, subreflexo.*

**THE GROOVED HELIX.** Shell rather largely and deeply umbilicated, depressly globose, subdiscoid, deep chestnut-red within and without, obliquely spirally wrinkle-grooved and indented; spire convexly flattened; whorls five, convex; aperture transversely lunar, lip broadly expanded, a little reflected.

PFEIFFER, Zeitschrift für Malac. 1854, p. 65.

*Hab.* Island of Celebes.

A new and very characteristic species, received by Mr. Gruner from Celebes, along with *H. euchroes*. The sculp-

ture consists of a superficial network of obliquely spiral wrinkle-grooves and indentations.

Species 1351. (Mus. Cuming.)

**HELIX BUCHI.** *Hel. testâ obtusè umbilicatâ, depresso-globosâ, tenui, tumidâ, obliquè rugis striatâ, sub lente striis densè decussatâ, pubesc. spadiceo-albâ, spirâ quinquefasciatâ, albilentiginosâ; anfractibus quatuor ad quinque, rotundatis; aperturâ verticali-lunari labro vix reflexo, ad umbilicum latè reflexo.*

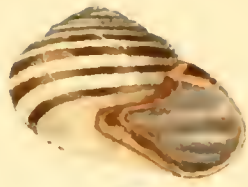
**BUCHI'S HELIX.** Shell with a covered umbilicus, centrally globose, thin, swollen, obliquely roughly striated, beneath the lens densely decussated with stripes light fawn-white, encircled with five fawn bands, freckled with white; whorls four to five, rounded; aperture vertically lunar, lip scarcely reflected, at the umbilicus broadly reflected.

DUBOIS, Kuster Couch. Cab. *Helix*, pl. 148. f. 6, 7

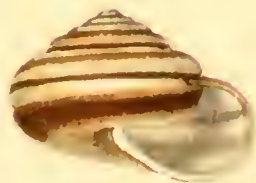
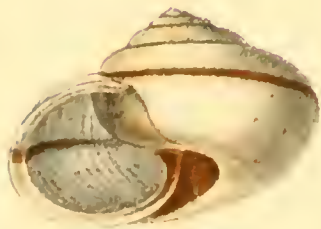
*Hab.* Colchis.

Very closely allied to *H. pomicea*, but distinguished by its light subtransparent roundness and freckled colouring.





135.



# HELIX.

PLATE CXCIII.

Species 1352. (Mus. Cuming.)

**HELIX PUNICA.** *Hel. testâ imperforatâ, depresso-globosâ, striâs obliquis sulcisque minutis spiritalibus decussatâ, albâ, spadiceo-fusco quadrifasciatâ; anfractibus quinque, convexis, ultimo anticè deflexo; aperturâ transversè subquadratâ, intus spadiceo tinctâ, labro subhiato, ad columellam spadiceo tincto.*

**THE PUNIC HELIX.** Shell imperforated, depressly globose, decussated with oblique striæ and minute spiral grooves, white, encircled with four fawn-brown bands; whorls five, convex, the last deflected in front; aperture transversely subquadrate, tinged with fawn within, lip slightly edged, fawn-stained at the columella.

MORELET, Journ. Conch. 1851, p. 352. pl. 9. f. 3, 4.

*Hab.* Constantine, Algeria.

I give a figure of this species since it is acknowledged as such by Dr. Pfeiffer, but consider it no more than a variety of *H. lactea*.

Species 1353. (Fig. a, b, Mus. Cuming.)

**HELIX APPENDICULATA.** *Hel. testâ oblate umbilicatâ, globoso-turbinatâ, obliquè subrugosè striatâ, stria ad suturas leviter plicatis, fuscescente-laciatâ, nigro spirâter fasciatâ et lineatâ, epidermide tenui corvâ lutescente indutâ; spiri obtusâ; anfractibus quinque, convexis, ultima anticè deflexo; aperturâ subquadrato-lunari, labro reflexo, ad umbilicum latè callosa-appresso, fumeo-purpurascente.*

**THE APPENDAGED HELIX.** Shell with a covered umbilicus, globosely turbinated, obliquely rather roughly striated, striæ slightly plicated at the sutures, brownish cream-colour, spirally banded and lined with black, covered with a thin yellowish-horny epidermis; spire obtuse; whorls five, convex, the last reflected in front; aperture somewhat squarely lunar, lip reflected at the umbilicus, broadly callously appressed, smoky-purple.

PEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Australia.

Allied somewhat to *H. Fraseri*, from the same locality, but a very distinct and characteristic species.

Species 1354. (Mus. Cuming.)

**HELIX BELLA.** *Hel. testâ viri umbilicatâ, globoso-turbinatâ,*

*tumidiusculâ, subobliquè plicatâ, spirâter fuscescente-laciatâ, fuscâ spirâ infra peripheriam, et ad suturas circulatâ; spiri erectâ, spiri obtusâ, anfractibus sex, convexis; aperturâ quadrato-lunari, labro simplici.*

**THE PRETTY HELIX.** Shell scarcely umbilicated, gibbously conic, somewhat swollen, rather absolutely perfectly striated, fawn-brown, ochreous-red towards the apex, encircled with an opake-white band below the periphery and sutures, spire raised obtuse at the apex; whorls six, rather convex; aperture quadrato-lunary, lip simple.

PEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Moluccas.

A light globe of fawn-red shell, peculiarly ornamented by opake white in the suture.

Species 1355. (Mus. Cuming.)

**HELIX QUERSITA.** *Hel. testâ rotunda, gibboso-turbinatâ, globosâ, striatâ, obliquè subrugosè striatâ, stria ad suturas leviter plicatis, fuscescente-laciatâ, nigro spirâter fasciatâ et lineatâ, epidermide tenui corvâ lutescente indutâ; spiri obtusâ; anfractibus quinque, convexis, ultima anticè deflexo; aperturâ subquadrato-lunari, labro reflexo, ad umbilicum latè callosa-appresso, fumeo-purpurascente.*

**THE SCOURT HELIX.** Shell deeply umbilicated, gibbously, sinistral, obliquely rather roughly striated, brownish cream-colour, spirally banded and lined with a narrow chestnut zone; spire rather obtuse; whorls five, convex; aperture roundly lunar, rather thin, a little reflected.

DESHAYES, Hist. Moll. vol. 1. p. 179. pl. 106. f. 1, 2, 3.

*Hab.* Moluccas.

A reversed shell, of light brown transparent white substance, encircled round the middle with a narrow chestnut zone.

Species 1356. (Mus. Cuming.)

**HELIX MACHINI.** *Hel. testâ gemelle sinistrali, gibboso-turbinatâ, depresso-globosâ, plicatâ, striâs rugosè striatâ, stria ad suturas leviter plicatis, fuscescente-laciatâ, nigro spirâter fasciatâ et lineatâ, epidermide tenui corvâ lutescente indutâ; spiri obtusâ; anfractibus quinque, convexis, ultima anticè deflexo; aperturâ subquadrato-lunari, labro reflexo, ad umbilicum latè callosa-appresso, fumeo-purpurascente.*

MARTIN'S HELIX. Shell excavated rather narrowly umbilicated, depressly globose, pale silky-olive, concave beneath, very beautifully densely rib-striated without, interstices beneath the lens minutely cancellated; spire obtuse, with the suture impressed; whorls eight, rounded, the last obsolete keeled at the periphery; aperture obliquely lunar, lip, especially at the lower margin, reflected.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Pedaug, Island of Sumatra; Capt. Adolphe Martin.

Chiefly distinguished by its very beautiful densely striated sculpture, which has a silky aspect.

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Species 1357. (Mus. Cuming.)

HELIX ZOSTEROPHORA. *Hel. testā imperforatā, depresso-orbiculari, subtilis excavatā, striis obliquis sulcisque*

*spiralibus minutis superficialiter decussatā, ad lāzonā castaneā unicā fasciisque duabus ferrugineo-cingulatā; spirā subelevatā; anfractibus sex, supra plano-declivibus, deinde convexis; aperturā obliquē lunari, labro simplici.*

THE GIRDLED HELIX. Shell imperforated, depressly orbicular, excavated beneath, superficially decussated with oblique striae and minute spiral grooves, whitish, encircled with a single chestnut zone and two rust bands; spire slightly raised; whorls six, flatly slanting above, then convex; aperture obliquely lunar lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

Allied to *H. citrina*, but of more solid structure. Although imperforated, there is indication of a closed umbilicus.

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1553



1550a



1551



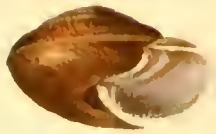
1560



1560



1562



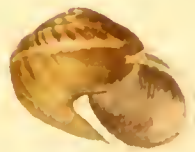
1564



1568



1568



1566

# HELIX.

PLATE CXCIV.

Species 1358. (Mus. Cuming.)

**HELIX HORTIOMPHALA.** *Hel. testâ latissimè apertè umbilicatâ, plano-orbiculari, depressissimâ, subdiscoidè, subtus convexâ, sordidè stramineâ, semipellucidâ, sub lente tenuissimè decussatim striatâ; spirâ tenuimarginatâ; anfractibus sex ad septem, lentè accrescentibus, acutissimè carinatis; aperturâ compresso-securiformi, labro simplici; umbilico peculiariter marginato.*

**THE EDGE-UMBILICATED HELIX.** Shell very broadly openly umbilicated, flatly orbicular, very depressed, subdiscoid, convex beneath, dirty straw-colour, semitransparent, beneath the lens very finely decussately striated; spire thinly margined; whorls six to seven, increasing slowly, very sharply keeled; aperture compressly hatchet-shaped, lip simple; umbilicus peculiarly edged.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Japan Archipelago.

A remarkable species from Japan, peculiarly typically distinct about the umbilicus, which has the appearance of being artificially scooped out.

Species 1359. (Mus. Cuming.)

**HELIX PAGODULA.** *Hel. testâ imperforatâ, conoidè, subtus convexâ, sordidè albâ, sub lente minutissimè decussatim striatâ; spirâ subobtusâ; anfractibus sex, convexo-planis, ad peripheriam carinatis, carinâ conspicuè recurvâ; aperturâ orato-securiformi, labro rix reflecto.*

**THE LITTLE PAGODA HELIX.** Shell imperforated, conoid, convex below, beneath the lens very minutely decussately striated; spire somewhat obtuse; whorls six, convexly flattened, keeled at the periphery, keel conspicuously turned up; aperture ovately hatchet-shaped, lip scarcely reflected.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

A conical pagoda-like dead-white shell, chiefly characterized by the keel which encircles the periphery of the whorls being turned up all round.

Species 1360. (Mus. Cuming.)

**HELIX CURVIDENS.** *Hel. testâ imperforatâ, subglobosâ,*

*crassiusculâ, semipellucido-albâ, obliquè striatâ, subtus granoso-indentatâ; spirâ obtusâ; anfractibus quatuor, convexis, ultimo subobscurè carinato, carinâ opaco-albâ; aperturâ lunari-ovata, labro paululum reflecto, ad columellam usque ad basin latè appresso-caloso, dente curvato; columellâ excavatâ.*

**THE CURVED-TOOTH HELIX.** Shell imperforated, subglobose, rather thick, semitransparent-white, obliquely striated, granosely indented beneath; spire obtuse; whorls four, convex, the last somewhat obscurely keeled, keel opaque-white; aperture lunar-ovate, lip a little reflected, at the columella as far as the base broadly appressly callous, with a curved tooth; columella excavated.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

A very characteristic species, semitransparent-white though solid, encircled with a somewhat obscure keel, which, near the aperture, is opaque-white. From the columella to the base the lip has a broad callous shelf on it, ending in a curved tooth.

Species 1361. (Mus. Cuming.)

**HELIX SUBVITREA.** *Hel. testâ subangustè profundè umbilicatâ, conoidè, basi plano-convexâ, subvitreo-albâ tenuissimè decussatim striatâ; spirâ elevatâ, apice subobtusâ; anfractibus sex ad septem, pliculatis, carinatis, deinde convexis; aperturâ obliquè lunari, labro ad basin caloso-reflecto, ad columellam latè appressè, umbilicum semitopente.*

**THE GLASS-LIKE HELIX.** Shell rather narrowly deeply umbilicated, conoid, flatly convex at the base, subglassy-white, very finely decussately striated, spire raised, rather obtuse at the apex; whorls six to seven, flattened, keeled, then convex; aperture obliquely lunar, callously reflected at the base, broadly appressed at the columella, half-covering the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Moluccas.

A rather solid obtusely conical species, of transparent-white substance, keeled at the periphery.

Species 1362. (Mus. Cuming.)

**HELIX GONIOMPHALA.** *Hel. testâ angustissimè umbilicatâ, orbiculari-subconoidè, olivaceo-fuscâ, sublus lutescente-viridi; spirâ brevisculâ, apice obtusâ; anfractibus sex ad septem, angustis, planatis, tenui-marginatis, lentè accrescentibus, ultimo ad peripheriam acutè carinato; aperturâ horizontali, labro simplici, ad basin calloso.*

**THE NARROW-UMBILICATED HELIX.** Shell very narrowly umbilicated, orbicularly subconoid, olive-brown, yellowish-green beneath; spire rather short, obtuse at the apex; whorls six to seven, narrow, flattened, finely margined, increasing slowly, the last sharply keeled at the periphery; aperture horizontal, lip simple, callous at the base.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

A closely convoluted species, of smooth angular broadly conical growth.

Species 1363. (Mus. Cuming.)

**HELIX FUNICULATA.** *Hel. testâ subampliter umbilicatâ, orbiculari, tumidiusculâ, obliquè plicato-striatâ et rugoso-granatâ, fulvo-castaneâ, zonâ unicâ pallidâ cingulatâ; spirâ convexâ, suturâ impressâ; anfractibus septem, rotundatis, ultimo carinâ latâ obtusâ subobscurè cincto; aperturâ orbiculari-lunatâ, labro subreflexo, ad columellam latè appresso.*

**THE CORDED HELIX.** Shell rather largely umbilicated, orbicular, rather swollen, obliquely plicately striated and rugosely granuled, fulvous-chestnut, encircled with a single pale zone; spire convex, with a suture impressed; whorls seven, rounded, the last somewhat obscurely encircled with a broad obtuse keel; aperture orbicularly lunar, lip a little reflected, broadly appressed at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Island in Torres Straits, North Australia.

Roughly granuled throughout, and obscurely encircled round the periphery with a rather broad obtuse keel.

Species 1364. (Mus. Cuming.)

**HELIX CRASSIDENS.** *Hel. testâ imperforatâ, globosâ,*

*crassâ, nigro-castaneâ, obliquè lirato-striatâ; spirâ brevis, obtusâ; anfractibus quinque, plano-convexis, ad peripheriam obsolete curinatis; aperturâ horizontali, angustâ, contractâ, labro densè calloso, marginibus junctis, superiore dente oblongo crasso, inferiore dentibus duobus tenuibus internis.*

**THE THICK-TOOTHED HELIX.** Shell imperforated, globose, thick, black-chestnut, obliquely ridge-like striated; spire short, obtuse; whorls five, slightly convex, obsolete keeled at the periphery; aperture horizontal, narrow, contracted, lip densely callous, margins joined, upper margin furnished with a thick oblong tooth, lower with two thin internal teeth.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Martinique.

Very closely allied to *H. pachygastra*, from which it differs in having so prominent an oblong callous tooth.

Fig. 1365. (Mus. Cuming.)

This beautifully sculptured shell, the *Helix delphinula*, Lowe, from Madeira, is included by Dr. Pfeiffer in his list of fossil species.

Species 1366. (Mus. Cuming.)

**HELIX CORNEO-VIRENS.** *Hel. testâ subobtectè umbilicatâ, conoido-globosâ, tenui, subinflatâ, supernè obliquè rugosâ, infra lævigatâ, corneo-virente, subdiaphanâ; spirâ obtusâ; anfractibus quinque ad sex, convexiusculis, ultimo lecite angulato, anticè descendente; aperturâ obliquè lunari, subamplâ, labro albido, tenuè reflexo, ad columellam latè appresso.*

**THE HORN-GREEN HELIX.** Shell with a nearly covered umbilicus, conoidly globose, thin, somewhat inflated, obliquely rugose at the upper part, smooth beneath, horny-green, subdiaphanous; spire obtuse; whorls five to six, slightly convex, the last faintly angled, descending in front; aperture obliquely lunar, rather large, lip thinly reflected, broadly appressed at the columella, lip white.

PFEIFFER, Zeitschrift für Malac. 1851, p. 25.

*Hab.* San Nicholas.

A light subinflated diaphanous horny shell, of simple character.





1367



1370



1369



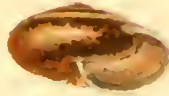
1371



1374



1372



1373



1375



1376



1377

(Magnified  $\frac{1}{2}$  diam.)

# HELIX.

PLATE CXC.V.

Species 1367. (Mus. Cuming.)

**HELIX SOLIDULA.** *Hel. testá rix umbilicatá, depresso-conoideá, fuscá, obliquè plicato-striatá, striis elevatis; spirá obtusá; anfractibus sex, planatis, ad peripheriam carinatis; aperturá angustè lunari, labro simplici, ad columellam leviter reflexo.*

**THE RATHER SOLID HELIX.** Shell scarcely umbilicated, depressly conoid, brown, obliquely plicately striated, striæ raised; spire obtuse; whorls six, flattened, keeled at the periphery; aperture narrowly lunar, lip simple, a little reflected at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

A firm, conoid species, scarcely umbilicated, sculptured with fine raised striæ.

Species 1368. (Mus. Cuming.)

**HELIX CUMULUS.** *Hel. testá obtectè umbilicatá, orbiculari, pellucido-corneá, densè elevato-striatá; spirá depresso-concavá; anfractibus quinque, ultimo leviter carinato; aperturá obliquè lunari, labro simplici, ad columellam paululum reflexo.*

**THE PILE HELIX.** Shell with a covered umbilicus, orbicular, transparent horny, densely elevately striated; spire depressly convex; whorls five, the last slightly keeled; aperture obliquely lunar, lip simple, a little reflected at the columella.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Banks of Manning River, East Australia.

A simple transparent horny shell, a little excavated around the umbilicus, which is very small, and covered over by the slight callously reflected expansion of the columellar margin.

Species 1369. (Mus. Cuming.)

**HELIX CAYENNENSIS.** *Hel. testá latè perspectivè umbilicatá, depresso-orbiculari, subdiscoidé, tenui, hyaliná, densè obliquè striatá, epidermide corneá lutescente indutá; spirá leviter concavá, saturá impressá; anfractibus quinque, rotundatis; aperturá parvâ, circulari, labro simplici.*

**THE CAYENNE HELIX.** Shell broadly perspectivevely umbilicated, depressly orbicular, subdiscoid, thin, hyaline,

densely obliquely striated, covered with a yellowish-horny epidermis; spire slightly convex, suture impressed; whorls five, rounded; aperture small, circular, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Cayenne.

A spiral narrow-whorled species, nearly discoid, with an open perspective umbilicus.

Species 1370. (Mus. Cuming.)

**HELIX STIMPSONI.** *Hel. testá angustè profundè umbilicatá, depresso-globosá, tenuiculá, subcorneá, fulrescente-fuscá, densè elevato-striatá; anfractibus quinque, concavis, ultimo subinflato, et leviter carinato; aperturá subcirculari, labro reflexo, carneo tincto.*

**STIMPSON'S HELIX.** Shell narrowly deeply umbilicated, depressly globose, rather thin, somewhat horny, yellowish-brown, thickly elevately striated; whorls five, convex, the last somewhat inflated, faintly keeled, aperture subcircular, lip reflected, flesh-tinged.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* China.

A depressly globose horny shell, characterized by a rounded aperture with a conspicuously reflected flesh-tinged lip.

Species 1371. (Mus. Cuming.)

**HELIX CALCULUS.** *Hel. testá parvè et latissimè umbilicatá, planissimè depressá, utrinque concavá, angustè discoidé, lutescente-olivaceá, lineis rufis undatis decussatá; anfractibus octo, angustissimis, supra et infra angulatis; aperturá minutá, lunari.*

**THE PEBBLE HELIX.** Shell very largely and broadly umbilicated, very flatly depressed, concave on both sides, narrowly discoid, yellowish-olive, crossed with waved red lines; whorls eight, extremely narrow, angular above and below; aperture very small, lunar.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* — ?

This remarkably discoid species has the most complete Ammonite-form of any of the genus, and the cross waved lines almost give it the appearance of being chambered.



## Species 1372. (Mus. Cuming.)

HELIX YORKENSIS. *Hel. testā minutè umbilicatā, orbiculari-depressā, pellucido-corneā, olivaceā, obsolete striatā, nitente; spirā convexā, lævigatā; anfractibus quinque, plano-declivibus, ad peripheriam obtusè carinatis; aperturā obliquè lunari, labro simplici.*

THE YORK HELIX. Shell minutely umbilicated, orbicularly depressed, transparent horny, olive, obsolete striated, shining; spire convex, smooth; whorls five, flatly slanting, obtusely keeled at the periphery; aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Cape York, North Australia.

A simple horny species, with a smoothly convex spire, faintly keeled at the periphery.

## Species 1373. (Mus. Cuming.)

HELIX MALACCANUS. *Hel. testā angustè umbilicatā, depresso-orbiculari, subpellucido-corneā, saturatè olivaceā, lævigatā, politā; spirā convexo-planatā, suturā tenuissimè marginatā; anfractibus quinque, supernè planulatis, deinde convexis; aperturā obliquè lunari, labro simplici.*

THE MALACCA HELIX. Shell narrowly umbilicated, depressly orbicular, subtransparent-horny, dark olive, smooth, polished; spire convexly flattened, suture finely margined; whorls five, flattened at the upper part, convex; aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Province of Queda, Malacca; Captain Adolphe Martin.

Of a hard, polished, *Vitrina*-like substance.

## Species 1374. (Mus. Cuming.)

HELIX CARNEOLA. *Hel. testā minutè umbilicatā, depresso-orbiculari, carneolo-corneā, pellucidā, lævigatā, politā; spirā læviter convexā, suturā subimpressā; anfractibus quinque, supernè planulatis, deinde rotundatis; aperturā obliquè lunari, labro simplici.*

THE CARNELIAN HELIX. Shell minutely umbilicated, depressly orbicular, carnelian-horny, transparent, smooth, polished; spire slightly convex, the suture rather impressed; whorls five, flattened at the upper

part, then rounded; aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Ceylon; Thwaites.

A shell of very simple character, but the horny substance of which it is composed has a peculiar carnelian tint.

## Species 1375. (Mus. Cuming.)

HELIX VILLARIS. *Hel. testā minutè umbilicatā, orbiculari, pallidè virescente-corneā, diaphanā, lævigatā, politā; spirā plano-convexā, suturā subtilissimè marginatā; anfractibus quinque; aperturā obliquè lunari, labro simplici.*

THE VILLAGE HELIX. Shell minutely umbilicated, orbicular, pale greenish-horny, diaphanous, smooth, polished; spire flatly convex, suture very finely margined; whorls five; aperture obliquely lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. 1854.

*Hab.* Lizard Island, North Australia.

A very delicate pale-green horny species, minutely umbilicated, with the suture of the spire very finely margined.

## Species 1376. (Mus. Cuming.)

HELIX BACTRIANA. *Hel. testā angustè profundè umbilicatā, orbiculari, subobsolete plicato-striatā, sordidè corneā, cinereo obliquè strigatā, juxta suturam et ad peripheriam albidā; anfractibus quinque, rotundatis; aperturā circulari, labro simplici, ad columellam subreflexo.*

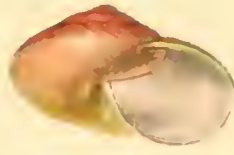
THE BACTRIAN HELIX. Shell narrowly deeply umbilicated, orbicular, somewhat obsolete plicately striated, dull horny, obliquely streaked with ash, whitish next the suture and at the periphery; whorls five, rounded; aperture circular, lip simple, a little reflected at the columella.

HUTTON, Journ. Asiatic Soc. 1849.

*Hab.* Candahar.

A pale, somewhat opaque shell, obliquely marked with ash streaks, which are interrupted in the middle by a faint light zone.

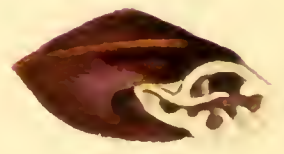
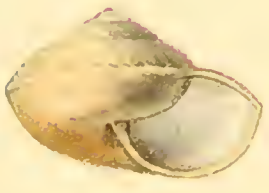
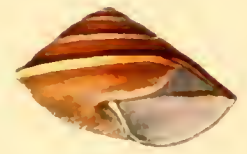




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# HELIX.

PLATE CACVI.

Species 1377. (Mus. Cuming.)

**HELIX SOPHIE.** *Hel. testâ rix umbilicatâ, obliquè depressâ, Vitrinaformi, pellucido-cornuâ, tenuissimâ, obliquè plicatâ, spirâliber minutissimè lineari-sculatâ; spirâ parum elevatâ; anfractibus quinque, convexo-declivibus, ultimo tumido, circa umbilicum impresso; aperturâ latè lunari, horizontali, labro tenui, rix reflexo.*

**SOPHIA'S HELIX.** Shell scarcely umbilicated, obliquely depressed, Vitrina-shaped, transparent-horny, very thin, obliquely plicated, spirally very minutely linearly grooved; spire but little raised; whorls five, convexly slanting, last whorl tumid, impressed around the umbilicus; aperture broadly lunar, horizontal, lip thin, scarcely reflected.

GASKOIN, Pro. Zool. Soc. July, 1854.

*Hab.* Lord Howe's Island; Macgillivray.

An extremely delicate transparent-horny Vitrina-like species.

Species 1378. (Mus. Cuming.)

**HELIX GLUTINOSA.** *Hel. testâ minutè umbilicatâ, conoideo-lenticulari, tenuiculâ, pellucido-corneâ, lubricâ, politissimâ, fulvescente-castaneâ, supra peripheriam fasciâ angustâ castaneo-rufâ cingulatâ, infra fasciâ albidâ; spirâ conoideo-depressâ, apice obtusâ; anfractibus sex, plano-declivibus, ultimo ad peripheriam carinato, corinâ rotundatâ; aperturâ angulato-lunari, labro simplici.*

**THE GLUTINOUS HELIX.** Shell minutely umbilicated, conoidly lens-shaped, rather thin, transparent-horny, slimy, very highly polished, pale fulvous-chestnut, encircled above the periphery with a narrow chestnut-red band, below with a whitish band; spire conoidly depressed, obtuse at the apex; whorls six, flatly slanting, the last keeled at the periphery, keel rounded; aperture angularly lunar, lip simple.

METCALFE, Pro. Zool. Soc. 1851.

*Hab.* Borneo.

A shell of firm growth, remarkable for its excessively polished transparent-horny substance, looking as if highly varnished.

Species 1379. (Mus. Cuming.)

**HELIX BORNEENSIS.** *Hel. testâ minutè umbilicatâ, obliquè orbiculari, decussatè striatâ, fove brunneâ, infra peripheriam saturatè fasciatâ, fasciâ versus basin dilutâ; spirâ depressâ; saturâ distinctâ; anfractibus quatuor, convexis, infra convexioribus; aperturâ transversè lunari, subamplâ, labro simplici, limbo calloso-albo, ad umbilicum calloso-reflexo.*

**THE BORNEO HELIX.** Shell minutely umbilicated, obliquely orbicular, decussately striated, fulvous-brown, darkly banded below the periphery, band diluted towards the base; spire depressed; suture distinct, whorls four, convex, more convex below, aperture transversely lunar, rather large, lip simple, callous-white at the edge, callously reflected at the umbilicus.

PFEIFFER, Pro. Zool. Soc. 1849, p. 127.

*Hab.* Borneo.

A fine large depressly convoluted species, somewhat amply obliquely produced at the aperture, of a burnt-brown colour, darker banded below the periphery.

Species 1380. (Mus. Cuming.)

**HELIX LETA.** *Hel. testâ angustè profundè umbilicatâ, subturbinatâ, pellucido-stramineâ, solutiusculâ, subnitente, striolis spirâlibus decussatim granulatâ et subtiliter corrugato-indentatâ; spirâ depressâ, versus apicem subdecalâ; anfractibus sex, planiusculis, ultimo ad peripheriam subacutè carinato, corinâ rugosâ, opacâ; aperturâ angulato-lunari, labro simplici, rix incrassato.*

**THE CHEERFUL HELIX.** Shell narrowly rather deeply umbilicated, slightly turbinated, transparent straw-colour, rather solid, a little shining, decussately granulated with fine spiral striae, and finely corrugately indented; spire depressed, a little raised towards the apex; whorls six, rather flat, the last rather sharply keeled at the periphery, keel rough, opaque; aperture angularly lunar, lip simple, scarcely thickened.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* — ?

A characteristic subtransparent straw-coloured species of rather solid structure, finely indented and stria-crossed.

encircled at the periphery with a sharp rough keel, which is more opaque than the rest of the shell.

Species 1381. (Mus. Cuming.)

**HELIX BOGOTENSIS.** *Hel. testâ subampliter umbilicatâ, lenticulari, solidâ, acutè carinatâ, striatâ, sub lente minutissimè granulatâ, nigro-castaneâ; spirâ brevis-simâ, obtusâ; anfractibus quatuor ad quinque, planulatis, ultimo anticè multo deflexo, supra et infra carinam profundè scrobiculari; aperturâ perobliquâ, auriformi, labro continuo, albo, crasso, undique expanso-reflexo, margine supero arcuato, intus tuberculo triangulari munito, margine parietali flexuoso, laminam rotundam linguaformem emittente, margine basali medio subangulatim descendente, latere sinistro tuberculis duobus inæqualibus munito, dextro plicis duabus inæqualibus in tuberculo elevato positis munito.*

**THE BOGOTA HELIX.** Shell rather largely umbilicated, lens-shaped, solid, sharply keeled, striated, very minutely granulated beneath the lens, blackish-chestnut; spire very short, obtuse; whorls four to five, rather flat, the last rather much deflected in front, deeply pitted above and below the keel; aperture very oblique, ear-shaped, lip continuous, white, thick, expandedly reflected throughout, upper margin arched, furnished within with a triangular tubercle, parietal margin flexuous, emitting a strong tongue-shaped lamina, basal margin somewhat angularly descending

in the middle, the left side being furnished with two unequal tubercles, the right side with two unequal plates, placed on a raised tubercle.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Santa Fé de Bogotá.

Remarkable for the very prominent tongue-shaped lamina issuing from the parietal margin, with two double-plaited tubercles on the lower margin.

Species 1382 (Mus. Cuming.)

**HELIX AURIS.** *Hel. testâ sinistrali, subprofundè umbilicatâ, subauriformi, depresso-tumidâ, tenui, subpelluculâ, fulvescente-olivaceâ, striatulâ; spirâ vix elevatâ, obtusâ; suturâ impressâ; anfractibus quatuor ad quinque, leviter convexis, ultimo obtusè carinato, subtus convexiari, nitente; aperturâ obliquè lunari, subamplâ, labro vix reflexo.*

**THE EAR HELIX.** Shell sinistral, rather deeply umbilicated, somewhat ear-shaped, depressly tumid, thin, subtransparent, fulvous-olive, finely striated; spire scarcely raised, obtuse; suture impressed; whorls four to five, slightly convex, the last obtusely keeled, more convex beneath, shining; aperture obliquely lunar, rather large, lip scarcely reflected.

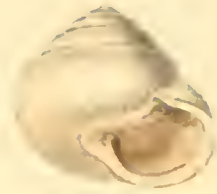
PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Koondah Mountains, near Calicut, India; Pirrie.

A light tumid yellowish-olive shell, subtransparent in substance, and of reversed growth.







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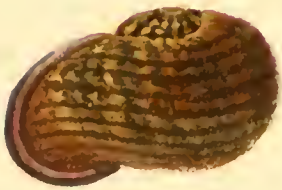
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# HELIX.

PLATE CXCVII.

Species 1383. (Mus. Cuming.)

**HELIX CANDIDISSIMA.** *Hel. testā imperforatā, globosā, solidā, cretaceā, candidā; spirā obtusè conoidē; anfractibus quinque, convexis, ultimo anticè deflexo, obsolete carinato; aperturā parviusculā, rotundato-lunari, labro expanso-reflexo.*

**THE VERY WHITE HELIX.** Shell imperforated, globose, solid, chalky, white; spire obtusely conoid; whorls five, convex, the last deflected in front, obsolete keeled; aperture rather small, rotundately lunar, lip expandedly reflected.

DRAPARNAUD, *Hist. Moll.* p. 89. pl. 5. f. 19.

*Helix rimosa*, Jan.

*Hab.* Southern Europe and North Africa.

Of a solid globose form and clear bright white chalky substance, with rather a contracted aperture.

Species 1384. (Mus. Cuming.)

**HELIX EDDYSTONENSIS.** *Hel. testā subangustè profundè umbilicatā, conoideo-depressā, versus aperturam obliquè productā, minutissimè spirāliter striatā, striis subcorrugatis obliquis densè decussatis, subpellucido-stramineā, zonulis duabus castaneis cingulatā; spirā subelevatā; anfractibus quatuor, convexo-declivibus, ultimo obtusè carinato, carinā opacā; aperturā obliquè lunari, subhorizontali, labro latè expanso-reflexo.*

**THE EDDYSTONE HELIX.** Shell rather narrowly deeply umbilicated, conoidly depressed, obliquely produced towards the aperture, very minutely spirally striated, striæ densely decussated with slightly wrinkled oblique striæ, subtransparent straw-colour, encircled with two chestnut zones; spire rather raised; whorls four, convexly slanting, the last obtusely keeled, keel opaque; aperture obliquely lunar, rather horizontal, with the lip broadly expandedly reflected.

*Hab.* Eddystone Island, Australia.

A very characteristic species, of delicate straw-colour, encircled with two narrow chestnut zones; one above the periphery, which is more opaque than the rest of the shell, and the other below it.

Species 1385. (Mus. Cuming.)

**HELIX AFRICANA.** *Hel. testā minutè umbilicatā, depresso-*

*orbiculari, pellucido-cornuā, opacè, minutissimè spirāliter striatā, obliquè beneplicatā; anfractibus sex angustis, plano-convexis, ultimo obtusè carinato, infra convexiore; aperturā lunari, labro tenui, simplici.*

**THE AFRICAN HELIX.** Shell minutely umbilicated, depressly orbicular, transparent-horny, shining, very minutely spirally striated, obliquely finely plicated. Whorls six, narrow, flatly convex, the last obtusely keeled, more convex beneath; aperture broadly lunar, lip thin, simple.

PFEIFFER, *Pro. Zool. Soc.* 1849, p. 128.

*Hab.* West Africa.

A transparent-horny depressly orbicular shell, sometimes of darker fulvous-brown than here represented.

Species 1386. (Mus. Cuming.)

**HELIX AMAZONICA.** *Hel. testā profundè subopertè umbilicatā, depressā, subtextè convexiore, densè plicatè corrugato-striatā et granulatā, foveolato-punctā, rufo-castaneo ad suturam punctatā; spirā ex elevatā anfractibus quinque, ultimo conspicuè carinato, circa umbilicam albicante, lineis rufo-castaneis cingulatā; aperturā latè lunari, labro reflexo.*

**THE AMAZON HELIX.** Shell deeply rather largely umbilicated, depressed, more convex beneath, densely plicately wrinkle-striated and granuled, fulvous-brown, dotted with reddish-chestnut at the suture, spire scarcely raised; whorls five, the last conspicuously keeled, whitish round the umbilicus, encircled with reddish-chestnut lines; aperture broadly lunar, lip reflected.

PFEIFFER, *Pro. Zool. Soc.* November, 1854.

*Hab.* Banks of the Amazon.

Chiefly distinguished from its allied species by the arrangement of the colouring and densely plicately wrinkle-striated surface.

Species 1387. (Mus. Cuming.)

**HELIX SKINNERI.** *Hel. testā subglabro-depressā, crassa, solidā, versus aperturam perobliquè productā, multique minutè granulatā, spirāliter latè superficialiter subcatā, livido-castanei, epidermidè foveolæ in maculis hieroglyphicis spirāliter distinctissimā, subtiliusculā; spirā*

*brevis, parvâ; suturâ impressâ; anfractibus tribus ad quatuor, ultimo multo maximo; aperturâ subquadrato-oblongâ, labro extus latè incrassato, intus densè calloso, sub parietem continuo, undique intensè purpureo-violece.*

SKINNER'S HELIX. Shell subglobose depressed, thick, solid, very obliquely produced towards the aperture, everywhere minutely granuled, spirally broadly superficially grooved, livid chestnut, spirally freckled with a fulvous epidermis, disposed in hieroglyphic spots; spire short, rose-colour beneath, small; suture impressed; whorls three to four, last whorl very much the largest; aperture subquadrately oblong, lip externally broadly thickened, interiorly densely callous, continuous over the body-whorl, everywhere deep purple-violet.

*Hab.* Ceylon; Major Skinner.

A very characteristic species, of solid obliquely produced growth, of the same peculiar type as *H. Waltoni*, from the same locality. The lip is of a particularly deep purple-violet callous deposit continued over the body-whorl, and curiously thickened exteriorly.

Species 1385. (Mus. Cuming.)

HELIX SOBRINA. *Hel. testâ imperforatâ, globoso-depressâ, solidâ, obliquè striatâ, albâ aut lutescente; anfractibus quinque, convexiusculis, ultimo ad peripheriam obtusè angulato; aperturâ perobliquâ, lunari-rotundatâ, labro multo incrassato, reflexo, marginibus callositate junctis, columellari dilatato, irregulariter et obsolete denticulato.*

THE COUSIN HELIX. Shell imperforated, globose depressed, solid, obliquely striated, white or yellowish; whorls five, rather convex, the last obtusely angled at the periphery; aperture very oblique, lunar rounded, lip very much thickened, reflected, margins joined by a callosity, columellar margin dilated, irregularly and obsoletely toothed.

FERUSSAC, Hist. Moll. pl. 43. f. 6.

*Hab.* Cuba.

A heavy solid colourless species, with a very thickened reflected lip obsoletely rudely puckered within





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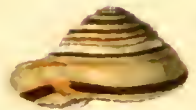
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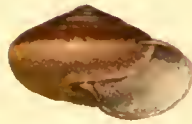
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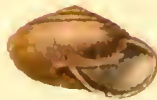
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# HELIX.

PLATE CXCVIII.

Species 1389. (Mus. Cuming.)

**HELIX ELLIPSOSTOMA.** *Hel. testâ semiobtectè umbilicatâ, lenticulari, minutissimè granulatâ, nigro-brunneâ; spirâ depresso-conoidè; suturâ submarginatâ; anfractibus quinque, planiusculis, ultimo acutissimè carinato, anticè subito deflexo, triscrobiculato; aperturâ horizontali, elliptico-rhombicâ, dente libero lamelliformi intraute, labro continuo, albo, margine parietali erecto, supero breviter expanso, basali reflexo, medio subangulatum descendente, parte sinistrâ tuberculo unico, dextrâ plicis duabus divergentibus basi junctis.*

**THE ELLIPTIC-MOUTH HELIX.** Shell with a half-covered umbilicus, lens-shaped, very minutely granulated, black-brown; spire depressly conoid; suture slightly margined; whorls five, rather flat, the last very sharply keeled, suddenly deflected in front, three-pitted; aperture horizontal, elliptic-rhomboid, with a free lamelliform tooth on the body-whorl, lip continuous, white, parietal margin erect, upper shortly expanded, basal reflected, somewhat angularly descending in the middle, left part with a single tubercle, right with two diverging plates, joined at the base.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Santa Fé de Bogotâ.

An interesting species, of the plaited mouth group, collected at Santa Fé de Bogotâ by Mr. Marks, Consul-General of that district.

Species 1390. (Mus. Cuming.)

**HELIX SUBRUDIS.** *Hel. testâ subampliter profundè umbilicatâ, depresso-orbiculari, subrudè densè plicato-striatâ, albidâ, superne castaneo-fusciatâ, apice carinâ; anfractibus quinque, subrotundatis; aperturâ circulari, labro simplici.*

**THE RUDE HELIX.** Shell rather largely deeply umbilicated, depressly orbicular, rather rudely densely plicately striated, whitish, chestnut-banded at the upper part, flesh-tinged at the apex; whorls five, somewhat rounded; aperture circular, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* — ?

A roughly striated species, of rounded growth, whitish beneath, reddish-chestnut banded above.

Species 1391. (Mus. Cuming.)

**HELIX KRAUSSI.** *Hel. testâ profundè umbilicatâ, globosè depressâ, corsus aperturam obliquè producti densè striatâ, olivaceo-corneâ; spirâ vix elevatâ; anfractibus quatuor ad quinque, ultimo lato, inflato, anticè paululum deflexo; aperturâ perobliquâ, subaplici, lunari-circulari, labro simplici, marginibus approximatis.*

**KRAUSS'S HELIX.** Shell deeply umbilicated, globosely depressed, obliquely produced towards the aperture, closely striated, olive-horny; spire scarcely raised, whorls four to five, the last broad, inflated, a little deflected in front; aperture very oblique, rather large, lunar-circular, lip simple, with margins approximating.

PFEIFFER, Symbolæ, vol. iii. p. 79.

*Hab.* Knysna, Cape of Good Hope (in the woods); Krauss.

A semitransparent olive-horny species, with the last whorl circularly convoluted, but much enlarged and obliquely produced towards the aperture.

Species 1392. (Mus. Cuming.)

**HELIX LOXOTROPIS.** *Hel. testâ excavatè profundè umbilicatâ, turbinato-depressâ, solidiusculâ, obliquè tenuistriatâ, sordidè lutescente, ad suturam opaco-albâ, lineâ univâ castaneo-rufâ, fascisque duabus latè castaneo-rufis ad basin; spirâ obtuso-conoidè; anfractibus quinque, declivè-concavis, ultimo anticè deflexo, infra plano-concavo, post labrum constricto; aperturâ horizontali, transversè lunari-ovali, labro expanso-reflexo, marginibus approximatis.*

**THE OBLIQUELY-KEELED HELIX.** Shell excavately deeply umbilicated, turbinately depressed, rather solid, obliquely finely striated, dirty-yellowish, opaque-white at the suture, with a single chestnut-red line, and two broad red bands beneath; spire obtusely conoid, whorls five, slantingly convex, the last deflected in front, flatly concave beneath, constricted behind the lip; aperture horizontal, transversely lunar-oval, lip expandedly reflected, with the margins approximating.

PFEIFFER, Zeitschrift für Malac. 1850, p. 82.

*Hab.* Moluccas.

A solid characteristic species, excavately flattened beneath, with the lip expandedly produced and constricted.



Species 1393. (Mus. Cuming.)

HELIX TROGLODYTES. *Hel. testâ rix umbilicatâ, depresso-orbiculari, corneâ, sordidè cinnamomeo-olivaceâ, obliquè striatâ, striis minutissimis spirâlibus decussatâ; spirâ depresso-conoideâ; suturâ distinctâ; anfractibus sex, convexiusculis; aperturâ latè lunari, labro simplici.*

THE SPARROW HELIX. Shell scarcely umbilicated, depressly orbicular, horny, dull cinnamon-olive, obliquely striated, decussated with very minute spiral striae; spire depressly conoid; suture distinct, whorls six, rather convex; aperture broadly lunar, lip simple.

MORELET, Revue Zoologique Soc. Cuvierienne, 1848, p. 351.

*Hab.* Gaboon, West Africa.

A dull cinnamon-olive horny shell, of simple convolution, scarcely umbilicated.

Species 1394. (Fig. *a, b*, Mus. Cuming.)

HELIX INEQUALIS. *Hel. testâ latè perspectivè umbilicatâ, depresso-orbiculari, subcorneâ, solidâ, densè corrugato-striatâ, fusco-luleâ, fasciâ nigrâ ad peripheriam interdum cingulatâ; aperturâ lunato-circulari, labro simplici.*

THE UNEQUAL HELIX. Shell broadly perspectivevely um-

bilicated, depressly orbicular, somewhat horny, solid, densely wrinkle-striated, brownish-yellow, sometimes encircled at the periphery with a black band; aperture lunar-circular, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854

*Hab.* Isle of Pines, Australian Seas; Macgillivray

A yellowish horny-looking shell, but of solid structure, broadly openly umbilicated, sometimes dark-banded at the periphery.

Species 1395. (Mus. Cuming.)

HELIX CONSUL. *Hel. testâ rix umbilicatâ, depressâ, tenui, pellucido-corneâ, nitente, eximie obliquè striatâ, striis minutissimis spirâlibus decussatâ; spirâ convexo-obtusâ; anfractibus sex, planiusculis; aperturâ latè lunari, labro simplici.*

THE CONSUL HELIX. Shell scarcely umbilicated, depressed, thin, transparent-horny, shining, delicately obliquely striated, and decussated with very minute spiral striae; spire convexly obtuse; whorls six, rather flat; aperture broadly lunar, lip simple

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Sarawak, Borneo.

A simple horny species, very closely allied to *H. troglodytes*, more shining and slightly varying in form.





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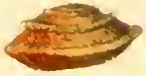
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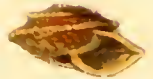
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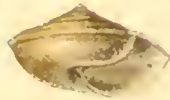
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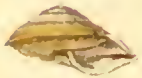
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1101



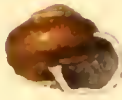
1102



1103



1104



1105

# HELIX.

PLATE CXCIX

Species 1396. (Mus. Cuming.)

**HELIX AGLAJA.** *Hel. testâ eix umbilicatâ, depressâ, pellucido-cornuâ, lutescente, nitidissimâ, spiræ suturâ subimpressâ, tenuimarginatâ; anfractibus sex, rotundatis, juxta suturam obsolete plicatis; aperturâ latè lunari, labro simplici.*

**THE AGLAJA HELIX.** Shell scarcely umbilicated, depressed, transparent-horny, yellowish, very shining, suture of the spire rather impressed, finely margined; whorls six, rounded, obsoletely plicated next the suture; aperture broadly lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Sarawak, Borneo.

A very shining horny species, obsoletely plicated next the suture, which is finely margined.

Species 1397. (Mus. Cuming.)

**HELIX VALLICOLA.** *Hel. testâ angustè umbilicatâ, depressâ, pellucido-corneâ, sordidè olivaceâ, nitidissimâ; spirâ planulatâ; suturâ impressâ, tenuimarginatâ; anfractibus quinque, parum convexis, ad suturam obsolete plicatis; aperturâ lunari, labro simplici.*

**THE TRENCH HELIX.** Shell narrowly umbilicated, depressed, transparent-horny, dull olive, very shining; spire flat; suture impressed, finely margined; whorls five, but little convex, obsoletely plicated at the suture; aperture lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Koondah Mountains, near Calicut, India; Pirrie.

Very similar to the preceding Borneo species, but composed of fewer whorls more flatly convoluted.

Species 1398. (Mus. Cuming.)

**HELIX IBUENSIS.** *Hel. testâ rix minutè umbilicatâ, trochiformi, tenui, pallidè corneuâ, obliquè subtilissimè striatâ; spirâ acutè conicâ; anfractibus septem, planulatis, ultimo acutissimè filocarinato, basi convexo; aperturâ latè angulato-lunari, labro simplici.*

**THE IBU HELIX.** Shell scarcely minutely umbilicated, trochus-shaped, thin, pale horny, obliquely very finely striated; spire sharply conical; whorls seven, rather flat, the last very sharply thread-keeled, convex at

the base, aperture broadly angularly lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Ibu.

A transparent horny shell, of sharply trochoid form finely obliquely thread-striated throughout.

Species 1399. (Mus. Cuming.)

**HELIX PALEATA.** *Hel. testâ angustè obtectè umbilicatâ, globosâ, tenuiculâ, cretaceo-albâ, undique corrugato-granulatâ aut paleatâ; spirâ subobtusâ; suturâ distinctâ; anfractibus quatuor, ad suturam subdescendentibus, convexis, ultimo anticè deflexo, aperturâ circulari, labro simplici, margine columellari reflexo.*

**THE WATFLED HELIX.** Shell with a narrow covered umbilicus, globose, rather thin, chalk-white, everywhere wrinkled-grained or wattled; spire rather obtuse; suture distinct; whorls four, a little descending at the suture, convex, the last deflected in front, aperture circular, lip simple, columellar margin reflected.

*Hab.* Banks of Swan River, Australia; Bacon.

A light globose chalk-white species, peculiarly wrinkled-grained or wattled throughout.

Species 1400. (Mus. Cuming.)

**HELIX TUNETANA.** *Hel. testâ subampliter profunde umbilicatâ, depressâ, solidâ, ferrugineo-albâ, cretaceâ, ruditer corrugato-granulatâ; spirâ eix obrotati, apice planatâ; anfractibus quatuor, planis, ad peripheriam carinatis, carinâ compresso-exsertâ et erectâ, anfracti ultimo, basi declivi-convexo; aperturâ obliquè angulato-lunari, labro reflexo.*

**THE TUNISIAN HELIX.** Shell rather largely deeply umbilicated, depressed, solid, rusty-white, chalky, rudely wrinkle-grained; spire scarcely raised, flat at the apex; whorls four, flat, keeled at the periphery, keel compressly exerted and turned up, last whorl slantingly convex at the base; aperture obliquely angularly lunar, lip reflected.

PFEIFFER, Zeitschrift für Malac. 1850, p. 70.

*Hab.* Environs of Tunis.

Though of such very different form from the preceding

December, 1854.

Australian species, there is a peculiar typical resemblance in the sculpture and substance of the shell.

Species 1401. (Mus. Cuming.)

HELIX PELLUCIDA. *Hel. testâ angustè umbilicatâ, depressâ, subtus convexâ, tenui, pellucido-corneâ, pallidè stramineâ, supra minutissimè granulatâ, infra lævigatâ, nitente; spirâ plano-convexâ, ad suturam marginatâ; anfractibus quinque, planulatis, ad peripheriam angulato-carinatis, deinde rotundatis; aperturâ angulato-lunari, labro simplici.*

THE TRANSPARENT HELIX. Shell narrowly umbilicated, depressed, convex beneath, thin, transparent-horny, light straw-colour, above very minutely granuled, beneath smooth and shining; spire flatly convex, margined at the suture; whorls five, flattened, angularly keeled at the periphery, then rounded; aperture angularly lunar, lip simple.

GOULD, Pro. Nat. Hist. Soc. Boston, U.S. 1843, p. 157.

*Hab.* West Africa.

The upper surface of this delicate straw-coloured horny shell is beautifully densely granulated throughout, but so minutely so as not to be discernible without a lens.

Species 1402. (Mus. Cuming.)

HELIX APIA. *Hel. testâ profundè umbilicatâ, depresso-conoideâ, sublenticulari, densè arcuatim striatâ, lutescente, fasciâ castaneâ angustâ interdum cingulatâ; spirâ plano-convexâ; anfractibus quinque ad sex, declivibus, ad peripheriam acutè compresso-carinatis; aperturâ obliquè securiformi, labro simplici.*

THE BEE HELIX. Shell deeply umbilicated, depressly conoid, somewhat lens-shaped, densely arcuately striated, yellowish, sometimes encircled with a narrow chestnut band; spire flatly convex; whorls five to six, slanting, sharply compressly keeled at the periphery; aperture obliquely hatchet-shaped, lip simple. HOMBROU and JACQUINOT, Voy. au Pôle Sud, pl. 7. f. 9. *Hab.* Island of Annaton, New Hebrides; Maegillivray.

A semitransparent horny shell, but of very solid substance, depressly slantingly conoid, sharply compressly keeled at the periphery, and a little excavated round the umbilicus.

Species 1403. (Mus. Cuming.)

HELIX TOMENTOSA. *Hel. testâ profundè umbilicatâ, subgloboseâ, tenui, superficie quasi tomentosa, cinnamomeâ; spirâ brevi, obtusâ; suturâ impressâ; anfractibus quinque, convexis, ultimo subinflato, circa umbilicum compresso; aperturâ rotundato-lunari, labro reflexo, carneo.*

THE WOOLLY HELIX. Shell deeply umbilicated, subglobose, thin, the surface as though woolly, cinnamon-coloured; spire short, obtuse; suture impressed; whorls five, convex, the last rather inflated, compressed round the umbilicus; aperture rotundately lunar, lip reflected, flesh-tinged.

PREIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Sarawak, Borneo.

A delicate cinnamon-coloured subglobose shell, with a rather broad flesh-tinged reflected lip and minutely hairy surface.







1404



1405 a



1405 b



1406



1407 a



1407 b



1408



1409 a



1409 b



1410

( Enlarged One Half )

# HELIX.

PLATE CC.

Species 1104. (Mus. Cuming.)

**HELIX RUFULA.** *Hel. testâ profundè umbilicatâ, condeopressâ, tenui, diaphanâ, obscurè plicato-striatâ, rufulâ aut pallidè olivaceâ, spirâ suturâ impressâ; anfractibus quatuor ad quinque, convexis; aperturâ rotundato-lunari, labro tenui, rix expanso.*

**THE REDDISH HELIX.** Shell deeply umbilicated, conoidly depressed, thin, diaphanous, obscurely plicately striated, reddish or pale olive, suture of the spire impressed; whorls four to five, convex; aperture rotundately lunar, lip thin, scarcely expanded.

PFEIFFER, *Zeitschrift für Malac.* 1849, p. 160.

*Hab.* Jamaica.

A simply convoluted horny shell, more frequently transparent olive or green than reddish.

Species 1105. (Fig. a, b, c, d, Mus. Cuming.)

**HELIX FOLINI.** *Hel. testâ minutè umbilicatâ, trochiformi, diaphanâ, nitente, albidâ vel rufulâ, filis setigeris distantibus obscurè decussatâ; spirâ acutè conicâ; suturâ tenuimarginatâ; anfractibus septem, planulatis, ultimo acutè angulato-carinato, basi convexo-tumido; aperturâ parvâ obliquâ, angulato-lunari, labro simplici, margine columellari breviter reflexo.*

**FOLIN'S HELIX.** Shell minutely umbilicated, trochus-shaped, diaphanous, shining, whitish or reddish, obscurely decussated with distant bristly threads; spire sharply conical; suture finely margined; whorls seven, flattened, the last sharply angularly keeled, convexly swollen at the base; aperture a little oblique, angularly lunar, lip simple, columellar margin shortly reflected.

MORELET, *Revue Zool. Soc. Cuvierienne*, 1848, p. 352.

Eadem var. *Helix talcosa*, Gould.

*Hab.* Princer's Island, West Africa; Folin.

A diaphanous trochiform species, curiously decussated with somewhat distant fine threads of bristles.

Species 1106. (Mus. Cuming.)

**HELIX SETUBALENSIS.** *Hel. testâ profundè prospectivè umbilicatâ, depresso-lenticulari, solidâ, confertè arcuatim lamelloso-costatâ, pallidè stramineâ, subopacâ;*

*spirâ rix elevatâ; anfractibus quatuor ad sex, planulatis, exsertis, serrulato-carinatis; aperturâ oblique securiformi, labro leviter expanso, utriusque labiato.*

**THE SETUBAL HELIX.** Shell deeply prospectively umbilicated, compressly lens-shaped, solid, closely arcuately lamella-ribbed, pale straw-colour, subopaque, spire scarcely raised; whorls five to six, flat, exserted, serrulately keeled; aperture obliquely hatchet-shaped, lip slightly expanded, edged within.

PFEIFFER, *Zeitschrift für Malac.* 1850, p. 88.

*Helix serrula*, Morelet.

*Hab.* Setubal, Portugal.

A solid lens-shaped shell, of an opaque straw-colour, curiously lamella-ribbed throughout.

Species 1107. (Mus. Cuming.)

**HELIX SINGULARIS.** *Hel. testâ sinistrâ, angustè profundè umbilicatâ, pyramidali-trochiformi, solidiusculâ, obliquè tenuistriatâ, castaneo-brunnâ; spirâ concavo-conicâ; anfractibus sex ad septem, ultimo acutè angulato-carinato, basi convexo; aperturâ perobliquè oratâ, labro expanso-reflexo, albicante, marginibus approximatis.*

**THE SINGULAR HELIX.** Shell sinistral, narrowly deeply umbilicated, pyramidally trochiform, rather solid, obliquely finely striated, chestnut-brown; spire concavely conical; whorls six to seven, the last sharply angularly keeled, convex at the base; aperture very obliquely ovate, lip expandedly reflected, whitish, with the margins approximating.

PFEIFFER, *Pro. Zool. Soc.* November, 1854.

*Hab.* Koondah Mountains, near Cabent, India.

A sharply conical deep brown shell, curiously reversed, with the aperture unusually obliquely ovate.

Species 1108. (Mus. Cuming.)

**HELIX SYSTROPHA.** *Hel. testâ prospectivè umbilicatâ, compresso-discoidi, lenticulari, nitente; spirâ planâ; suturâ carinata; anfractibus sex ad septem, angustis, ad suturâ obsolete puncto-striatis; aperturâ vix alio-lunari, parvâ, labro subreflexo.*

**THE COMPACTLY ROLLED HELIX.** Shell very largely openly umbilicated, compressly discoid, vivid horny.

shining; spire flat; suture channelled; whorls eleven, very narrow, obsoletely plicately striated; aperture vertically lunar, small, lip slightly thickened.

ALBERS, *Zeitschrift für Malac.* 1854.

*Hab.* Banks of the Marañon River, Columbia.

Singularly characterized by its numerous discoidal closely convoluted whorls.

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Species 1409. (Mus. Cuming.)

HELIX ANNATONENSIS. *Hel. testã subprofundè subperspectivè umbilicatã, depressã, pellucido-corneã, nitente;*

*spirã obtuso-convexã, unfractibus quinque, convexiusculis, infra rotundatis; aperturã obliquè lunari, labro simplici.*

THE ANNATON HELIX. Shell rather deeply subperspectively umbilicated, depressed, transparent-horny, shining; spire obtusely convex; whorls five, slightly convex, rounded beneath; aperture obliquely lunar, lip simple.

PFEIFFER, *Pro. Zool. Soc.* November, 1854.

*Hab.* Isle of Annaton, New Hebrides; Macgillivray

A transparent horny species, of simple growth, of few whorls, with a rather conspicuous umbilicus.

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1414



1415



1416



1417



1418



1419



1420



1421



1422



1423

( Enlarged 2 Diameters

# HELIX.

PLATE CCI.

Species 1410. (Mus. Cuming.)

**HELIX OLEOSA.** *Hel. testá eix umbilicatá, depressá, fusco-corneá; spirá subconvexá; anfractibus quatuor ad quinque, planulatis, infra medio subconvexis; aperturá obliquè lunari, labro simplici.*

**THE OILY HELIX.** Shell scarcely umbilicated, depressed, brownish-horny; spire slightly convex; whorls four to five, flat, rather excavated below about the middle; aperture obliquely lunar, lip simple.

PFEIFFER, Zeitschrift für Malac. 1850, p. 69.

*Hab.* Ibu, West Africa.

A small horny species, scarcely umbilicated, but rather excavated about the base.

Species 1411. (Mus. Cuming.)

**HELIX CIMEX.** *Hel. testá subnupliler apertè umbilicatá, discoideá, subtilissimè striatá, sordidè olivaceo-corneá; spirá planiusculá; suturá impressá; anfractibus quinque, convexis, lentè accrescentibus; aperturá parvâ, rotundato-lunari, labro simplici.*

**THE BUG HELIX.** Shell rather largely openly umbilicated, discoid, very finely striated, dull olive-horny; spire rather flat; suture impressed; whorls five, convex, increasing slowly; aperture small, rotundately lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. November, 1854.

*Hab.* Lord Howe's Island, New Hebrides; Cuming.

A minute dull horny species, simply convoluted, with a rather open umbilicus.

Species 1412. (Mus. Cuming.)

**HELIX PERROTTETI.** *Hel. testá rix umbilicatá, depressá, pellucido-corneá, nitente; spirá brevissimè subturbinatá; anfractibus quinque, declivi-convexis, basi subdepressis; aperturá verticali-lunari, labro simplici.*

**PERROTTET'S HELIX.** Shell scarcely umbilicated, depressed, transparent-horny, shining; spire very shortly subturbinated; whorls five, slantingly convex, rather depressed at the base; aperture vertically lunar, lip simple.

PFEIFFER, Pro. Zool. Soc. November 1854.

*Hab.* Neilgherry Hills, India; Perrottet.

Distinguished by a flat gently turbinate spire and rather flattened base.

Species 1413. (Mus. Cuming.)

**HELIX PINICOLA.** *Hel. testá late perspectiveè umbilicatá, depressá, densè costulato-striatá, oleo-fuscescente, lineis rufis acutè undatis pictâ, maculisque rufis juxta suturam; spirá planá; suturá impressá; anfractibus quinque, convexis; aperturá lunato-circulari, labro simplici, marginibus approximatis.*

**THE ISLE OF PINES HELIX.** Shell broadly perspectiveè umbilicated, depressed, densely rib-like striated, yellowish-brown, painted with sharply zigzag red lines, and red blotches next the suture; spire flat; suture impressed; whorls five, convex; aperture lunar-circular, lip simple, margins approximating.

PFEIFFER, Pro. Zool. Soc. November 1854.

*Hab.* Isle of Pines, Australian Seas; Macgillivray.

A subdiscoid largely umbilicated shell, densely sculptured with rib-like striae, and conspicuously painted with red zigzag lines and spots.

Species 1414. (Mus. Cuming.)

**HELIX PROSERPINULA.** *Hel. testá perforatá, depressá, pellucido-citréâ, circoscenti-labrá, nitente; spirá convexo-planatá; anfractibus quatuor ad quinque, declivi-convexis, infra excavatis; aperturá diagonali, obliquè lunari, labro simplici.*

**THE PROSERPINA-LIKE HELIX.** Shell imperforated, depressed, transparent glassy, greenish-yellow, shining; spire convexly flattened; whorls four to five, slantingly convex, excavated beneath; aperture diagonal, obliquely lunar, lip simple.

PFEIFFER, Zeitschrift für Malac. 1851, p. 128.

*Proserpina discoides*, Adams.

*Hab.* Jamaica.

A somewhat glassy horny species, with the lower margin of the aperture running diagonally, as in *Proserpinula*, to the seat of the columella.

Species 1415. (Mus. Cuming.)

**HELIX LGINULA.** *Hel. testá vix umbilicatá, depressá,*



*subglobosá, lutescenti-corneá, nitente; spirá parum elevatá; anfractibus quatuor ad quinque, declivi-convexis, basi subplanulatis; aperturá obliquè lunari, labro simplici.*

THE DISTRESSED HELIX. Shell minutely umbilicated, depressly subglobose, yellowish-horny, shining; spire but little raised; whorls four to five, slantingly convex, rather flat at the base; aperture obliquely lunar, lip simple.

MORELET, Revue Zool. Soc. Cuvierienne, 1841, p. 351.

*Hab.* Senegal.

A subtransparent yellowish-horny shell, minutely umbilicated.

Species 1416. (Mus. Cuming.)

HELIX PETRONELLA. *Hel. testá angustè apertè umbilicatá, supernè distinctè et confertim plicatulá, virenti-hyalinú; spirá convexiusculá; suturá impressá, submarginatá; anfractibus quatuor, planiusculis, ultimo depressè rotundato; aperturá parum obliquá, lunato-rotundatá, labro simplici.*

THE PETRONELLA HELIX. Shell narrowly openly umbilicated, distinctly and closely plicated at the upper part, greenish-hyaline; spire rather convex; suture impressed, slightly margined; whorls four, rather flat, the last depressly rounded; aperture a little oblique, lunar-rounded, lip simple.

CHARPENTIER, MSS. Pfeiffer, Mon. Helic. viv. vol. iii. p. 95.

*Hab.* On the summit of the Swiss Alps.

A minute horny species, of extremely rare occurrence.

Species 1417. (Mus. Cuming.)

HELIX INFANS. *Hel. testá vix umbilicatá, depresso-sub-*

*globosá, solidulá, lævigatá, nitente, corneá, spirá convexá; suturá subimpressá et distinctè marginatá; anfractibus quinque, convexiusculis; aperturá obliquè lunari, labro simplici, rufulo.*

THE INFANT HELIX. Shell scarcely umbilicated, depressly subglobose, rather solid, smooth, shining, horny; spire convex, with a suture rather impressed and distinctly margined; whorls five, slightly convex; aperture obliquely lunar, lip simple, reddish.

PFEIFFER, Pro. Zool. Soc. November 1854.

*Hab.* Sarawak, Borneo.

A depressly globose horny shell, with a finely margined suture.

Species 1418. (Mus. Cuming.)

HELIX COSTULIFERA. *Hel. testá ampliter apertè umbilicatá, depresso-discoideá, densè arcuatim costellato-striatá, fuscescente, rufo maculatá et strigatá; spirá planá; anfractibus quinque, parum convexis, ultimo ad peripheriam obsolete angulato, basi planato; aperturá fere circulari, labro simplici, marginibus approximatis.*

THE FINELY-RIBBED HELIX. Shell largely openly umbilicated, depressly discoid, densely arcuately rib-like striated, brownish, spotted and streaked with red, spire flat; whorls five, but little convex, the last obsoletely angled at the periphery, flat at the base; aperture nearly circular, lip simple, margins approximating.

PFEIFFER, Pro. Zool. Soc. November 1854.

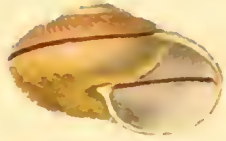
*Hab.* Isle of Pines, Australian Seas; Macgillivray

Of the same peculiar type as *H. Pinicola*, from the same locality, more flatly compressed.





119



120



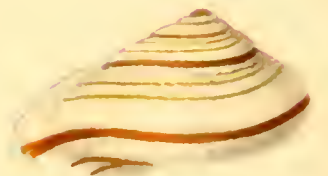
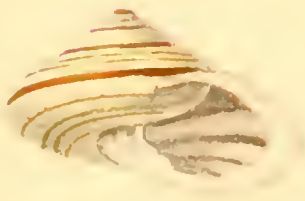
121



122



123



# HELIX.

PLATE CCII.

Species 1419. (Mus. Cuming.)

**HELIX PARADOXA.** *Hel. testā imperforatā, globoso-depressā, obliquè ruguloso-striatā, virescenti-flavā, apice nigro-violaceā, arcū columellari saturatè castaneā; anfractibus quinque, pluriusculis, ultimo irregulari, lateraliter compressā; aperturā lunari-ellipticā, labro albo, latè reflexo, margine basali appressè tuberculato.*

**THE PARADOXICAL HELIX.** Shell imperforated, globosely depressed, obliquely rugulosely striated, greenish-yellow, black-violet at the apex, columellar area dark chestnut; whorls five, rather flat, the last irregular, rather compressed at the side; aperture lunar-elliptic, lip white, broadly reflected, basal margin appressly tuberculated.

PFEIFFER, Pro. Zool. Soc. 1845, p. 39.

*Hab.* Island of Luzon, Philippines; Cuming.

A solid pale yellowish-green shell, distinguished by a blackish-violet apex, and by the presence of a dark chestnut blotch in the region of the columella.

Species 1420. (Mus. Cuming.)

**HELIX CEYLANICA.** *Hel. testā rix umbilicatā, subgloboso-depressā, supernè granulato-decussatā, diaphanā, parum nitidā, rubello-corneā, infra lævigulā, nitente, pallidè olivaceā, ad peripheriam lineā castaneā vinctulā; anfractibus quatuor ad quinque, convexis; aperturā obliquè lunari, labro simplici, ad columellam breviter reflexo.*

**THE CEYLON HELIX.** Shell scarcely umbilicated, subglobosely depressed, granulated decussated at the upper part, diaphanous, but little shining, reddish-horny, smooth and shining, pale olive beneath, encircled round the periphery with a single chestnut line; whorls four to five, convex; aperture obliquely lunar, lip simple, shortly reflected at the columella.

PFEIFFER, Zeitschrift für Malac. 1850, p. 67.

*Hab.* Ceylon.

Arranged by Dr. Pfeiffer as a variety of *H. histrialis*, but subsequently separated by him from that species.

Species 1421. (Mus. Cathcart.)

**HELIX TRIUMPHALIS.** *Hel. testā imperforatā, globoso-turbinitā, obliquè irregulariter plicat-striatā, albā,*

*fasciis tribus latis castaneo-brunneo-cinereis, quæ a inferiore ad basin diffusæ; anfractibus quinque, ad apicem convexiusculis, ultimo autè paululè reflexo; aperturā obliquè lunari, labro albo, latè reflexo, margine columellari calloso, latè appresso.*

**THE TRIUMPHANT HELIX.** Shell imperforated, globosely turbinated, obliquely irregularly plicately striated, white, encircled with three broad chestnut-brown bands, of which the lower over-spreads the base, whorls five to six, rather convex, the last a little deflected in front; aperture obliquely lunar, lip white, broadly reflected, columellar margin callous, broadly appressed.

*Hab.* — ?

A fine new and unique species, in the collection of the Hon. Mrs. Macadam Cathcart.

Species 1422. (Mus. Taylor.)

**HELIX PRINCEPS.** *Hel. testā imperforatā, oblongo-turbinatā, solidā, lunuliusculā, tenuissimè ruguloso-striatā, flavicautè, apice purpuriscentè, epidermide tenui hydrophanā indutā; aperturā lunato-ovali, labro tenui reflexo, margine columellari appresso-tuberculato, calloso, striatè.*

**THE PRINCE HELIX.** Shell imperforated, oblong-turbinated, solid, rather swollen, very finely rugulosely striated, yellowish, purple at the apex, covered with a slight hydrophanous epidermis; aperture lunar-oval, lip thinly reflected, columellar margin appressly tubercled, callous, drawn out.

*Hab.* — ?

This shell, collected by Sir Edward Belcher in the voyage of the Samarang, is probably from one of the Philippine Islands. It is allied to *H. ceylanica*, but of a more decided oblong-turbinated form, with the columellar margin more appressly callously drawn out.

Species 1423. (Mus. Taylor.)

**HELIX AMPULLARIOIDES.** *Hel. testā excavatè subgloboso-umbilicatā, simpliciter, depresso-globosā, tenuissimè, irregulariter striatā, bruno-nerè; spirā obtusè depressā; anfractibus quinque, convexis; aperturā lunato-columellari, labro simplici, margine basali appresso-tuberculato, calloso, tenuissimè ciliatè-junctis.*

THE AMPULLARIA-LIKE HELIX. Shell excavately rather narrowly umbilicated, sinistral, depressly globose, rather thin, irregularly striated, livid ash; spire obtusely depressed; whorls five, convex; aperture lunar-circular, lip simple, margins approximating, joined by a very thin callous lamina.

*Hab.* Neilgherry Hills; Jerdon.

A fine reversed species, with very much the aspect of *Ampullaria perversa*, collected at the above locality by Dr. Jerdon.

Species 1424. (Mus. Taylor.)

HELIX SPECTRUM. *Hel. testâ perangustè umbilicatâ, plano-conoideâ, basi latè depressâ, arcuatim tenuistriatâ, albâ, fasciâ angustâ centrali lineisque perpaucis remotis castanea-rufis cingulatâ; spirâ brevi, apice subacutâ; anfractibus quinque, convexo-declivibus, obsolete carinatis, ultimo anticè deflexo, ad aperturam obliquè producto; aperturâ lunato-ellipticâ, fauce nitente-albâ, labro ampliter expanso-reflexo, margine columellari suberecto, ad umbilicum calloso et latissimè dilatato-appresso.*

THE SPECTRE HELIX. Shell very narrowly umbilicated, flatly conoid, broadly depressed at the base, areately finely striated, white, encircled with a narrow chestnut-red band and a few distant lines; spire short,

rather sharp at the apex; whorls five, convexly slanting, obsolete keeled, last whorl a little deflected in front, obliquely produced at the aperture; aperture lunar-elliptic, shining white within, lip largely expandedly reflected, columellar margin suberect, callous, and very broadly dilately appressed at the umbilicus.

*Hab.* — ?

A delicately pencilled and very characteristic species, perfectly distinct from any other of the genus, from the collection of Thomas Loube Taylor, Esq.

Species 1425. (Mus. Taylor.)

HELIX OVI-VITELLUS. *Hel. testâ rix umbilicatâ, depresso-conoideâ, obliquè ruguloso-striatâ, roseo-vitellinâ, nitente, ad suturas albidâ; spirâ obtusâ; anfractibus quinque, convexo-declivibus, ad suturas tenuè marginatis; aperturâ lunari, labro simplici.*

THE EGG-YELK HELIX. Shell scarcely umbilicated, depressly conoid, obliquely rugulose-striated, rose-yelk, shining, whitish at the sutures; spire obtuse; whorls five, convexly slanting, finely margined at the sutures; aperture lunar, lip simple.

*Hab.* Amboyna.

This shell also appears to be distinct from any hitherto described species.



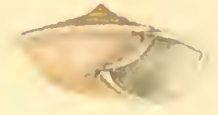




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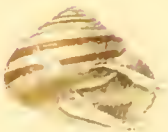
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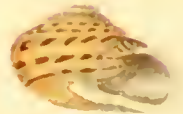
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# HELIX.

PLATE CCIII.

Species 1426. (Mus. Cuming.)

**HELIX EXTENSA.** *Hel. testā imperforatā, subglobosā, densè plicato-striatā, sub epidermide deciduā fulvescente-albā, interdum diaphano-albā; spirā brevi, obtusā; anfractibus quatuor, planulatis, ultimo convexo, inflato, ad aperturam obliquè extenso; aperturā lunato-orali, tenuè reflexā, ad columellam subcallosā.*

**THE DRAWN-OUT HELIX.** Shell imperforated, subglobose, densely plicately striated, fulvous white beneath a deciduous epidermis, sometimes diaphanous white; spire short, obtuse; whorls four, rather flat, the last convex, inflated, obliquely drawn out at the aperture: aperture lunar-oval, thinly reflected, rather callous at the columella.

MULLER, Vermes, vol. ii. p. 60.

*Hab.* Moluccas.

A light, rather inflated shell, with the last whorl obliquely enlarged at the aperture.

Species 1427. (Mus. Cathcart.)

**HELIX CATHCARTI.** *Hel. testā ampliter excavatè umbilicatā, plano-orbiculari, depressissimā, arcuatim ruguloso-striatā, rubello-corneā; anfractibus sex, supernè planatis, ad suturas tenuimarginatis, ad peripheriam acutè compressè carinatis, infra convexis; aperturā compressè securiformi, labro simplici.*

**CATHCART'S HELIX.** Shell largely excavately umbilicated, flatly orbicular, very depressed, arcuately rugulose-striated, reddish-horny; whorls six, flat at the upper part, finely margined at the sutures, sharply compressly keeled at the periphery, convex beneath; aperture compressly hatchet-shaped, lip simple.

*Hab.* Island of Typisan, Meiacoshimas.

This interesting species, distinctly intermediate in its characters between *H. Muckensii* and *horionphala*, I have the pleasure of naming after the Hon. Mrs. Macadam Cathcart, by the aid of whose specimen I have been able to identify other specimens collected by Sir Edward Becher, in the Samarang, and now in Mr. Cuming's cabinet.

Species 1428. (Mus. Cathcart.)

**HELIX MERA.** *Hel. testā rix umbilicatā, depressè orbiculari, corneā, subdiaphanā, arcuatim ruguloso-striatā,*

*epidermide tenuissimā olivaceā; spirā plano-convexā, anfractibus quinque, acutè carinatis, infra convexo-tumidis; aperturā angulato-lunari, labro simplici, ad columellam brevissimè reflexo.*

**THE PLAIN HELIX.** Shell scarcely umbilicated, depressly orbicular, horny, subdiaphanous, arcuately rugulose-striated, with a very thin olive epidermis. spire flatly convex; whorls five, sharply keeled, convexly tumid beneath; aperture angularly lunar. lip simple, very shortly reflected at the columella.

*Hab.* — ?

Of somewhat similar texture to the preceding species, more tumid below the periphery, and only minutely umbilicated.

Species 1429. (Mus. Taylor.)

**HELIX CROMYODES.** *Hel. testā imperforatā, depressoglobosā, tenuissimā, semipellucidā, olivaceo-fulvā aut rirescente, ad apicem et suturas purpurascente, fasciā angustā epidermidis hydrophane intridua ad peripheriam cingulatā; spirā obtusā; anfractibus quatuor, ultimo sub amplo, inflato; aperturā lunato-orali, labro tenuè reflexo, purpurascente.*

**THE ONION-LIKE HELIX.** Shell imperforated, depressly globose, very thin, semi-transparent, olive-fulvous or greenish, purple at the apex and in the sutures, sometimes encircled at the periphery with a yellow band of hydrophanous epidermis; spire obtuse. whorls four, the last rather large and inflated; aperture lunar-oval, lip thinly reflected, purplish.

PFEIFFER, Pro. Zool. Soc. 1842, p. 150.

*Hab.* Misamis, Island of Mindanao, Philippines; Cuming

This species, which I formerly regarded as a variety of *H. coccomelus*, I now believe to be distinct. It is of lighter structure, and uniformly of a more depressly inflated form.

Species 1430. (Mus. Cuming)

**HELIX BUSCHI.** *Hel. testā imperforatā, globosè conoidi tenuissimè striatā, carneiscenti-albā et spaliceso-citrinā; anfractibus quinque ad sex, plano-convexis, aperturā retusate-lunari, labro tenuè reflexo, margine carinulari recta, subnulla.*

**BUSCH'S HELIX.** Shell imperforated, globosely conoid,

very finely striated, blue-white or fawn-yellow; whorls five to six, flatly convex; aperture rotundately lunar, lip thinly reflected, columellar margin straight and rather callous.

PFEIFFER, Pro. Zool. Soc. 1845, p. 126.

*Hab.* Island of Mindoro, Philippine Islands.

Collected in large quantities by Captain Sir Edward Belcher, in the voyage of the *Samarang*.

Species 1431. (Mus. Cuming.)

HELIX CECILLEI. *Hel. testā subampliter profundè umbilicatā, orbiculari, tumidiusculā, arcuatim densè striatā, et granulatā, fulvo-fuscā, fasciis duabus castaneis cingulatā; spirā obtusè convexā; anfractibus sex, ultimo rotundato, anticè paululum deflexo; aperturā rotundato-lunari, labro sublatè reflexo, purpurascente, marginibus approximatis.*

CECILLE'S HELIX. Shell rather largely deeply umbilicated, orbicular, rather tumid, arcuately densely striated, and granulated, fulvous-brown, encircled with two chestnut bands; spire obtusely convex; whorls six, the last rounded, a little deflected in front; aperture rotundately lunar, lip rather broadly reflected, purplish, with the margins approximating.

PHILIPPI, Zeitschrift für Malac. 1849, p. 82.

*Hab.* Tien Tong, China; Admiral Cecille.

This fine species was collected in the China Seas by Captain Sir E. Belcher and by the above-named Admiral of the French Navy about the same time.

Species 1432. (Mus. Cuming.)

HELIX CONSTRICTA. *Hel. testā imperforatā, semiglobosā, solidā, obliquè striatā, striis spiralibus minutissimis decussatā, flavicante-albā, fasciis duabus fuscis cingulatā; anfractibus quatuor ad quinque, convexis, ultimo ad basin subexcavatè planato, anticè su-*

*bito deflexo, constricto, aperturā subcirculari-lunari, labro expanso-reflexo, marginibus approximatis, labio calloso.*

THE CONSTRICTED HELIX. Shell imperforated, semiglobose, solid, obliquely striated, decussated with very minute spiral striae, yellowish-white, encircled with two light-brown bands; whorls four to five, convex, the last rather excavately flattened at the base, suddenly deflected in front, and drawn out, aperture rather contractedly lunar, lip expandedly reflected, margins approximating, basal margin callous.

PFEIFFER, Pro. Zool. Soc. 1845, p. 39.

*Hab.* Island of Mindoro, Philippines; Cuming.

Chiefly distinguished by its simple belt of two light-brown bands, one above the periphery and the other below it.

Species 1433. (Mus. Cuming.)

HELIX MINORICENSIS. *Hel. testā imperforatā, orbiculato-convexā, albidā vel lutescente, fasciis fuscis plus minus undato-interruptis cingulatā; anfractibus quinque, plano-convexis, ultimo anticè deflexo; aperturā subquadrato-lunari, rix reflexo, intus labiato, marginibus subapproximatis, columellari calloso-dilatato.*

THE MINORCA HELIX. Shell imperforated, orbicularly convex, whitish or yellowish, encircled with more or less zigzag interrupted brown bands; whorls five, slightly convex, the last deflected in front; aperture somewhat squarely lunar, scarcely reflected, edged within, margins rather approximated, columellar margin callously dilated.

MITTRE, Annales des Sci. Nat. vol. xviii. p. 188.

*Hab.* Island of Minorca.

Of the true European type, encircled with close-set broad brown bands, broken more or less with zigzag marks of the yellow ground.





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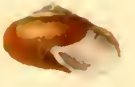
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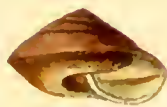
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# HELIX.

PLATE CCIV.

Species 1434. (Mus. Cuming.)

**HELIX ARGENTEA.** *Hel. testâ ex umbilicatâ, acutè conicâ, minutissimè decussatim striatâ, carnâ, vividè castaneâ, fasciâ tenui argentiâ epidermoideâ ad peripheriam anfractuum latè cingulatâ; spirâ subobtusâ; anfractibus quinque, concavo-planulis, ad peripheriam acutè angulato-carinatis; aperturâ subsecuriformi, labro simplici.*

**THE SILVERY HELIX.** Shell scarcely umbilicated, sharply conical, very minutely decussately striated, horny, bright chestnut, broadly encircled at the periphery of the whorls with a thin silvery band of epidermis. Spire rather obtuse; whorls five, concavely flattened, sharply angularly keeled at the periphery; aperture somewhat hatchet-shaped, lip simple.

*Hab.* Mauritius; Barelây.

A light sharply conical species, of bright chestnut-horny substance, encircled about the periphery, and in some specimens almost wholly enveloped with a thin silvery epidermis-like deposit, distinct in character from any hitherto recorded species. Received from Sir David Barelây, of Port Louis, Mauritius.

Species 1435. (Mus. Cuming.)

**HELIX SINAITENSIS.** *Hel. testâ perampliter excavato-umbilicatâ, orbiculato-concavâ, arcuatim densè striatâ, striâ elevatâ; spirâ obtusâ, acutè marginatâ; anfractibus septem, concavo-declivibus, ad peripheriam acutè carinatis; aperturâ angulato-lunari, labro simplici.*

**THE SINAIT HELIX.** Shell very largely excavately umbilicated, orbicularly convex, arcuately densely striated, striae raised; spire obtuse, finely margined; whorls seven, convexly slanting, keeled at the periphery; aperture angularly lunar, lip simple.

*PREIFFER, Pro. Zool. Soc. 1845, p. 129.*

*Hab.* Sinait, Province of Ilocos, Island of Luzon, Philippines; Cuming.

Singularly distinguished by its very large and deeply excavated umbilicus.

Species 1436. (Mus. Cuming.)

**HELIX DESHUTTA.** *Hel. testâ subglobosè perampliter umbilicatâ, globosè-depressâ, arcuatim densè striatâ, striâ*

*elevatâ, carnâ, a fractibus quinque, rotundis, aperturâ lunari, labro simplici.*

**THE DEHUTTE HELIX.** Shell rather largely deeply umbilicated, globose-depressed, finely striated, opake white, apex obtuse, horny, whorls five, rounded, aperture obliquely circular, lip simple.

*CHARPENTIER, Pfeiffer, Monog. Helv. vol. iii. p. 130.*

*Hab.* Abruzzi Mountains, Italy.

A simple globosely turbated opake blue-white shell with a rather conspicuous umbilicus.

Species 1437. (Mus. Saut.)

**HELIX FILICOSTA.** *Hel. testâ subglobosè umbilicatâ, impresso-globosâ, regulariter fuscâ striatâ, carnâ, fasciâ rufâ dilatâ tenui cingulatâ; anfractibus quatuor ad quinque, concavis, utrinque a latè subinflatis; aperturâ lunari-circulari, labro expanso, margine incrassato, marginibus approximatis, columella peripheriâ castaneo-rosâ tinctâ.*

**THE THREAD-RIBBED HELIX.** Shell with a nearly covered umbilicus, depressly globose, regularly thread-ribbed, flesh-white, encircled with a faint reddish band and lines; whorls four to five, convex, the last suddenly deflected in front; aperture lunar-circular, lip expanded, thickened inwardly, margins approximating, columella stained with light chestnut-rose.

*PREIFFER, Pro. Zool. Soc. 1845, p. 73.*

*Hab.* — ?

Beautifully sculptured throughout after the manner of some of the smaller species of *Succinea*, with the sub-transarcuate thread-like ribs.

Species 1438. (Mus. Taylor.)

**HELIX PITYOSESICA.** *Hel. testâ subglobosè umbilicatâ, impresso-globosâ, regulariter fuscâ striatâ, carnâ, fasciâ rufâ dilatâ tenui cingulatâ; anfractibus quatuor ad quinque, concavis, utrinque a latè subinflatis; aperturâ lunari-circulari, labro expanso, margine incrassato, marginibus approximatis, columella peripheriâ castaneo-rosâ tinctâ.*

**THE PITYOSESIC HELIX.** Shell with a covered umbilicus, globosely turbated, rather solid, spirally green-striated dull fives, enclosed with a narrow reddish band; spire rather obtuse, whorls five, convex, the



last suddenly deflected in front; aperture oblong-lunar, horizontal, lip callously reflected, with the margins rather approximating.

PFEIFFER, Zeitschrift für Malac. 1854, p. 156.

*Hab.* — ?

A solid groove-striated shell, with a covered umbilicus, and callously reflected lip.

Species 1439. (Mus. Taylor.)

HELIX CORYLUS. *Hel. testā rix umbilicatā, convexo-depressā, infra concaviusculā, olivaceo-castaneā, subcorneā, densè subtiliter costellato-striatā; spirā obtusā, suturā impressā; anfractibus quinque; aperturā latè lunari, labro simplici.*

THE NUT HELIX. Shell scarcely umbilicated, convexly depressed, rather concave beneath, olive-chestnut, somewhat horny, densely finely rib-striated; spire obtuse, with the suture impressed; whorls five; aperture broadly lunar, lip simple.

*Hab.* Ceylon; Dr. Gardner.

An olive-chestnut horny shell, of rather solid growth, densely finely rib-striated throughout, with scarcely any umbilicus.

Species 1440. (Mus. Taylor.)

HELIX VIRGATA. *Hel. testā subangustè excavato-umbilicatā, depresso-orbiculari, corneā, supra sordidè olivaceā et densè costellato-striatā, infra virescente-olivaceā, politissimā, fasciā angustā rufā infra peripherium, et circa umbilicum rufā; spirā subobtusā; anfractibus sex, declivi-convexis, medio angulato-carinatis; aperturā latè lunari, labro rix incrassato.*

THE STRIPED HELIX. Shell rather narrowly excavately umbilicated, depressly orbicular, horny, dirty-olive and densely rib-striated above, greenish-olive, highly polished below, with a narrow red band beneath the periphery, and red about the umbilicus; spire rather obtuse; whorls six, slantingly convex, angularly keeled in the middle; aperture broadly lunar, lip slightly thickened.

SOWERBY, Moll. Beechey's Voyage of the Blossom, p. 144, pl. 38, f. 9.

*Hab.* — ?

A solid, though transparent horny shell, of which the upper and lower portions present a characteristic contrast, one dull and roughly rib-striated, the other bright, smooth, and shining.

Species 1441. (Mus. Cuming.)

HELIX VILIS. *Hel. testā subangustè profundè umbilicatā, depresso-globosā, granuloso-striatā, corneā; spirā brevis; anfractibus quinque, convexis, ultimo anticè deflexo; aperturā circulari, labro subexpanso, intus calidè labiato, marginibus fere approximatis.*

THE WORTHLESS HELIX. Shell rather narrowly deeply umbilicated, depressly globose, granulously striated, horny; spire short; whorls five, convex, the last deflected in front; aperture circular, lip a little expanded, strongly edged within, margins nearly approximating.

PFEIFFER, Pro. Zool. Soc. 1851.

*Hab.* — ?

A depressly globose dull horny species, with a very circular white-rimmed aperture.

Species 1442. (Mus. Cuming.)

HELIX ERICLORUM. *Hel. testā apertè subperspectivè umbilicatā, depressā, tenuistriatā, albidā aut pallidè fuscescente, fusco variè fasciatā et lineatā; spirā planatā; anfractibus quinque, supra planatis, infra rotundatis, ultimo subdeflexo; aperturā ferè circulari, labro simplici.*

THE HEATH HELIX. Shell openly subperspectively umbilicated, depressed, finely striated, whitish or light brown, variously banded and lined with brown, spire flattened; whorls five, flat above, rounded below, last whorl a little deflected; aperture nearly circular, lip simple.

MULLER, Vermes, vol. ii. p. 33.

*Helix striata*, Muller.

*Helix nivea*, Gmelin.

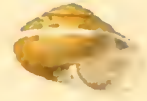
*Helix albella*, Pennant.

*Helix erica*, Da Costa.

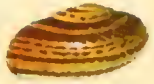
*Hab.* Europe.

This well-known species is mainly distinguished from the equally common *H. virgata* by its larger umbilicus.





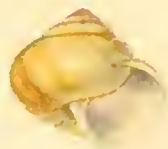
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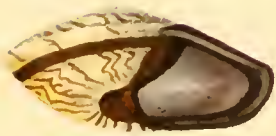
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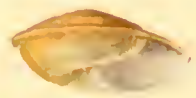
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# HELIX.

PLATE CCV.

Species 1443. (Mus. Brit.)

**HELIX PHILLIPI.** *Hel. testâ imperforatâ, subgloboso-depressâ, tenui, tranè rugatâ, nitidâ, pallidè corneâ, pellucidâ, maculis viridibus irregulariter aspersâ; spirâ parum elevatâ, obtusâ; anfractibus quinque, planiusculis, ultimo basi convexiusculo, medio fasciâ angustâ albâ cingulatâ, subincrassatâ; aperturâ lunari, labro simplici; columellâ breviter arcuatâ.*

**THE PHILLIP ISLAND HELIX.** Shell imperforated, subglobosely depressed, thin, slightly wrinkled, shining, pale horny, transparent, irregularly sprinkled with green spots; spire but little raised, obtuse; whorls five, rather flat, then slightly convex at the base, encircled round the middle with a narrow white band; aperture lunar, lip simple; columella shortly arched, rather thick.

GRAY, Pro. Zool. Soc. 1834, p. 65.

*Hab.* Phillip Island, Australia; Cunningham.

An opaque yellowish-horny shell, encircled with a narrow whitish central band, and spotted promiscuously with curiously irregular dusky green spots.

Species 1444. (Mus. Brit.)

**HELIX SINCLAIRI.** *Hel. testâ latè umbilicatâ, depressâ, tenui, regulariter et confertim costulato-striatâ, fulvo-flavâ, lineis rufis interruptis multifasciatâ; spirâ planulatâ; anfractibus quatuor, planulatis, suturâ lævibus, disjunctis, ultimo depresso, anticè valdè deflexo; aperturâ perobliquâ, lunato-ovali, labro simplici, marginibus approximatâ.*

**SINCLAIR'S HELIX.** Shell broadly umbilicated, depressed, thin, regularly and closely rib-striated, fulvous-yellow, banded with numerous interrupted red lines; spire rather flat; whorls four, flat, smooth and disjoined at the suture, the last depressed, very much deflected in front; aperture very oblique, lunar-oval, lip simple, with the margins approximating.

PFEIFFER, *Zeitschrift für Malac.* 1845, p. 134.

*Hab.* Van Diemen's Land; Dr. Sinclair. Sarah Island; Milligan.

A bright green horny shell, encircled with dot-interrupted chestnut lines and bands; but chiefly remarkable for its beautiful close-set ribbed sculpture.

Species 1445. (Mus. Brit.)

**HELIX DESPECTA.** *Hel. testâ angustè umbilicatâ, subglobosâ, tenui, rugoso-striatâ, flavido-fuscâ; spirâ pau-*

*lulum elatâ; suturâ profundâ; anfractibus quinque, convexis, ultimo inflato; aperturâ ampliâ, lunato-rotundatâ, labro simplici, intus subincrassato, marginè columellari dilatato-reflexo, umbilicum semiocculante.*

**THE DESPISED HELIX.** Shell narrowly umbilicated, subglobose, thin, roughly striated, yellowish-brown; spire a little raised; suture deep; whorls five, convex, the last inflated; aperture large, lunar-rounded, lip simple, slightly thickened within, columellar margin dilately reflected at the upper part, half-covering the umbilicus.

GRAY, *Zool. Beechey's Voyage*, p. 143. pl. 38. f. 5.

*Hab.* — ?

A light straw-coloured horny species, of globose form and rather solid structure.

Species 1446. (Mus. Brit.)

**HELIX FULGURATA.** *Hel. testâ mediocriter umbilicatâ, depressâ, acutè carinatâ, lineis confertis regulariter decussatâ, nitidâ, fulvescente-albâ, lineis rufis elegantissimè fulguratâ; spirâ subplanulatâ; anfractibus quatuor, planulatis, ultimo subtilis fasciâ unicâ rufâ ornato, basi inflato, circa umbilicum angustè infundibuliformem angulato; aperturâ subtriangulari, utente-lividâ, labro castaneo, marginibus callo castaneo introrsum diffuso junctis, supèro subexpanso, basali reflexo, cum columellari brevi, obliquo, angulum obtusum formante.*

**THE LIGHTNING-MARKED HELIX.** Shell moderately umbilicated, depressed, sharply keeled, regularly decussated with close-set lines, shining, yellowish-white, very elegantly zigzag-marked with yellowish lines, spire rather flat; whorls four, flat, the last ornamented beneath with a single red band, inflated at the base, angled around the umbilicus, which is narrowly funnel-shaped; aperture somewhat triangular, shining livid, lip chestnut, margins joined by a chestnut callosity diffused inwardly, upper margin slightly expanded, basal reflected, with the columellar margin short and oblique, forming an obtuse angle.

SOWERBY, *Malac. and Conch. Mag.* vol. i. p. 47.

*Hab.* — ?

This very remarkable shell, of which the peculiar form and colouring is well represented in the accompanying figures, has been for many years in the collection of the British Museum, no one knowing from whence it has come or from whom it was procured. No other specimen has been seen.

## Species 1447. (Mus. Brit.)

**HELIX YULEI.** *Hel. testâ umbilicatâ, depresso-globosâ, solidâ, obliquè striatulâ, parum nitente, falcâ, zonis latâ nigricantibus ornata; spirâ subconoidâ, apice subobtusâ; anfractibus quinque, convexiusculis, ultimo anticè descendenti, peripheriâ rotundato, basi planiusculo, umbilico infanlibuliformi, saturatè castaneo; aperturâ ferè du-gmali, lunato-subcirculari, labro nigro, marginibus convergentibus, latè expansis, columellari dilatato.*

**YULE'S HELIX.** Shell umbilicated, depressly globose, solid, obliquely finely striated, but little shining, fulvous, ornamented with broad blackish zones; spire subconoid, rather obtuse at the apex; whorls five, rather convex, the last descending in front, rounded at the periphery, rather flat at the base, umbilicus funnel-shaped, dark chestnut; aperture almost diagonal, lunar-subcircular, lip black, margins approximating, broadly expanded, columellar margin dilated.

FORBES, Voy. Rattlesnake, Appendix, p. 377. pl. 2. f. 6.  
*Hab.* Port Molle, Australia; Macgillivray.

A dark purple-chestnut banded shell, allied to *H. Fraseri*.

## Species 1448. (Mus. Brit.)

**HELIX BRUMERIENSIS.** *Hel. testâ imperforatâ, globoso-conicâ, solidulâ, sub lente subtilissimè granulata, opaco-albâ; anfractibus quatuor, convexiusculis, ultimo anticè subdeflexo, peripheriâ subangulato, basi planiusculo, pone labrum strigâ latâ nigrâ ornato; aperturâ ovato-oblongâ, labro nigro, marginibus approximatis, callo tenui junctis, dextro sinuoso, latè expanso, basali reflexo, ad columellam dilatato, appresso.*

**THE BRUMER ISLAND HELIX.** Shell imperforated, globose-conical, rather solid, very finely granulated beneath the lens, opake-white; whorls four, rather convex, the last a little deflected in front, slightly angled at the periphery, rather flat at the base, ornamented with a broad black streak behind the lip; aperture ovately oblong, lip black, margins approximating, joined by a thin callosity, right margin sinuous, broadly expanded, basal reflected, dilated and appressed at the columella.

FORBES, Voy. Rattlesnake, Appendix, p. 375. pl. 2. f. 1.  
*Hab.* Bruner Island, near New Guinea.

Of a delicate pale straw-colour, intensely stained about the lip and its immediate vicinity with jet purple-black.

## Species 1449. (Mus. Brit.)

**HELIX LOUISIADENSIS.** *Hel. testâ imperforatâ, tenuiusculâ, obliquè striatulâ et obsolete granulata, carosâ, strigis latâ rufescentibus albido-carinatis ornata; spirâ conoidâ, acutiusculâ; anfractibus quatuor et quinque, viz convexiusculis, ultimo convexo, basi et basi fuscis latâ albidis signato, anticè obliquo, per aperturam perobliquam subtrigona restrictâ, labro nigro, margine dextro sinuoso, expanso, basali reflexo, versus columellam planato.*

**THE LOUISIADE HELIX.** Shell imperforated, trochus-shaped, rather thin, obliquely finely striated and obsolete granuled, flesh-tinted, ornamented with broad reddish streaks, variegated with white; spire conoid, rather sharp; whorls four to five, slightly convex, the last more convex, marked round the middle and at the base with broad whitish bands, deflected in front, constricted behind the aperture, which is very oblique and somewhat square, lip black, right margin sinuous, expanded, basal margin reflected, flattened towards the columella.

FORBES, Voy. Rattlesnake, Appendix, p. 376. pl. ii. f. 5.  
*Hab.* Louisiade Archipelago, Australia; Macgillivray.

Allied to preceding species in form, light purple-tinged, mottled and banded with opake-yellow, with the lip dark stained with purple.

## Species 1450. (Mus. Brit.)

**HELIX DIVISA.** *Hel. testâ umbilicatâ, perdepressâ, tenuiusculâ, superne obliquè striatâ, lineis impressis obsolete decussatâ, rubello-furvidâ; spirâ parvè elevatâ, obtusâ; anfractibus quinque, planis, suturâ marginalis, ultimo peripheriâ compressè carinato, basi convexo, subtrigato, nitido; aperturâ obliquâ, angulato-lunari, labro simplici, recto, margine columellari superne breviter reflexo.*

**THE DIVIDED HELIX.** Shell umbilicated, very depressed, rather thin, obliquely striated at the upper part, obsolete decussated with impressed lines, reddish-fulvous; spire but little raised, obtuse, whorls five, flat, margined at the suture, the last compressly keeled at the periphery, convex, rather smooth and shining at the base; aperture oblique, angularly lunar, lip simple, straight, columellar margin shortly reflected at the upper part.

FORBES, Voy. Rattlesnake, Appendix, p. 376. pl. ii. f. 5.  
*Hab.* Louisiade Archipelago, Australia; Macgillivray.

A sharply keeled depressly orbicular shell, smooth and shining beneath, strongly carve-striated above.









1652



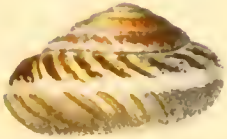
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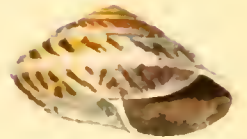
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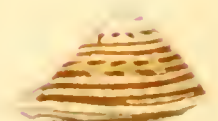
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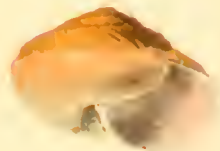
1658



1659



1660



1661

# HELIX.

PLATE CCVI.

Species 1151. (Mus. Brit.)

**HELIX STODDARTI.** *Hel. testâ imperforatâ, depresso-turbinatâ, solidâ, leviter rugosâ, nitidâ, brunneâ, pallidè fasciatâ, vel flavescente, fasciis saturatioribus; spirâ depresso-conicâ; anfractibus quinque, planiusculis, basi convexiore, mediâ angulato; aperturâ lunari, labro simplici, margine columellari breviter reflexo.*

**STODDART'S HELIX.** Shell imperforated, depressly turbinated, solid, slightly wrinkled, rather shining, brown, pale banded or yellow, with darker bands; spire depressly conical; whorls five, rather flat, the last more convex, angled in the middle; aperture lunar, lip simple, columellar margin shortly reflected.

GRAY, *Proc. Zool. Soc.* 1834, p. 65.

*Hab.* Phillip Island, Australia; Cunningham.

A shining yellow depressly trochoid shell, encircled chiefly on the upper surface, with burnt chestnut bands.

Species 1152. (Mus. Brit.)

**HELIX GYROSTOMA.** *Hel. testâ obtusè umbilicatâ, subgloboseâ, solidâ, levi, albâ, fasciis quatuor vel quinque fulvicantibus interdum obsolete angulatâ; anfractibus quinque, convexiusculis, ultimo antè subito multo deflexo; aperturâ ferè circulari, labro incrassato, latè lobato, marginibus continuis, columellari excavato-expanso.*

**THE TURNED-MOUTH HELIX.** Shell with a covered umbilicus, subglobose, rather solid, smooth, white, sometimes obsolete encircled with four or five yellowish bands; whorls five, rather convex, the last suddenly much deflected in front; aperture nearly circular, lip thickened, broadly edged, margins continuous, columellar margin excavately expanded.

FERUSSAC, *Hist. Moll.* pl. 32, f. 5, 6.

*Hab.* Tripoli.

Opake chalk-white, distinguished from its allies by the continuous subcontracted growth of the thickened margin of the aperture.

Species 1153. (Mus. Brit.)

**HELIX LEACHI.** *Hel. testâ obtusè umbilicatâ, depressâ, utrinque convexâ, obliquè costatâ, albâ, crenulato-carinata; anfractibus quatuor, planiusculis, ultimo*

*basi inflato antè deflexo; aperturâ subellipticâ, labro subincrassato, marginibus continuis, supèro expanso, columellari subreflexo.*

**LEACH'S HELIX.** Shell with a covered umbilicus, depressed, convex above and below, obliquely ribbed, white, crenulately keeled, whorls four, rather flat, the last inflated at the base, and deflected in front; aperture subelliptic, lip somewhat thickened, margins continuous, upper margin expanded, columellar margin a little reflected.

FERUSSAC, *Hist. Moll.* pl. 64, f. 2.

*Helix Tripolitana*, Wood.

*Caryocolla Tripolitana*, Gray

*Hab.* Tripoli.

Opake chalk-white like the preceding species, but depressed, conspicuously compressly keeled round the periphery, and distinguished especially by its numerous close-set delicately wrinkled thread ribs.

Species 1154. (Fig. a, b, Mus. Brit.)

**HELIX CLAIRVILLE.** *Hel. testâ modèrè excavato-umbilicatâ, subglobose-turbinatâ, inflatâ, supèrè rugoso-liriatâ, liris subretolis, fulvescente, infra peripheriâ saturatè fasciatâ; anfractibus sex, convexis, ultimo turgido; aperturâ rotundatè-lunari, labro simplici, margine columellari dentato, reflexo.*

**CLAIRVILLE'S HELIX.** Shell moderately excavately umbilicated, subglobose-turbinated, inflated, wrinkled-ridged on the upper part, ridges rather distant, fulvous, dark-banded below the periphery, whorls six, convex, the last swollen; aperture roundly lunar, lip simple, columellar margin slanting and slightly thickened.

FERUSSAC, *Hist. Moll.* pl. 91, f. 1.

*Naxina Clairvillia*, Gray.

*Hab.* Island of Anghona.

A boldly convoluted subinflated shell, of light texture with a simple lip, sculptured next the suture with plicated rib-like striae. The banded colouring is of a bright orange-tinted fulvous-fawn.

Species 1155. (Fig. r, b, Mus. Brit.)

**HELIX CHASTELLI.** *Hel. testâ modèrè umbilicatâ*

*depressâ, lenticulari, obtuse carinatâ, obliquè striatâ, albidâ, maculis fuscis lentiginosâ, vincto albo cingulatâ; anfractibus sex ad septem, plano-declivibus; aperturâ subangulato-lunari, intus fuscâ, labro simplici, ad columellam breviter dilatato.*

CHAUSTELLE'S HELIX. Shell moderately umbilicated, depressed, lenticular, obtusely keeled, obliquely striated, whitish, freckled with brown spots, encircled with white round the middle; whorls six to seven, flatly slanting; aperture somewhat angularly lunar, brown in the interior, lip simple, shortly dilated at the columella.

FERUSSAC, Hist. Moll. pl. 50. f. 4.

*Helix Crucherodii*, Gray.

*Hab.* India.

Curiously mottled throughout with opaque milk-white, through which the chestnut-brown colouring is seen at intervals.

Species 1456. (Fig. a, b, Mus. Brit.)

HELIX RHOMBOSTOMA. *Hel. testâ imperforatâ, trochiformi, obliquè striatâ, lineis confertissimis concentricis subdecussatâ, nitidulâ, albido-fulvescente, fuscis castaneis plurimis cingulatâ; anfractibus quinque, plano-declivibus, ultimo acutè carinato, basi convexo-depresso, anticè subdeflexo, ad latus concavo-impresso; aperturâ rhombâ, labro violaceo, margine columellari latè calloso-stricto.*

THE RHOMBOID-MOUTH HELIX. Shell imperforated, trochus-shaped, obliquely finely striated, faintly decussated with very close-set concentric lines, rather shining, light fulvous, encircled with several chest-

nut bands, whorls five, flatly slanting the last sharply keeled, convexly depressed at the base, a little deflected in front, concavely impressed at the side. aperture rhomboid, lip violet, columellar margin broadly callously drawn out.

PREIFER, Pro. Zool. Soc. 1845, p. 72.

*Hab.* — ?

Of this peculiar species only one other specimen, in the collection of Miss Saul, is known. It is of an Australian type, sharply angled at the base, encircled throughout with clear narrow orange-chestnut linear bands, blotched next the suture, the sharply angled oblique aperture being purple-tinged.

Species 1457. (Mus. Brit.)

HELIX BELANGERI. *Hel. testâ angustè umbilicatâ, subplanulato-globosâ, tenui, subpellucidâ, superne stris tenuibus decussatâ, aurantio-fulvâ, infra albidâ et roseo tinctâ; anfractibus quinque, convexiusculis, ultimo ad peripheriam obtusè carinato; aperturâ subangulâ, labro simplici.*

BELANGER'S HELIX. Shell narrowly umbilicated, rather flatly globose, thin, subpellucid, decussated at the upper part with fine strise, orange-fulvous, whitish and rose-tinged beneath; whorls five, rather convex, the last obtusely keeled at the periphery; aperture rather large, lip simple.

DESHAYES, Voy. Belanger, Zool. p. 43. pl. 1. f. 1-3

*Hab.* Pondicherry, India.

A light globosely inflated species, bright orange-fulvous above, whitish and delicately rose-tinted beneath.





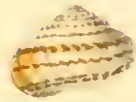
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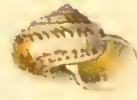
1461 a



1462



1463



1464 b



1465 a



1465



1466

Variously Magnified

# HELIX.

PLATE CCVII

Species 1458. (Mus. Brit.)

**HELIX COSTATA.** *Hel. testâ subumbilicâ unibilicâ, fulvescens albâ, membranaceo-costatâ, subopacâ; anfractibus tribus ad quatuor, convexis, ultimo antice subdepresso; aperturâ perobliquâ, circulari, labro expanso, reflexo, intus albo-labiato.*

**THE RIBBED HELIX.** Shell rather largely umbilicated, fulvous-white, membrane-ribbed, rather opaque; whorls three to four, convex, the last a little deflected in front; aperture very oblique, circular, lip expanded, reflected, white-edged within.

MULLER, Vermes, vol. ii. p. 31.

*Helix crenella*, Montagu

*Hab.* Europe.

A minute white shell, delicately ribbed and rather loosely convoluted, with a thickened circular aperture.

Species 1459. (Mus. Brit.)

**HELIX FABRICII.** *Hel. testâ angustè unibilicatâ, globoso-conicâ, tenui, striatâ, pellucido-fulvâ, spiræ suturâ impressâ; anfractibus quaque, convexis, ultimo latiusculo, circa umbilicam impresso; aperturâ parvisculâ, rotundato-lunari, labro simplici.*

**FABRICIUS'S HELIX.** Shell narrowly umbilicated, globosely conical, thin, finely striated, transparent fulvous, suture of the spire impressed; whorls five, convex, the last rather broad, impressed around the umbilicus; aperture rather small, rotundately lunar, lip simple.

*Helix nitida*, Fabricius, Fauna Greenlandica.

*Helix Fabricii*, Moller.

*Hab.* Greenland.

A minute diaphanous white shell, of rather conoid growth.

Species 1460. (Mus. Brit.)

**HELIX TULLIA.** *Hel. testâ rix unibilicatâ, subgloboso-depressâ, tenui, confertim costatâ, diaphanâ, rufo et luteo tessellatâ; anfractibus quaque, convexiusculis, ultimo ad peripheriam obsolete angulato, circa umbilicam impresso; aperturâ subverticali, lunari, labro simplici.*

**TULLIA'S HELIX.** Shell scarcely umbilicated, subglo-

bosely depressed, thin, closely finely ribbed, diaphanous, tessellated with red and yellow, whorls five, rather convex, the last obsoletely angular at the periphery, impressed around the umbilicus; aperture subvertical, lunar, lip simple.

GRAY, Pro. Zool. Soc. 1849, p. 165.

*Hab.* Auckland, New Zealand, Major Greenway.

A minute species, of depressed nauticoid growth, very finely close-ribbed and brown-tesselated throughout.

Species 1461. (Fig. a, b, Mus. Brit.)

**HELIX UTENHAGENSIS.** *Hel. testâ orbiculato-conicâ, depresso-turbatâ, tenui, striatâ, crassa, intus punctis fuscis conspersâ; anfractibus sex, convexis, ultimo subangulo, aperturâ rotundato-lunari, intus fusciculâ, labro simplici, ad circumstantes cretæ reflexa.*

**THE UTENHAGEN HELIX.** Shell moderately umbilicated, depressly turbinated, rather thin, finely striated, white, sprinkled with brown spots; whorls six, convex, the last rather inflated, aperture rotundately lunar, brownish within, lip simple, at the corners, shortly reflected.

KRAUSS, Südafric. Moll. p. 70, pl. 4. f. 22.

*Hab.* Province of Utenhagen, South Africa.

A small opaque-white brown-banded and promiscuously freckled species, of quite a European type.

Species 1462. (Mus. Brit.)

**HELIX JACKSONIENSIS.** *Hel. testâ orbiculato-conicâ, orbiculato-depressâ, tenui, striatâ, rufo-fulvâ, punctis fuscis conspersâ; anfractibus quaque, convexiusculis, ultimo ad peripheriam obsolete angulato, circa umbilicam impresso; aperturâ lunari, labro simplici.*

**THE PORT JACKSON HELIX.** Shell scarcely minutely umbilicated, orbicularly depressed, horny, burnt-reddish; spire obtuse, whorls five, the last impressly excavated at the base, aperture lunar, lip simple.

GRAY, Pro. Zool. Soc. 1834, p. 65.

*Hab.* Port Jackson, Australia.

An obtusely depressed shining horny species, striated and tinted with burnt-red.



Species 1463. (Mus. Brit.)

HELIX CRUENTATUS. *Hel. testâ angustè profundè umbilicatâ, depressâ, transversè plicatâ, carnea-succinea, spirâ planè depressâ; anfractibus quinque, convexis, marginatis, ultimo multo latiore, inflato, circa umbilicam impresso; aperturâ rotundato-lunari, labro simplici, marginibus conicentibus.*

THE BLOOD-DYED HELIX. Shell narrowly deeply umbilicated, depressed, transversely finely plated, horny amber-coloured; spire flatly depressed; whorls five, convex, margined, the last much the broader, inflated, impressed around the umbilicus; aperture rotundately lunar, lip simple, margins approximating.

*Stenopus cruentatus*, Guilding, Zool. Journal, vol. iii. p. 527. pl. 15. f. 1-5.

*Hab.* Island of St. Vincent, West Indies.

A shining horny almost glassy species, of somewhat nautiloid growth.

Species 1464. (Mus. Brit.)

HELIX JULOIDEA. *Hel. testâ subtilè perspectivè umbilicatâ, constrictâ et elegantè costatâ, cornâ; spirâ planâ, subimmersâ, suturâ impressâ; anfractibus quatuor, convexis; aperturâ perobliquâ, lunari-rotundatâ, labro simplici, marginibus conicentibus.*

THE MOSS-LIKE HELIX. Shell rather broadly perspectivevly umbilicated, closely elegantly ribbed, horny; spire flat, and rather immersed, with the suture impressed; whorls four, convex; aperture very oblique, lunar-rounded, lip simple, margins approximating.

Forbes, Voy. Rattlesnake, Appendix, p. 379. pl. 2. f. 4.

*Hab.* Port Mollé, North Australia; Macgillivray.

Distinguished chiefly by its very broadly umbilicated *Cyclotoma*-like growth, with a concavely impressed spire.

Species 1465. (Coll. Chitty, in Mus. Brit.)

HELIX McNABIANA. *Hel. testâ angustè profundè umbilicatâ, depressâ, transversè plicatâ, succinea striatâ, et circumscriptè plicatâ, carnea-succinea quinque, convexis, marginatis, ultimo multo latiore, inflato, circa umbilicam impresso; aperturâ rotundato-lunari, labro simplici.*

McNAB'S HELIX. Shell narrowly deeply umbilicated, pyramidally conical, diaphanous-white, somewhat obscurely striated, covered with a fugacious horny epidermis; whorls five, convex; aperture rather small, lunar-circular, lip simple.

CHITTY, Contributions to Conchology.

*Hab.* Jamaica.

An interesting small pyramidally conoid diaphanous shell, covered very sparingly with a fugacious epidermis, contained in the magnificent collection of Jamaica Land Shells presented to the British Museum by the Hon. Mr. Chitty, Chairman of Quarter Sessions in that island, and the active companion in his researches of the late Professor C. B. Adams.

Species 1466. (Mus. Brit.)

HELIX ALVEUS. *Hel. testâ profundè perspectivevè umbilicatâ, depressè-conicâ, opacè-âliâ, charpè striatâ, spirâ subobliquâ; suturâ impressâ; anfractibus quinque, angustis, rotundatis, ultimo multo latiore, inflato, circa umbilicam impresso; aperturâ parvâ, lunari-circulari, labro simplici.*

THE BEEHIVE HELIX. Shell deeply perspectivevly umbilicated, depressly conoid, opaque-white, obscurely striated; spire rather obtuse; suture impressed; whorls five, narrow, rounded, the last absolutely keeled; aperture small, lunar-circular, lip simple.

C. B. ADAMS, Contributions to Conchology, No. 5. p. 80.

*Hab.* Jamaica.

A depressly conoid narrow-whorled species, deeply umbilicated, the umbilicus being rather small, but excavated.





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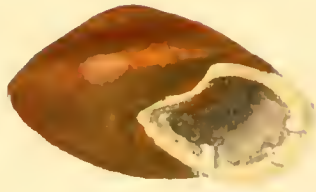
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# HELIX.

PLATE CCVIII.

Species 1467. (Mus. Brit.)

**HELIX VESTALIS.** *Hel. testâ mediocriter umbilicatâ, subgloboso-depressâ, nireâ, nitidâ, apice nigricantè; anfractibus quinque ad sex, convexis, ultimo multo latiore; aperturâ fere circulari, labro simplici, leviter expanso, marginibus convergentibus.*

**THE VESTAL HELIX.** Shell moderately umbilicated, subglobosely depressed, snow-white, shining, blackish at the apex; whorls five to six, convex, the last much broader; aperture nearly circular, lip simple, slightly expanded, with the margins approximating.

PARREYSS, Pfeiffer, Symbolæ, vol. i. p. 10. Monog.

Helic. viv. vol. iii. p. 170.

*Hab.* Egypt.

An opaque-white cyclostomoid shell, of simple spiral growth

Species 1468. (Coll. D'Orbigny in Mus. Brit.)

**HELIX MONILIFERA.** *Hel. testâ obtusè umbilicatâ, globosâ, parum depressâ, obsolete striatâ, albo- cinerascens, fuscis angustis interruptè nigro-fuscis moniliformibus cingulatâ; anfractibus sex, rotundatis; aperturâ rotundato-lunari, labro simplici, subexpanso.*

**THE NECKLACE-BOUND HELIX.** Shell with a covered umbilicus, globose, but little depressed, obsolete striated, whitish-ash, encircled with narrow interrupted necklace-like brown bands; whorls six, rounded; aperture rotundately lunar, lip simple, a little expanded

WEBB and BERTHELLOT, Synopsis, p. 315. D'Orbigny, Moll. des Isles Canaries, p. 61. pl. 1. f. 21 and 22.

*Hab.* Canary Islands.

A small necklace-banded species, having somewhat the external aspect of a *Neritina*

Species 1469. (Coll. D'Orbigny in Mus. Brit.)

**HELIX LANCEROTTENSIS.** *Hel. testâ obtusè umbilicatâ, subglobosâ, rugosè tenuistriatâ, albidâ, fusca sparsim interruptè fasciatâ; anfractibus quinque, convexis; aperturâ obliquè lunari, labro simplici, intus labiato, ad columellam dilatato-reflexo.*

**THE LANCEROTTE HELIX.** Shell with a covered umbilicus, subglobose, roughly finely striated, whitish, sparingly banded with interrupted brown, whorls

five, convex, aperture obliquely lunar, lip simple, edge within, dilately reflected at the columella

WEBB and BERTHELLOT, Synopsis, p. 316. D'Orbigny, Moll. des Isles Canaries, p. 60. pl. 1. f. 24, 25

*Hab.* Lancerotte Island, Canaries.

Closely allied to the preceding species, and probably only a coarse variety

Species 1470. (Mus. Brit.)

**HELIX ALEXANDRI.** *Hel. testâ peculiariter rivati-umbilicatâ, subgloboso-conoidâ, pallidè fuscâ vel albidâ supra minutè costulato-striatâ, infra loricatâ, spirâ parum elevatâ, apice acuminatâ; anfractibus quinque, convexis, ultimo subinflato, antice subito predeflexo, basi declivitate; aperturâ perobliquâ, fere circulari labro incrassato, continuo, expanso-reflexo.*

**ALEXANDER'S HELIX.** Shell with a peculiar clefted umbilicus, subglobosely conoid, pale fulvous or whitish minutely rib-striated above, smooth beneath; spiral but little raised, acuminated at the apex; whorls five, convex, the last rather inflated, suddenly very deflected in front, deviating from the base; aperture very oblique, nearly circular, lip thickened, continuous, expandedly reflected.

GRAY, MSS. in Mus. Brit. Pfeiffer, Zeitschrift für Malac. 1845, p. 87.

*Hab.* Damarha, South Africa, Alexander.

Distinguished from all other species of the genus by the prolonged subtubular deflection of the last whorl which throws the aperture into an *Anatina*-like position

Species 1471. (Mus. Brit.)

**HELIX SCULPTURATA.** *Hel. testâ latè rivati-umbilicatâ, depressâ, discoidi, concentricè costulato-costatâ, interstitiis reticulato-striatis, albidâ, spirâ planulatâ; anfractibus quinque, convexis, a basi anticè basi constructis; aperturâ circulari, limbo labris lateralis contracto, labio reflexo, marginibus convergentibus.*

**THE SCULPTURED HELIX.** Shell very broadly perispirally umbilicated, depressed, discoid, concentrically closely ribbed, with the interstices reticulately striated, whitish; spire flattened, whorls five, convex, the last drawn out in front at the base; aperture

circular, contracted with three internal lamellæ, lip slightly reflected, margins joined.

GRAY, MSS. in Mus. Brit. Pfeiffer, *Zeitschrift für Malac.* 1845, p. 86.

*Hab.* Damarha, South Africa; Alexander.

Most elaborately and curiously sculptured after the manner of the small *Delphinula*.

Species 1472. (Mus. Brit.)

HELIX APICINA. *Hel. testâ apertè umbilicatâ, globoso-depressâ, supra planiusculâ, infra turgidâ, albidâ, interdum fusco-fasciatâ, striatâ, apice corneo-variegatâ, spirâ suturâ profundâ; anfractibus quatuor ad quinque, concavis, ultimo anticè dilatato; aperturâ rotundato-lunari, labro subexpanso.*

THE TIFTED HELIX. Shell openly umbilicated, globosely depressed, rather flat above, swollen beneath, whitish, sometimes brown-banded, striated, horn-variegated at the apex, suture of the spire deep; whorls four to five, convex, the last dilated in front; aperture rotundately lunar, lip a little expanded.

LAMARCK, *Anim. sans vert.* (Deshayes' edit.) vol. vii. p. 74. *Hab.* Southern Europe.

Allied to *H. restalis*, from which it chiefly differs in being obtusely angularly contracted round the umbilicus.

Species 1473. (Coll. D'Orbigny in Mus. Brit.)

HELIX TRIODONTA. *Hel. testâ mediocriter excavato-umbilicatâ, orbiculato-convexâ, crassâ, lævigatâ, fusco-rubente; spirâ brevi, obtusâ; anfractibus quinque, declivi-concavis, obtusè carinatis; aperturâ obliquè quadrato-lunari, labro incrassato, latè reflexo, tridentato, marginibus callo junctis.*

THE THREE-TOOTHED HELIX. Shell moderately excavately umbilicated, orbicularly convex, thick, smooth, brown-red; spire short, obtuse; whorls five, slantingly convex, obtusely keeled; aperture obliquely quadrately lunar, lip thickened, broadly reflected, three-toothed, margins joined by a callosity.

D'ORBIGNY, *Voy. dans l'Amérique Méridionale*, p. 234. pl. 24. f. 1-3.

*Hab.* Puna Island, Guayaquil River, Ecuador.

Distinguished from its allies by the three small blunted teeth of the aperture, but not distinct in any other respect.

Species 1474. (Mus. Brit.)

HELIX HOOKERI. *Hel. testâ mediocriter umbilicatâ, or-*

*biculari-depressâ, sordidè olivaceâ, subirregulariter rugoso-striatâ; spirâ subplanulatâ, suturis impressis, anfractibus quatuor, concavis; aperturâ lunato-circulari, labro simplici.*

HOOKE'S HELIX. Shell moderately umbilicated, orbicularly depressed, dull olive, rather irregularly roughly striated; spire rather flat, with the sutures impressed. whorls four, convex; aperture lunar-circular, lip simple. *Hab.* Kerguelen's Land; Dr. J. D. Hooker.

A small depressed species, collected by Dr. Hooker in the Antarctic Expedition of the Erebus and Terror, peculiarly characterized by the sombre olive-horny coating of *Pululina* and *Ampullaria*.

Species 1475. (Coll. D'Orbigny in Mus. Brit.)

HELIX CYCLODON. *Hel. testâ rix umbilicatâ, trochiformi, rugoso-striatâ, fuscescente-albidâ; spirâ turratâ; anfractibus septem, planiusculis, dentato-carinatis, supra carinum serie tuberculorum instructis, anfractu ultimo basi rix concaviusculo; aperturâ depressâ, angulato-lunari, labro simplici.*

THE TOOTH-ENCIRCLED HELIX. Shell scarcely umbilicated, trochus-shaped, roughly striated, brownish-white; spire turreted; whorls seven, rather flat, dentately keeled, with a row of tubercles above the keel, last whorl but little convex at the base; aperture depressed, angularly lunar, lip simple.

WEBB and BERTHELOT, *D'Orbigny, Moll. des Isles Canaries*, p. 64. pl. 2. f. 1-3.

*Hab.* Canary Islands and Azores.

Singularly characterized by its fine tubercular keel.

Species 1476. (Coll. Chitty in Mus. Brit.)

HELIX FORTIS. *Hel. testâ imperforatâ, depressâ, globosâ, solidâ, tenuè granulatâ, subcarinatâ, rufo-fusçâ, carinâ pallidâ; spirâ convexo-conoideâ; anfractibus quinque, superne subconcavis, deinde rotundatis; aperturâ et dentibus ut in *H. sinuata*.*

THE STRONG HELIX. Shell imperforated, depressly globose, solid, finely granulated, faintly keeled, red-brown, keel pale; spire convexly conoid; whorls five, slightly concave at the upper part, then rounded. aperture and teeth as in *Helix sinuata*.

ADAMS, *Contributions to Conchology*, No. 5. p. 77

*Hab.* Jamaica.

A fine stout shell, very closely allied to *H. sinuata*, from which it differs little except in being large and obese







1477



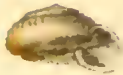
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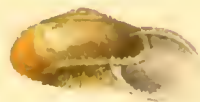
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1481



1482



1483



1484



1485



1486

# HELIX.

PLATE CCIX

Species 1477. (Coll. D'Orbigny in Mus. Brit.)

**HELIX BOUNOBENA.** *Hel. testâ subapiliter profundè umbilicatâ, depresso-conoidâ, diaphanâ, lævigatâ, albâ; anfractibus sex, declivi-convexis; aperturâ obliquè lunari, labro incrassato, subexpanso.*

**THE HILL HELIX.** Shell rather largely deeply umbilicated, depressly conoid, diaphanous, smooth, whitish; whorls six, slantingly convex; aperture obliquely lunar, lip thickened, slightly expanded.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 253. pl. 28. f. 17 to 20.

*Hab.* San José de Chiquitos, Bolivia.

Of transparent, almost glassy texture, clear and shining.

Fig. 1478. (Coll. D'Orbigny in Mus. Brit.)

The shell here figured is the typical specimen of D'Orbigny's *H. oethophila*, referred subsequently by him, as a variety, to *H. hylephila*, species 1482.

Species 1479. (Coll. D'Orbigny in Mus. Brit.)

**HELIX PARAGUAYANA.** *Hel. testâ vix umbilicatâ, orbiculari, elevata, lævigatâ, tenui, diaphanâ; spirâ conicâ, apice obtusâ; anfractibus sex, convexis; aperturâ depressâ, rotundato-lunari, labro subincrassato, albo.*

**THE PARAGUAY HELIX.** Shell scarcely umbilicated, orbicular, raised, smooth, thin, diaphanous; spire conical, obtuse at the apex; whorls six, convex; aperture depressed, rotundately lunar, lip rather thick, white.

*Helix elevata*, D'Orbigny (not of Say), Voy. dans l'Amér. Mérid. p. 254. pl. 28. f. 5 to 8.

*Helix Paraguayana*, Pfeiffer.

*Hab.* Paraguay, near Montevideo.

A light subglobose shell, of diaphanous colourless texture.

Species 1480. (Coll. D'Orbigny in Mus. Brit.)

**HELIX SKIAPHILA.** *Hel. testâ scharipliter apertè umbilicatâ, depresso-orbiculari, discoidè, subglatâ, tenui, diaphanâ, albâ, lævigatâ; spirâ parvâ; anfractibus sex, rotundatis; aperturâ circulari, labro tenui, vix expanso.*

**THE SHADE-LOVING HELIX.** Shell rather largely openly

umbilicated, depressly orbicular, discoid, sub-inflated, thin, diaphanous, whitish, smooth; spire small, whorls six, rounded; aperture circular, lip thin, scarcely expanded.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 249. pl. 27. f. 4 to 7.

*Hab.* Bolivian Andes, between Moros and Cochabamba.

Deeply perspectively umbilicated, much flattened at the spire.

Species 1481. (Coll. D'Orbigny in Mus. Brit.)

**HELIX CHALICOPHILA.** *Hel. testâ ampliter perspectivè umbilicatâ, orbiculari-depressâ, lævigatâ, tenui, tenuistriatâ, diaphanâ, griseo-cornéâ; spirâ obtusâ; anfractibus sex, declivi-convexis; aperturâ obliquè lunari, labro simplici.*

**THE STONE-LOVING HELIX.** Shell largely perspectively umbilicated, orbicularly depressed, smooth, thin, finely striated, diaphanous, grayish-horny; spire obtuse; whorls six, slantingly convex; aperture obliquely lunar, lip simple.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 251. pl. 27. f. 8 to 11.

*Hab.* Chiquitos, Bolivia.

Allied to the preceding, but more broadly umbilicated, and less flattened at the spire.

Species 1482. (Coll. D'Orbigny in Mus. Brit.)

**HELIX HYLEPHILA.** *Hel. testâ mediocriter umbilicatâ, orbiculato-conoidâ, diaphanâ, albâ, striatâ, subius lævigatâ, levâ; anfractibus sex, emicantibus, aperturâ rotundato-lunari, obliquâ, labro subincrassato.*

**THE WOOD-LOVING HELIX.** Shell moderately umbilicated, orbicularly conoid, diaphanous, whitish, striated, smooth beneath, clear; whorls six, convexly slanting; aperture rotundately lunar, oblique, lip rather thickened.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 253. pl. 28. f. 9 to 16.

Enlem var. *H. oethophila*, D'Orbigny.

*Hab.* Chiquitos, Bolivia.

Of the same typical form as *H. skiaphila*, more conically convoluted.

Species 1483. (Coll. D'Orbigny in Mus. Brit.)

HELIX OMALOMORPHA. *Hel. testā latissimè perspectivè umbilicatā, depresso-orbiculari, subdiscoideā, lævigatā, diaphanā, fulvo-brunnēā; spirā subobtusā; anfractibus septem, convexis; aperturā lunato-ovali, subinflatā, labro tenui, marginibus approximatis.*

THE FLAT HELIX. Shell very broadly perspectively umbilicated, depressly orbicular, subdiscoid, smooth, diaphanous, fulvous-brown; spire rather obtuse; whorls seven, convex; aperture lunar-oval, rather inflated, lip thin, with the margins approximating.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 249. pl. 27. f. 1 to 3.

*Hab.* Capinata, Bolivian Andes.

A fine cyclostomoid species, with a very broad shallow open umbilicus, of transparent horny texture, covered with a thin layer of epidermis.

Species 1484. (Coll. D'Orbigny in Mus. Brit.)

HELIX INSIGNIS. *Hel. testā mediocriter umbilicatā, orbiculari, subdiscoideā, tenui, diaphanā, lævigatā, brunneo-fluviceante; spirā obtusā; anfractibus quatuor, rotundatis; aperturā rotundato-lunari, labro tenui, ad columellam breviter reflexo.*

THE REMARKABLE HELIX. Shell moderately umbilicated, orbicular, subdiscoid, thin, diaphanous, smooth, brownish-yellow; spire obtuse; whorls four, rounded; aperture rotundately lunar, lip thin, shortly reflected next the columella.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 247. pl. 26. f. 14 to 17.

*Hab.* Guayaquil.

There is nothing in this species to suggest the idea of its name. It is of a dull horny texture, and of simple rather flattened growth.

Species 1485. (Coll. D'Orbigny in Mus. Brit.)

HELIX POLLODONTA. *Hel. testā latissimè aperte umbilicatā, orbiculari, depressivā, striatā, albā, spirā planā; anfractibus septem, angulato-rotundatis; aperturā parvā, circulari, dentibus plurimissimis, labro incrassato, reflexo, marginibus continuis.*

THE MANY-TOOTHED HELIX. Shell very broadly openly umbilicated, orbicular, very depressed, striated, whitish; spire flat; whorls seven, angularly rounded; aperture small, circular, furnished with several small internal teeth, lip thickened, reflected, with the margins continuous.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 237. pl. 23. f. 9 to 13.

*Hab.* Santa Cruz, Bolivia.

A peculiarly openly convoluted species, having the umbilicus very broadly excavated and shallow, densely finely rib-striated with fine keel-like lamellæ within the aperture.

Species 1486. (Coll. D'Orbigny in Mus. Brit.)

HELIX ARGONAUTULA. *Hel. testā subampliter profundè umbilicatā, orbiculari-depressā, rugoso-striatā, albidā interdum obscurè fusco-fusciatā; spirā latè planatā, anfractibus quatuor, supra concavo-planatis, dentibus acutè carinatis, infra carinam angulato-convexis; aperturā compressè trigonā, labro simplici.*

THE LITTLE ARGONAUT HELIX. Shell rather largely deeply umbilicated, orbicularly depressed, roughly striated, whitish, sometimes obscurely brown-banded; spire broadly flattened; whorls four, concavely flattened above, then sharply keeled, angularly convex beneath; aperture compressly triangular, lip simple.

WEBB and BERTHELOT, D'Orbigny, Moll. des Isles Canaries, p. 64. pl. 2. f. 13 to 18.

*Hab.* Canary Islands.

Of a peculiar flatly compressed form, but angularly convex beneath.





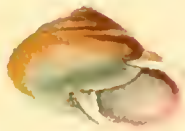
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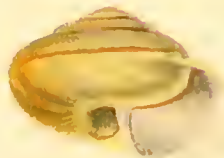
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1496

# HELIX.

PLATE CCX.

Species 1487. (Mus. Metcalfe.)

**HELIX PROXIMA.** *Hel. testā ampliter excavatē umbilicatā, depresso-orbiculari, leviter striatā, albidā, basi subustulatā, lineis tenuibus fusciscentibus cingulatā; spirā planā; anfractibus quinque ad sex, ultimo rotundato, anticē tumido et deflexo; aperturā frē circulari, labro expanso-reflexo, marginibus approximatis, laminā callosā junctis.*

**THE ALLIED HELIX.** Shell largely excavately umbilicated, depressly orbicular, faintly striated, whitish, scorched at the base, encircled with fine brown lines; spire flat; whorls five to six, the last rounded, swollen and deflected in front; aperture nearly circular, lip expandedly reflected, margins approximated, joined by a callous lamina.

FERUSSAC, Hist. Moll. pl. 71. f. 5.

*Hab.* Coimbatore, East Indies; Leschenault.

Characterized by a peculiarly excavated umbilicus, and rounded aperture with a rather broadly reflected lip.

Species 1488. (Mus. Woollaston.)

**HELIX OBSERATA.** *Hel. testā oblectē umbilicatā, conoido-lenticulari, arcuatim plicato-striatā, subhispidulā, sordidē olivaceo-corneā, basi lineā rufulā cingulatā; anfractibus quinque ad sex, subangustis, acutē carinatis, ultimo anticē paululū deflexo; aperturā obliquē lunari, contractā, labro flavicante, subreflexo, constricto, ad columellam callosoppresso.*

**THE CLOSED HELIX.** Shell with umbilicus closed up, conoidly lens-shaped, arcuately plicately striated, slightly hairy, dull olive-horny, encircled with a reddish line at the base; whorls five to six, rather narrow, sharply keeled, the last deflected in front; aperture obliquely lunar, contracted, lip yellowish, a little reflected, constricted, callously appressed at the columella.

LOWE, Synopsis, p. 9. Albers, Malacographia Maderensis, p. 40. pl. 10. f. 11-14.

*Hab.* Madeira.

Of a close Neritina-like form, allied to *H. fausta*.

Species 1489. (Mus. Woollaston.)

**HELIX SQUALIDA.** *Hel. testā subangustē umbilicatā, depresso-conoidē, ruguloso-striatā, sordidē fusciscente;*

*anfractibus quinque, rotundatis, ultimo deflexo, aperturā lunato-circulari, labro simplici, subexpansulento albilabiato.*

**THE SQUALID HELIX.** Shell rather narrowly umbilicated depressly conoid, rugulose striated, dirty brown whorls five, rounded, the last deflected in front; aperture lunar-circular, lip simple, slightly expandedly white-edged within.

LOWE, Synopsis, p. 5. Albers, Malacographia Maderensis, p. 33. pl. 8. f. 13-15.

*Hab.* Madeira.

Of a dull brownish colour, simply convoluted.

Species 1490. (Mus. Metcalfe.)

**HELIX LESA.** *Hel. testā subangustē profunde conoidē, depresso-globosā, plicato-striatā et omnique parte minutē granulatā, livido-virescente, purp. rasecēt. testā, spirā subconoidē; anfractibus quinque ad sex, convexis, ultimo anticē paululū deflexo; aperturā rotundatē lunari, labro expanso-reflexo, albis, ad umbilicem late dilatato.*

**THE BRUISED HELIX.** Shell rather narrowly deeply umbilicated, depressly globose, plicately striated and everywhere minutely granulated, livid greenish, purple-stained; spire subconoid; whorls five to six, convex, the last a little deflected in front; aperture rotundately lunar, lip expandedly reflected, white broadly dilated at the umbilicus.

*Hab.* — ?

A simple minutely granulated species, of a peculiar purple-livid or gangrene hue, allied to *H. Greyi*.

Species 1491. (Mus. Metcalfe.)

**HELIX DEMISSA.** *Hel. testā modice umbilicatā, convexo-depressā, carneo-lubā aut latexeā, ad l. annā; spirā subplano-concavā, saturā inpressā; anfractibus sex, rotundatis, ad basin subexcavatis; aperturā transversē lunari, labro simplici.*

**THE MEAN HELIX.** Shell very minutely umbilicated, convexly depressed, horny-white or yellowish, subdiaphanous; spire rather flatly concave, suture impressed; whorls six, rounded, rather excavated at the base; aperture transversely lunar, lip simple.

LESLY, Boston Journ. Nat. Hist. vol. iv. p. 391. pl. 10. f. 1.

December, 1874



*Hab.* West Pennsylvania, United States.

A subpellucid narrow-whorled depressed species, with a rather deep suture, allied to *H. ligera*.

Species 1492. (Mus. Hanley.)

HELIX CHLOROTICA. *Hel. testā subampliter profundè umbilicatā, orbiculato-concavā, tenuiculā, virescenti-luteā, supernè densè reticulatim oblongo-granulatā, infra loricatā, nitente; spirā breviter conoidē, apice peculiariter concavo-obtusā; anfractibus quinque, rotundatis; aperturā lunato-circulari, labro simplici, annulo calloso albo interno.*

THE GREENISH HELIX. Shell rather largely deeply umbilicated, orbicularly convex, rather thin, greenish-yellow, closely reticulately oblong granulated at the upper part, smooth and shining beneath; spire shortly conoid, peculiarly concavely obtuse at the apex; whorls five, rounded; aperture lunar-circular, lip simple, with a white callous ring within.

PREIFFER, Zeitschrift für Malac. 1851, p. 127.

*Hab.* Grecian Archipelago.

This is a most distinct and characteristic species, the upper half of the shell being densely reticulately oblong-granulated, the pattern suddenly ceasing at the periphery, below which it is smooth and highly polished.

Species 1493. (Mus. Wollaston.)

HELIX MUSTELINA. *Hel. testā angustè umbilicatā, pyramidal-conicā, undique densè rugoso-granulatā, mustelinā, nigro-fusco fasciatā; spirā elevatā, apice obtusā; anfractibus septem, convexis, obsoletè obtusè carinatis; aperturā lunato-circulari, labro simplici, subexpanso.*

THE TAWNY HELIX. Shell narrowly umbilicated, pyramidally conical, everywhere densely roughly granulated, tawny, banded with black-brown; spire raised, obtuse at the apex; whorls seven, convex, obsoletely bluntly keeled; aperture lunar-circular, lip simple, a little expanded.

LOWE, Pro. Zool. Soc. 1854.

*Hab.* Porto Santo, Madeira.

A pyramidally conoid tawny-brown species, roughly granuled throughout, and encircled with black-brown linear bands.

Species 1494. (Mus. Wollaston.)

HELIX SUBCALLIPERA. *Hel. testā viz umbilicatā, conoidā, obtusè pyramidalī, ruguloso-granulatā, obliquè densè plicato-striatā, fuscescenti-albā, juxta saturam fusco obsoletè fasciatā; anfractibus sex ad septem, convexis, ultimo anticè deflexo; aperturā lunato-circulari, horizontali, labro subexpanso, marginibus approximatis, columellari subcalloso-dilatato.*

THE SUBCALLOUS HELIX. Shell scarcely umbilicated, conoid, obtusely pyramidal, rugulose granulated, obliquely densely plicately striated, brownish-white, obsoletely banded next the suture with brown; whorls six to seven, convex, the last deflected in front; aperture lunar-circular, horizontal, lip a little expanded, margins approximated, columellar margin slightly callously dilated.

LOWE, Pro. Zool. Soc. 1854.

*Hab.* Porto Santo, Madeira.

Of a shorter pyramidally conoid form than the preceding species, with a slight callously dilated reflexion of the columellar margin.

Species 1495. (Mus. Metcalfe.)

HELIX GLOBULARIS. *Hel. testā imperforatā, conico-globosā, tumidiusculā, obliquè tenuistriatā, striis spiralis minutis impressis decussatā, albā, fasciis lineisque maculatis aurantio-fuscis ciugulatā; anfractibus quinque, convexis, ultimo anticè subito deflexo; aperturā lunato-circulari, parviusculā, contractā, perobliquā, labro tenuè reflexo, ad columellam culloso-arcuato.*

THE GLOBULAR HELIX. Shell imperforated, conically globose, rather swollen, obliquely finely striated, decussated with minute impressed spiral striae, white, encircled with orange-brown bands and blotched lines; whorls five, convex, the last suddenly deflected in front; aperture lunar-circular, rather small, contracted, very oblique, lip thinly reflected, callously arched at the columella.

ZIEGLER, Rossmüsler, Hist. Moll. vol. vii. p. 7. f. 442

*Hab.* Sicily.

Very closely allied to *H. Sicana*, and scarcely more than a variety of that species.

# HELIIX.

	Plate.	Species.		Plate.	Species.
abjecta, <i>Loew</i> .....	CXXXVIII.	572	algira, <i>Linnæus</i> .....	CLXI.	1066
abnormis, <i>Pfr.</i> .....	CLXXXIV.	1275	aliens, <i>Ziegler</i> .....	CLXVI.	1115
achates, <i>Ziegler</i> .....	CLIV.	1012	alliacea, <i>Jeffreys</i> .....	CLXIII.	1084
achalina, <i>Potiez</i> .....	CLIV.	1012	alliaria, <i>Müller</i> .....	CLXIII.	1084
acies, <i>Partsch</i> .....	CLXI.	1065	alligans, <i>Adams</i> .....	LXII.	311
actinophora, <i>Loew</i> .....	CXL.	886	Alonensis, <i>Férussac</i> .....	XCIII.	505
acuducta, <i>Benson</i> .....	CXXIII.	739	alpestris, <i>Ziegler</i> .....	CXLVI.	943
aculeata, <i>Müller</i> .....	CLXVI.	1111	alpha, <i>Pfr.</i> .....	CXXXII.	513
acuminata, <i>Pfr.</i> .....	CXXIX.	785	alpina, <i>Faure-Bignel</i> .....	CLIV.	1007
acuta, <i>Lamarck</i> .....	XLVII.	219	Allenana, <i>Gärtner</i> .....	CLXII.	1072
acuta, <i>Da Costa</i> .....	CLIII.	993	alterata, <i>Say</i> .....	CXVI.	670
acuta, <i>Quoy</i> .....	LXXX.	422	alveus, <i>Adams</i> .....	CCVII.	1466
acutissima, <i>Deshayes</i> .....	XLVII.	219	Amazonica, <i>Pfr.</i> .....	CXCVII.	1386
acutimargo, <i>Pfr.</i> .....	XXXIII.	140	ambigua, <i>Adams</i> .....	LXIII.	320
Adansonii, <i>Webb and Berth.</i> ..	CXXXIV.	529	amicta, <i>Reeve</i> .....	XIV.	52
addita, <i>Férussac</i> .....	XXXIV.	149	ammoniformis, <i>D'Orbigny</i> ..	LXI.	307
adusta ( <i>Bulinus</i> ), <i>Sowerby</i> ..	XIX.	77	Ammonitoides, <i>Reeve</i> .....	CLXXXI.	1246
adusta, <i>Hinds</i> .....	LXXXIV.	451	ammonoceras, <i>Pfr.</i> .....	CXCI.	1338
advena, <i>Webb and Berth.</i> .....	CXXXVI.	852	amurna, <i>Pfr.</i> .....	XXXII.	136
ægopthalmos, <i>Gmelin</i> .....	CLXI.	1066	amphibulina, <i>Férussac</i> .....	XXXVIII.	172
ægrotus, <i>Reeve</i> .....	XXII.	95	ampulla, <i>Benson</i> .....	CXXIII.	736
æmula, <i>Rossmäslcr</i> .....	CLXXVIII.	1220	ampullarioides, <i>Reeve</i> .....	CCH.	1423
ænea, <i>Krauss</i> .....	CLXXXIX.	1320	anaglyptica, <i>Reeve</i> .....	CXXXIX.	833
æruginea, <i>Pfr.</i> .....	CLXXXIII.	1265	anceps ( <i>Carocolla</i> ), <i>Gould</i> ..	XXXV.	155
afflicta, <i>Férussac</i> .....	CXLIV.	932	Andicola, <i>Pfr.</i> .....	CH.	568
affinis, <i>Linnæus</i> .....	CLIII.	993	angigya, <i>Ziegler</i> .....	CLIX.	1047
Africana, <i>Pfr.</i> .....	CXCVII.	1384	angistoma, <i>Férussac</i> .....	XLIV.	206
Aglaja, <i>Pfr.</i> .....	CXCIX.	1396	anguiculus, <i>Reeve</i> .....	CXXXI.	802
agreabilis, <i>Ziegler</i> .....	CLII.	988	angulata, <i>Férussac</i> .....	XLIX.	230
alabastrites, <i>Michaud</i> .....	CLXXV.	1190	angustata, <i>Férussac</i> .....	XLVI.	216
alauda, <i>Férussac</i> .....	LIV.	257	angustispira, <i>Adams</i> .....	LXVI.	343
Albaniensis, <i>Sowerby</i> .....	XIII.	48	Annatonensis, <i>Pfr.</i> .....	CC.	1409
Albanica, <i>Ziegler</i> .....	CLXI.	1069	annulata, <i>Sowerby</i> .....	XXVI.	110
albella, <i>Chemn.</i> .....	CLXXVII.	1212	annulifera, <i>Pfr.</i> .....	C.	555
albella, <i>Drap.</i> .....	CLXXVII.	1213	anomala, <i>Adams</i> .....	LI.	246
albella, <i>Pennant</i> .....	CCIV.	1442	Anthonia, <i>Adams</i> .....	LXIII.	316
Albersi, <i>Pfr.</i> .....	LX.	300	antiqua, <i>Ad. and Reeve</i> .....	LXXVII.	402
albescens, <i>Jan</i> .....	XCIV.	515	antiquorum, <i>Leach</i> .....	XCV.	552
albicans, <i>Pfr.</i> .....	LXV.	335	aperta, <i>Born</i> .....	CLXI.	1063
albidens, <i>Benson</i> .....	CLXXII.	1167	apex, <i>Adams</i> .....	LXVI.	339
albina, <i>Ziegler</i> .....	CLII.	987	apia, <i>Homb. and Jacq.</i> .....	CXCIX.	1402
alboincta, <i>Pfr.</i> .....	XXXIV.	153	appendiculata, <i>Pfr.</i> .....	CXCH.	1353
albolabris, <i>Say</i> .....	CXIV.	624	appressa, <i>Say</i> .....	CXVIII.	689
Alboranensis, <i>Webb</i> .....	CLII.	987	apicina, <i>Lam.</i> .....	CCVIII.	1472
Alexandri, <i>Gray</i> .....	CCVIII.	1470	approximata, <i>Le Guill.</i> .....	CVIII.	603

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	Plate.	Species.		Plate.	Species.
<i>aprica</i> , <i>Krauss</i> . . . . .	XLIII.	201	<i>Baconi</i> , <i>Benson</i> . . . . .	CLXXII.	1166
<i>Arabica</i> , <i>Terzer</i> . . . . .	CXLVIII.	958	<i>Bactriana</i> , <i>Hutton</i> . . . . .	CXCV.	1376
<i>arata</i> , <i>Sowerby</i> . . . . .	XV.	59	<i>badia</i> , <i>Férussac</i> . . . . .	LVI.	274
<i>arboreoides</i> , <i>Adams</i> . . . . .	LXIII.	319	<i>badia</i> , <i>Gmelin</i> . . . . .	LXXXVII.	473
<i>arborea</i> , <i>Say</i> . . . . .	CXXII.	733	<i>Bahamensis</i> , <i>Pfr.</i> . . . . .	LVII.	276
<i>arbustorum</i> , <i>Linnaeus</i> . . . . .	CXLVI.	943	<i>Bainbridgii</i> , <i>Pfr.</i> . . . . .	XLVII.	222
<i>areta</i> , <i>Lowe</i> . . . . .	CXLII.	905	<i>Bajadera</i> , <i>Pfr.</i> . . . . .	LXXV.	388
<i>aretispira</i> , <i>Pfr.</i> . . . . .	CXIII.	653	<i>Baldensis</i> , <i>Villa</i> . . . . .	CLX.	1059
<i>areolata</i> , <i>Pfr.</i> . . . . .	XXXVII.	169	<i>Balearica</i> , <i>Ziegler</i> . . . . .	XCX.	518
<i>Ardouinii</i> , <i>Deshayes</i> . . . . .	XXII.	93	<i>Balesteriana</i> , <i>Lea</i> . . . . .	XCI.	494
<i>arenosa</i> , <i>Ziegler</i> . . . . .	CLXIII.	1089	<i>Balmei</i> , <i>Potiez</i> . . . . .	CLXIV.	1093
<i>arcolata</i> , <i>Sowerby</i> . . . . .	CXV.	664	<i>balteata</i> , <i>Sowerby</i> . . . . .	XXV.	71
<i>argentea</i> , <i>Reeve</i> . . . . .	CCIV.	1434	<i>Banatica</i> , <i>Partsch</i> . . . . .	CLI.	982
<i>argillacea</i> , <i>Férussac</i> . . . . .	LXXIX.	415	<i>Banksii</i> , nonnull. . . . .	XCVII.	532
<i>argillacea</i> , <i>Gray</i> . . . . .	LXVIII.	353	<i>barbata</i> , <i>Deshayes</i> . . . . .	CLXXXVIII.	1221
<i>argonautula</i> , <i>Webb and Berth.</i> . . . .	CCIX.	1486	<i>barbatula</i> , <i>Reeve</i> . . . . .	CXXXII.	814
<i>arietina</i> , <i>Rossm.</i> . . . . .	CLXXXVI.	1204	<i>barbula</i> , <i>Charpentier</i> . . . . .	CLIV.	1004
<i>Armeniaca</i> , <i>Pfr.</i> . . . . .	CXLIV.	925	<i>Barclayana</i> , <i>Pfr.</i> . . . . .	XLII.	188
<i>Armida</i> , <i>Pfr.</i> . . . . .	CLVII.	1032	<i>Barclayi</i> , <i>Benson</i> . . . . .	CLXXIV.	1178
<i>armillata</i> , <i>Lowe</i> . . . . .	CXLII.	906	<i>Barrakporensis</i> , <i>Pfr.</i> . . . . .	CXXXII.	816
<i>Armitageana</i> , <i>Lowe</i> . . . . .	CXLI.	898	<i>Baskervillei</i> , <i>Pfr.</i> . . . . .	CXVII.	684
<i>arridens</i> , <i>Lowe</i> . . . . .	CXLII.	912	<i>Batanica</i> , <i>Ad. and Reeve</i> . . . . .	CV.	588
<i>arvensis</i> , <i>Krynicky</i> . . . . .	CXLVI.	949	<i>Bataviana</i> , <i>Busch</i> . . . . .	LXXXVI.	463
<i>aspera</i> , <i>Férussac</i> . . . . .	XLIV.	207	<i>Beckiana</i> , <i>Pfr.</i> . . . . .	XXXIII.	145
<i>asperella</i> , <i>Pfr.</i> . . . . .	CXXV.	752	<i>Belangeri</i> , <i>Deshayes</i> . . . . .	CCVI.	1457
<i>aspersa</i> , <i>Müller</i> . . . . .	XCIV.	513	<i>Belcheri</i> , <i>Pfr.</i> . . . . .	CXC.	1328
<i>asperula</i> , <i>Lowe</i> . . . . .	CXXXVII.	857	<i>bella</i> , <i>Pfr.</i> . . . . .	CXCIII.	1354
<i>associata</i> , <i>Ziegler</i> . . . . .	CLIII.	998	<i>Berlanderiana</i> , <i>Moricand</i> . . . . .	CXX.	708
<i>atrata</i> , <i>Pfr.</i> . . . . .	XCIX.	549	<i>Bermudensis</i> , <i>Pfr.</i> . . . . .	LVII.	275
<i>atrolabiata</i> , <i>Krynicky</i> . . . . .	CXLVI.	948	<i>Berytensis</i> , <i>Férussac</i> . . . . .	CXLIX.	966
<i>Atropos</i> , <i>Férussac</i> . . . . .	CXCII.	1347	<i>Beskei</i> , <i>Dunker</i> . . . . .	CLXXXII.	1255
<i>atritata</i> , <i>Lowe</i> . . . . .	CXXXVII.	856	<i>beta</i> , <i>Pfr.</i> . . . . .	CXXXII.	814
<i>Auberi</i> , <i>D'Orbigny</i> . . . . .	CLXXX.	1243	<i>Bethencourtiana</i> , <i>Shutt.</i> . . . . .	CXLV.	937
<i>Audebardi</i> , <i>Pfr.</i> . . . . .	XLV.	211	<i>biangulata</i> , <i>Pfr.</i> . . . . .	XXXV.	157
<i>Audouinii</i> , <i>D'Orbigny</i> . . . . .	XCVIII.	540	<i>bicallosa</i> , <i>Friwaldsky</i> . . . . .	CLXXVIII.	1217
<i>aulacospira</i> , <i>Pfr.</i> . . . . .	CL.	975	<i>bicarinata</i> , <i>Sowerby</i> . . . . .	CXLII.	908
<i>aulica</i> , <i>Pfr.</i> . . . . .	LXXXIX.	481	<i>bicincta</i> , <i>Menke</i> . . . . .	LV.	266
<i>aurata</i> , <i>Sowerby</i> . . . . .	XIII.	46	<i>bicolor</i> , <i>Lowe</i> . . . . .	CXXXVIII.	873
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<i>auriculata</i> ( <i>Polygyra</i> ), <i>Swainson</i> . . . . .	XXVIII.	122	<i>bicostata</i> , <i>Pfr.</i> . . . . .	CXIX.	697
<i>auriculata</i> , <i>Say</i> . . . . .	CXIX.	700	<i>bidens</i> ( <i>Trochus</i> ), <i>Chemn.</i> . . . . .	CLXIV.	1096
<i>auriculina</i> , <i>Petit</i> . . . . .	CI.	562	<i>bidentalis</i> , <i>Lamarck</i> . . . . .	CXXXV.	842
<i>auridens</i> , <i>Rang</i> . . . . .	LVII.	281	<i>bidentata</i> , <i>Gmelin</i> . . . . .	CLXIV.	1096
<i>auris</i> , <i>Pfr.</i> . . . . .	CXCVI.	1382	<i>bidentata</i> , <i>Drap.</i> . . . . .	CLXXX.	1242
<i>australis</i> , <i>Menke</i> . . . . .	CXXXI.	803	<i>bidenticulata</i> , <i>Benson</i> . . . . .	CLXXIV.	1184
<i>Austriaca</i> , <i>Mühlfeldt</i> . . . . .	CXLVI.	949	<i>bifasciata</i> ( <i>Trochus</i> ), <i>Burrows</i> . . . . .	CIV.	574
<i>avara</i> , <i>Say</i> . . . . .	CXXI.	720	<i>bifrons</i> , <i>Lowe</i> . . . . .	CXXXIX.	881
<i>avellana</i> , <i>Férussac</i> . . . . .	LV.	261	<i>bifureata</i> , <i>Deshayes</i> . . . . .	C.	554
<i>avus</i> , <i>Pfr.</i> . . . . .	CXIV.	658	<i>bigonia</i> , <i>Férussac</i> . . . . .	XXIV.	105
<i>Babondubii</i> , <i>Parreyss</i> . . . . .	CLXXIX.	1228	<i>bilabiata</i> , <i>Lamarck</i> . . . . .	CLIX.	1049

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	Plate.	Species.		Plate.	Species.
<i>bilamellata</i> , Pfr. . . . .	CXIII.	646	<i>bursatella</i> , Gould . . . . .	CXI.	635
<i>bilineata</i> , Pfr. . . . .	CXLIV.	928	<i>Busbyi</i> , Gray . . . . .	LXXIII.	350
<i>Binneyana</i> , Pfr. . . . .	CLXXIX.	1230	<i>Buschi</i> , Pfr. . . . .	CCHL.	1430
<i>bipartita</i> , Férussac . . . . .	LXIX.	359	<i>Butleri</i> , Pfr. . . . .	VIII.	37
<i>bisculpta</i> , Benson . . . . .	CLXXIII.	1171	<i>eacuminifera</i> , Benson . . . . .	CXXIV.	744
<i>bistrialis</i> , Beck. . . . .	XC.	483	<i>caduea</i> , Pfr. . . . .	XCVII.	530
<i>bisulcata</i> , Pfr. . . . .	CXLVIII.	969	<i>caducior</i> , Reeve . . . . .	III.	12
<i>bituberculata</i> , Pfr. . . . .	XCIX.	544	<i>cærulans</i> , Mühlfeldt . . . . .	CLX.	1057
<i>Blainvilleana</i> , Lea . . . . .	XXVII.	115	<i>cælatura</i> , Férussac . . . . .	XLI.	183
<i>Blandiana</i> , Adams . . . . .	LXI.	303	<i>Callra</i> , Férussac . . . . .	XL.	179
<i>Blanchetiana</i> , Moric. . . . .	CIV.	574	<i>Cailliandi</i> , Deshayes . . . . .	VIII.	33
<i>Bogotensis</i> , Pfr. . . . .	CXCVI.	1381	<i>calamechroa</i> , Jonas . . . . .	CLXXIX.	1231
<i>Boholensis</i> , Pfr. . . . .	XXXV.	154	<i>calathus</i> , Lowe . . . . .	CXL.	889
<i>Boissieri</i> , Charpentier . . . . .	CXLVIII.	961	<i>calcareo</i> , Pfr. . . . .	CXXXIX.	877
<i>Boivini</i> , Petit . . . . .	LXXVIII.	410	<i>calculus</i> , Pfr. . . . .	CXCV.	1371
<i>Bombayana</i> , Grateloup . . . . .	CLXXV.	1194	<i>Californiensis</i> , Lea . . . . .	CXV.	661
<i>bombycina</i> , Pfr. . . . .	CLXXXVIII.	1314	<i>caliginosa</i> , Ad. and Reeve . . . . .	XCVI.	525
<i>Bonplandi</i> , Lamarck . . . . .	LIV.	259	<i>callifera</i> , Pfr. . . . .	CXI.	634
<i>Bonplandi</i> , Valenciennes . . . . .	L.	239	<i>calliostoma</i> , Ad. and Reeve . . . . .	CV.	585
<i>Boothiana</i> , Pfr. . . . .	LXV.	333	<i>calva</i> , Lowe . . . . .	CXLI.	900
<i>Borneensis</i> , Pfr. . . . .	CXCVI.	1379	<i>campanula</i> , Pfr. . . . .	XVI.	66
<i>Bornii</i> , Chemnitz . . . . .	XLIV.	204	<i>Campbelli</i> , Gray . . . . .	LXXXII.	438
<i>Bosciana</i> , Férussac . . . . .	CIV.	574	<i>campecina</i> , Ezquerria . . . . .	CLXXXV.	1286
<i>Bourcierii</i> , Pfr. . . . .	XCIX.	545	<i>Candaharica</i> , Pfr. . . . .	LXXXV.	456
<i>Bowdichiana</i> , Férussac . . . . .	CXXXV.	835	<i>candescens</i> , Adams . . . . .	LI.	242
<i>brachyodon</i> , Sowerby . . . . .	XIX.	79	<i>candicans</i> , Ziegler . . . . .	CLXIII.	1089
<i>Brardiana</i> , Pfr. . . . .	CVIII.	604	<i>candidissima</i> , Draparnaud . . . . .	CXCVII.	1383
<i>Brasiliana</i> , Deshayes . . . . .	XCVIII.	536	<i>candidula</i> , Studer . . . . .	CLXXX.	1242
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<i>brevipila</i> , Pfr. . . . .	CXXVIII.	777	<i>Capensis</i> , Pfr. . . . .	XLIII.	202
<i>brevis</i> , Adams . . . . .	LXVI.	341	<i>caperata</i> , Montagu . . . . .	CLXIV.	1090
<i>Bridwilli</i> , Pfr. . . . .	CLVII.	1034	<i>capitanea</i> , Pfr. . . . .	CLXXXV.	1279
<i>Broderipii</i> , Pfr. . . . .	XXI.	88	<i>capitium</i> , Benson . . . . .	CXXV.	749
<i>Bronni</i> , Pfr. . . . .	LI.	241	<i>caput-spinulæ</i> , Reeve . . . . .	CXXXIII.	818
<i>Brookei</i> , Ad. and Reeve . . . . .	LXXIII.	377	<i>cara</i> , Adams . . . . .	XLVIII.	223
<i>Brugneriana</i> , Pfr. . . . .	VIII.	38	<i>carabinata</i> , Férussac . . . . .	LXXVIII.	413
<i>Brumeriensis</i> , Forbes . . . . .	CCV.	1448	<i>Carascalensis</i> , Férussac . . . . .	CLXIX.	1134
<i>brunnea</i> , Anton . . . . .	CXI.	628	<i>carbonaria</i> , Sowerby . . . . .	XVI.	63
<i>brunnea</i> , Sowerby . . . . .	XIX.	80	<i>Carica</i> , Roth . . . . .	CXLVI.	946
<i>buccinella</i> , Pfr. . . . .	CXXXIII.	821	<i>carina</i> , Wood . . . . .	XLIV.	205
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<i>Buddiana</i> , Adams . . . . .	LX.	296	<i>cariosula</i> , Michaud . . . . .	CLXXVI.	1199
<i>Buffoniaua</i> , Pfr. . . . .	CII.	565	<i>Carmelita</i> , Férussac . . . . .	XL.	181
<i>bullæ</i> , Pfr. . . . .	IV.	15	<i>carneola</i> , Pfr. . . . .	CXCV.	1374
<i>bullacea</i> , Pfr. . . . .	CLXXXVI.	1288	<i>carnicolor</i> , Férussac . . . . .	LVIII.	283
<i>bullula</i> , Hutton . . . . .	CXXXIII.	819	<i>carnicolor</i> , D'Orbigny . . . . .	LIV.	260
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<i>buonobrena</i> , D'Orbigny . . . . .	CCIX.	1477	<i>carocolla</i> , Chemnitz . . . . .	XLIV.	205
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	Plate.	Species.		Plate.	Species.
Caroni, <i>Deshayes</i> . . . . .	CLXXXI.	1251	cimex, <i>Pfr.</i> . . . . .	CCI.	1411
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Carthusiana, <i>Müller</i> . . . . .	CLXIII.	1085	cincta, <i>Müller</i> . . . . .	XCH.	509
<i>Carthusiana</i> , <i>Drap.</i> . . . . .	CLXII.	1077	cincta, <i>Kuster</i> . . . . .	XCIV.	515
<i>Carthusianella</i> , <i>Drap.</i> . . . . .	CLXIII.	1085	cincta, <i>Sheppard</i> . . . . .	CLII.	989
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casta, <i>Pfr.</i> . . . . .	XXI.	86	einerascens, <i>Pfr.</i> . . . . .	XIX.	78
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Cathcartæ, <i>Reeve</i> . . . . .	CCIII.	1427	cingulina, <i>Deshayes</i> . . . . .	CLIV.	1012
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Cayennensis, <i>Pfr.</i> . . . . .	CXX.	710	Circe, <i>Pfr.</i> . . . . .	CLVI.	1025
Cecillea, <i>Philippi</i> . . . . .	CCIII.	1431	circinata, <i>Studer</i> . . . . .	CLXIII.	1087
Celinde ( <i>Nanina</i> ), <i>Gray</i> . . . . .	CXXXI.	799	circulus, <i>Pfr.</i> . . . . .	LXXXII.	440
cellaria, <i>Müller</i> . . . . .	CLXIV.	1092	circumdata, <i>Férussac</i> . . . . .	LXXXV.	470
cepa, <i>Müller</i> . . . . .	XLIX.	233	circumfiruata, <i>Redfield</i> . . . . .	CLXXXIX.	1319
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cerea, <i>Pfr.</i> . . . . .	CLXXXIII.	1174	circumtexta, <i>Férussac</i> . . . . .	LV.	266
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Ceres, <i>Pfr.</i> . . . . .	CLVI.	1021	citrina, <i>Linnaeus</i> . . . . .	LXXXIX.	482
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<i>figulina</i> , Parreyss	XCV.	516	<i>galactites</i> , Lamarek	XII.	45
<i>filaris</i> , Valenciennes	XXI.	84	<i>galactostoma</i> , Pfr.	XLII.	192
<i>filicina</i> , Schmidt	CLXX.	1146	<i>gallinula</i> , Pfr.	XXX.	130
<i>filicosta</i> , Pfr.	CCIV.	1437	<i>gallo-pavonis</i> , Val.	CLXXXVII.	1207
<i>filicum</i> , Krynicki	CLXI.	1064	<i>ganoma</i> , Pfr.	CLXXXIII.	1267
<i>filimargo</i> , Ziegler	CLXXXIX.	1233	<i>Gardueri</i> , Pfr.	LXXXIII.	446
<i>filocincta</i> , Pfr.	XXXVI.	158	<i>Gargotta</i> , Rossm.	CLXXXVIII.	1223

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gemina, <i>Busch</i> . . . . .	LXXIII.	374	Guayaquilensis, <i>Pfr.</i> . . . . .	CX.	621
gemma, <i>Pfr.</i> . . . . .	XXXVII.	168	Guermi, <i>Pfr.</i> . . . . .	LXXXV.	457
Gemonensis, <i>Férussac</i> . . . . .	CLXIII.	1086	Gueriniana, <i>Loce</i> . . . . .	CXLII.	907
generalis, <i>Pfr.</i> . . . . .	CXCII.	1349	Guillarmadi, <i>Shuttl.</i> . . . . .	CIV.	576
germanus, <i>Reve</i> . . . . .	LXXIV.	385	gularis, <i>Say</i> . . . . .	CXXI.	719
Ghiesbrihti, <i>Nysl</i> . . . . .	XCVII.	535	gummata, <i>Sowerby</i> . . . . .	XXXI.	134
Gibboni, <i>Pfr.</i> . . . . .	XCVIII.	539	Gundlachi, <i>Pfr.</i> . . . . .	LXVII.	345
<i>Gibbsii</i> , <i>Leach</i> . . . . .	CLXIII.	1085	Gussoniana, <i>Shuttl.</i> . . . . .	XCIV.	510
<i>gigantea</i> , <i>Lamarek</i> . . . . .	XLV.	210	guttata, <i>Ollivier</i> . . . . .	CXLVII.	953
gilva, <i>Férussac</i> . . . . .	LIX.	292	guttula, <i>Pfr.</i> . . . . .	CLVIII.	1040
glabella, <i>Drap.</i> . . . . .	CLXIV.	1091	gyria, <i>Roth.</i> . . . . .	CXLIV.	929
glaberrima, <i>Pfr.</i> . . . . .	CLXXXIX.	1317	gyrostoma, <i>Férussac</i> . . . . .	CCVI.	1452
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globularis, <i>Ziegler</i> . . . . .	CCX.	1485	Hartmanni, <i>Pfr.</i> . . . . .	XCI.	489
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<i>globulus</i> , <i>Chemnitz</i> . . . . .	LXXV.	391	<i>Hasselquistii</i> , <i>Ehrenb.</i> . . . . .	CXLVIII.	964
glutinosa, <i>Metcalfé</i> . . . . .	CXCVI.	1378	<i>Hedenborgi</i> , <i>Pfr.</i> . . . . .	CXLV.	935
Gmeliniana, <i>Pfr.</i> . . . . .	XXXII.	138	Helenensis, <i>Forbes</i> . . . . .	CXXXI.	801
goniophala, <i>Pfr.</i> . . . . .	CXCIV.	1362	heliaca, <i>D'Orbigny</i> . . . . .	XCVIII.	538
Gossei, <i>Pfr.</i> . . . . .	LVIII.	285	Helicinoides, <i>Homb.</i> . . . . .	CL.	976
Goudotiana, <i>Férussac</i> . . . . .	XXXVIII.	174	Helicoides ( <i>Bul.</i> ), <i>Pfr.</i> . . . . .	XVII.	72
Gouldi, <i>Pfr.</i> . . . . .	XXXVI.	163	helicophantoides, <i>Pfr.</i> . . . . .	CXIII.	650
gradata, <i>Pfr.</i> . . . . .	XXXVII.	165	helicyeloides, <i>D'Orbigny</i> . . . . .	CVII.	599
Grællsiana, <i>Pfr.</i> . . . . .	CXLV.	939	heligmoidea, <i>D'Orbigny</i> . . . . .	CVII.	597
graminicola, <i>Adams</i> . . . . .	LXI.	306	<i>Hemprichii</i> , <i>Ehrenb.</i> . . . . .	CXLVIII.	964
grandis, <i>Pfr.</i> . . . . .	VII.	30	hepatica, <i>Reve</i> . . . . .	III.	9
granifera, <i>Gray</i> . . . . .	LII.	252	<i>heteroclités</i> , <i>Lamarek</i> . . . . .	XLVII.	219
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<i>Grayana</i> , <i>Pfr.</i> . . . . .	XXX.	129	hippocrepis, <i>Pfr.</i> . . . . .	CLXXX.	1238
Grayi, <i>Pfr.</i> . . . . .	CXXVI.	755	hirsuta, <i>Say</i> . . . . .	CXXI.	714
Greenwoodii, <i>Gray</i> . . . . .	LXXXI.	434	<i>hirsuta</i> , <i>Jan</i> . . . . .	CLXIV.	1099
<i>greyaria</i> , <i>Ziegler</i> . . . . .	CLXIV.	1098	<i>hirsuta</i> , <i>Brumati</i> . . . . .	CLI.	980
Gridlithi, <i>Pfr.</i> . . . . .	CIV.	579	hirta, <i>Menke</i> . . . . .	CLIII.	996
grisea, <i>Linnaeus</i> . . . . .	XCIII.	509	Hispana, <i>Linnaeus</i> . . . . .	CLI.	986
griseola, <i>Pfr.</i> . . . . .	LXIV.	327	Hispanica, <i>Partsch</i> . . . . .	XCIII.	506
Grohmanni, <i>Philippi</i> . . . . .	CLXVIII.	1127	<i>hispida</i> , <i>Jeffreys</i> . . . . .	CXLIII.	921
<i>Groviana</i> , <i>Férussac</i> . . . . .	CXXXIV.	831	<i>hispida</i> , <i>Linnaeus</i> . . . . .	CLXV.	1103
<i>Grayana</i> , <i>Férussac</i> . . . . .	CLXXVIII.	1223	<i>hispidula</i> ( <i>Caroc.</i> ), <i>Lam.</i> . . . . .	CXLIV.	926

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Hoffmanni, Partsch	CLI.	984	<i>infecta</i> , Reeve	CXXXII.	808
Hollandi, Adams	LXIII.	321	<i>inflata</i> , Deshayes	XLIX.	230
holoserica, Studer	CLIX.	1050	<i>inlecta</i> , Say	CXIX.	704
<i>holoserica</i> , Gmelin	CLIX.	1049	<i>infrendens</i> , Gould	CXXXVIII.	770
Hondana, Pfr.	CXC.	1329	<i>infula</i> , Benson	CXXIX.	783
honesta, Gould	LXXXIV.	452	<i>ingens</i> , Adams	XLVII.	221
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Hopetonensis, Shuttl.	CXX.	709	<i>inornata</i> , Say	CXVI.	666
horiomphala, Pfr.	CXCIV.	1358	<i>inquinata</i> , Busch	LXXVI.	399
horizontalis, Pfr.	XXVII.	116	<i>insculpta</i> , Pfr.	CLXXX.	1236
<i>hortensis</i> , Pennant	XCIV.	513	<i>insignis</i> , D'Orbigny	CCIX.	1485
<i>hortensis</i> , Müller	CLII.	989	<i>insolida</i> , Ziegler	CLXVII.	1121
Huachinensis, Pfr.	CLVIII.	1039	<i>instabilis</i> , Ziegler	CLXIX.	1141
Hugeli, Pfr.	XXXII.	136	<i>intercarinata</i> , Mighels	CXIII.	647
Humboldtiana, Valenc.	CII.	566	<i>intermedia</i> , Férussac	CLX.	1060
humilis, Hutton	CXXXIII.	825	<i>interna</i> , Say	CXXI.	718
Humphreysiana, Lea	LXXIV.	387	<i>intersecta</i> , Poiret	CLXIV.	1090
Huttoni, Pfr.	CXXIX.	786	<i>interrupta</i> , Benson	CLXXI.	1159
hyalina, Férussac	CLXX.	1143	<i>intersecta</i> , Michaud	CLXXXVIII.	1216
<i>hybrida</i> , Poiret	CLII.	989	<i>intertexta</i> , Binney	CXVI.	668
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hypopolea, Pfr.	CXXX.	787	<i>iota</i> , Pfr.	CXXXII.	809
hystrix, Mighel	CXIII.	655	<i>irregularis</i> , Férussac	CXLVIII.	964
Ibuensis, Pfr.	CXCIX.	1398	Isabella, Férussac	LII.	249
Idc, Gray	CXXX.	789	Isabellina, Pfr.	CLXXXV.	1280
igniflua, Reeve	CXXXVIII.	774	<i>isodoma</i> , Jan	CLXIII.	1086
ignobilis, Sowerby	XV.	57	<i>isodon</i> , Pfr.	CXLIX.	965
Iloconensis, Sowerby	XXV.	109	<i>isognostomus</i> , Gmelin	CLIX.	1053
immaculata, Ad. and Reeve	LXXIX.	420	Jacksonienseis, Gray	CCVII.	1162
immunda, Adams	LXI.	302	Jacquinoti, Pfr.	CXI.	631
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Incei, Pfr.	LXVIII.	356	Javanica, Lamarek	LXXVI.	396
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<i>incerta</i> , Férussac	XLVI.	214	Jellreysiana, Pfr.	CXXX.	788
<i>incerta</i> , Drap.	CLXI.	1064	Jenyasi, Pfr.	CL.	979
inchoata, Morelet	CLIII.	1002	Jervisenseis, Quoy	CXXVI.	758
inconspicua, Adams	LXVII.	350	Jonasi, Pfr.	XXVI.	113
<i>inconspicua</i> , Forbes	CXXX.	795	Josephina, Férussac	LVI.	272
incrassata, Poy	CL.	972	Juilleti, Terver	CLXXVI.	1201
indentata, Say	CXXII.	730	Juliana (Nanina), Gray	LXXII.	373
Indica, Pfr.	LXXXIII.	448	<i>Juliformis</i> , Lowe	CXLI.	902
indistincta, Férussac	CXXVIII.	776	juloidea, Gray	CCVII.	1464



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<i>Juno</i> , Pfr. . . . .	XCLX.	547	<i>latitans</i> , Broderip . . . . .	III.	10
<i>kappa</i> , Pfr. . . . .	CXXXII.	811	<i>Launcestonensis</i> , Reeve . . . . .	CXLIX.	268
<i>Karalitana</i> , Sowerby . . . . .	CLXI.	1063	<i>lauta</i> , Loze . . . . .	CXL.	891
<i>Kawaiensis</i> , Pfr. . . . .	CLXXXII.	1256	<i>laxata</i> , Férussac . . . . .	XCVII.	572
<i>Kellettii</i> , Forbes . . . . .	CXV.	665	<i>Layardi</i> , Pfr. . . . .	CIX.	614
<i>Keppelli</i> , Pfr. . . . .	CLXXXVII.	1305	<i>Leachii</i> , Férussac . . . . .	CCVI.	1153
<i>Kermocani</i> , Michaud . . . . .	CLX.	1056	<i>lecta</i> , Férussac . . . . .	CLIV.	1003
<i>Kierulfi</i> , Pfr. . . . .	XXXIII.	115	<i>lecythis</i> , Benson . . . . .	CLXXII.	1164
<i>Kingi</i> , Pfr. . . . .	CX.	619	<i>Lefebriana</i> , Férussac . . . . .	CLI.	980
<i>Kirbii</i> , Sheppard . . . . .	CXLIII.	916	<i>Leimonias</i> , Gray . . . . .	CXXXVIII.	820
<i>Kivi</i> , Gray . . . . .	CXXX.	794	<i>lemniscata</i> , Webb and Berth. . . . .	CXXXIX.	876
<i>Knoxvilliana</i> , Férussac . . . . .	CXVII.	681	<i>lemniscata</i> , Brunati . . . . .	XCHI.	509
<i>Knysnaensis</i> , Pfr. . . . .	LXXVII.	403	<i>lemniscata</i> , Lesson . . . . .	LXXVI.	400
<i>Kochi</i> , Pfr. . . . .	CLXVII.	1120	<i>lenis</i> ( <i>Zonites</i> ), Shuttl. . . . .	CXXXIX.	882
<i>Krausi</i> , Pfr. . . . .	CXCVIII.	1391	<i>lens</i> , Férussac . . . . .	CLXXVIII.	1221
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<i>Kurri</i> , Pfr. . . . .	LXXXI.	432	<i>lenticula</i> , Held . . . . .	CXXI.	715
<i>Kusteri</i> , Pfr. . . . .	CVI.	593	<i>lentiginosa</i> , Loze . . . . .	CXLI.	896
<i>labiata</i> , Pfr. . . . .	LXXIII.	376	<i>Leopoldina</i> , Charp. . . . .	CLXI.	1064
<i>labium</i> , Férussac . . . . .	XXII.	92	<i>leporina</i> , Gould . . . . .	CXXI.	722
<i>labrella</i> , Lamarek . . . . .	XXXIX.	147	<i>Leprieurii</i> , Petit . . . . .	CI.	569
<i>labyrinthica</i> , Say . . . . .	CXXII.	728	<i>leptogramma</i> , Pfr. . . . .	LXXXII.	437
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<i>lactea</i> , Hartmann . . . . .	CXLVIII.	962	<i>leucoraphe</i> , Pfr. . . . .	LXIV.	330
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<i>Lais</i> , Pfr. . . . .	CLV.	1016	<i>ligata</i> , Müller . . . . .	XCIV.	515
<i>Lamarekiana</i> , Lea . . . . .	IV.	20	<i>ligeri</i> , Say . . . . .	CXVIII.	693
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<i>lambda</i> , Pfr. . . . .	CXXXVIII.	774	<i>liguaria</i> , Pfr. . . . .	IX.	40
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<i>lamellosa</i> , Férussac . . . . .	CXI.	630	<i>limbata</i> , Krynicki . . . . .	CXLV.	934
<i>lampas</i> , Müller . . . . .	XLIV.	205	<i>limbata</i> , Drop. . . . .	CLXII.	1073
<i>lampira</i> , Pfr. . . . .	CLXXXVI.	1295	<i>Lindeni</i> , Pfr. . . . .	LIX.	291
<i>Lancerothensis</i> , Webb and Berth. . . . .	CCVIII.	1469	<i>lineata</i> , Say . . . . .	CXXII.	724
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Loveni, <i>Krauss</i> . . . . .	XLIII.	195	mansucta, <i>Pfr.</i> . . . . .	CLXXXVII.	1304
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lucana, <i>Lamarek</i> . . . . .	XLI.	186	maritima, <i>Drap.</i> . . . . .	CXLIV.	930
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lucidella, <i>Pfr.</i> . . . . .	XXXVII.	164	Martini, <i>Pfr.</i> . . . . .	CXCH.	1356
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lucorum, <i>Linnaus</i> . . . . .	XCIV.	512	Mauritiana, <i>Pfr.</i> . . . . .	XLII.	189
luctuosa, <i>Beck.</i> . . . . .	CLV.	1017	maxima, <i>Pfr.</i> . . . . .	CLV.	1015
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lurida, <i>Studer</i> . . . . .	CLXIII.	1084	melanocheila, <i>Valenc.</i> . . . . .	XIX.	80
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Luzonica, <i>Sowerby</i> . . . . .	X.	41	membranicosta, <i>Pfr.</i> . . . . .	CLXXXIX.	1318
lychnia, <i>Benson</i> . . . . .	CLXXII.	1161	Menkeana, <i>Pfr.</i> . . . . .	CVI.	591
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Mackensii, <i>Valenc.</i> . . . . .	XCVI.	527	<i>meridionalis</i> , <i>Parreyss</i> . . . . .	CLII.	988
Macmurrayi, <i>Adams</i> . . . . .	XLV.	208	Merziana, <i>Pfr.</i> . . . . .	CXLIX.	971
Maenabiana, <i>Chilly.</i> . . . . .	CCVII.	1465	metaformis, <i>Férussac</i> . . . . .	XVII.	70
macrodon, <i>Menke</i> . . . . .	CXXVII.	761	<i>Melcalfei</i> , <i>Pfr.</i> . . . . .	XXX.	127
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Malacanus, <i>Pfr.</i> . . . . .	CXCV.	1373	Minerva, <i>Pfr.</i> . . . . .	CXLIX.	970
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<i>minuta</i> , Studer	CXLIII.	916	<i>neglecta</i> , <i>Drap.</i>	CLXIII.	1053
<i>mirabilis</i> , <i>Férussac</i>	XII.	45	<i>nematophora</i> , <i>Pfr.</i>	CXC.	1333
<i>misella</i> , <i>Férussac</i>	CXI.	632	<i>nemoralina</i> , <i>Petit</i>	LX.	293
<i>modesta</i> , <i>Férussac</i>	CXXXV.	836	<i>nemorialis</i> , <i>Linn.</i>	CLII.	959
<i>monile</i> , <i>Broderip</i>	CHII.	572	<i>nemoraloïdes</i> , <i>Adams</i>	LVI.	273
<i>monilifera</i> , <i>Menke</i>	CLII.	985	<i>nemorensis</i> , <i>Müller</i>	LXXXVIII.	474
<i>monilifera</i> , <i>Webb. and Berth.</i>	CCVIII.	1468	<i>Neogrnadensis</i> , <i>Pfr.</i>	ACIX.	548
<i>monoehron</i> , <i>Sowerby</i>	III.	11	<i>Neritoides</i> , <i>Chemn.</i>	CLXI.	1063
<i>monodon</i> , <i>Férussac</i>	CLXV.	1106	<i>Newcombi</i> , <i>Pfr.</i>	CLXXXIX.	1321
<i>monodon</i> , <i>Binney</i>	CXXI.	717	<i>Niciensis</i> , <i>Férussac</i>	XCX.	517
<i>monodon</i> , <i>Rackett</i>	CXIX.	696	<i>Nicobarica</i> , <i>Chemn.</i>	CLXXI.	1157
<i>monodonta</i> , <i>Lea</i>	LX.	294	<i>nigrescens</i> , <i>Wood</i>	LVII.	280
<i>monodonta</i> , <i>Grateloup</i>	CLXXII.	1167	<i>nigritella</i> , <i>Philippi</i>	CI.	561
<i>mononema</i> , <i>Benson</i>	CXCI.	1339	<i>Nilagirica</i> , <i>Pfr.</i>	LXXXIV.	450
<i>montana</i> , C. <i>Pfr.</i>	CLXIII.	1087	<i>nitens</i> , <i>Michaud.</i>	CLXIX.	1136
<i>Montfortiana</i> , <i>Pfr.</i>	XVIII.	76	<i>nitens</i> , <i>Maton</i>	CLXIV.	1092
<i>monticola</i> , <i>Hutton</i>	CXXVII.	762	<i>nitens</i> , <i>Sheppard</i>	CLXIII.	1084
<i>monticola</i> , <i>Sowerby</i>	XXIV.	103	<i>nitida</i> , <i>Müller</i>	CLVIII.	1042
<i>monozonalis</i> , <i>Lamarck</i>	LXXXVI.	467	<i>nitida</i> , <i>Chemnitz</i>	CLXIII.	1085
<i>mora</i> , <i>Gray</i>	XL.	181	<i>nitida</i> , <i>Fabricius</i>	CCVII.	1462
<i>morbida</i> , <i>Morelet</i>	CL.	974	<i>nitidiuscula</i> , <i>Soc.</i>	CXXXVI.	844
<i>Morchiana</i> , <i>Pfr.</i>	XXXI.	132	<i>nitidiosa</i> , <i>Rossm.</i>	CXXI.	715
<i>Moretonensis</i> , <i>Pfr.</i>	CLXXXVIII.	1313	<i>nitidula</i> , <i>Drap.</i>	CLXIV.	1105
<i>Moricandi</i> , <i>Sowerby</i>	XV.	58	<i>nitidula</i> , <i>Studer</i>	CXLII.	904
<i>Mortoni</i> , <i>Jeffreys.</i>	CXXII.	732	<i>Nivariensis</i> , <i>Shull.</i>	CXLIV.	924
<i>Moussoni</i> , <i>Pfr.</i>	LXXXVIII.	479	<i>nivea</i> , <i>Gmelin</i>	CCIV.	1442
<i>mucrouata</i> , <i>Pfr.</i>	XLIII.	197	<i>nivosa</i> , <i>Sowerby</i>	CXXXVI.	845
<i>Mühlfeldtiana</i> , <i>Pfr.</i>	LXX.	361	<i>nobilis</i> , <i>Pfr.</i>	LXXIV.	381
<i>Mülleri</i> , <i>Pfr.</i>	IV.	19	<i>Norrisii</i> , <i>Sowerby</i>	V.	21
<i>multidentata</i> , <i>Gould</i>	CXXII.	729	<i>noscibilis</i> , <i>Férussac</i>	L.	239
<i>multilimbata</i> , <i>Hombr.</i>	CXXX.	790	<i>notata</i> , <i>Deshayes</i>	CXVII.	678
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<i>multistriata</i> , <i>Deshayes</i>	LV.	266	<i>Novæ-Hiberniæ</i> , <i>Quoy</i>	LXXXI.	429
<i>munda</i> , <i>Adams</i>	LX.	297	<i>noverea</i> , <i>Friwaldsky</i>	CLXXVIII.	1219
<i>munda</i> , <i>Benson</i>	CLXXIII.	1174	<i>novella</i> , <i>Pfr.</i>	CLXXXVI.	1294
<i>muralis</i> , <i>Müller</i>	CLIII.	1001	<i>nucleola</i> , <i>Rang</i>	LVII.	277
<i>musearum</i> , <i>Lea</i>	LIV.	260	<i>nuda</i> , <i>Pfr.</i>	CXXIX.	781
<i>mustelina</i> , <i>Loce</i>	CCX.	1483	<i>nummus</i> , <i>Ehrenb.</i>	CXLV.	935
<i>musicola</i> , <i>Shull.</i>	CXC.	1330	<i>Nuttalliana</i> , <i>Lea</i>	CXIV.	657
<i>mutabilis</i> , <i>Hartmann</i>	CXLVI.	947	<i>nux-denticulata</i> , <i>Chemn.</i>	LII.	255
<i>mutata</i> , <i>Lamarck</i>	XCIV.	512	<i>nympha</i> , <i>Pfr.</i>	XXI.	85
<i>Najas</i> , <i>Pfr.</i>	XC.	484	<i>Nystiana</i> , <i>Pfr.</i>	CVII.	595
<i>nana</i> , <i>Wagner</i>	CIX.	613	<i>obesa</i> , <i>Beck</i>	LVII.	282
<i>Naninoïdes</i> , <i>Benson</i>	CLXXI.	1158	<i>obliquata</i> , <i>Reeve</i>	LXXIV.	384
<i>nasuta</i> , <i>Metcalfé</i>	CLVII.	1031	<i>oblita</i> , <i>Pfr.</i>	LXXXIII.	444
<i>Natalensis</i> , <i>Pfr.</i>	CLXXIX.	1227	<i>obliterata</i> , <i>Férussac</i>	NLIX.	231
<i>Naticoides</i> , <i>Drap.</i>	CLXI.	1063	<i>oblonga</i> , <i>Sowerby</i>	XXIII.	99
<i>Navigatorum</i> , <i>Pfr.</i>	CLXXXVII.	1303	<i>obnubila</i> , <i>Reeve</i>	CXXX.	792
<i>Nautiliformis</i> , <i>Cantr.</i>	CLIX.	1045	<i>obseurata</i> , <i>Porro</i>	CLXIX.	1138

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<i>obserrata</i> , Loew . . . . .	CCX.	1478	<i>ovum</i> , Valenciennes . . . . .	I.	1
<i>obsolela</i> , Ziegler . . . . .	CLII.	988	<i>ovum-reguli</i> , Lea . . . . .	LXIII.	287
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<i>obtecta</i> , Loew . . . . .	CXXXIX.	878	<i>oxytos</i> , Benson . . . . .	CXXIII.	734
<i>obtusa</i> , Pfr. . . . .	XIV.	49	<i>oxytropis</i> , Loew . . . . .	CXXXVIII.	868
<i>obtusata</i> , Ziegler . . . . .	XCH.	509	<i>pachygastra</i> , Gray . . . . .	LVI.	270
<i>obversa</i> , Born . . . . .	CLI.	983	<i>pachystoma</i> , Hombr. . . . .	LXXIV.	386
<i>obvoluta</i> , Müller . . . . .	CLIX.	1049	<i>pachystyla</i> , Pfr. . . . .	LXX.	364
<i>occidentalis</i> , Recluz . . . . .	CLIV.	1005	<i>Pacifica</i> , Pfr. . . . .	CXII.	640
<i>ochroleuca</i> , Ferrussac . . . . .	CLXXXVII.	1212	<i>Paciniana</i> , Philippi . . . . .	CLXIX.	1139
<i>ochlhephila</i> , D'Orbigny . . . . .	CCIX.	1478	<i>paleata</i> , Reeve . . . . .	CXCIX.	1399
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<i>Okeniana</i> , Pfr. . . . .	XLVIII.	225	<i>pallascens</i> , Ziegler . . . . .	CLXIV.	1109
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<i>oleosa</i> , Pfr. . . . .	CCI.	1410	<i>pallida</i> , Jeffreys . . . . .	CLXII.	1077
<i>olivatorum</i> , Gmelin . . . . .	CLXI.	1064	<i>pallidula</i> , Pfr. . . . .	CLXXXII.	1261
<i>Olivieri</i> , Ferrussac . . . . .	CLXII.	1071	<i>paludicola</i> , Benson . . . . .	CLXXIV.	1179
<i>omalomorpha</i> , D'Orb. . . . .	CCIX.	1483	<i>paludosa</i> , Pfr. . . . .	LXIV.	329
<i>omega</i> , Pfr. . . . .	CXXX.	791	<i>paludosa</i> , Walker . . . . .	CXLII.	904
<i>omicron</i> , Pfr. . . . .	CLXXXI.	1246	<i>Pan</i> , Broderip . . . . .	V.	24
<i>omphalodes</i> , Pfr. . . . .	XLI.	184	<i>Panayensis</i> , Pfr. . . . .	XXVII.	115
<i>onychina</i> , Rossm. . . . .	CLXIV.	1098	<i>Pandora</i> , Forbes . . . . .	CXVI.	671
<i>oomorpha</i> , Sowerby . . . . .	XXIII.	98	<i>pagodula</i> , Pfr. . . . .	CXCIV.	1359
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<i>Oparica</i> , Anton . . . . .	CXIII.	654	<i>papilionacea</i> , Valenc. . . . .	XXVIII.	122
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<i>Otaheitana</i> , Ferrussac . . . . .	I.	1	<i>pellucens</i> , Shuttle. . . . .	CLXIV.	1095
<i>Otis</i> , Solander . . . . .	C.	550	<i>pellucida</i> , Gould . . . . .	CXCIX.	1401
<i>Otthiana</i> , Forbes . . . . .	CLXXVI.	1203	<i>pellucida</i> , Pennant . . . . .	CLXVI.	1114
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## ERRATA.

- Sp. 2. For *H. Bataanae*—read *H. volubilis*.
- Sp. 36. *H. Harfordi*—add authority, Broderip, *Pro. Zool. Soc.* 1840, p. 123.
- Sp. 127. For *H. Solaroides*, *Reeve*—read *H. Metcalfei*, *Pfeiffer*.
- Sp. 179. *H. Caffra*—add authority, *Férussac*, *Hist. Moll.* pl. 9. A. f. 8.
- Sp. 188. *H. Barclayana* vs *Pupa pagodas*, *Young*.
- Sp. 205. *H. lamias*—add authority, *Müller*, *Verm.* vol. ii. p. 12.
- Sp. 209. *H. crassilabris*—add authority, *Pfeiffer*, *Pro. Zool. Soc.* 1846, p. 111.
- Sp. 228. *H. Sprengleriana*—add authority, *Pfeiffer*, *Pro. Zool. Soc.* 1846, p. 111.
- Sp. 254. *H. formosa*—add authority, *Férussac*, *Prodrome*, p. 67.
- Sp. 308. Instead of *Müller* (not of *Férussac*)—read *Férussac* (not of *Müller*).
- Sp. 335. *H. albicans*—add authority, *Pfeiffer*, *Pro. Zool. Soc.* 1849, p. 127.
- Sp. 336. *H. chelonicola*—add authority, *Pfeiffer*, *Zeitschrift für Malac.* 1850, p. 67.
- Sp. 379. *H. Shunaheriana*—add reference, *Zeitschrift für Malac.* 1850, p. 70.
- Sp. 428. *H. egyptiaca*—add reference, *Zeitschrift für Malac.* 1849, p. 83; and synonymy, *H. pyralis*, *Athers*.
- Sp. 435. For *H. praehians*, *Gould*—read *H. mulsanti*, *Benson*, *Journ. Asiatic Soc. Calcutta*, 1836, p. 352, and the former as synonymy.
- Sp. 456. *H. epixantha*—add reference, *Zeitschrift für Malac.* 1850, p. 70.
- Sp. 461. *H. serrata*—add reference, *Journ. Asiatic Soc. Calcutta*, 1836, p. 352; and synonymy *H. Bensoni*, *Benson*.
- Sp. 491 and 496.—Transpose descriptions, the shells have been exchanged in arranging the figures.
- Sp. 551. For *H. stictica*—read *H. olivacea*.
- Sp. 585. For *H. calistocoma*, *Ad. and Reeve*—read *H. planata*, *Chemnitz*, *Conch. Cab.* vol. xi. p. 281. pl. 240. t. 2067-69.
- Sp. 737. For *H. Cypria*—read *H. Cucc.*
- Sp. 741. For *H. solida*—read *H. solita*.
- Sp. 745. For "(not of *Benson*)"—read (not of *Gould*).
- Sp. 1000. *H. Cassidaria*—add authority, *Férussac*, *Hist. Moll.* pl. 41. f. 1.
- Sp. 1077. *H. Cassidaria*—For *Quat's Helix*, read *The Kentish Helix*.
- Sp. 1245. For *H. Zolotricha*—read *H. Lebetricha*.
- Sp. 1331. *H. erosa*—add reference to *Symbale*, *Reeve*, p. 68.













