

MONOGRAPH
OF THE GENUS
AMPULLARIA.

"He looks abroad into the varied field
Of Nature, and though poor perhaps, compared
With those whose mansions glitter in his sight,
Calls the delightful scenery all his own,-
His own mountains, and the valleys his,
And the resplendent rivers."-Cowper

AMPULLARIA.

Plate I.

Ampullaria, Pl. I.

Genus AMPULLARIA, Lamarck.

Testa globosa vel ovata, plus minus umbilicala, raro imper forata, epidermide crassinsculâ olivaceâ iuduta, spiræ auturâ modo simplici, modo canaliculatâ, anfractibus "plus minus ventricosis, lavigatis; aperturâ. Subamplâ labor simplici." Operculum nunc corneum nunc calcareum, aperturam claudens.

Shell globose or ovate, more or less umbilicated, rarely imperforated, covered with a rather thick olive epidermis, suture of the spire sometimes simple, sometimes channeled, whorls more or less ventricose, smooth; aperture rather large; lip simple. Operculum sometimes horny, sometimes calcareous, closing the aperture.

The sombre hue and obvious similarity of form, destitute of any indication of sculpture, of the shells of *Ampullaria*, have led to this genus being very much neglected by the collector; and their unattractive range of habitation, in swampy marshes, ponds, and rivers, has not been very inviting to the traveler. A few ardent naturalists, including among the foremost M. D'Orbigny and Mr. Bridges on the banks of the great rivers of Bolivia, Dr. Spix in Brazil, M. Caillaud in Africa, Mr. Yates and Mr. Wallace at the rivers Marañon and Amazon, MM. Sallé and Ghiesbrecht in Mexico, Mr. Dyson in Honduras, Mr. Benson in India, and Mr. Layard and Mr. Templeman in Ceylon, have directed their energies since Lamarck's time to *Ampullaria*-hunting; and the result is the following ample series of a hundred and thirty species, nearly two-thirds of which are new to science, and which scarcely a dozen were known to the author of the 'Histoire des Animaux sans Vertébrés.' A monograph of the genus was published by Dr. Philippi in 1851, in M. Kuster's edition of the 'Conchylien Cabinet' of Chemnitz, but it is founded on very imperfect materials.

The species of *Ampullaria* are exceedingly well-defined, though bearing great general resemblance, and, what is not unusual with mollusks affecting such habitats, many of them are stained at the aperture with brilliant color. The animal, as is now sufficiently well known, is of an amphibious nature, possessing a double system of respiration, which adapts it to breathe either air or water, according to the requirements of the place of its habitation, which may be at one time flooded and at another dry. This peculiarity, observed originally by Mr. Guilding at the Caribbee Islands, was noticed first in detail by M. Caillaud on his return from his expedition

to the Nile. On placing some of his *Ampullarie* in a basin of water, M. Caillaud unexpectedly found many of his specimens come to life, and M. D'Orbigny discovered the existence of a distinct pulmonary apparatus.

So many new species of *Ampullaria* have been collected by recent travellers in comparatively few localities, that it is more than probable the genus abounds to a much larger extent than we have at present any idea of. It does not however, exist in the great rivers of North America or of North-temperate Europe, and is peculiar to warm and tropical latitudes.

Species 1. (Mus.Cuming.)

AMPULLARIA CUPRINA. *Amp. testâ sunquadrato-globosâ tenuiculâ, profundè angulato-umbilicatâ, spirâ obtusè exsertâ, anfractibus supernè latè planatis, ad angulum rotundatis, deinde plano-convexia; lutescente, rufofusco tinctâ et fasciatâ; aperturâ ocatâ, labor simplici.*

THE COPPER AMPULLARIA. Shell somewhat squarely globose, rather thin, deeply angularly umbilicated, spire obtusely exerted, whorls broadly flattened round the upper part, rounded at the angle, then flatly convex; yellowish, stained and banded with red-brown; aperture ovate, lip simple.

Hab. —?

A light, somewhat inflated species, with the whorls broadly rotundately angled round the upper part.

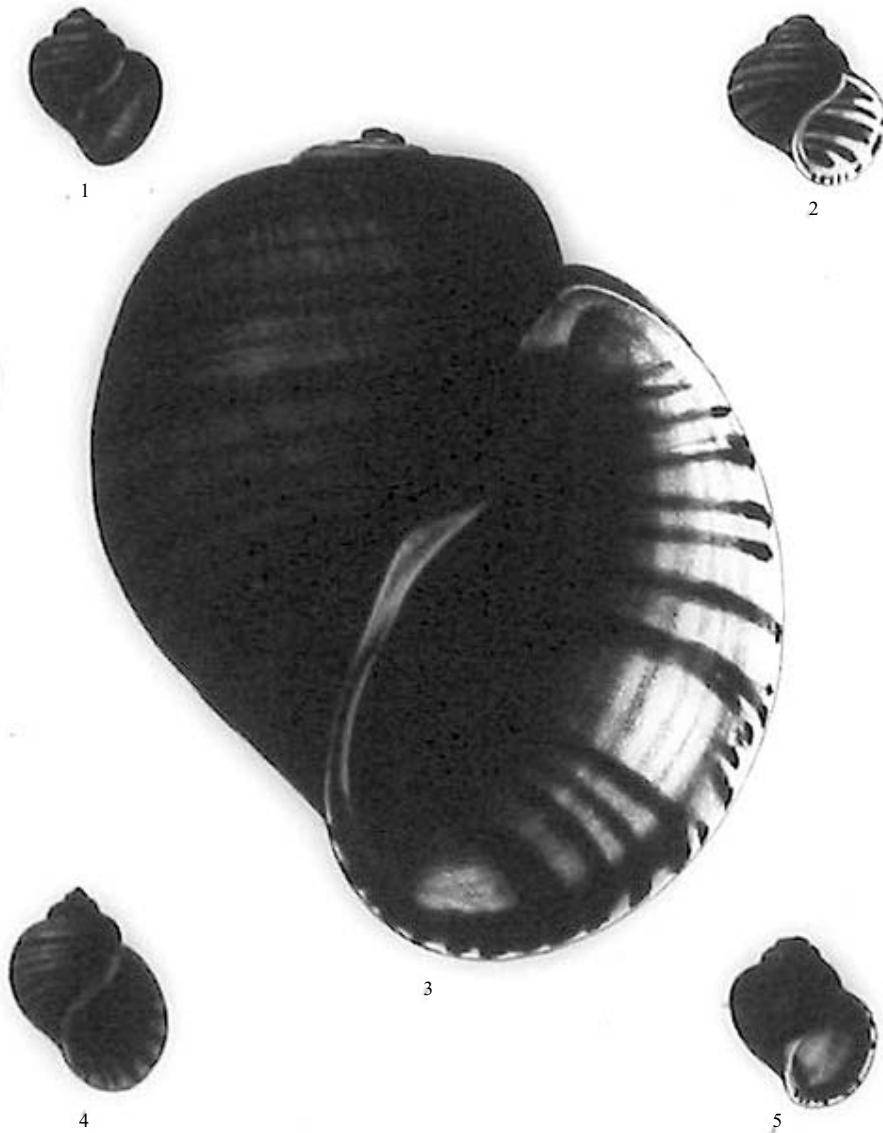
Species 2. (Mus.Cuming.)

AMPULLARIA SPIXII. *Amp. Testâ globoso-turbinatâ, subambliter umbilicatâ, spirâ subobtusâ, anfractibus rotundatis, lænibus, subangustis, supernè declivibus; lutescente, fasciis intense castaneis cingulatâ; aperturâ circulari-occatâ, labor simplici.*

SPIX'S AMPULLARIA. Shell globose-turbinated, rather largely umbilicated, spire narrow, slanting round the upper part; yellowish, encircled with dark chestnut bands; aperture circular-ovate, lip simple.

D'ORBIGNY, Voy. dans l'Amér. Mérid. p. 376. pl. 52. f 7, 8.

Hab. River Parama, South America



AMPULLARIA.-Plate I.

A fine turbinated species, of *Cyclostoma*-like growth, conspicuously banded and lineated with dark chestnut upon a yellowish ground.

Species 3. (Mus. Cuming.)

AMPULLATIA GIGAS. *Amp. testâ ventricosoglobosâ, maximâ, angustè umbilicatâ, spirâ brepissinâ, immersâ, suturâ angustè profundè canaliculatâ, anfractibus convexis; virescente-olivaceâ, fasciis angustis pallidè olivaceis cingulatâ; aperturâ oblongo-ovatâ, fauce aurantio-lutescente, cærulescente fasciatâ, labro simplici, intus nigro-maculato.*

THE GIANT AMPULLARIA. Shell ventricosely globose, very large, narrowly umbilicated, spire very short, immersed, suture narrowly deeply channeled whorls convex; greenish-olive, encircled with narrow raint olive bands; aperture oblong-ovate, interior orange yellow, blue-banded, lip simple, black spotted within.

SPIX, Testacea Fluvialia Brasiliensia, p. 1. pl. 1. f. 1.
Hab. Solomon's River, Brazil.

This truly fine species is quite remarkable for its bold ventricose growth and immersed channeled spire.

Species 4. (Mus. Cuming.)

AMPULLARIA CORNUCOPIA. *Amp. testâ oblongo-ovatâ, obliquè productâ, angustè umbilicatâ, spirâ brecci, subacuminatâ, anfractibus rotundatis, lævibus, nitentibus, supernè declivibus; livido-fuscescente, lineis fasciisque rufis angustis cingulatâ; aperturâ ovatâ, subamplâ, effusâ.*

THE CORNUCOPIA AMPULLARIA. Shell oblong-ovate, obliquely produced, narrowly umbilicated, spire short, rather acuminate, whorls rounded, smooth, shining, slanting round the upper part; livid-brown, encircled with narrow red bands and lines; aperture ovate, rather large, effused.

Hab. Columbia

Of light substance, elegantly obliquely convoluted, with the aperture boldly effused.

Species 5. (Mus. Cuming.)

AMPULLARIA CRASSA. *Amp. Testâ subquadrato-globosâ, crassâ, imperforatâ, spirâ brevinsculâ, abtusâ, anfractibus convexis, læcibus, supernè declivibus; sordidè lutescente, fasciis lineisque castaneis subdistantibus cingulatâ; aperturâ ovatâ, labor columellari calloso, apresso, albo.*

THE THICK AMPULLARIA. Shell somewhat squarely globose, thick, imperforated, spire rather short, obtuse, whorls convex, smooth, slanting round the upper part; dull yellowish, encircled with rather distant chestnut bands and lines; aperture ovate, columellar lip callous, appressed, white.

SWAINSON, Zool. Illus. (first Series), Vol. iii. Pl. 101.

Helix crassa, Spix.

Ampullaria Olivieri, Deshayes.

Helicina-exumbilicata, Spix.

Ampullaria Brownii, Jay.

Hab. Brazil

Chiefly distinguished by its white, callous columellar lip, which is appressed over the place of the umbilicus.

AMPULLARIA.

Plate II.

Ampullaria. Pl. II.



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Species 6. (Mus. Cuming.)

AMPULLARIA FIGULINA. *Amp. testâ ovatâ, tenuiculâ, spirâ brevi, anfractibus convexis, ad suturam subdepressis, lævibus; umbilico amplo; aperturâ ovatâ; pallidè olivaceo-cinereâ, lineis fasciisque rufis cingulatâ.*

THE CLAY AMPULLARIA. Shell ovate, rather thin, spire short, whorls convex, rather depressed at the suture, smooth; umbilicus large; aperture ovate; pale olive-ash, encircled with red lines and bands.

SPIX, Test. Fluv. Brasil. pl. 4. f. 4.

Ampullaria lineata, var., Spix.

Hab. Brazil.

Spix appears to have figured this species under the above name, and to have regarded it afterwards as a variety of his *A. lineata*. It is well distinguished by its light texture, largely umbilicated growth, and red-banded colouring upon a pale olive-ash ground.

Species 7. (Mus. Cuming.)

AMPULLARIA RUFILINEATA. *Amp. testâ ovatâ, spirâ subprominulâ, anfractibus supernè subdepressis, deinde convexis, lævibus; umbilico oblecto; aperturâ ovatâ, labro columellari reflexo; albâ, fulvo-spadiceâ, lineis rufis variè cingulatâ.*

THE RED-LINED AMPULLARIA. Shell ovate, spire rather prominent, whorls rather depressed at the upper part, then convex, smooth; umbilicus covered; aperture ovate, columellar lip reflected; white, fulvous-fawn, variously encircled with red lines.

Hab. —?

Conspicuously encircled with red lines upon a fulvous-fawn ground, as in the preceding species, but distinguished by the absence of a visible umbilicus and by the more prominent convolution of the spire.

Species 8. (Mus. Cuming.)

AMPULLARIA NOBILIS. *Amp. testâ subpyriformi-globosâ, spirâ depressiusculâ, anfractibus supernè ventricosus, lævibus; umbilico subprofundo; aperturâ pyriformi-ovatâ, peramplâ; intensè olivaceâ, extus corneâ, obscurè nigro fasciatâ,*

labro intensè ustulato-rufo.

THE NOBLE AMPULLARIA. Shell somewhat pyriformly globose, spire rather depressed, whorls ventricose round the upper part, smooth; umbilicus rather deep; aperture pyriformly ovate, very large; dark olive, externally horny, obscurely black-banded, lip deep burnt red.

Hab. River Maranon; Mr. Yates.

This fine species, of a pyriformly globose shape, with a dark olive horny exterior, is painted within the lip with a peculiar deep toned burnt red.

Species 9. (Mus. Cuming.)

AMPULLARIA PALUDINOIDES. *Amp. testâ globosâ, spirâ mediocri, anfractibus rotundatis, ad suturam subdepressis, lævibus; umbilico suboblecto; sordidè olivaceâ, labro flavicante.*

THE PALUDINA-LIKE AMPULLARIA. Shell globose, spire middling, whorls rounded, a little depressed at the suture, smooth; umbilicus nearly covered; dull olive, lip yellowish.

CHRISTOFORI and JAN, Mus. Berolin. Philippi in Küster, Conch. Cab. *Amp.* p. 27. pl. 7. f. 4.

Hab. —?

Distinguished by its plump, rounded form and dark olive colour, the lip being coloured in a characteristic manner, with pale yellow.

Species 10. (Mus. Cuming.)

AMPULLARIA CONICA. *Amp. testâ subglobosâ, spirâ subprominulâ, anfractibus convexis, lævibus, nitentibus; umbilico oblecto; aperturâ ovatâ, labro vix reflexo; fulvo-olivaceâ, labro albicante.*

THE CONICAL AMPULLARIA. shell subglobose, spire rather prominent, whorls convex, smooth, shining; umbilicus covered; aperture ovate, lip scarcely reflected; fulvous olive, lip whitish.

WOOD,

Hab. —?

The spire has a more prominently convoluted aspect than in the preceding species, from the last whorl rather more than usually descending next the aperture. In colour the shell is of a lighter fulvous olive.

AMPULLARIA.

Plate III.

Ampullaria. Pl. III.



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Species 11. (Mus. Cuming.)

AMPULLARIA ADUSTA. *Amp. testâ globoso-turbinatâ, spirâ mediocri, suturâ canaliculatâ, anfractibus rotundatis, lævigatis; umbilico subamplo; aperturâ ovata; lutescente-viridi, fasciis saturatè olivaceis undique cingulatâ.*

THE ADUST AMPULLARIA. Shell globosely turbinated, spire middling, suture channeled, whorls rounded, smooth; umbilicus rather large; aperture ovate; yellowish-green, encircled throughout with dark olive bands.

Hab. —?

A rich dark-banded species, with channeled suture, of globose form, probably from Borneo.

Species 12. (Mus. Cuming.)

AMPULLARIA PILULA. *Amp. testâ globosâ, spirâ brevi, subimmersâ, anfractibus convexis, tumidis, supernè depressè rotundatis, lævigatis; umbilico parvinsculo; aperturâ ovatâ; lutescente-viridi, olivaceo fasciatâ et nubeculatâ.*

THE BALL AMPULLARIA. Shell globose, spire short, rather immersed whorls convex, swollen, depressly rounded at the upper part, smooth; umbilicus rather small; aperture ovate; yellowish-green, banded and clouded with olive.

Hab. Borneo.

Of the same typical character as the preceeding species, rounder, with the spire shorter and slightly immersed.

Species 13. (Mus. Cuming.)

AMPULLARIA MEGASTOMA. *Amp. Testâ, globoso-ventricosâ, Naticæformi, spirâ plano-immersâ, anfractibus convexis, tumidis, spiraliter obscurè funiculatis, rugosis; umbilico oblecto; aperturâ peramplâ, lunato-ovatâ; intensè fasco-olivaceâ, intus purpureo-fuscâ, lividâ.*

THE LARGE-MOUTHED AMPULLARIA. Shell globosely ventricose, Natica-shaped, spire flatly immersed, whorls convex, swollen, spirally obscurely corded, rugose; umbilicus covered over; aperture very large, lunar-ovate; dark brown-olive,

interior purple-brown, livid.

SOWERBY, Tankerville Catalogue, App. p. 10. *Ampullaria Neritoides*, D'Orbigny.

Hab. Mouth of the Rio Uruguay; D'Orbigny.

Distinguished from all other species of the genus by its remarkably expansive Natica-shaped growth and livid purple-brown interior.

Species 14. (Mus. Cuming.)

AMPULLARIA SORDIDA. *Amp. testâ globoso-turbinatâ, spirâ subprominulâ, suturâ canaliculatâ, anfractibus rotundatis, supernè impressis, lævigatis; umbilico profundo; aperturâ ovatâ, labro vix reflexo; rufo-olivaceâ, labro castaneo.*

THE DULL AMPULLARIA. Shell globosely turbinated, spire rather prominent, suture channeled, whorls rounded, impressed at the upper part, smooth; umbilicus deep; aperture ovate, lip scarcely reflected; reddish-olive, lip chestnut.

SWAINSON, Zoological illustrations, vol. iii. pl. 143. *Hab.* Rio de la Plata.

Of regular rotundately turbinated growth, smooth, and chestnut-rust-coloured.

Species 15. (Mus. Cuming.)

AMPULLARIA HONDURASENSIS. *Amp. testâ ovatâ, ventricosâ, spirâ breviusculâ, acutâ, anfractibus supernè plano-declivibus, deinde convexis, basin versus subattenuatis, corrugato-striatis; umbilico angusto; aperturâ pyriformi-ovatâ, labro subexpanso; cinereo-olivaceâ, nitente, fasciis linearibus obscurè pictâ.*

THE HONDURAS AMPULLARIA. Shell ovate, ventricose, spire rather short, sharp, whorls flatly slanting round the upper part, then convex, rather attenuated towards the base, wrinkle-striated; umbilicus narrow; aperture pyriformly ovate, lip rather expanded; ash-olive, shining, obscurely painted with linear bands.

Hab. Honduras; Dyson.

A neatly convoluted species of a peculiar shining livid ash-olive colour, obscurely painted with linear bands.

AMPULLARIA.

Plate IV.

Ampullaria Pl. IV.



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Species 16. (Mus. Cuming.)

AMPULLARIA AUTUMNALIS. *Amp. testâ turbinatâ, spirâ subprominulâ, anfractibus rotundalis, ad suturam depressiusculis, obscurè spiraliter funiculatis, funiculis irregularibus, interstitiis malleatis et striatis; umbilico subamplo; apertura rotundato-ovatâ, labor subexpanso; olivaceâ, castaneo-rufo tinctâ.*

THE AUTUMNAL AMPULLARIA. Shell turbinated, spire rather prominent, whorls rounded, rather depressed at the suture, obscurely spirally corded, cords irregular, with the interstices malleated and striated; umbilicus rather large; aperture rotundately ovate, lip rather expanded; olive, stained with chestnut-red.

Hab. —?

The whorls of this species are somewhat more than usually rounded, while they are concentrically sculptured with obscure cords, irregular and wrinkle-like in parts, with the interstices malleated and striated. The outer surface is partially covered on the olive ground with a deciduous chestnut-red coating.

Species 17. (Mus. Cuming.)

AMPULLARIA VENETUS. *Amp. testâ globosâ, subventricosâ, spirâ breviusculâ, acutâ, anfractibus supernè declivibus, deinde convexis, undique malleatis et minutè crenulato-striatis; umbilico mediocri; aperturâ lunato-pyriformi, parviusculâ, labor expanso; luteo-virescente, versus apicem pallidiore, labor lutescente.*

THE SEA-GREEN AMPULLARIA. Shell globose, subventricose, spire rather short, sharp, whorls slanting round the upper part, then convex, everywhere malleated and minutely crenulately striated; umbilicus middling; aperture lunar-pyriform, rather small, lip expanded; yellowish-green, paler towards the apex, lip yellowish.

Hab. —?

A pale sea-green species, with the surface rather largely malleated throughout and minutely crenulately striated, the lip and columella being of a rather conspicuous pale yellow tone.

Species 18. (Mus. Cuming.)

AMPULLARIA URCEUS. *Amp. testâ globoso-turbinatâ, solidiusculâ, spirâ brevi, plerumque plus minus erosâ, anfractibus compressè rotundatis, ad suturam depressiusculis, irregulariter corrugato-liratis, et rugoso-reticulatis; umbilico amplo, profundo; aperturâ pyriformi, labio columellari reflexo; lutescente-albâ, epidermide crassâ carneâ olivaceâ indutâ.*

THE PITCHER AMPULLARIA. Shell globosely

turbinated rather solid, spire short, generally more or less eroded, whorls compressly rounded, a little depressed at the suture, irregularly wrinkle-ridged and rugosely reticulated; umbilicus large and deep; aperture pyriform, columellar lip reflected; yellowish-white, covered with a thick horny olive epidermis.

Nerita urceus, Müller, Hist. Verm. P. 174.

Ampullaria urceus, Deshayes.

Ampullaria rugosa, Lamarck.

An eadem. *Ampullaria dolium*, Philippi.

An testa junior. *Ampullaria leucostoma*, Swainson.

Hab. Trinidad; Cutter.

This well-known species is at once recognized by its compressly rounded form and stout wrinkle-ridged horny epidermis, mostly at the apex.

Species 19. (Mus. Cuming.)

AMPULLARIA PUNCTICULATA. *Amp. testâ subpyriformi-ovatâ, ventricosâ, spirâ mediocri, anfractibus supernè tumidis, versus basin attenuatis, lævigatis, sub lente punctulatis; umbilico angusto; aperturâ oblongo-ovatâ, labro columellari reflexo; olivaceo-virescente, fasciis angustis viridibus obscurè pictâ, labor aurantio-rufo.*

THE PUNCTURED AMPULLARIA. Shell somewhat pyriformly ovate, ventricose, spire middling, whorls swollen round the upper part, attenuated towards the base, smooth, finely punctured beneath the lens; umbilicus narrow; aperture oblong-ovate, columellar lip reflected; olive-green, obscurely painted with narrow green bands, lip orange-red.

SWAINSON, Zoological Illustrations, vol. iii. P. 143.

Hab. —?

Of a very characteristic pear-like ovate form, with a warm orange-red lip.

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

AMPULLARIA VEXILLUM. *Amp. testâ ovatâ, tenuiculâ, ventricosâ, anfractibus convexis, supernè subplanulatis, lævigatis, sub lente punctulatis; umbilico angusto; aperturâ pyriformi-ovatâ, expansâ, labro columellari reflexo; olivaceo-virescente, fasciis saturatè viridibus cingulatâ, labor rufescente.*

THE FLAG AMPULLARIA. Shell ovate, rather thin, ventricose, whorls convex, rather flattened at the upper part, smooth, finely punctured beneath the lens; umbilicus narrow; aperture pyriformly ovate, expanded, columellar lip reflected; olive-green, encircled with dark green bands, lip tinged with red.

Hab. —?

Very closely allied to the preceding species, but of a less pear-shaped form, with the whorls more flattened round the upper part.

AMPULLARIA.

PLATE V.

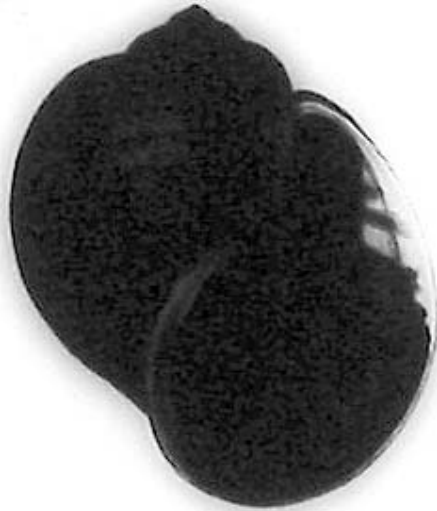
Ampullaria, Pl. V.



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Species 21. (Mus. Cuming.)

AMPULLARIA LIVESCENS. *Amp. testâ globosâ, subventricosâ, spirâ brevi, anfractibus tumidè declivibus, deinde convexis, lævibus, nitentibus; umbilico profundo, subcontracto; aperturâ pyriformi-ovatâ; livido-cinereâ, juxta suturam fulvescente, fasciis olivaceo-viridibus cingulatâ.*

THE LIVID AMPULLARIA. Shell globose, somewhat ventricose, spire short, whorls tumidly slanting round the upper part, then convex, smooth, shining; umbilicus deep, rather contracted; aperture pyriformly ovate; livid ash, fulvous next the suture, encircled with narrow olive-green bands.

Hab. —?

A rather tumid species, with the whorls full and slanting round the upper part, of a fulvous livid colour, encircled with a narrow greenish band. In substance rather thin, with a smooth shining surface.

Species 22. (Mus. Cuming.)

AMPULLARIA LATTREI. *Amp. testâ globosâ, solidiusculâ, spirâ breviusculâ, anfractibus rotundatis, lævibus; umbilico profundo, subcontracto; sordidè fulvâ, fasciis pallidè olivaceo-viridibus cingulatâ; aperturâ ovatâ, labro subreflexo.*

LATTRE'S AMPULLARIA. Shell globose, rather solid, spire rather short, whorls rounded, smooth; umbilicus deep, rather contracted; dull fulvous, encircled with pale olive green bands; aperture ovate, lip slightly reflected.

Hab. Coban, Guatemala; Lattre.

Of a less tumid form than the preceding species, and of thicker substance, not shining exteriorly.

Species 23. (Mus. Cuming.)

AMPULLARIA HAUSTRUM. *Amp. testâ compressè ovatâ, ventricosissimâ, vix umbilicatâ, spirâ parvâ, subimmersâ, anfractibus ad suturam impressè canaliculatis, deinde convexis; sordidè olivaceâ, striatâ et malleatâ, fasciis angustis pallidè virescentibus cingulatâ; aperturâ pyriformi-oblongâ, peramplâ; fauce livida-purpureâ.*

THE SCOOP AMPULLARIA. Shell compressly ovate, very ventricose, scarcely umbilicated, spire small,

rather immersed, whorls impressly channelled at the suture, then convex; dull olive, striated and malleated, encircled with narrow faint green bands; aperture pyriformly oblong, very large; livid purple in the interior.

Hab. River Maranon, Brazil.

This fine species belongs to the same type as *A. insularum*, D'Orbigny, from La Plata. Its chief points of difference consist in being less distinctly umbilicated, and in having a much larger and more expanded aperture.

Species 24. (Mus. Cuming.)

AMPULLARIA MELANOCHEILA. *Amp. testâ globoso-turbinatâ, spirâ mediocri, anfractibus supernè planatis, deinde convexis; umbilico amplo, profundo; aperturâ ovatâ; olivaceo-virescente, fasciis angustis pallidè rufescente-fuscis cingulatâ, labro nigro.*

THE BLACK-LIPPED AMPULLARIA. Shell globosely turbinated, spire middling, whorls flattened round the upper part, then convex; umbilicus large, deep; aperture ovate, olive-green, encircled with narrow faint reddish-brown bands, lip black.

Hab. —?

A very characteristic species, rather depressly flattened next the suture, with the lip conspicuously black-stained with in the aperture.

Species 25. (Mus. Cuming.)

AMPULLARIA COLUMBIENSIS. *Amp. testâ globosâ, tenuiculâ, ventricosâ, spirâ subplanulatâ, anfractibus convexis, lævibus, nitentibus; umbilico parvo, contracto; aperturâ ovatâ, subamplâ; fulvescente-cinereâ, fasciis pallidè olivaceo-viridibus cingulatâ.*

THE COLUMBIA AMPULLARIA. Shell globose, rather thick, ventricose, spire rather flat, whorls convex, smooth, shining; umbilicus small, contracted; aperture ovate, rather large; fulvous ash, encircled with faint olive-green bands.

SOWERBY, MS. Mus. Cuming.

Hab. Chiriqui, Veragua.

Of light globose structure, with only a small umbilicus, fulvous in tone of colour, encircled with faint olive-green bands.

AMPULLARIA.

Plate VI.

Ampullaria Pl. VI.



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Species 26. (Mus. Cuming.)

AMPULLARIA LUZONICA. *Amp. testâ globosâ, tumidiusculâ, tenui, anfractibus supernè plano-impressis, deinde rotundatis, lævibus, longitudinaliter, obsolete, deinde rotundatis, lævibus, longitudinaliter, obsolete sulcatis; umbilico parvo; aperturâ ovatâ, subamplâ; fulvescente-olivaceâ, obscure fasciatâ.*

THE LUZON AMPULLARIA. Shell globose, rather swollen, thin, whorls flatly impressed, round the upper part, then rounded, smooth, longitudinally obsolete grooved; umbilicus small; aperture ovate, rather large; fulvous-olive, obscurely banded.

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

A light globosely turbinated shell, rather impressed next the suture, obscurely longitudinally grooved on the penultimate whorl.

Species 27. (Mus. Cuming.)

AMPULLARIA LAYARDI. *Amp. testâ subcompressè globosâ, anfractibus supernè angustè plano-impressis, deinde rotundatis, lævibus, nitentibus; umbilico parvo, contracto; aperturâ ovatâ; albidâ, epidermide cornea olivaceâ indutâ.*

LAYARD'S AMPULLARIA. Shell rather compressly globose, whorls narrowly flatly impressed round the upper part, then rounded, smooth, shining; umbilicus small, contracted; aperture ovate; whitish, covered with an olive horny epidermis.

Hab. Colombo, Ceylon; Layard, Templeman.

Of a more compressly globose form than the preceding species, with a conspicuous horny epidermis.

Species 28. (Mus. Cuming.)

AMPULLARIA YATESII. *Amp. testâ globosâ, spirâ brevi, parum exsertâ, anfractibus supernè subimpressis, deinde plano-convexis, longitudinaliter irregulariter striatis; umbilico subangusto, profundo; aperturâ pyriformi-ovatâ, peramplâ, labor reflexo; fulvo-castaneâ, lineis*

nigris inæquidistantibus cingulatâ, labor intus rufo-aurantio tincto.

YATES'S AMPULLARIA. Shell globose, spire short, but little exserted, whorls rather impressed round the upper part, then flatly convex, longitudinally irregularly striated; umbilicus rather narrow, deep; aperture pyriformly ovate, very large, lip reflected; fulvous-chestnut, encircled at unequal distances with black lines, lip tinged within with reddish-orange.

Hab. River Maranon; Yates.

This interesting species is of a peculiar fulvous-chestnut colour, encircled at unequal distances with black lines. The aperture is unusually large, tinged next the lip with a warm reddish-orange.

Fig. 29. (Mus. Cuming.)

The specimen here figured is the Ceylon form of *A. Luzonica*, represented above it at fig. 26, from the Philippine Islands. It is rather more flatly impressed round the upper part of the whorls.

Species 30. (Mus. Cuming.)

AMPULLARIA PORPHYROSTOMA. *Amp. testâ oblongo-globosâ, spirâ subprominulâ, anfractibus supernè declivibus, deinde convexis, lævibus, nitentibus umbilico subangusto, profundo; aperturâ ovatâ, subeffusâ; cinereo-olivaceâ, obscure multifasciatâ, aperturâ nigri-cante.*

THE PURPLE-MOUTH AMPULLARIA. Shell oblong-globose, spire rather prominent, whorls slanting round the upper part, then convex, smooth, shining; umbilicus rather narrow, deep; aperture ovate, rather effused; ash-olive, faintly many-banded, aperture rather blackish.

Hab. —?

Of a rather oblong turbinated form, and shining ash-olive hue, the whorls being gently slanted next the suture.

AMPULLARIA.

Plate VII.

Ampullaria Pl. VII.



31



32



33



34



35

Species 31. (Mus. Cuming.)

AMPULLARIA FLATILIS. *Amp. testâ vix umbilicatâ, globosâ, tumidâ, spirâ breviusculâ, anfractibus convexis; lævibus, longitudinaliter striato-scalptis; virescente-olivaceâ, angustè fasciatâ; aperturâ pyriformi-ovatâ, labro columellari subreflexo, flavescente.*

THE BLOWN AMPULLARIA. Shell scarcely umbilicated, globose, tumid, spire rather short, whorls convex, smooth, longitudinally striately scratched; greenish-olive, narrowly banded; aperture pyriformly ovate, columellar lip slightly reflected, yellowish.

Hab. Tabasco, Mexico.

Allied to *A. livescens*, but obviously distinct in form, more rounded, with the spire less exserted, and more contracted at the umbilicus.

Species 32. (Mus. Cuming.)

AMPULLARIA MALLEATA. *Amp. testâ globosâ, tumidâ, vix umbilicatâ, spirâ subacuminatâ, anfractibus convexis, undique conspicuè malleatis; livido-olivaceâ; aperturâ pyriformi-ovatâ, labro subeffuso, intus flavescente.*

THE HAMMERED AMPULLARIA. Shell globose, tumid, scarcely umbilicated, spire rather acuminated, whorls convex, everywhere conspicuously malleated; livid olive; aperture pyriformly ovate, lip rather effused, yellowish within.

JONAS, Moll. Beitr. P. 22. pl. 10. f. 11.

Ampullaria reflexa, var., Philippi.

Hab. Mexico.

This species is clearly not a variety of *A. reflexa*. Although the malleated surface predominates in a manner to render it a distinguishing character, the shell is distinguished otherwise by peculiarities of form.

Species 33. (Mus. Cuming.)

AMPULLARIA SPECIOSA. *Amp. testâ globosâ, profundè umbilicatâ, spirâ breviusculâ, subimmersâ, anfractibus ad suturam canaliculatis, deinde convexis; glaucâ, lineato-fasciatâ, epidermide olivaceâ corneâ indutâ; aperturâ pyriformi-oblongâ, peramplâ, labro intus intensè miniato.*

THE HANDSOME AMPULLARIA. Shell globose,

deeply umbilicated, spire rather short, somewhat immersed, whorls channelled at the suture, then convex; glaucous, banded with lines, covered with an olive horny epidermis; aperture pyriformly oblong, very large, lip deep vermilion within.

PHILIPPI, Zeitschrift für Malac. 1849, p. 18. Küster, Conch. Cab. *Amp.* p. 40. pl. 11. f. 2.

Hab. Zanzibar.

A fine glaucous species, covered with a rather thin olive-horny epidermis, deep vermilion-stained within the lip, convoluted nearly on a vertical plane.

Species 34. (Mus. Cuming.)

AMPULLARIA HEMASTOMA. *Amp. testâ globosâ, solidiusculâ, subprofundè umbilicatâ, spirâ brevi, obtusâ, anfractibus supernè planulatis, deinde convexis, undique peculiariter corrugato-malleatis; lividè olivacea-nigrâ; aperturâ lunato-oblongâ, labro intus intensè sanguineo.*

THE BLOOD-MOUTHED AMPULLARIA. Shell globose, rather solid, rather deeply umbilicated, spire short, obtuse, whorls rather flat at the upper part, then convex, everywhere peculiarly wrinkle-malleated; livid olive-black; aperture lunar-oblong, lip deep blood-red within.

Hab. Peru.

Of an intense dark livid colour, almost black, with the surface peculiarly wrinkle-malleated, and the lip stained within with deep blood-red.

Species 35. (Mus. Cuming.)

AMPULLARIA POLITA. *Amp. testâ oblongo-globosâ, subglandiformi, subimperfocatâ, spirâ vix acuminatâ, anfractibus convexis, peculiariter nitentibus, olivaceo-virente; aperturâ pyriformi, subangustâ.*

THE POLISHED AMPULLARIA. Shell oblong-globose somewhat acorn-shaped, almost imperforated, spire slightly acuminated, whorls convex, peculiarly shining; olive-green; aperture pyriform, rather narrow.

DESHAYES, Encyclopédie Méthodique, Vers, vol. ii. p. 31. Eadem. *Ampullaria virescens*, Deshayes.

Hab. Port Jackson, Australia.

Of an oblong-globose glandiform shape, with a peculiar dark, shining, olive-green surface.



36



37



38



39



40

AMPULLARIA.

Plate VIII.

Fig. 36. (Mus. Cuming.)

The shell here figured proves to be a variety, of finer growth, of *A. pilula*, represented at Pl. III Fig. 12.

Species 37. (Mus. Cuming.)

AMPULLARIA TURBINOIDES. *Amp. testâ oblongo-turbinatâ, soliduscutâ, subimperfocatâ, spirâ exsertâ, anfractibus convexis, lævibus; olivaceo-virente, obscure fasciatâ; aperturâ ovatâ, parviusculâ, labor columellari reflexo.*

THE TURBO-LIKE AMPULLARIA. Shell oblong-turbinated, rather solid, almost imperforated, spire exserted, whorls convex, smooth; olive-green, obscurely banded; aperture ovate, rather small, columellar lip reflected.

Hab. Australia.

A dull smooth olive-green species, faintly banded, of a Turbo-like growth.

Species 38. (Mus. Cuming.)

AMPULLARIA OLIVACEA. *Amp. testâ suboblongo-globosâ, vix umbilicatâ, spirâ mediocri, anfractibus ad suturam canaliculatis, deinde convexis, longitudinaliter corrugato-striatis; virente-olivaceâ; aperturâ lunato-oblongâ, subamplâ, labro intus aurantio-rufo.*

THE OLIVE AMPULLARIA. Shell somewhat oblong-globose, scarcely umbilicated, spire moderate, whorls slightly channeled at the suture, then convex, longitudinally corrugately striated; greenish-olive; aperture lunar-oblong, rather large,

lip tinged with orange-red within. SPIX Test. Fluv. Brasiliensia, pl. 3. f. 1.

Hab.—?

Allied to *A. urceus*, but less roughly wrinkled, and of a lighter olive-horn colour, tinged in the mouth with a warm orange-red.

Species 39. (Mus. Cuming.)

AMPULLARIA LYMNÆÆFORMIS. *Amp. testâ compressè ovatâ, subtus excavatâ, subampliter umbilicatâ, spirâ subimmersâ, anfractibus supernè planulatis, deinde plano-convexis; sordidè glaucâ, fasciis quatuor fuscis distantibus angustis cingulatâ; aperturâ ovatâ, latè expansâ.*

THE LYMNÆA-SHAPED AMPULLARIA. Shell compressly ovate, hollowed beneath, rather largely umbilicated, spire slightly immersed, whorls flattened round the top, then flatly convex; dull glaucous, encircled with four distant narrow brown bands; aperture ovate, largely expanded.

Hab. River Maranon.

This fine species is distinguished by its elegantly convoluted Lymnæa-like form, and largely expanded aperture.

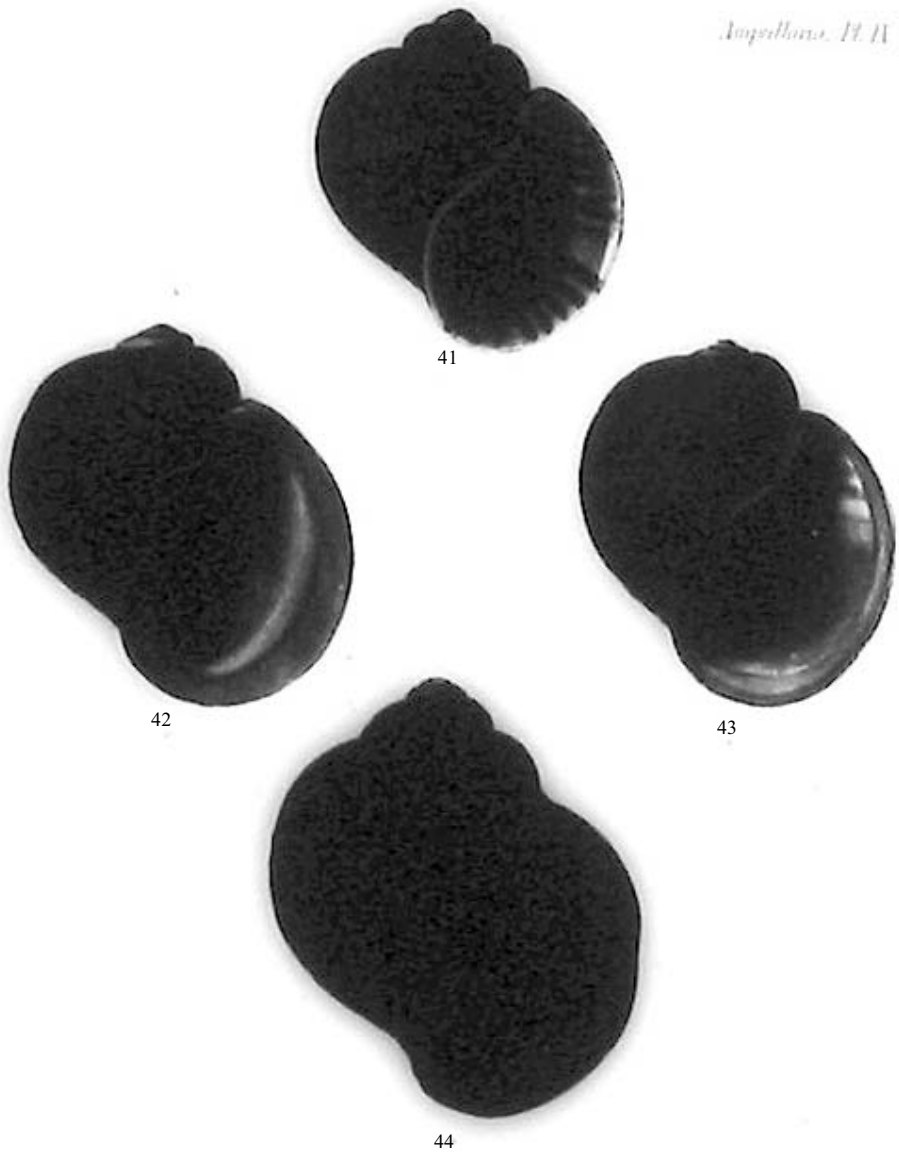
Fig. 40. (Mus. Cuming.)

This shell, though differing so much in appearance from *A. Layardi*, represented at Pl. VI. Fig. 27, is identical with it, and illustrates an example of the same species with the surface malleated.

AMPULLARIA.

Plate IX.

Ampullaria. Pl. IX



Species 41. (Mus. Cuming.)

AMPULLARIA FASCIATA. *Amp. testâ ovato-globosâ, tenui, inflatâ, umbilicatâ, spirâ parviusculâ, subimmersâ, anfractibus ad suturam impressè canaliculatis, deinde rotundatis, malleatis, nitentibus; livido-glaucâ, fasciis angustis rufescente-glaucis cingulatâ; aperturâ ovatâ, subamplâ.*

THE BANDED AMPULLARIA. Shell ovately globose, thin, inflated, umbilicated, spire rather small, slightly immersed, whorls impressly channelled at the suture, then rounded, malleated, shining; livid glaucous, encircled with narrow reddish-glaucous bands; aperture ovate, rather large.

Hab. —?

A very characteristic elegantly convoluted species, deeply impressed at the suture and conspicuously umbilicated, of light texture and pale glaucous colour, encircled with darker reddish-glaucous bands.

We select this out of the many that have been described and figured by authors under the name of *A. fasciata*, trusting it may henceforth be regarded as the fixed type of that species.

Species 42. (Fig. 42 and 43, Mus. Cuming.)

AMPULLARIA INSULARUM. *Amp. testâ ovato-globosâ, tenuiculâ, inflatâ, angustè, profundè umbilicatâ, spirâ brevissimâ, immersâ, anfractibus ad suturam impressè canaliculatis, deinde convexis, undique densè reticulostriatis; olivaceo-virente, pallidè fasciatâ; aperturâ circulari-ovatâ, labro integro, intus rufo-aurantio tincto.*

THE ISLAND AMPULLARIA. Shell ovately globose, rather thin, inflated, narrowly deeply umbilicated, spire very short, immersed, whorls impressly

channelled at the suture, then convex, everywhere closely reticulately striated; olive-green, faintly banded; aperture circular-ovate, lip entire, tinged with reddish-orange.

D'ORBIGNY, Voy. dans l'Amér. Mérid. Moll. p. 374. pl. 51. 1, 2.

Hab. Isles of Parana; D'Orbigny. Rio Grande, Bolivia, Bridges.

The shells represented at Fig. 42 and 43 illustrate two different states of this species; one in which the surface is finely indently striated, the other in which it is also ridged and malleated. The suture is deeply impressed and the aperture nearly circular and armply tinged with orange. M. D'Orbigny describes having found specimens among the water-plants in the lakes and brook of the Isles of Parana, La Plata, which he kept alive for a twelve-month afterwards without water.

Species 44. (Mus. Cuming.)

AMPULLARIA POPYRACEA. *Amp. testâ globoso-turbinatâ, tenuissimâ, imperforatâ, spirâ exsertâ, obsolete spirally lirata, anfractibus convexis, lævibus, nitentibus, undique intense rufo-nigrâ; aperturâ pyriformi-oblongâ, labro columellari tenuè reflexo.*

THE PAPER AMPULLARIA. Shell globosely turbinated, very thin, imperforated, spire exserted, obsolete spirally ridged, whorls convex, smooth, shining, everywhere intense red-black; aperture pyriformly oblong, columellar lip thinly reflected. *SPIX*, Test. Fluv. Brasiliensia, p.3. pl. 4. f. 1, 2.

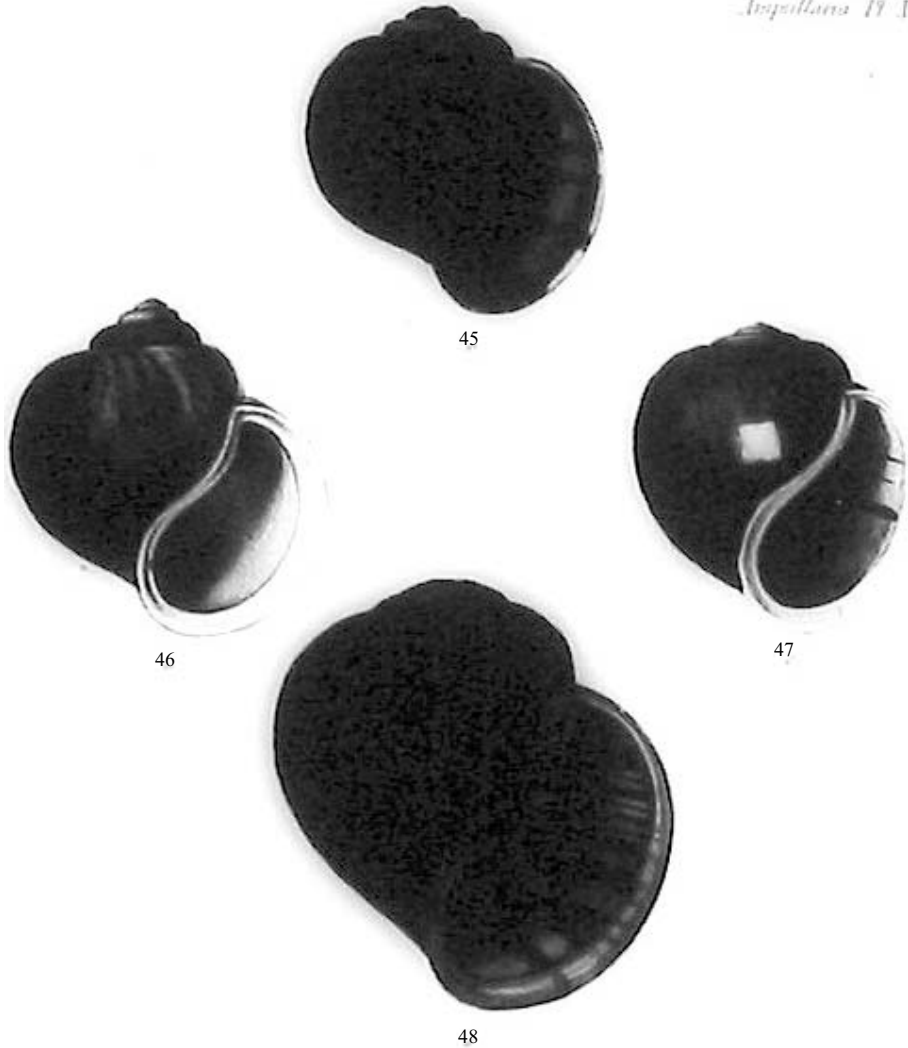
Hab. Meobamba, Western Brazil.

Chiefly distinguished by its peculiarly light horny texture, and very dark shining ebony colour.

AMPULLARIA.

Plate X.

Ampullaria 19 1



Species 45 (Mus. Cuming.)

AMPULLARIA ORONOCENSIS. *Amp. testâ globosâ, ampliter perspectivè umbilicatâ, spirâ breviusculâ, anfractibus supernè impresso-planis, deinde rotundatis; intensè olivaceo-virente, fasciis angustis nigris cingulatâ, aperturâ pyriformi-ovatâ, labro intus intensè aurantio-sanguineo.*

THE ORONOCO AMPULLARIA. Shell globose, largely perspective umbilicated, spire rather short, whorls impressly flattened at the upper part, then rounded; dark olive-green, encircled with narrow black bands; aperture pyriformly ovate, lip deep-orange, blood red within.

ZIEGLER Mus. Cuming.

Hab. River Oronoco

Of very characteristic helicoids growth, forming a large perspective umbilicus, distinguished by its vivid colouring. The outer surface of the shell is painted with narrow black bands upon a rich olive-green ground, whilst the aperture is stained with blood-red passing into orange.

Species 46. (Fig. 46 and 47, Mus. Cuming.)

AMPULLARIA GLOBOSA. *Amp. testâ rotundato-globosâ, angustè profundè umbilicatâ, spirâ brevi, obtuse, interdum subexsertâ, anfractibus rotundatis, lævibus, nitentibus, plus minus malleatis; lutescente-olivaceâ, vix fasciatis; aperturâ lunato-oblongâ, amplâ, labro incrassato, flavescente.*

THE GLOBOSE AMPULLARIA. Shell rotundately globose, narrowly deeply umbilicated, spire short, obtuse, sometimes a little exserted, whorls rounded, smooth, shining, more or less malleated; yellowish-olive, scarcely banded; aperture lunar oblong, large, lip thickened, yellowish.

SWAINSON, Zool. Illus. First Series; Pl. 119.

Eadem var. *Ampullaria corrugata*, Swainson.

Ampullaria pachystoma, Benson.

Hab. Calcutta (in the Botanic Gardens); Benson.

Peculiarly distinguished by its shining, olive, malleated, globular form and thickened peritreme. The specimens being more or less smooth or wrinkled, with Fig. 46 and 47, represent the extreme states of the species, the spire more or less acuminate and the umbilicus larger or smaller.

Species 48. (Mus. Cuming.)

AMPULLARIA AMPULLACEA. *Amp. testâ pyriformi-globosâ, basin versus attenuatâ, angustè compressè umbilicatâ, spirâ brevi, obtusâ, anfractibus supernè declivibus, deinde planoconvexis, lævibus; castaneo-olivaceâ fasciis angustis numerosis cingulatâ; aperturâ pyriformi-oblongâ, amplâ, labro intus aurantio-rufo plus minus tincto.*

THE JUG AMPULLARIA. Shell pyriformly globose, attenuated towards the base, narrowly compressly umbilicated, spire short, obtuse, whorls slanting round the upper part, then slightly convex, smooth; chestnut-olive, encircled with numerous narrow bands; aperture pyriformly oblong, large, lip more or less tinged within with orange-red.

Helix ampullacea, Linnæus, Syst. Nat. p. 1244.

Nerita ampullacea, Müller.

Ampullaria fasciata, Lamarck.

Bulineus ampullaceus, Bruguière.

Ampullaria ampullacea, Férussac.

Ampullaria magnifica, Dunker.

Ampullaria Sumatrensis, Philippi.

Ampullaria Celebensis, Quoy and Gaimard.

Hab. Borneo.

This appears to be the old Linnean type of the genus so far as it is possible to determine it. The shell is chiefly distinguished by a characteristic globosely pear-shaped form.

AMPULLARIA.

Plate XI.



49



50



51



52

Species 49. (Mus. Cuming.)

AMPULLARIA DYSONI. *Amp. testâ globosâ, profundè umbilicatâ, spirâ acuminatâ, anfractibus supernè declivibus, deinde tumido-rotundatis, conspicuè malleatis; livido-griseâ, ferrugineo tinctâ; aperturâ pyriformi-oblongâ, fauce livido-purpureâ.*

DYSON'S AMPULLARIA. Shell globose, deeply umbilicated, spire acuminated, whorls slanting at the upper part, then tumidly rounded, conspicuously malleated; livid grey, tinged with rust; aperture pyriformly oblong, livid purple within.

HANLEY, Conch. Miscellany. No. 1. Pl. 2. Fig. 7.

Hab. Honduras, Dyson.

This species scarcely differs from *A. malleata*, except in being more umbilicated and more globosely acuminated towards the spire.

Species 50. (Fig. 50 and 51, Mus. Cuming.)

AMPULLARIA BRIDGESII. *Amp. testâ oblongâ, tenui, subprofundè umbilicatâ, spirâ turritâ, anfractibus supernè latè plano-angulatis, deinde convexis, levibus, submalleatis; virente-olivaceâ, interdum sordidè olivaceo-brunneâ, fasciis angustis numerosis cingulatâ; aperturâ ovato-oblongâ, labro effuso.*

BRIDGES'S AMPULLARIA. Shell oblong, thin, rather

deeply umbilicated, spire turreted, whorls broadly flatly angled at the upper part, then convex, smooth, faintly malleated; greenish-olive, sometimes dusky olive-brown, encircled with numerous narrow bands, aperture ovately oblong, lip effused.

Hab. Rio Grande, Bolivia; Bridges.

This fine species, collected in the interior of Bolivia by Mr. Bridges, is remarkably distinguished by the broad spiral shelf which is formed by the angular structure of the upper part of the whorls next the suture.

Species 52. (Mus. Cuming.)

AMPULLARIA IMMERSA. *Amp. testâ ovatâ, tenui, ventricosâ, spirâ brevi, peculiariter immersâ, anfractibus ad suturam profundè canaliculatis, deinde convexis levibus; virescente-olivaceâ, versus spiram pallidâ, fasciis angustis cingulatâ; aperturâ ovatâ, labro subeffuso.*

THE IMMersed AMPULLARIA. Shell ovate, thin, ventricose, spire short, peculiarly immersed, whorls deeply channelled at the suture, then convex, smooth greenish-olive, pale towards the spire, encircled with narrow bands; aperture ovate, lip rather effused.

Hab. Rio Grande, Bolivia; Bridges.

A light ventricose species, deeply channelled at the suture, with the spire peculiarly rudely immersed.

AMPULLARIA.

Plate XII.

Species 53. (Mus. Cuming.)

AMPULLARIA ZONATA. *Amp. testâ subquadrato-ovatâ, tenuiculâ, inflatâ, angustè profundè umbilicatâ, spirâ brevi, acuminatâ, anfractibus supernè latè rotundatis, ultimo basin versus attenuato; luteo-olivaceâ, lineis rufis, nigricantibus, et viridibus promiscuè cingulatâ; operaturâ ovatâ, ampliter effusâ, fauce aurantio-luteâ.*

THE ZONED AMPULLARIA. Shell somewhat squarely ovate, rather thin, inflated, narrowly deeply umbilicated, spire short, acuminated, whorls broadly rounded at the upper part, the last whorl attenuated towards the base; yellowish-olive, promiscuously encircled with red, black and green lines; aperture ovate, largely effused, interior orange-yellow.

SPIX, Test. Fluv. Brasiliensia, p. 1. pl. 2. f. 1, 2.

Hab. Columbia.

The shell here figured, the only specimen we have been able to refer to *A. zonata*, corresponds with the variety figured by Dr. Spix with the name *A. Archimedes*.

Species 54. (Mus. Cuming.)

AMPULLARIA VERMIFORMIS. *Amp. testâ globoso-turbinatâ, subampliter umbilicatâ, spirâ mediocri, anfractibus ad suturam impressè canaliculatis, deinde rotundatis, subrudè striatis; lutescente-olivaceâ, fasciis virescentibus angustis cingulatâ; operaturâ circulari-ovatâ, fauce aurantio tinctâ.*

THE VERMIFORM AMPULLARIA. Shell globosely turbinated, rather largely umbilicated, spire middling, whorls impressly channelled at the suture, then rounded, rather roughly striated; yellowish-olive, encircled with narrow faint green bands; aperture circular-ovate, interior tinged with orange.

Hab. Paraguay.

Distinguished from *A. insularum*, to which it is closely allied, by its more spirally turbinated growth, larger umilicus, and painting of narrow green bands.

Species 55. (Mus. Cuming.)

AMPULLARIA AMAZONICA. *Amp. testâ oblongo-ovatâ, subangustè profundè umbilicatâ, spirâ exsertâ, anfractibus ad suturam impressis, deinde convexis, longitudinaliter striatis; virescente-olivaceâ, obscurè fasciatâ; operaturâ pyriformi-oblongâ, fauce aurantio tinctâ.*

THE AMAZON AMPULLARIA. Shell oblong-ovate, rather narrowly deeply umbilicated, spire exserted, whorls impressed at the suture, then convex, longitudinally striated; greenish-olive, obscurely banded; aperture pyriformly oblong, interior tinged with orange.

Hab. River Amazon.

Closely resembling Mr. Swainson's drawing of *A. reflexa*, but of larger size and differently coloured in the mouth.

Species 56. (Mus. Cuming.)

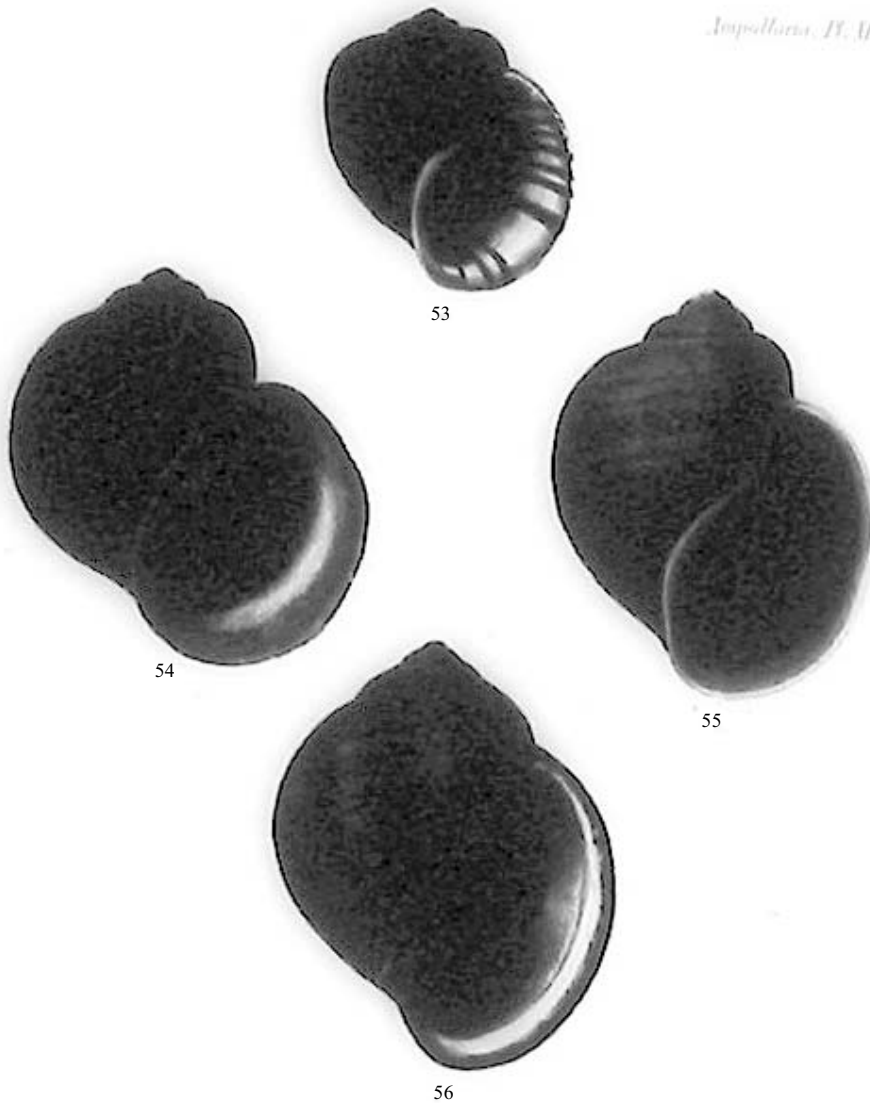
AMPULLARIA CASSIDIFORMI. *Amp. testâ oblongâ, versus basin attenuatâ, subangustè profundè umbilicatâ, spirâ breviusculâ, conoideâ, anfractibus supernè tumido-declivibus, deinde plano-convexis; lutescente-viridi, nigricante obscurè fasciatâ; operaturâ pyriformi-oblongâ, fauce livido-purpureâ, labro columellari interdum sanguineo tincto.*

THE CASSIS-SHAPED AMPULLARIA. Shell oblong, attenuated towards the base, rather narrowly deeply umbilicated, spire rather short, conoid, whorls tumidly slanting at the upper part, then flatly convex; yellowish-green, obscurely banded with blackish-brown; aperture pyriformly oblong, interior livid purple, columellar lip sometimes tinged with blood-red.

Hab. Lake of Maracaibo, Venezuela.

A fine species from Venezuela, distinguished by its oblong Cassis-like form.

Ampullaria, Pl. XII.



AMPULLARIA.

Plate XIII.

Ampullaria, Pl. XIII.



57.



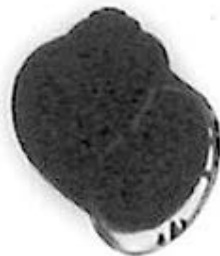
58.



59.



60.



61.

Species 57. (Mus. Cuming.)

AMPULLARIA MAURA. *Amp. Testâ globosâ, anguatè umbilicatâ, spirâ breviusculâ, anfractibus ad suturas planulatis, deinde rotundatis, lævibus; saturatè olivaceâ; aperturâ ovatâ, labro intus purpureo-nigro tincto.*

THE MOOR AMPULLARIA. Shell globose, narrowly umbilicated, spire rather short, whorls a little flattened at the sutures, then rounded, smooth; dark olive; aperture ovate, lip stained within with purple-black.

Hab. —?

Of a particularly globose form, the lip being characteristically stained within with purple or chestnut black.

Species 58. (Mus. Cuming.)

AMPULLARIA CARINATA. *Amp. Testâ globosâ, crassâ, angustè umbilicatâ, spirâ subobtusâ, anfractibus supernè plano-angulatis, deinde convexis; lutescente-olivaceâ; aperturâ ovatâ, labro incrassato, luteo tincto.*

THE KEELED AMPULLARIA. Shell globose, thick narrowly umbilicated, spire rather obtuse, whorls flatly angled at the upper part, then convex; yellowish-olive; aperture ovate, lip thickened, tinged with yellow.

SWAINSON (not of Lamarck), Zoological Illustrations. *Hab.* India.

A round shell of solid growth, with the whorls abruptly angled round the upper part; so as to present a narrow shelf, not impressed as in the *A. canaliculata*, which Lamarck further characterizes as having a pointed apex.

Species 59. (Mus. Cuming.)

AMPULLARIA ERYTHROSTOMA. *Amp. Testâ globoso-turbinatâ, profundè umbilicatâ, spirâ acuminato-exertâ, anfractibus rotundatis, longitudinaliter corrugato-striatis; intensè olivaceo-castaneâ; aperturâ ovatâ, subamplâ, labro intus intensè sanguineo.*

THE RED-MOUTHED AMPULLARIA. Shell globosely turbinated, deeply umbilicated, spire

acuminately exerted, whorls rounded, longitudinally wrinkle-striated; dark olive-chestnut; aperture ovate, rather large, lip deep blood-red within.

Hab. Zanzibar; Mr. T. Thorn

This fine dark species, with blood-red-stained mouth, is perfectly distinct from any hitherto described.

Species 60. (Mus. Cuming.)

AMPULLARIA HOPETONESIS. *Amp. Testâ subtrigono-globosâ, tumidiuculâ, mediocriter umbilicatâ anfractibus supernè impresso-declivibus, deinde convexis, lævibus; virescente olivaceâ, versus spiram pallidiore, fasciis angustis saturatioribus cingulatâ aperturâ ovatâ, fauce nigricante-purpureâ.*

THE HOPETOWN AMPULLARIA. Shell somewhat triangularly globose, rather swollen, moderately umbilicated, whorls impressly slanting round the upper part, then convex smooth; greenish-olive, paler towards the spire, encircled with narrow darker bands; aperture ovate interior blackish-purple.

LEA, Trans. Amer. Phil. Soc. Vol. v. pl. 19. f. 84.

Hab. Darien, Georgia.

A tumid globose shell, inclined somewhat angularly towards to base.

Species 61. (Mus. Cuming.)

AMPULLARIA LUBRICA. *Amp. Testâ globoso-ovatâ, angustissimè umbilicatâ, spirâ subexsertâ, apice obtusâ, anfractibus convexis, longitudinaliter rugoso-striatis, nitentibus squasi lubricatis; livido-olivaceâ, atro-tinctâ; aperturâ ovatâ, basi subeffusâ.*

THE GLAZED AMPULLARIA. Shell globosely ovate, very narrowly umbilicated, spire rather exerted, obtuse at this apex, whorls convex, longitudinally rugosely striated, shining as if glazed; livid olive black smeared; aperture ovate, rather effused at the base.

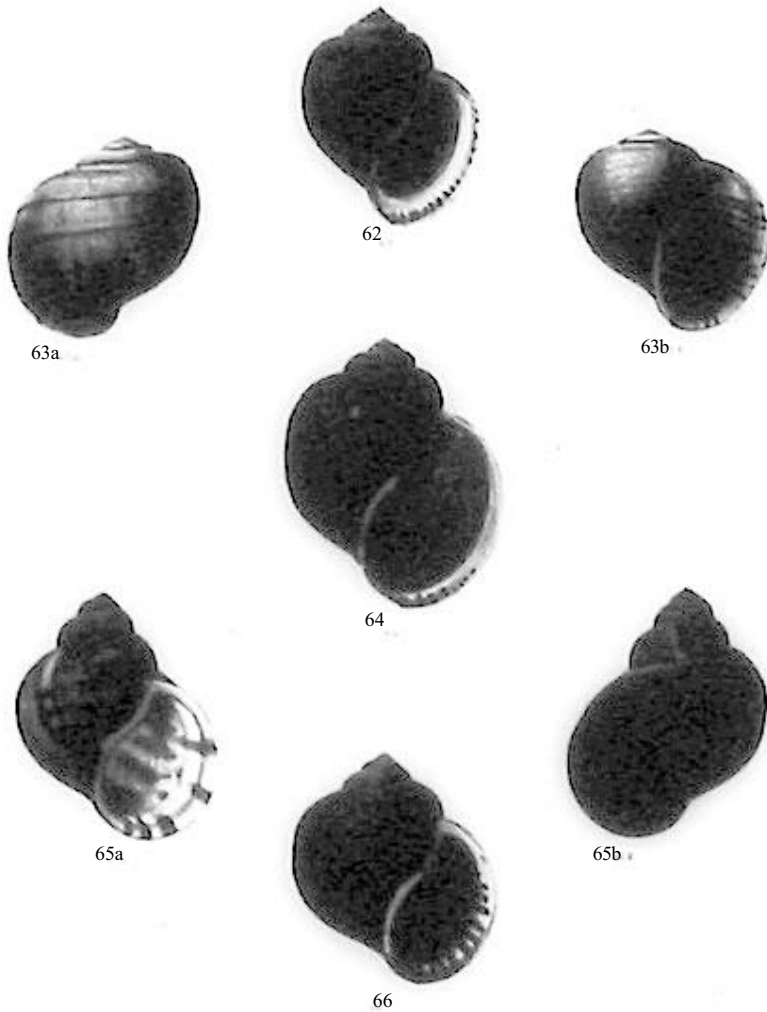
Hab. —?

Of a peculiar glazed livid black-smeared olive-colour, with a narrow scarcely perceptible umbilicus, the aperture being a little effused at the base.

AMPULLARIA.

Plate XIV.

Ampullaria, Pl. XIV.



Species 62. (Mus Cuming.)

AMPULLARIA COMPACTA. *Amp. testâ subgloboso-ovatâ, vix umbilicatâ, spirâ breviuscilâ, anfractibus convexis, lævibus; fulvescenti-olivaceâ, fasciis virescentibus cingulatâ; aperturâ oblongo-ovatâ, ad marginem marmoratâ.*

THE COMPACT AMPULLARIA. Shell somewhat globosely ovate, scarcely umbilicated, spire rather short, whorls convex, smooth; fulvous-olive, encircled with greenish bands; aperture oblong-ovate, marbled at the edge.

Hab. Malacca.

A smooth dark olive species, scarcely umbilicated, with rather a contracted aperture, the interior being purple-brown, with a thickened rim of opake blue-white near the edge.

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

AMPULLARIA NOTABILIS. *Amp. testâ subquadrato-ovatâ, tenui, inflatâ, umbilicatâ, spirâ brevissimâ, anfractibus rotundato-productis, lævibus, malleatis; fulvo-spadiceâ, fasciis angustis, interruptis, subobsoletis cingulatâ; aperturâ amplâ, fauce conspicuè fasciatâ.*

THE REMARKABLE AMPULLARIA. Shell somewhat squarely ovate, thin, inflated, umbilicated, spire very short, whorls rotundately produced round the upper part, smooth, malleated; fulvous-fawn, encircled with faint narrow interrupted bands; aperture large, with the bands conspicuously marked in the interior.

Hab. — ?

A light inflated species, having the upper part of the whorls almost on a plane with the spire.

Species 64. (Mus. Cuming.)

AMPULLARIA OVATA. *Amp. testâ ovatâ, tumidiusculâ, subangustè umbilicatâ, spirâ exsertâ, anfractibus convexis, undato-striatis; virescente-olivaceâ; aperturâ ovatâ, labro columellari subrecurvo.*

THE OVATE AMPULLARIA. Shell ovate, rather swollen, rather narrowly umbilicated, spire

exserted, whorls convex, wave-striated; greenish-olive; aperture ovate, columellar lip slightly recurved.

OLIVIER, Voy. dans l'Empire Ottoman, l'Egypte et la Perse; vol. ii. p. 39. pl. 31. f. 1.

Hab. Egypt.

Of a regularly tumid ovate form, characterized with longitudinally waved striæ.

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

AMPULLARIA NUBILA. *Amp. testâ conico-ovatâ, Turbiniformi, solidâ, vix umbilicatâ, spirâ acuminato-exsertâ, anfractibus rotundatis, lævibus, hic illic varicosis; lutescente, olivaceo-viridi interruptè fasciatâ et nebulatâ; aperturâ parviusculâ, subcirculari, obliquè effusâ.*

THE CLOUDY AMPULLARIA. Shell conically ovate, Turbo-shaped, solid, scarcely umbilicated, spire acuminately exserted, whorls rounded, smooth, here and there varicose; yellowish, interruptedly banded and clouded with olive-green; aperture rather small, nearly circular, obliquely effused.

Hab. River Salomoens; Mr Yates.

A solid Turbo-like species, unusually acuminately convoluted, clouded with olive-green upon a dull fulvous-yellow ground.

Species 66. (Mus. Cuming.)

AMPULLARIA TROCHULUS. *Amp. testâ globosâ, subampliter umbilicatâ, spirâ breviusculâ, acutè acuminatâ, anfractibus supernè declivibus, deinde convexis; fulvo-olivaceâ, fasciis angustis virescentibus numerosis cingulatâ; aperturâ oblongâ, subangustâ, fauce conspicuè fasciatâ.*

THE TOP AMPULLARIA. Shell globose, rather largely umbilicated, spire rather short, sharply acuminated, whorls slanting round the upper part, then convex; fulvous-olive, encircled with numerous narrow green bands; aperture oblong, rather narrow, bands conspicuous in the interior.

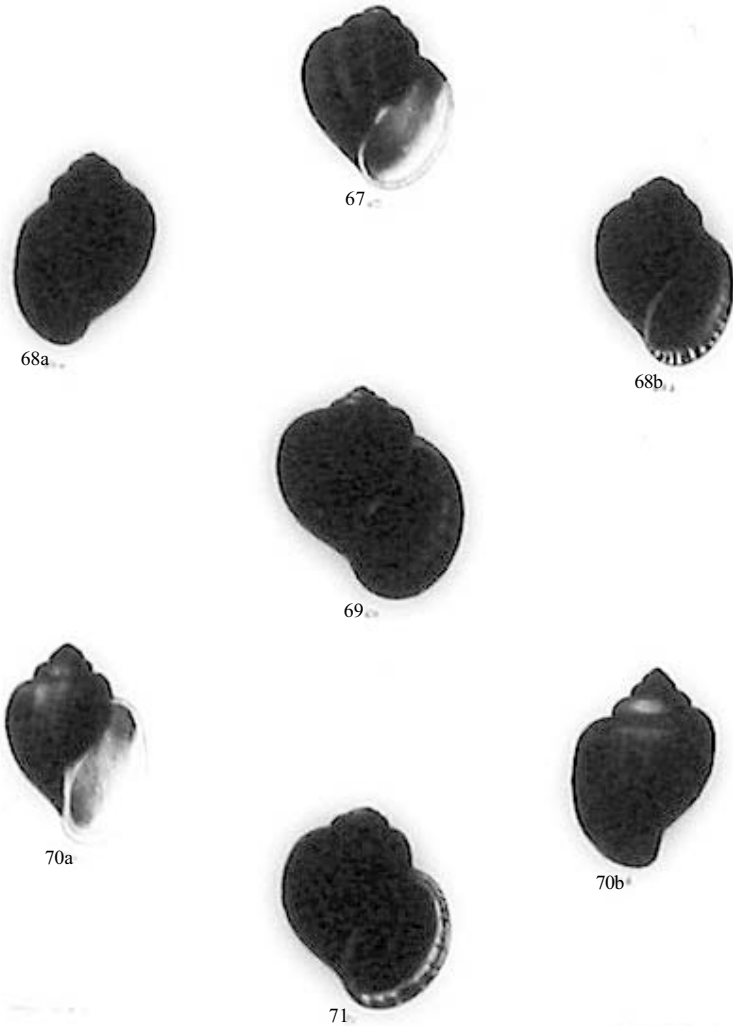
Hab. — ?

A globose many-banded shell, with a characteristic sharply acuminated spire.

AMPULLARIA.

Plate XV.

Ampullaria. Pl. XV.



Species 67. (Mus. Cuming.)

AMPULLARIA MALABARICA. *Amp. testâ ovatâ, angustè umbilicatâ; fulvo-olivaceâ, spirâ subexsertâ, anfractibus supernè declivibus et minutè rugosis, deinde convexis lævibus, nitentibus, vix malleatis; aperturâ ovatâ, labro tenui, intus incrassato.*

THE MALABAR AMPULLARIA. Shell ovate, narrowly umbilicated; fulvous-olive, spire somewhat exserted, whorls slanting at the upper part and minutely wrinkled, then convex, smooth shining, faintly malleated; aperture ovate, lip thin, thickened within.

PHILIPPI, Küster, Consh. Cab. *Ampullaria*, p. 29. pl. 7. f. 8.

Hab. Malabar.

The outer surface of this species is shining fulvous-olive, with the umbilicus almost obsolete.

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

AMPULLARIA PRODUCTA. *Amp. testâ oblongo-ovali, ad basin productâ, angustè umbilicatâ, umbilico ferè obsolete, spirâ subobtusâ, anfractibus supernè declivibus et tenuirugosis, deinde plano-convexis; olivaceâ, rufo-castaneo fasciatâ; aperturâ oblongâ, ad basin effusâ, ad marginem maculatâ.*

THE PRODUCED AMPULLARIA. Shell oblong-oval, produced at the base, narrowly umbilicated, umbilicus almost obsolete, spire rather obtuse, whorls slanting, and finely wrinkled at the upper part, then flatly convex; olive, banded with reddish-chestnut; aperture oblong, effused at the base, spotted at the edge.

Hab. —?

This species is chiefly characterized by its oblong-oval form, produced and effused at the base.

Species 69. (Mus. Cuming.)

AMPULLARIA REFLEXA. *Amp. testâ globosâ, subprofundè umbilicatâ, spirâ brevi, anfractibus ad suturam subimpressis, deinde rotundatis,*

lævibus, nitentibus, obscure corrugatis et malleatis; virente-olivaceâ, lineis fasciisque angustis nigricantibus cingulatâ; aperturâ ovatâ, intus nigricante-purpureâ, labro intus nigrescente.

THE REFLECTED AMPULLARIA. Shell globose, rather deeply umbilicated, spire short, whorls somewhat impressed at the suture, then rounded, smooth, shining, obscurely wrinkled and malleated; greenish-olive, encircled with dark lines and narrow bands; aperture ovate, interior blackish-purple, lip black within.

SWAINSON, Zoological Illustrations, vol. iii. pl. 172. *Hab.* —?

A globose shell, very symmetrically convoluted, chiefly distinguished by its blackish-purple interior, the lip being stained within darker.

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

AMPULLARIA OBLONGA. *Amp. testâ subtrigono-oblonga, solidusculâ, angustè umbilicatâ, spirâ subpyramidali, anfractibus ad suturam plano-impressis, deinde rotundato-angulatis; albidâ, epidermide fulvâ indutâ, apice carneâ; aperturâ angustè oblongâ, labro columellari reflexo.*

THE OBLONG AMPULLARIA. Shell somewhat triangularly oblong, rather solid, narrowly umbilicated, spire subpyramidal, whorls flatly impressed at the suture, then rotundately angled; whitish, covered with a fulvous epidermis, flesh-tinted at the apex; aperture narrowly oblong, columellar lip refected.

SWAINSON, Zoological Illustrations, vol. iii. pl. 136. *Hab.* —?

An interesting species, distinguished by its peculiarly oblong form, and light fulvous external colouring.

Fig. 71. (Mus. Cuming.)

The shell here figured is a variety of *A. compacta*, represented in the preceding Plate, of which there are several, all distinguished by a peculiar narrow contracted umbilicus.

AMPULLARIA.

Plate XVI.

Ampullaria, Pl. XVI.

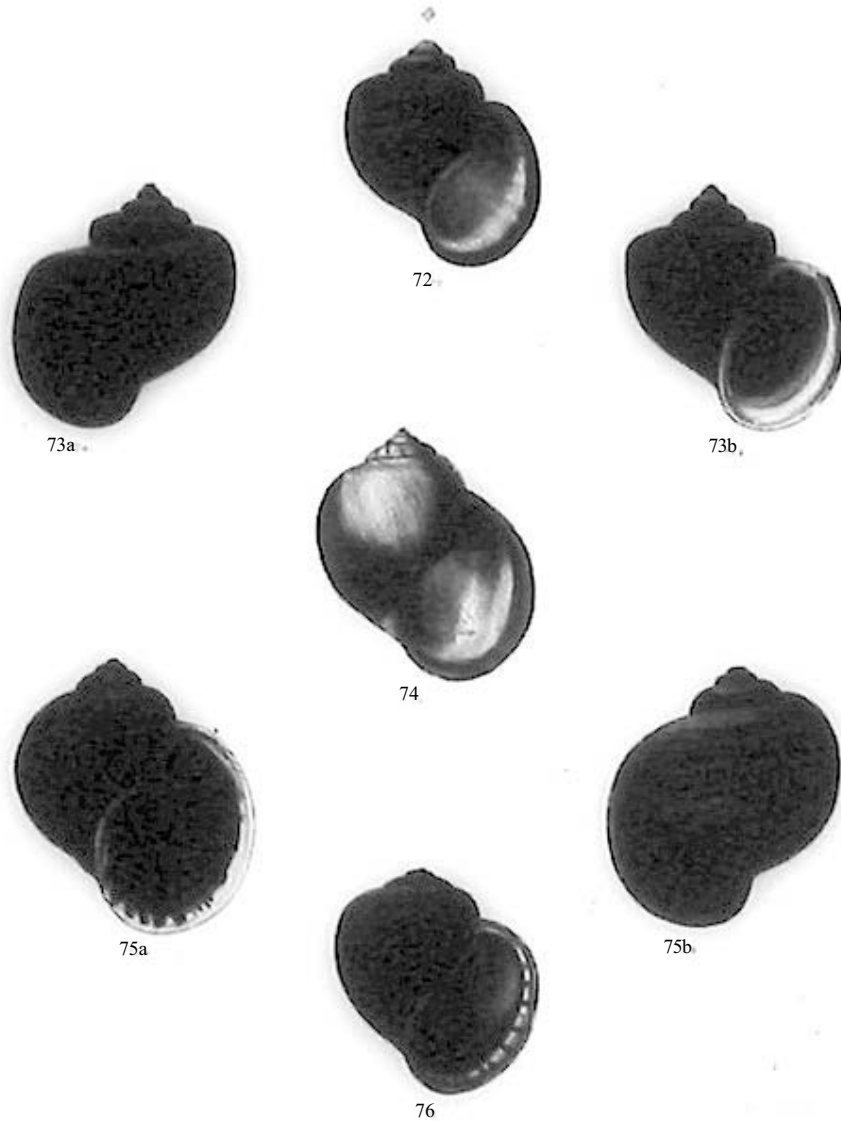


Fig. 72. (Mus. Cuming.)

An interesting banded variety of *A. sordida*, represented at Pl. III. Fig. 14, presenting a link with *A. melanocheila* Sp. 24.

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

AMPULLARIA SCALARIS. *Amp. testâ pyriformi-ovatâ, crassiusculâ, umbilicatâ, spirâ declivi-pyramidali, acutâ, anfractibus supernè, latè plano-angulatis, deinde convexis, ultimo anticè descendente; purpureo-fuscâ, ad angulum livido-albicante; aperturâ ovali, fauce albidâ.*

THE LADDER AMPULLARIA. Shell pyriformly ovate, rather thick, umbilicated, spire slantingly pyramidal, sharp, whorls broadly flatly angled at the upper part, then convex, last whorl descending in front; purple-brown, livid whitish at the angle; aperture oval, interior whitish.

D'ORBIGNY, Voy. dans l'Amérique Mérid. Moll. p. 374. pl. 50. f. 1-3.

Hab. Bolivia; D'Orbigny. Bridges.

Singularly distinguished from all other species of the genus by its broad angularly turbinated spire.

Species 74. (Mus. Cuming.)

AMPULLARIA LABIOSA. *Amp. testâ obliquè globosâ, subangustè umbilicatâ, spirâ exsertiusculâ, acutâ, anfractibus convexis, nitentibus, longitudinaliter striatis et malleatis; fulvo-stramineâ; aperturâ oblongo-ovatâ, expansâ, labro columellare reflexo, fauce ad marinem fulvo-aurantiâ.*

THE LIPPED AMPULLARIA. Shell obliquely globose, rather narrowly umbilicated, spire somewhat exserted, sharp, whorls convex, shining, longitudinally striated and malleated; fulvous straw-colour; aperture oblong-ovate, expanded, columellar lip reflected, interior fulvous-orange at the edge.

KOCH, Philippi, in Küster, Conch. Cab. *Ampullaria*, p. 58. pl. 18. f. 5.

Hab. India.

Of a peculiar obliquely expanded globose form, with a characteristic shining fulvous straw-coloured exterior, the aperture being edged within with fulvous-orange.

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

AMPULLARIA DOLIOIDES. *Amp. testâ ovatâ, tenui, ventricosâ, angustè umbilicatâ, spirâ brevi, acutâ, anfractibus convexis, nitentibus, ad suturas impressis, ultimo ampliter tumido et expanso; cinereo-olivaceâ, obscure rufo, fasciatâ, fasciis linearibus, irregularibus; aperturâ peramplâ, apertâ, labro columellari reflexo.*

THE DOLIUM-LIKE AMPULLARIA. Shell ovate, thin, ventricose, narrowly umbilicated, spire short, sharp, whorls convex, shining, impressed at the sutures, last whorl largely swollen and expanded; ash-olive, obscurely red-banded, bands linear, irregular; aperture very large, open, columellar lip reflected.

Hab. Bombay.

An elegantly convoluted species, of light semitransparent substance, the last whorl being unusually larger than the rest, and openly expanded.

Species 76. (Mus. Cuming.)

AMPULLARIA ENCAUSTICA. *Amp. testâ globosâ, basin versus obtusè attenuatâ, vix umbilicatâ, tenui, pellucidâ, spirâ brevi, obtusâ, anfractibus convexis, levibus, nitentibus; virescente-olivaceâ; aperturâ oblongo-ovatâ, labro breviter reflexo, carneolo-aurantio.*

THE ENAMELLED AMPULLARIA. Shell globose obtusely attenuated towards the base, scarcely umbilicated, thin, transparent, spire short, obtuse, whorls convex, smooth, shining; greenish-olive; aperture oblong-ovate, lip shortly reflected, carnelion-orange.

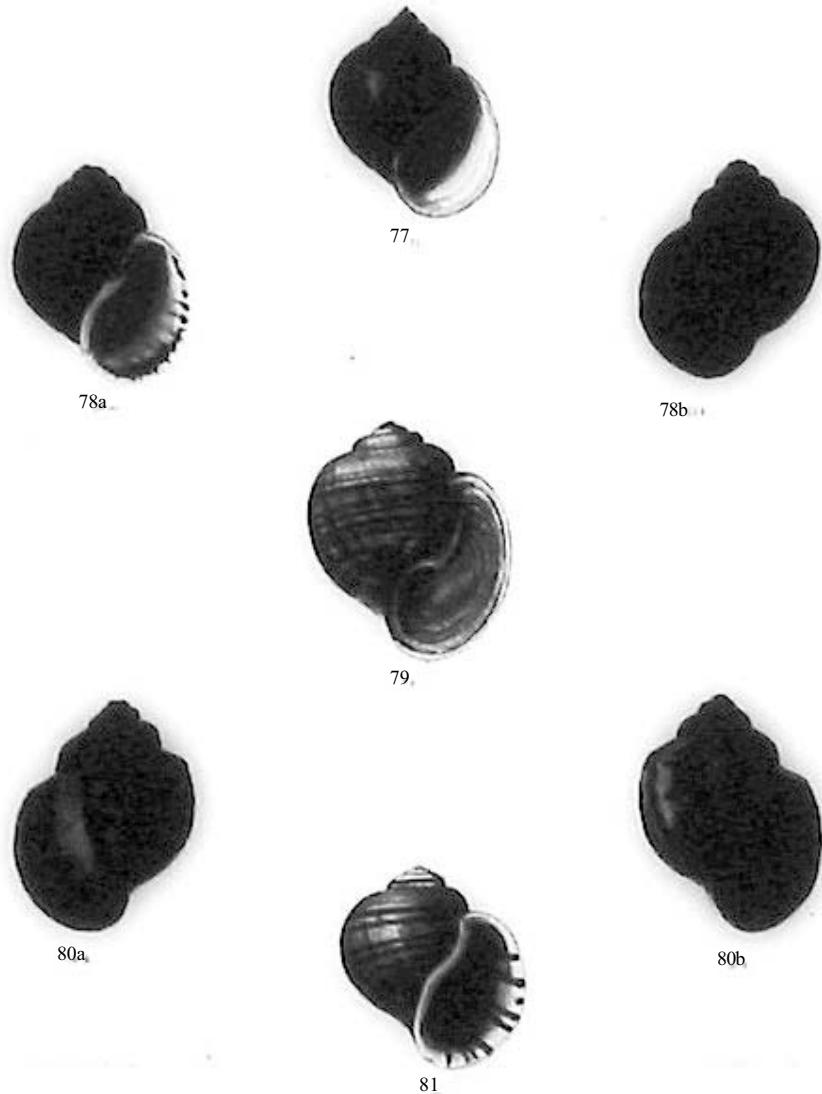
Hab. —?

An apparently solid globular species, but, in reality, thin and semitransparent. The colour is a shining smooth greenish-olive, with the lip bright carnelion-orange.

AMPULLARIA.

Plate XVII.

Ampullaria. Pl. XVII.



Species 77. (Mus. Cuming.)

AMPULLARIA HEPATARIA. *Amp. testâ subglobosâ, tenui, subinflata, angustè umbilicatâ, spirâ breviusculâ, acuminatâ, anfractibus supernè declivibus, deinde convexis, nintentibus, longitudinaliter, striatis; livido-spadiceâ, versus apicem pellucido-carneâ; aperturâ ovatâ, labro columellari tenuè reflexo.*

THE LIVER AMPULLARIA. Shell subglobose, thin, rather inflated, narrowly umbilicated, spire rather short, pointed, whorls slanting round the upper part, then convex, shining, longitudinally striated; livid fawn-colour, transparent flesh towards the apex; aperture ovate, columellar lip thinly reflected.

Hab. —?

Of the light inflated growth, thin in substance, characterized by a peculiar livid-fawn or liver-colour, changing towards the apex into a transparent flesh tint.

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

AMPULLARIA VITTATA. *Amp. testâ globoso-turbinatâ, subangustè umbilicatâ, spirâ exsertâ, anfractibus rotundatis, lævibus, supernè tenuissimè plicato-striatis; fulvescente-olivaceâ, fasciis brunneis angustis numerosis cingulatâ; aperturâ ovatâ, fauce livido-purpurascente, ad marginem maculatâ.*

THE FILLETED AMPULLARIA. Shell globosely turbinated, rather narrowly umbilicated, spire exserted, whorls rounded, smooth, very finely plicately striated at the upper part; fulvous-olive, encircled with numerous narrow brown bands; aperture ovate, interior livid-purple, blotched at the edge.

Hab. Philippine Islands; Cuming.

This species, which Mr. Cuming possesses in several states, is characterized throughout by a uniform fulvous-olive ground, encircled with narrow brown bands more than usually numerous.

Species 79. (Mus. Cuming.)

AMPULLARIA CANALICULATA. *Amp. testâ globosâ, subventricosâ, subangustè umbilicatâ, spirâ brevi, acutâ, anfractibus convexis, longitudinaliter striatis, supernè concavo-canaliculatis; pallidè cinereâ, saturatè fasciatâ, sub epidermide tenui olivaceâ; aperturâ pyriformi-ovatâ, cærulescente, prope columellari aurantio rufâ.*

THE CHANNELLED AMPULLARIA. Shell globose, somewhat ventricose, rather narrowly umbilicated, spire short, sharp, whorls convex, longitudinally striated, concavely channelled at the upper part; pale ash, dark banded beneath a thin olive epidermis; aperture pyriformly ovate, bluish, orange-red next

the columella.

LAMARCK, Anim. sans vert. vol. viii. p. 534.

Hab. Cashmere; Baron Hügel.

Chiefly distinguished from *A. immersa* and other channelled species of the genus by its sharp-pointed, though short spire, a character specially noted by Lamarck.

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

AMPULLARIA VITREA. *Amp. testâ ovato-turbinatâ, tenuis-simâ, corneâ, inflatâ, parum umbilicatâ, spirâ exsertâ, anfractibus primis quatuor angulatis, ad angulum indistinctè carinatis, anfractu ultimo supernè declivi, angulo evanido, deinde convexo; pellucido-brunneâ, flammis opaco-albidis longitudinaliter irregulariter strigatâ; aperturâ ovatâ, labro columellari tenuè reflexo, nitente-atro.*

THE GLASSY AMPULLARIA. Shell ovately turbinated, very thin, horny, inflated, but slightly umbilicated, spire exserted, first four whorls angled, indistinctly keeled at the angle, last whorl slanting round the upper part, the angle gradually disappearing, then rounded; transparent brown, longitudinally irregularly streaked with opaque-whitish flames; aperture ovate, columellar lip thinly reflected, shining black.

Helix vitrea, Born, Test. Mus. Vindobonensis, pl. 15. f. 15, 16. Chemn. Conch. vol. xi. p. 282. pl. 210. f. 2072, 2073.

Bulimus vitreus, Bruguière, Deshayes.

Hab. —?

This extremely rare and curious shell, of transparent light horny texture, variegated with opaque epidermis-like flakes, hitherto referred to the genus *Bulimus*, appears to belong rather to *Ampullaria*.

Species 81. (Mus. Cuming.)

AMPULLARIA CUMINGII. *Amp. testâ subgloboso-ovatâ, solidiusculâ, profundè umbilicatâ, spirâ brevi, anfractibus supernè planiusculis, deinde convexis, subdiscoideis; fulco-cinereâ, fasciis angustis et lineis paucis rufescentibus cingulatâ; aperturâ ovatâ, effusâ, labro columellari subincrassato.*

CUMINGS AMPULLARIA. Shell subglobosely ovate, rather solid, deeply umbilicated, spire short, whorls rather flat at the upper part, then convex, somewhat discoid; fulvous-ash, encircled with a few reddish narrow bands and lines; aperture ovate, effused, columellar lip rather thickened.

KING, Zoological Journal, vol. v. p. 344.

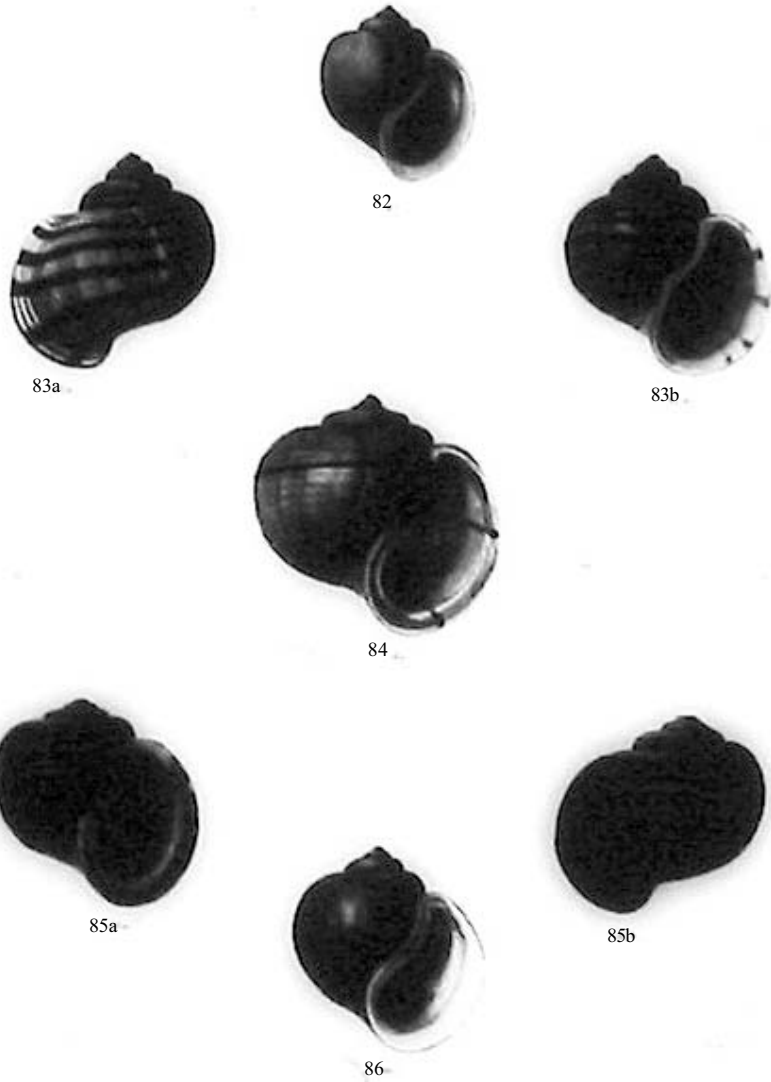
Hab. Island of Taboga, Panama.

A solid shell, of somewhat discoid growth, with the aperture thickened and much effused.

AMPULLARIA.

Plate XVIII.

Ampullaria. Pl. XVIII.



Species 82. (Mus. Cuming.)

AMPULLARIA PRUNULUM. *Amp. testâ globosâ, subdiscoideâ, profundè umbilicatâ, spirâ breviusculâ, acuminatâ, anfractibus supernè impresso-planis, deinde convexis; livido-olivaceâ, lineâ fuscescente obscure cingulatâ; aperturâ ovatâ, labro columellari subeffuso, fauce pallidè aurantiâ.*

THE LITTLE PLUM AMPULLARIA. Shell globose, subdiscoïd, deeply umbilicated, spire rather short, acuminate, whorls impressly flattened round the upper part, then convex; livid olive, obscurely encircled with a faint brown line; aperture ovate, columellar lip rather effused, interior pale orange.

Hab. New Granada.

Of the same typical outline as *A. luteostoma*, but less effused, and having a narrower umbilicus, with little external painting except a faint line or two.

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

AMPULLARIA CUBENSIS. *Amp. testâ subglobosâ, subprofundè umbilicatâ, spirâ exsertâ, anfractibus rotundatis, lævibus; livido-cinereâ, fasciis angustis rufis regulariter cingulatâ; aperturâ, subexpansâ.*

THE CUBA AMPULLARIA. Shell subglobose, rather deeply umbilicated, spire exserted, whorls rounded, smooth; livid ash, regularly encircled with narrow red bands; aperture ovate, rather expanded.

Hab. Cuba.

The regularity of the red bands with which this species is striped, is rather a characteristic feature.

Species 84. (Mus. Cuming.)

AMPULLARIA LUTEOSTOMA. *Amp. testâ orbiculato-ventricosâ, subdiscoideâ, perampliter umbilicatâ, spirâ breviusculâ, acuminatâ; anfractibus supernè subimpressis, deinde rotundatis; flavescence-fuscâ, lineis brunneis duabus vel tribus distantibus cingulatâ; aperturâ ovatâ, labro subeffuso, fauce aurantiâ.*

THE YELLOW-MOUTH AMPULLARIA. Shell orbicularly ventricose somewhat discoid, very largely umbilicated, spire rather short, acuminate,

whorls rather impressed round the upper part, then rounded; yellowish-brow, encircled with two or three distant brown lines; aperture ovate, lip somewhat effused, interior orange.

SWAINSON, Zoological Illustrations, vol. iii. pl. 157.

Ampullariae pachystoma and *balteata*, Philippi.

Hab. Venezuela.

Readily distinguished from the preceding species by its larger size and rougher epidermis-clad texture, the columellar lip being less broadly reflected back.

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

AMPULLARIA GLAUCA. *Amp. testâ orbiculato-ventricosâ, subdiscoideâ, ampliter umbilicatâ, spirâ brevi, anfractibus supernè planulatis, deinde plano-convexis; fuscescente, fasciis lineisque glauco-castaneis densè cingulatâ; aperturâ ovatâ, amplâ, labro columellare latè effuso, fauce aurantiâ.*

THE GLAUCOUS AMPULLARIA. Shell orbicularly ventricose, somewhat discoid, largely umbilicated, spire short, whorls flattened round the upper part, then flatly convex; pale brown, closely encircled with glaucous-chestnut lines and bands; aperture ovate, large, columellar lip broadly effused, interior orange.

Helix glauca, Linnæus, Mus. Uric, p. 667.

Nerita effusa, Müller.

Helix oculus communis, Gmelin.

Helix neritina, Gmelin.

Bulimus effusus, Bruguière.

Ampullaria effusa, Swainson.

Ampullaria Guyanensis, Guérin.

Hab. —?

A very characteristic species, distinguished by its shining porcelain-like aspect and broadly effused reflection of the columellar lip, which, with the interior, is enamelled orange, the external surface of the shell being closely lined and banded with glaucous-chestnut.

Fig. 86. (Mus. Cuming.)

A variety of *A. Paludinoides*, represented at Pl. II. Fig. 9, in which the whorls are more globosely convoluted.

AMPULLARIA.

Plate XIX.

Ampullaria Pl. Mal.

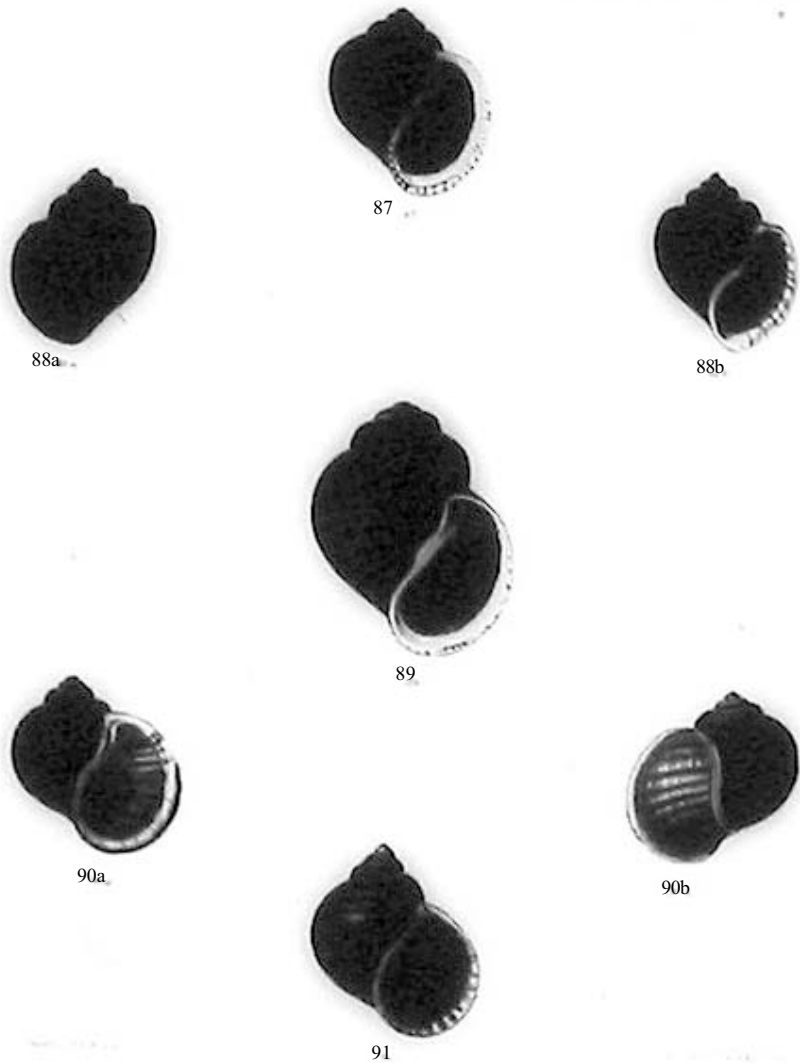


Fig 87. (Mus. Cuming.)

A variety of *A. compacta*, represented at Pl. XIV. Fig. 62.

Species 88. (Fig. a, b, Mus. Cuming.)

AMPULLARIA FILOSA. *amp. testâ ovatâ, imperforatâ, spirâ brevi, apice plus minus erosâ, anfractibus supernè plano-angulatis, striis elevatis undique filosis; fulvescente-castaneâ, fasciis angustis rufis numerosis cingulatâ; aperturâ oblongâ, basi effusâ, labro columellari albo, plano-reflexo.*

THE THREADED AMPULLARIA. Shell ovate, imperforated, spire short, more or less eroded at the apex, whorls flatly angled at the upper part, encircled throughout with thread-like raised striæ; fulvous-chestnut, encircled with numerous narrow red bands; aperture oblong, effused at the base; columellar lip white, flatly reflected.

Hab. Madagascar.

This species is distinguished by a typical charater of its own, represented most conspicuously in the surface being sculptured throughout with thread-like raised striæ.

Species 89. (Mus. Cuming.)

AMPULLARIA COMPLICATA. *Amp. testâ oblongo-turbinatâ, subimperforatâ, spirâ exsertâ, anfractibus convexis, subangustis, rotundatis; flavescente-olivaceâ, lineis rufo-fascis, numerosis, irregularibus; aperturâ ovatâ, parvâ, labro columellari albo, reflexo.*

THE CONTRACTED AMPULLARIA. Shell oblong-turbinated, almost imperforated, spire exserted, whorls convex, rather narrow, rounded; yellowish-olive, encircled with numerous irregular red-brown lines; aperture ovate, small, columellar lip white, reflected.

Hab. —?

A species well distinguished by its oblong turbinated form, and contracted aperure. The irregular linear painting is also a characteristic feature.

Species 90. (Fig a, b, and 91, Mus. Cuming.)

AMPULLARIA APERTA. *Amp. testâ conoideo-ovatâ, angustè umbilicatâ, spirâ breviusculâ, acuminatâ, anfractibus convexis, lævibus; pallidè cinereâ, lineis rufescentibus cingulatâ, epidermide olivaceâ subcorneâ indutâ, aperturâ subcirculari, subamplâ, conspicuè obliquè effusâ, labro reflexo.*

THE OPEN AMPULLARIA. Shell conoidly ovate, narrowly umbilicated, spire rather short, acuminated, whorls convex, smooth; pale ash, encircled with red lines, and covered with an olive subhorny epidermis; aperture nearly circular, rather large, conspicuously obliquely effused, lip reflected.

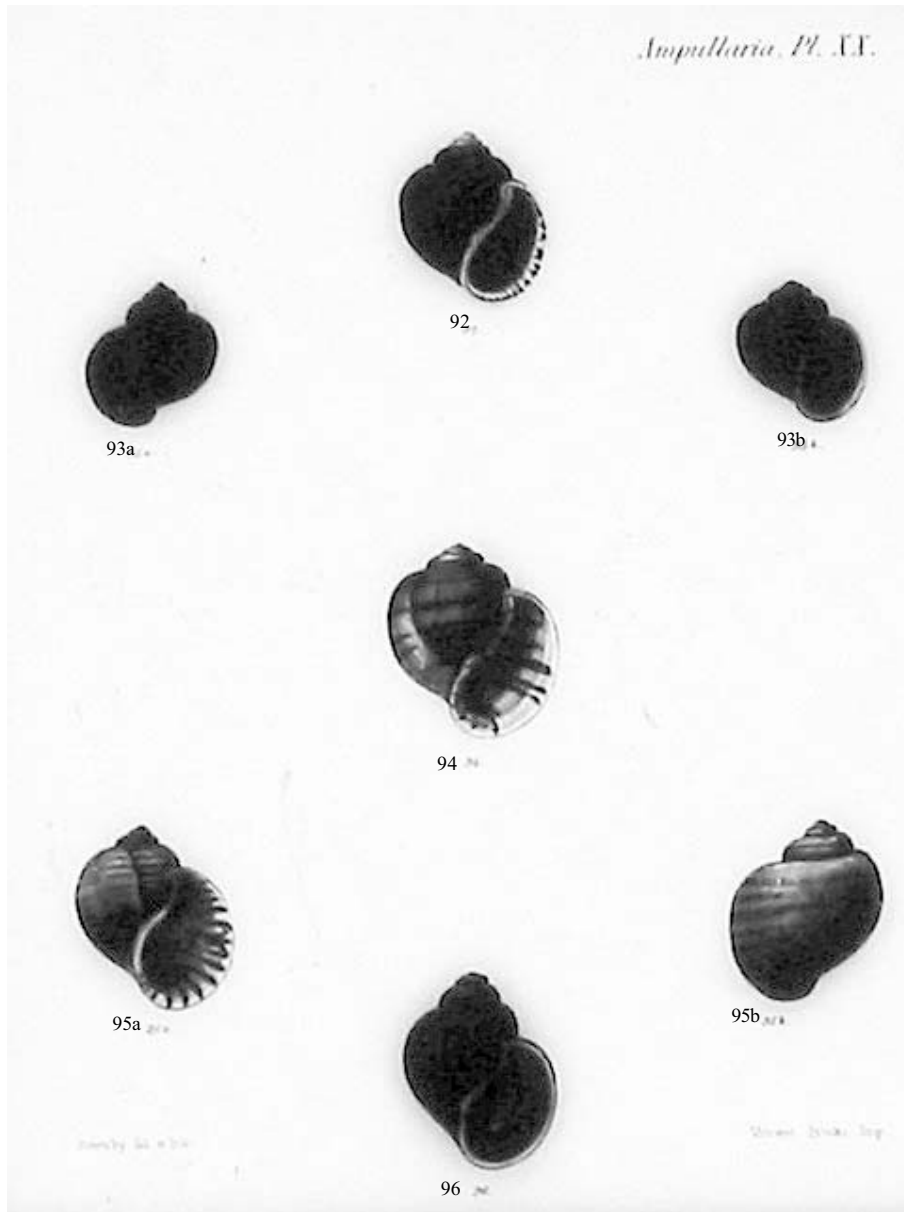
PHILIPPI, Zeitschrift für Malac. 1849, p. 18.

Hab. —?

Characterized by a peculiarly expanded aperture, and a light ash, red-lined colouring, covered by a thin shining horny epidermis.

AMPULLARIA.

Plate XX.



Species 92 (Mus. Cuming.)

AMPULLARIA MÆSTA. *Amp. testâ ovato-globosâ, angustè umbilicatâ, spirâ subexsertâ, anfractibus supernè subplanulatis, deinde rotundatis, lævibus; sordidè olivaceâ, fasciis angustis saturatoribus cingulatâ; aperturâ lunari-ovatâ, labro intus lutescente-albo.*

THE MOURNING AMPULLARIA. Shell ovately globose, narrowly umbilicated, spire rather exserted, whorls slightly flattened at the upper part, then rounded, smooth; dull olive, encircled with narrow darker bands; aperture lunar-ovate, lip yellowish-white within.

Hab. Ceylon; F. Layard.

A dull greenish-olive species, of globose form, narrowly compressly umbilicated, encircled with numerous faint bands, irregular in width, but mostly linear.

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

AMPULLARIA GOSSEI. *Amp. testâ ovato-globosâ, solidiusculâ, compressè umbilicatâ, spirâ subexsertâ, anfractibus supernè rotundato-angulatis, deinde convexis, obsolete liris et malleatis; castaneo-fuscâ, obscure fasciatâ; aperturâ ovatâ, fauce rufescente-aurantiâ, labro columellari incrassato, reflexo.*

GOSSE'S AMPULLARIA. Shell ovately globose, rather solid, compressly umbilicated, spire rather exserted, whorls rotundately angled round the upper part, then convex, obsolete ridged and malleated; chestnut-brown, obscurely banded; aperture ovate, interior reddish-orange, columellar lip thickened, reflected.

Hab. Jamaica; Gosse.

Allied to *A. decussata*, but of more solid growth, with the spire more exserted, and the columellar lip more thickend.

Species 94. (Mus. Cuming.)

AMPULLARIA CINERA. *Amp. testâ globosâ, tenui, subinflatâ, angustè umbilicatâ, spirâ brevi, anfractibus rotundatis, lævibus, ultimo anticè descendente; pallidè cinerâ, fasciis linearibus rufescente-fuscis tribus ad quatuor cingulatâ; aperturâ pyriformi-ovatâ, labro columellari tenuè reflexo.*

THE ASH-COLOURED AMPULLARIA. Shell globose, thin, rather inflated, narrowly umbilicated, spire short, whorls rounded, smooth, the last ascending in front; pale ash, encircled with three to four linear reddish-brown bands; aperture pyriformly ovate, columellar lip thinly reflected.

Hab. Ceylon.

A peculiarly rounded species, thin and somewhat inflated, of a light ash-color, encircled with faint bands which, towards the apex, are like red-brown lines, of which only the uppermost one is visible.

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

AMPULLARIA ELECTRINA. *Amp. testâ ovatâ, tenuissimâ, inflatâ, profundè umbilicatâ, spirâ brevi, acuminatâ, anfractibus ad suturam angustè impressis, deinde convexis, undique malleatis, nitentibus; rufescente-spadiceâ; obscure multifasciatâ; aperturâ ovatâ, subamplâ, labro columellari tenuè reflexo.*

THE AMBER AMPULLARIA. Shell ovate, very thin, inflated, deeply umbilicated, spire short, acuminate, whorls narrowly impressed at the suture, then convex, everywhere malleated, shining; reddish-fawn colour, obscurely many-banded; aperture ovate, rather large, columellar lip thinly reflected.

Hab. —?

A very light inflated species, of a pale amber-tinted reddish-fawn colour.

Species 96. (Mus. Cuming.)

AMPULLARIA JAVANICA. *Amp. testâ conico-oblongâ, vix umbilicatâ, spirâ exsertâ, anfractibus convexis, subangustis, lævibus; intense olivaceâ; aperturâ ovatâ, parviusculâ, labro tenui.*

THE JAVA AMPULLARIA. Shell conically oblong, scarcely umbilicated, spire exserted, whorls convex, rather narrow, smooth; dark olive; aperture ovate, rather small, lip thin.

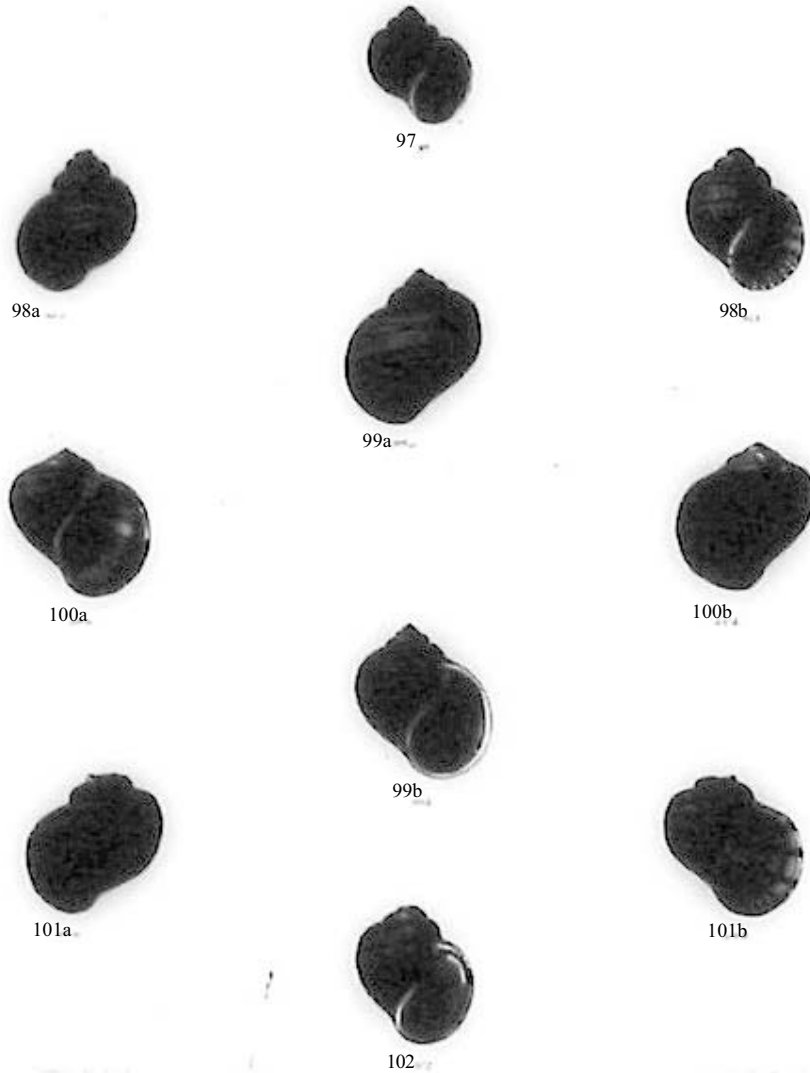
Hab. Java.

A smooth olive species, scarcely umbilicated, chiefly distinguished by its conically oblong form.

AMPULLARIA.

Plate XXI.

Ampullaria. Pl. III.



Species 97 (Mus. Cuming.)

AMPULLARIA TERES. *Amp. testâ subglobosâ, subampliter umbilicatâ, spirâ brevi, anfractibus supernè subplanulatis, deinde convexis, lævibus; olivaceâ, fasciis quatuor vel quinque rufescentibus cingulatâ; aperturâ ovatâ, labro columellari subreflexo aurantio tincto.*

THE TAPERING AMPULLARIA. Shell subglobose, rather largely umbilicated, spire short, whorls somewhat flattened at the upper part, then convex, smooth; olive, encircled with four or five reddish bands, aperture ovate, columellar lip slightly reflected, orange-tinted.

PHILIPPI, Zeitschrift für Malac. 1849, p. 19. Kuster, Monog. P. 38. pl. 10. f. 4.

Hab. —?

This is the nearest allied species to *A. effusa*, which it much resembles, but is uniformly of smaller size, with the columellar lip less broadly expanded.

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

AMPULLARIA SIMPLEX. *Amp. Testâ ovatâ, vix umbilicatâ, spirâ brevi, anfractibus convexis, lævibus, ultimo subexpanso; olivacâ fasciis angustis lineisque numerosis nigricante-rufis cingulatâ; aperturâ ovatâ, labro columellari tenuè reflexo.*

THE SIMPLE AMPULLARIA. Shell ovate, scarcely umbilicated, spire short, whorls convex, smooth, the last rather expanded; olive, encircled with numerous blackish-red lines and narrow bands; aperture ovate, columellar lip thinly reflected.

Hab. —?

A thin somewhat expanded shell, scarcely umbilicated against the thinly reflected columellar lip, encircled with numerous blackish-red pencil lines and narrow bands.

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

AMPULLARIA CERASUM. *Amp. testâ subglobosâ, minutè umbilicatâ, spirâ parviusculâ, acutâ, anfractibus convexis, longitudinaliter plicato-striatis; olivaceo-cinereâ, pallidissimè fasciatâ; aperturâ rotundato-ovatâ, labro reflexo, vividè miniato.*

THE CHERRY AMPULLARIA. Shell subglobose, minutely umbilicated, spire rather small, sharp, whorls convex, longitudinally plicately striated; ash-olive, very faintly banded; aperture rotundately ovate, lip reflected, bright scarlet.

HANLEY, Conch, Miscellany.

Hab. Mexico.

Of an obscure ash-olive colour, with a striking, bright cherry-coloured lip.

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

AMPULLARIA PATULA. *Amp. testâ suborbiculari, imperforatâ, tenui, spirâ brevissimâ, obtusâ, anfractibus supernè declivi-planulatis, deinde convexis, ultimo latissimè expanso; viriscente-olivaceâ, lineis nigris irregularibus cingulatâ; aperturâ amplâ, expansâ.*

THE OPEN-MOUTHED AMPULLARIA. Shell suborbicular, imperforated, thin, spire very short, obtuse, whorls slantingly flattened round the upper part, then convex, the last very widely expanded; greenish-olive, encircled with irregular black lines; aperture large, expanded.

Hab. —?

A thin open-mouthed species, belonging to the same peculiar type of the genus as the large *A. Neritoides*.

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

AMPULLARIA INTROPICATA. *Amp. testâ obliquè globosâ, subdepressâ, angustè umbilicatâ, spirâ brevi, obtusâ, plus minus erosâ, anfractibus angustis; supernè planatis, longitudinaliter striates; rufescente-aurantiâ, fasciis angustis olivaceis cingulatâ; aperturâ ferè circulari, expansâ, fauce vividè coloratâ, labro columellari tenuè reflexo.*

THE INNER PAINTED AMPULLARIA. Shell obliquely globose, rather depressed, narrowly umbilicated, spire short, obtuse, more or less eroded, whorls narrow, flattened at the upper part, longitudinally striated; reddish-orange, encircled with narrow olive bands; aperture nearly circular, expanded, vividly coloured within, columellar lip thinly reflected.

Hab. —?

A very distinct and beautiful species, of an obliquely expanded depressed form, of a warm orange-colour, encircled with narrow olive bands, the colouring being particularly warm and bright in the interior of the shell.

Species 102. (Mus. Cuming.)

AMPULLARIA OLEA. *Amp. testâ subglobosâ, vix umbilicatâ, spirâ breviusculâ, anfractibus rotundatis, longitudinaliter striates; niten-olivaceâ, fasciis duabus angustis nigricante-rufis distantibus cingulatâ; aperturâ pyriformi-ovatâ.*

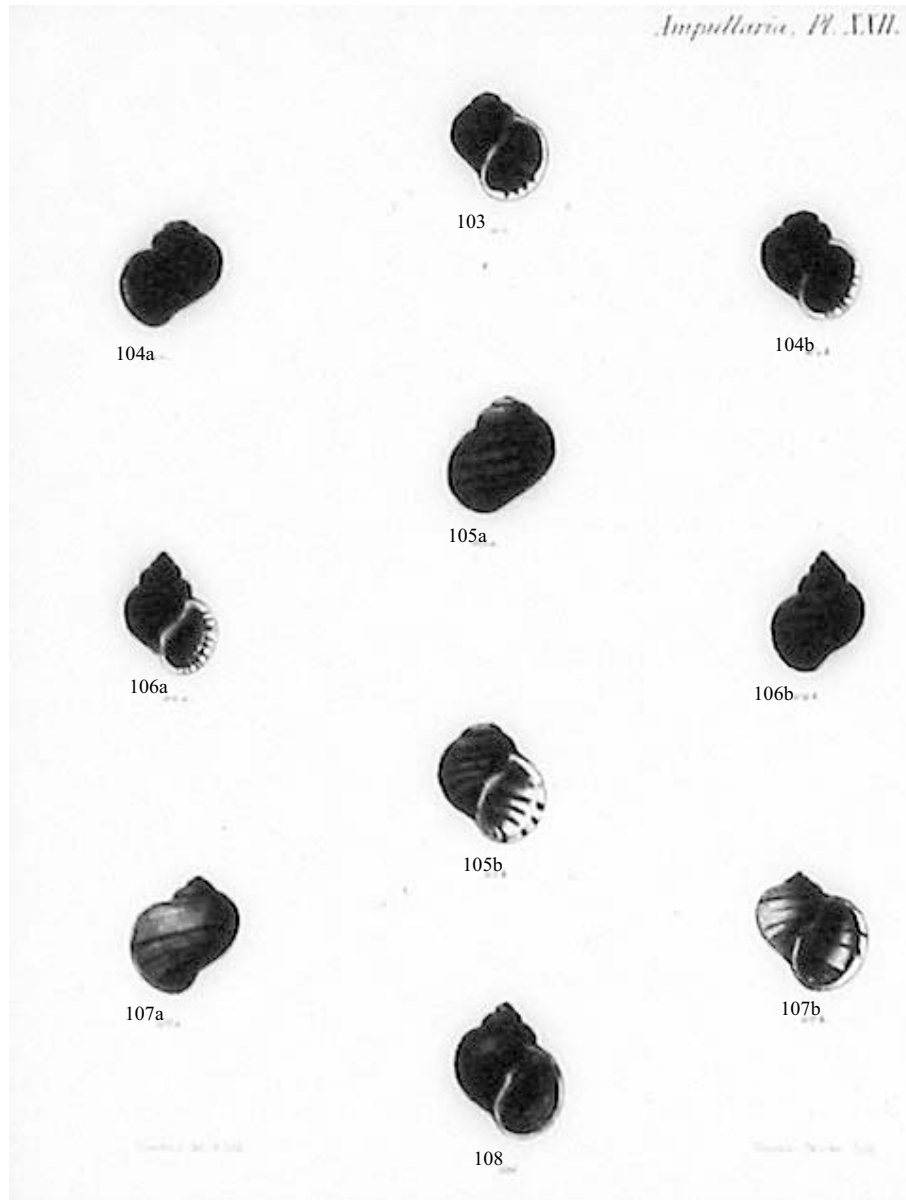
THE OLIVE AMPULLARIA. Shell subglobose, scarcely umbilicated, spire rather short, whorls rounded, longitudinally striated; shining olive, encircled with two distant narrow blackish-red bands; aperture pyriformly ovate.

Hab. —?

Of a peculiar compact subglobose form, with a shining olive surface, encircled with two distant linear bands.

AMPULLARIA.

Plate XXII.



Species 103. (Mus. Cuming.)

AMPULLARIA PERNAMBUCENSIS. *Amp. testâ obliquè orbiculari, imperforatâ, lateraliter compressâ, spirâ parvâ, anfractibus convexis, ultimo peramplo, expanso; olivaceâ, lineis nigricantibus cingulatâ; aperturâ patulâ, fauce nitente castaneâ, labro tenuè reflexo.*

THE PERNAMBUCO AMPULLARIA. Shell obliquely orbicular, imperforated, laterally compressed, spire small, whorls convex, the last very large and expanded; olive-ash, encircled with faint blackish lines; aperture wide open, interior shining chestnut, lip thinly reflected.

Hab. Pernambuco.

A laterally compressed expanded shell, of light texture, richly coloured with dark chestnut in the interior.

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

AMPULLARIA BULLA. *Amp. testâ subglobosâ, angustè umbilicatâ, spirâ subobtusâ, anfractibus rotundatis, lævibus; fulvo-olivaceâ, lineis rufescentibus cingulatâ; aperturâ rotundato-ovatâ, labro tenuè reflexo.*

THE BUBBLE AMPULLARIA. Shell subglobose, narrowly umbilicated, spire rather obtuse, whorls rounded, smooth; fulvous-olive, encircled with red lines; aperture rotundately ovate, lip thinly reflected.

Hab. —?

Of simple character, encircled upon a fulvous-olive ground with red lines, which are seen more conspicuously in the interior.

Species 105. (Fig. a, b, Mus. Cuming.)

AMPULLARIA ROISSYI. *Amp. testâ oblongo-conicâ, solidiusculâ, angustè profundè umbilicatâ, spirâ obtusâ, anfractibus rotundatis, supernè declivibus, exilissimè decussatim striatis; fulvo-albidâ, fasciis angustis olivaceo-nigricantibus cingulatâ; aperturâ pyriformi-ovatâ, labro columellari subcalloso, subreflexo.*

ROISSY'S AMPULLARIA. Shell oblong-conical, rather solid, narrowly deeply umbilicated, spire rather obtuse, whorls rounded, slanting at the upper part, very finely decussately striated; fulvous-white, encircled with narrow olive-black bands; aperture pyriformly ovate, columellar lip rather callous, slightly reflected.

D'ORBIGNY, Moll. Voy. Dans l'Amér. Mérid. P. 377. pl. 52. f. 1-3.

Hab. Rio Parana, La Plata; D'Orbigny.

The substance of this shell is rather more callous than usual, typical of a distinct section of the genus.

Fig. 106. (Mus. Cuming.)

The shell here represented proves to be an oblong convoluted variety of *A. crassa*, described at Pl. I. Fig. 5.

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

AMPULLARIA PHYSOIDES. *Amp. testâ semiglobosâ, tenuissimâ, vix umbilicatâ, spirâ parvâ, anfractibus convexis, longitudinaliter eleganter impressè undato-striatis, ultimo perinflato; pallidè fulvâ, carneo tinctâ, fasciis paucis rufis obscuris cingulatâ; aperturâ amplâ, labro tenuè reflexo.*

THE PHYSAL-LIKE AMPULLARIA. Shell semiglobose, very thin, scarcely umbilicated, spire small, whorls convex, longitudinally elegantly impressly wave-striated, last whorl much inflated; light fulvous, flesh-tinged, encircled with a few obscure linear red bands; aperture large, lip thinly reflected.

Hab. Pernambuco.

Of the same typical form as *A. Pernambucoensis*, but thinner and more inflated, and of a pale flesh-tinged fulvous colour.

Species 108. (Mus. Cuming.)

AMPULLARIA SAXEA. *Amp. testâ oblongo-ovatâ, solidiusculâ, angustè oblectè umbilicatâ, spirâ subobtusâ, anfractibus supernè subdepressis, obsoletè angulatis, deinde rotundatis; olivaceâ; aperturâ pyriformi, oblongâ, labro columellari tenuè reflexo.*

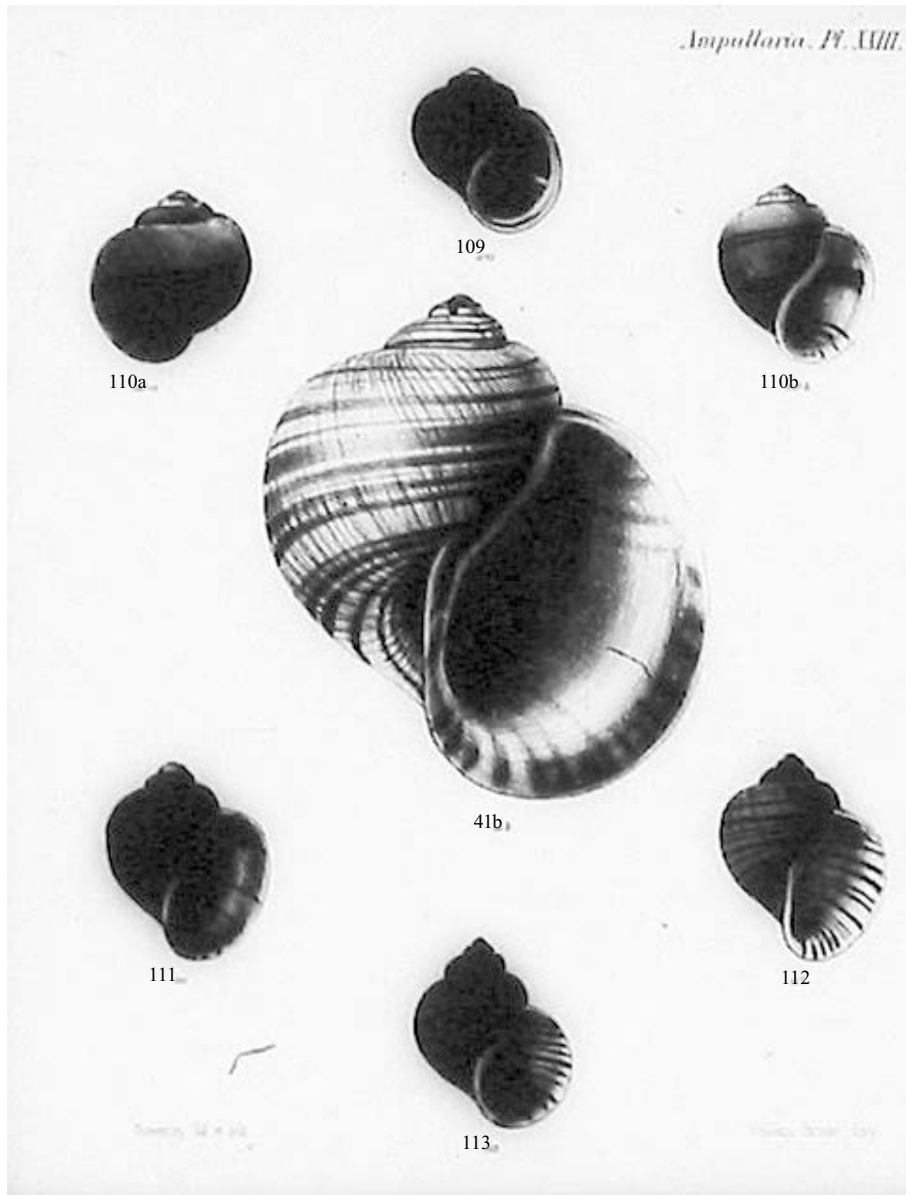
THE STONY AMPULLARIA. Shell oblong-ovate, rather solid, with a narrow covered umbilicus, spire rather obtuse, whorls a little depressed round the upper part, obsoletely angled, then rounded; olive; aperture pyriformly oblong, columellar lip thinly reflected.

Hab. —?

An oblong-ovate shell, of rather solid texture, characterized by a faint depression round the upper whorls, causing a scarcely perceptible angle.

AMPULLARIA.

Plate XXIII.



Species 109. (Mus. Hanley.)

AMPULLARIA LARGILLIERTI. *Amp. testâ ovato-globosâ, angustè umbilicatâ, tenuiculâ, spirâ obtusâ, anfractibus rotundatis, concentricè plicato-striatis; olivaceo-viridî, fasciis linearibus nigricantibus cingulatâ; aperturâ ovatâ, subeffusâ.*

LARGILLIERT'S AMPULLARIA. Shell ovately globose, narrowly umbilicated, rather thin, spire obtuse, whorls rounded, concentrically plicately striated; olive-green, encircled with blackish linear bands; aperture ovate, somewhat effused.

PHILIPPI, Zeitschrift für Malac. 1848, p. 192.

Hab. Madagascar; Largilliert.

This shell, which we take to be Dr. Philippi's *A. Largillierti*, is the nearest allied to *A. Layardi* from Ceylon.

Species 110. (Fig. a, b, Mus. Metcalfe.)

AMPULLARIA BILINEATA. *Amp. testâ globosâ, tenui, subinflatâ, vix umbilicatâ, spirâ brevi, obtusâ, anfractibus convexis, lævibus, nitentibus; livido-fulvescente, fasciis bilinearibus rufis duabus distantibus cingulatis; aperturâ ovatâ, labro subeffuso.*

THE TWO-LINED AMPULLARIA. Shell globose, thin, rather inflated, scarcely umbilicated, spire short, obtuse, whorls convex, smooth, shining; livid-fulvous, encircled with two distant red bilinear bands; aperture ovate, lip slightly effused.

Hab. —?

An interesting species from the collection of Mr. Metcalfe, light and globose, with a smooth, shining, livid-fulvous surface, encircled round the centre with a band of two reddish lines, and the same at the base.

Species 41. (Fig. b, Mus. Hanley.)

A fine characteristic specimen of the shell which we ventured to determine at Pl. IX. Sp. 41. to represent *A. fasciata*.

Species 111. (Mus. Hanley.)

AMPULLARIA DEPRESSA. *Amp. testâ ovatâ, subventricosâ, imperforatâ, spirâ breviusculâ, anfractibus convexis, supernè subplanulatis;*

luteo-olivaceâ, lineis viridibus cingulatâ; aperturâ oblongo-ovatâ, ad basin subsinuatâ.

THE DEPRESSED AMPULLARIA. Shell ovate, subventricose, imperforated, spire rather short, whorls convex, rather flattened at the upper part; yellowish-olive, encircled with green lines; aperture oblong-ovate, somewhat sinuated at the base.

SAY, Exped. S. Peters, vol. ii. p. 264.

Hab. —?

This species differs from *S. paludosa* of the same author, in being of a lighter and more inflated structure, rather attenuated towards the base; it is of a yellowtinged olive colour, encircled with green lines.

Species 112. (Mus. Hanley.)

AMPULLARIA BUXEA. *Amp. testâ ovatâ, subventricosâ, ad basin attenuatâ et effusâ, imperforatâ, spirâ breviusculâ, anfractibus supernè subdeclivibus, deinde planoconvexis; fusciscentefulvâ, lineis numerosis rufo-olivaceis cingulatâ; aperturâ oblongo-ovatâ.*

THE BOX AMPULLARIA. Shell ovate, subventricose, attenuated and effused at the base, imperforated, spire rather short, whorls rather slanting at the upper part, then flatly convex; brownish-fulvous, encircled with numerous reddish-olive lines; aperture oblong-ovate.

Hab. —?

Resembling the former species in the contour of the aperture and absence of umbilicus, but more slanting and inclined to angularity next the suture.

Species 113. (Mus. Hanley.)

AMPULLARIA HANLEYI. *Amp. testâ turbinatâ, tenui, pellucidâ, angustè umbilicatâ, spirâ ampliter exsertâ, anfractibus rotundatis, subangustis, lævibus; livido-fulvâ, lineis rufescente-fuscis cingulatâ; aperturâ parviusculâ, subcirculari, labro columellari reflexo.*

HANLEY'S AMPULLARIA. Shell turbinated, thin, transparent, narrowly umbilicated, spire largely exerted, whorls rounded, rather narrow, smooth; livid-fulvous, encircled with red-brown lines; aperture rather small, nearly circular, columellar lip reflected.

Hab. —?

A semi-transparent turbinated species, quite distinct from any that has preceded it.

AMPULLARIA.

Plate XXIV.

Species 114. (Mus. Hanley.)

AMPULLARIA TESTUDINEA. *Amp. testâ ovato-ventricosâ, tenui, angustè umbilicatâ, spirâ mediocri, anfractibus convexis, lævibus, nitentibus; fulvescente-cinereâ, fasciis lineisque ferrugineo-fuscentibus cingulatâ; aperturâ ovatâ, labro simplici.*

THE TORTOISE-SHELL AMPULLARIA. Shell ovately ventricose, thin, narrowly umbilicated, spire moderate; whorls convex, smooth, shining; fulvous-ash, encircled with rust-brown bands and lines; aperture ovate, lip simple.

Hab. —?

A shell of light substance, much painted with light rust-brown bands and lines.

Species 115. (Fig. a, b, Mus. Hanley.)

AMPULLARIA LINNÆ. *Amp. testâ subovato-turbinatâ, ventricosâ, subangustè umbilicatâ, spirâ exsertâ, anfractibus rotundatis, lævibus, nitentibus, ad suturam rudè impressis; livido-glaucâ, fasciis angustis rosaceis cingulatâ; aperturâ ovatâ, labro subeffuso.*

LINNÆUS'S AMPULLARIA. Shell ovately turbinated, ventricose, rather narrowly umbilicated, spire exserted, whorls rounded, smooth, shining, somewhat rudely impressed at the suture; livid-glaucous, encircled with pinkish narrow bands; aperture ovate, lip slightly effused.

PHILIPPI, Kuster Conch. Cab. *Ampullaria*, p. 62. pl. 20. f. 6.

Hab. —?

Of a livid-glaucous colour, smooth and shining, encircled with pale pink linear bands.

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

AMPULLARIA CITREUM. *Amp. testâ oblongo-globosâ, subampliter umbilicatâ, spirâ mediocri, anfractibus ad suturam impressis, deinde convexis, obscurè malleatis, circa umbilicum obtusè angulatis; pallidè fulvâ ant virescente, interdum olivaceo fasciatâ; aperturâ pyriformi-oblongâ, intus aurantio-rufâ.*

THE CITRON AMPULLARIA. Shell oblong-globose, rather largely umbilicated, spire moderate, whorls impressed at the suture, then convex, obscurely malleated, obtusely angled round the umbilicus; pale-fulvous, or greenish, sometimes banded with olive; aperture pyriformly oblong, orange-red within.

Hab. —?

A fine species, of very distinct character, peculiarly obtusely angled round the umbilicus.

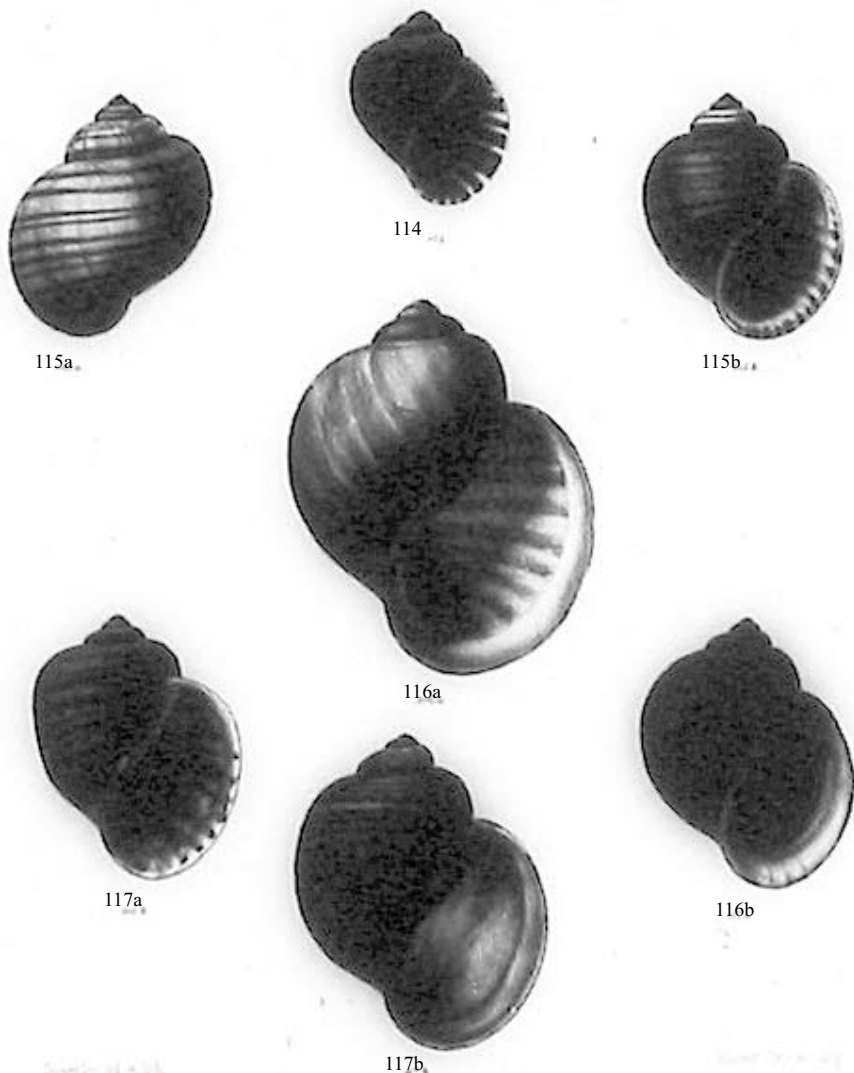
Species 117. (Fig. a, b, Mus. Cuming.)

AMPULLARIA PICTA. *Amp. testâ oblongo-ventricosâ, ampliter profundè umbilicatâ, spirâ mediocri, anfractibus ad suturam planulatis, deinde plano-convexis, circa umbilicum obtusè angulatis; virescente, fasciis lineisque olivaceis numerosis cingulatâ; aperturâ oblongo-ovatâ, intus aurantio-miniâtâ.*

THE PAINTED AMPULLARIA. Shell oblong-ventricose, largely deeply umbilicated, spire moderate, whorls rather flattened at the suture, then flatly convex, obtusely angled round the umbilicus; greenish, encircled with numerous olive bands and lines; aperture oblong-ovate, orange-vermilion within.

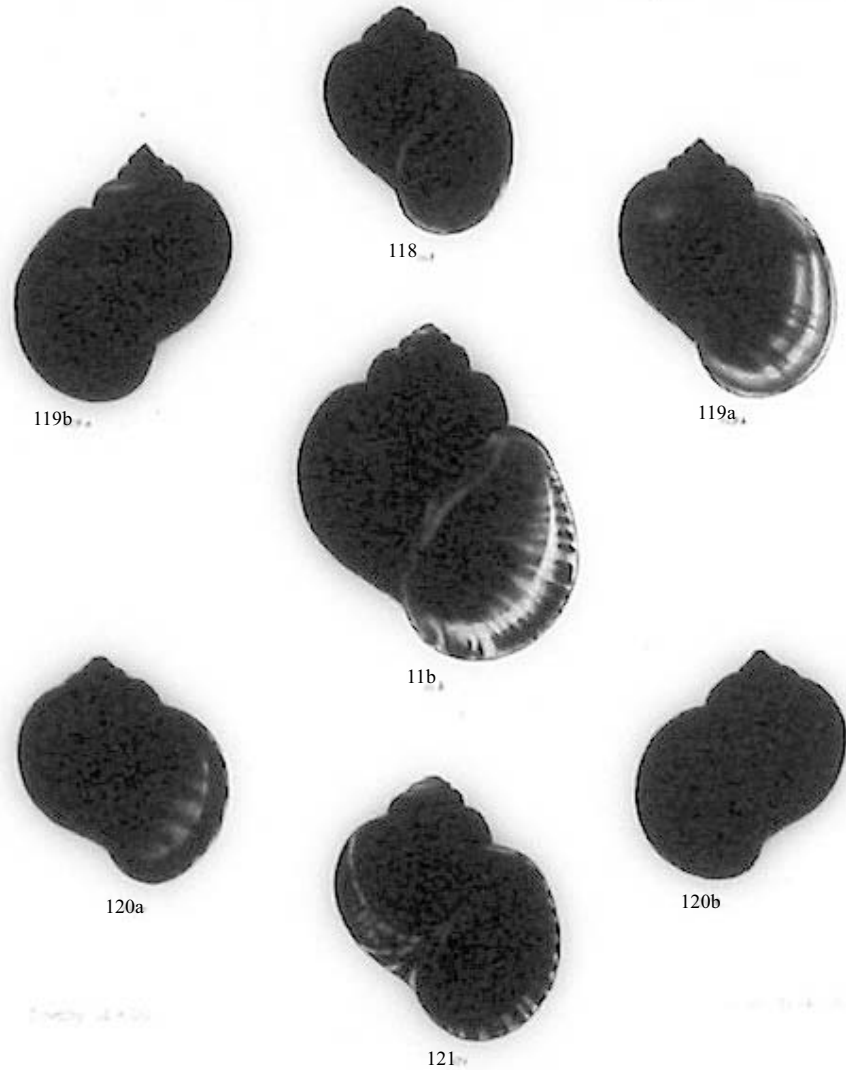
Hab. —?

Closely allied to the preceding species, especially in the peculiar obtusely angled structure of the whorl around the umbilicus, but uniformly distinct in all its stages of growth in general contour.



AMPULLARIA.

Plate XXV.



Species 118. (Mus. Metcalfe.)

AMPULLARIA CALIGINOSA. *Amp. testâ globosâ, subprofundè umbilicatâ, spirâ mediocri, anfractibus supernè plano-declivibus, medio gibbosiusculis, tenuè plicato-striatis et malleatis; nigricante-olivaceâ, prope suturam fulvescente; aperturâ ovatâ, labro vix reflexo.*

THE GLOOMY AMPULLARIA. Shell globose, rather deeply umbilicated, spire moderate, whorls flatly slanting round the upper part, somewhat gibbous in the middle, finely plicately striated and malleated; dark olive, yellowish next the suture; aperture ovate, lip scarcely reflected.

Hab. —?

The most characteristic feature of this species is the gibbous expansion of the whorls, after flatly sloping from the suture.

Species 119. (Fig *a, b*, Mus. Metcalfe.)

AMPULLARIA METCALFEI. *Amp. testâ compressè ovatâ, subtus excavatâ, vix umbilicatâ, spirâ parvâ, acuminatâ, anfractibus supernè obtusè angulatis, deinde plano-convexis, longitudinaliter striatis; fulvescente-olivaceâ, nigro irregulariter fasciatâ; aperturâ ampliter expansâ, labro columellari recurvo, aurantio-tincto.*

METCALFE'S AMPULLARIA. Shell compressly ovate, excavated beneath, scarcely umbilicated, spire small, acuminate, whorls obtusely angled round the upper part, then flatly convex, longitudinally striated; yellowish-olive,

irregularly banded with black; aperture largely expanded, columellar lip recurved, orange-tinted.

Hab. —?

The only species similar to this in form is the *A. Lymnæiformis*, which differs, among other essential characters in being largely umbilicated.

Figs. 11 *b*, and 121. (Mus. Metcalfe.)

The shells here figured, and which should have been numbered 12 *b* and 12 *c*, are fine characteristic examples of Sp. 12, *A. pilula*, a species described at Pl. III. from an obscure specimen in an immature stage of growth.

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

AMPULLARIA MILTOCHEILUS. *Amp. testâ globosâ, solidâ, subampliter profundè umbilicatâ, spirâ parviusculâ, anfractibus rotundatis, spiraliter corrugatis et malleatis, ad suturam declivibus; olivaceâ, ferrugineo hic illic tinctâ et vittatâ; aperturâ ovatâ, labro solidè reflexo, intensè aurantio-miniato.*

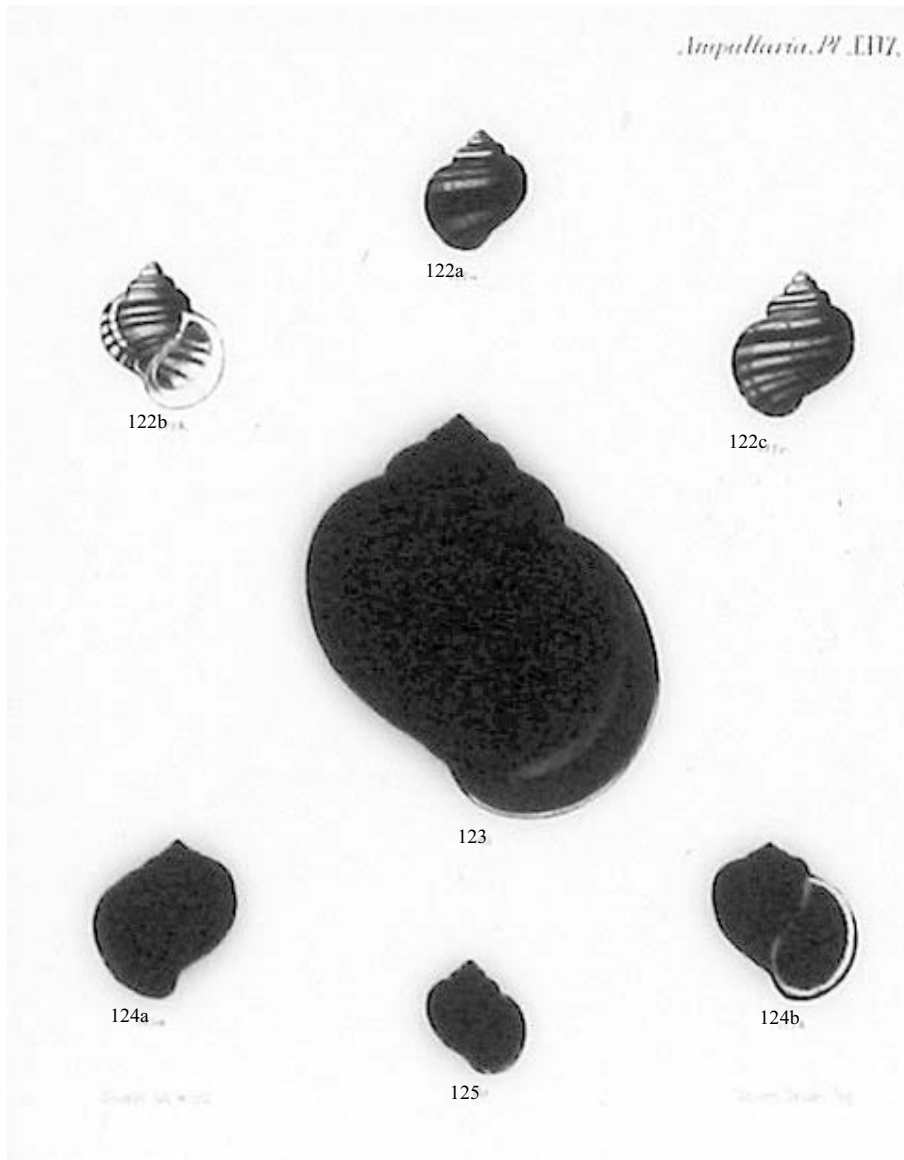
THE RED-LIPPED AMPULLARIA. Shell globose, solid, rather largely deeply umbilicated, spire rather small, whorls rounded, spirally wrinkled and malleated, slanting at the suture; olive, here and there stained and filleted with rust; aperture ovate, lip solidly reflected, deep orange-vermilion.

Hab. Province of Chiapes, Mexico; Ghiesbrecht.

A fine solid rust-stained olive shell, with a characteristic orange-vermilion lip.

AMPULLARIA.

Plate XXVI.



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

AMPULLARIA ELEGANS. *Amp. testâ turbinatâ, solidâ, vix umbilicatâ, spirâ subexsertâ, anfractibus convexis, subangustis, prope suturam planatis, lævibus; lutescente-albâ, fasciis lineisque rubido-fuscis cingulatâ; aperturâ rotundato-ovatâ, parviusculâ, fauce albâ.*

THE ELEGANT AMPULLARIA. Shell turbinated, solid scarcely umbilicated, spire rather exerted, whorls convex, rather narrow, flattened next the suture, smooth; yellowish-white, encircled with red-brown bands and lines; aperture rotundately ovate, rather small, interior white.

D'ORBIGNY, Mag. de Zool. 1835, p. 83, Moll. Voy. dans l'Amér. Mérid. p. 378. pl. 52. f. 3 to 6.

Hab. Rio Madeira, Tributary of the Amazon, Bolivia; D'Orbigny.

This species chiefly differs from *A. Roissyi*, to which it is nearest allied, by its broader form of convolution, and in the more depressed growth of the whorls next the suture.

Species 123. (Mus. Cuming.)

AMPULLARIA GHIESBRECHTII. *Amp. testâ globosâ, solidiusculâ, profundè umbilicatâ, spirâ parviusculâ, depressâ, apice acutâ, anfractibus rotundatis, undique decussatim malleatis; intensè olivaceâ; aperturâ pyriformi-ovatâ, labro effuso, vividè rubido-miniato.*

GHIESBRECHT'S AMPULLARIA. Shell globose, rather solid, deeply umbilicated, spire rather small, depressed, sharp at the apex, whorls rounded, everywhere decussately malleated; dark olive; aperture pyriformly ovate, lip effused, deep ruddy vermilion.

Hab. Province of Chiapas, Mexico; Ghiesbrecht.

A remarkable fine species, of solid globose form,

characteristically malleated throughout, and having a conspicuous deep red aperture.

Species 124. (Fig. a, b, Mus. Cuming.)

AMPULLARIA FUMATA. *Amp. testâ semiglobosâ, obliquè effusâ, angustè umbilicatâ, spirâ parvâ, acutâ, anfractibus convexis, lævibus, ultimo multo maximo; olivaceâ, ad suturam fulvescente, lineis nigricantibus cingulatâ; aperturâ amplâ, labro plano-expanso, fauce fumeo fusco tinctâ et lineatâ.*

THE SMOKED AMPULLARIA. Shell semiglobose, obliquely effused, narrowly umbilicated, spire small, sharp, whorls convex, smooth, the last one much the largest; olive, fulvous at the suture, encircled with dark lines; aperture large, lip flatly expanded, interior stained and lineated with smoky brown.

Hab. Province of Chiapas, Mexico; Ghiesbrecht.

Peculiarly distinguished by the flat expanded formation of the lip, and the painting of the interior, which is stained with shining smoky brown lines and tint.

Species 125. (Mus. Cuming.)

AMPULLARIA DIRA. *Amp. testâ subglososâ, minutè angusè umbilicatâ, anfractibus rotundatis, ad suturam planulatis, rudè striatis; olivaceo-nigracante; aperturâ ovatâ, labro simplici.*

THE DISMAL AMPULLARIA. Shell subglobose, minutely narrowly umbilicated, whorls rounded, rather flattened at the suture, rudely striated; olive-black; aperture ovate, lip simple.

Hab. —?

A dull rudely striated blackish-olive species, of the simplest form.

December, 1856.

AMPULLARIA.

Plate XXVII.

Ampullaria. Pl. XXVII.



126



127a



127b



128



129a



129b



130

Species 126. (Mus. Hanley.)

AMPULLARIA PLANORBULA. *Amp. testâ discoideâ, ampliter umbilicatâ, spirâ brevi, subimmersâ, anfractibus angustis, convexis, lævibus, ad suturam depressis; lutescente-albâ, fasciis lineisque castaneis cingulatâ; aperturâ lunato-circulari, labro simplici.*

THE LITTLE PLANORBIS AMPULLARIA. Shell discoid, largely umbilicated, spire short, subimmersed, whorls narrow, convex, smooth, depressed at the suture; yellowish-white, encircled with chestnut bands and lines; aperture lunar-circular, lip simple.

PHILIPPI, Kuster, Conch. Cab. *Amp.* p. 26. pl. 7. f. 3. *Hab.* —?

A small species, distinguished from all others of the genus by its discoid *Planorbis*-like growth.

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

AMPULLARIA DECUSSATA. *Amp. testâ subgloboâ, angustè profundè umbilicatâ, spirâ obtusâ, erosâ, anfractibus angustis, convexis, striis tenuè decussatis, ad suturam latè planatis; livido-castaneâ, lineis fulvescentibus cingulatâ, ad suturam fulvescente, aperturâ ovatâ, parviusculâ, labro simplici.*

THE DECUSSATED AMPULLARIA. Shell subglobose, narrowly deeply umbilicated, spire obtuse eroded, whorls narrow, convex, finely decussated with striae, broadly flattened at the suture; livid-chestnut, encircled with fulvous lines, fulvous at the suture; aperture ovate, rather small, lip simple.

MORICAND, Mem. Soc. Phys. de Genève, vol. vii. p. 445. pl. 2. f. 26, 27.

Hab. Brazil.

A rather narrowly convoluted shell, decussated throughout with fine striae, especially characterized by a broad flattened development of the whorls next the suture.

Species 128. (Mus. Hanley.)

AMPULLARIA SWAINSONI. *Amp. testâ oblongo-ovatâ, angustè profundè umbilicatâ, spirâ subexsertâ, anfractibus convexis, undique minutè punctulatis; lutescente-olivaceâ, fasciis numerosis angustis viridibus cingulatâ; aperturâ pyriformi-ovatâ, labro effuso, fauce albicante.*

SWAINSON'S AMPULLARIA. Shell oblong-ovate, narrowly deeply umbilicated, spire rather exserted, whorls convex, minutely punctured throughout; yellowish-olive, encircled with numerous narrow green bands; aperture

pyriformly ovate, lip effused, interior whitish.

Ampullaria fasciata, Swainson, Zool. Illus. Second Series, vol. ii. pl. 64.

Ampullaria Swainsoni, Philippi.

Hab. —?

Distinguished from its congeners by its bold oblong-ovate form of convolution and continuous encircling of narrow bands.

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

AMPULLARIA BALANOIDEA. *Amp. testâ ovatâ, solidâ, oblectè umbilicatâ, spirâ subexsertâ, obtusâ, anfractibus rotundatis, subangustis, tenuissimè granoso-striatis, ad suturam plano-declivibus; nigricante-castaneâ; aperturâ parviusculâ, ovatâ, labro effusâ, columellâ calloso-reflexo, aurantio tinctâ.*

THE ACORN-LIKE AMPULLARIA. Shell ovate, solid, with a covered umbilicus, spire rather exserted, obtuse, whorls rounded, rather narrow, very finely granosely striated, flatly slanting at the suture; blackish-chestnut; aperture rather small, ovate, lip effused, columella callously reflected, orange-tinted.

GOULD, MS., Mus. Hanley.

Hab. Liberia, West Africa.

Very closely allied to *A. Plate* which follows, but of a more obliquely effused form, with a more exserted spire.

Species 130. (Mus. Cuming.)

AMPULLARIA PLATÆ. *Amp. testâ ovatâ, solidiusculâ, imperforatâ, spirâ obtusè exsertâ, anfractibus subangustis, convexis, minutè granoso-striatis, ad suturam obtusè planatis; lutescente-castaneâ, fasciis angustis fuscis cingulatâ; aperturâ ovatâ, labro simplici, columellâ calloso-reflexâ, aurantio-tinctâ.*

THE PLATE AMPULLARIA. Shell ovate, rather solid, imperforated, spire obtusely exserted, whorls rather narrow, convex, minutely granosely striated, obtusely flattened at the suture; yellowish-chestnut, encircled with narrow brown bands; aperture ovate, lip simple, columella callously reflected, orange-tinted.

Helix plate, Maton, Trans. Linn. Soc. 1809, vol. x. pl. 24. f. 16, 17.

Ampullaria Plate, D'Orbigny.

Ampullaria Naticoides, D'Orbigny.

Ampullaria cyclostoma, Spix.

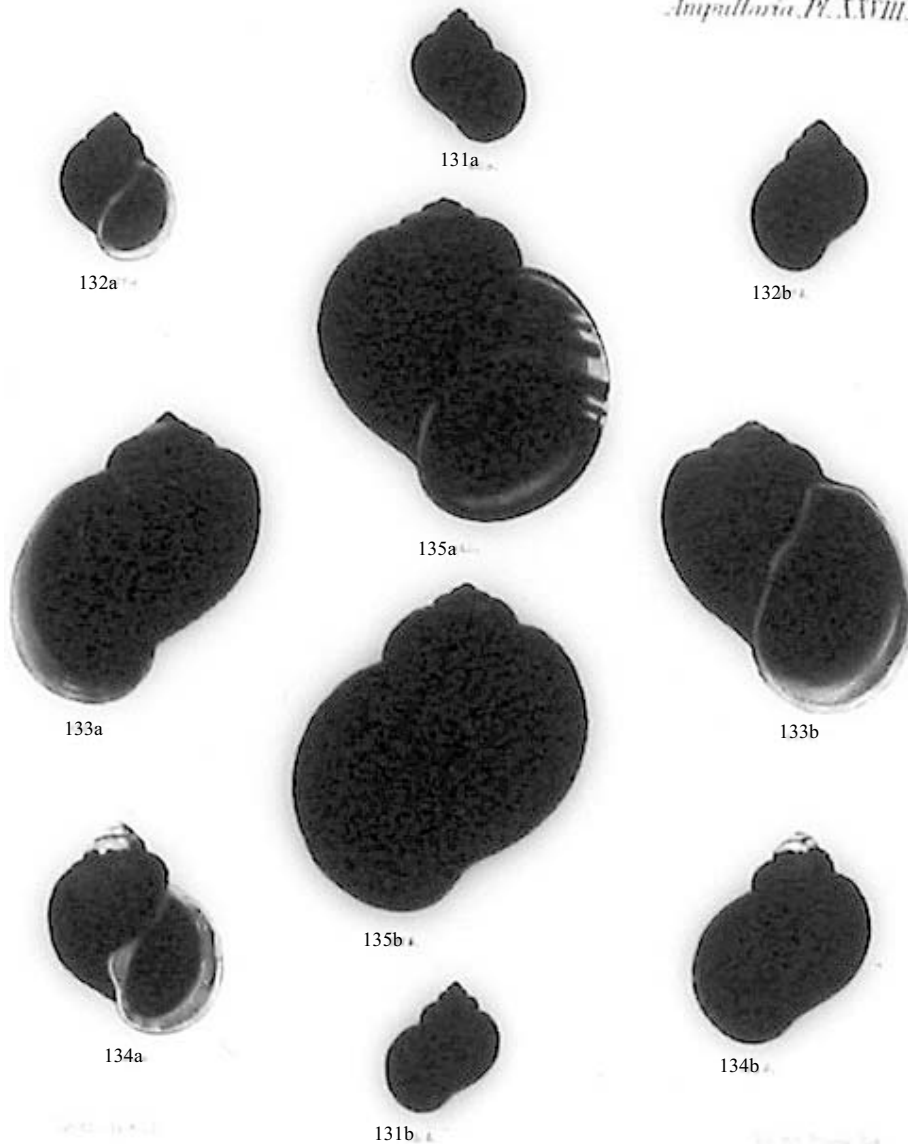
Hab. River Plate.

Distinguished from the preceding species, from Liberia, to which it is singularly closely allied, by its narrower form of convolution and banded painting.

AMPULLARIA.

Plate XXIII.

Ampullaria, Pl. XXIII.



Species 131. (Fig. a, b, Mus. Cuming.)

AMPULLARIA AUROSTOMA. *Amp. testâ globoso-turbinatâ, vix umbilicata, spirâ subexsertâ, anfractibus rotundatis, rugoso-striatis; nigricante-castaneâ; aperturâ ovatâ, labro vividè aurantiorufo.*

THE GOLDEN-MOUTH AMPULLARIA. Shell globose turbinated, scarcely umbilicated, spire somewhat exserted, whorls rounded, roughly striated; blackish-chestnut; aperture ovate, lip bright orange-red.

LEA, MS., Mus. Cuming.

A globose turbinated shell of solid structure and dark chestnut colour, with a pretty bright orange-red lip.

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

AMPULLARIA NUX. *Amp. testâ oblongo-conoideâ, solidâ, vix umbilicatâ, spirâ obtusè exsertâ, anfractibus convexis, ad suturam declivibus et obsolete plicato-corrugatis; fulvo-castaneâ; aperturâ ovatâ, parviusculâ, labro columellari calloso-reflexo.*

THE NUT AMPULLARIA. Shell oblong-conoid, solid, scarcely umbilicated, spire obtusely exserted, whorls convex, slanting and obsolete plicately wrinkled at the suture; fulvous-chestnut; aperture ovate, rather small, columellar lip callously reflected.

Hab. Bombay.

A solid fulvous-chestnut shell of an oblong conoid form, with the columellar lip rather callously reflected.

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

AMPULLARIA AURIFORMIS. *Amp. testâ compressè ovatâ, obliquè contortâ, Lymnæiformi, tenui, profundè umbilicatâ, spirâ parvâ, anfractibus convexis, striatis et malleatis, supernè obsolete obtusè angulatis, anfractu ultimo conspicuè effuso; intensè olivaceâ; aperturâ trigono-ovatâ, basi rotundato-expansâ, cærulescente.*

THE EAR-SHAPED AMPULLARIA. Shell compressly ovate, oblique twisted, *Lymnæa*-shaped, thin, deeply umbilicated, spire small, whorls convex, striated and malleated, obsolete and obtusely angled round the upper part, last whorl conspicuously effused; dark olive; aperture triangularly ovate, rotundately expanded at the base, bluish.

Hab. Honduras.

The form of this species is quite peculiar, the last whorl being unusually obliquely effused, more particularly towards the base.

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

AMPULLARIA SPRUCEI. *Amp. testâ oblongo-conoideâ, solidâ, imperforatâ, spirâ plus minus erosâ, anfractibus declivi-convexis, lævibus, haud nitentibus; fulvo-olivaceâ, prope aperturam obscurè rufo-fasciatâ; aperturâ ovatâ, parviusculâ, labro effuso, columellâ densè callosâ.*

SPRUCE'S AMPULLARIA. Shell oblong-conoid, solid, imperforated, spire more or less eroded, whorls slantingly convex, smooth, not shining; fulvous-olive, faintly red-banded near the aperture; aperture ovate, rather small, lip effused, columella thickly callous.

Hab. Tarapoto, east side of the Andes; Spruce.

This species has a peculiar *Littorina*-like aspect, with the columellar lip callously reflected over the place of the umbilicus.

Fig. 135. (Mus. De Burgh.)

This interesting shell has been selected from the collection of Mrs. De Burgh, for sake of giving a more characteristic illustration of *A. zonata* of Spix than that represented at Pl. XII.

**“Conchologia iconica: or illustrations of the shells
of molluscous animals,
10, Ampullaria - Cancellaria - Littorina -
Soletellina - Capsa - Capsella - Sanguinolaria -
Psammobia - Psammitella - Mytilus -
Modiola - Lithodomus - Avicula”**

Lovell Augustus Reeve, London, ca 1843.

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