

6. *GLANDINA ARCUATA*, Pfr. *Gland. testá fusiformi-turritá, tenuiusculá, nitidá, subarcuatim et confertim costulatá, succineo-flavidá, strigis angustis, remotis, arcuatis, rufis, pallidè marginatis ornatá; spirá subulatá, acutá; suturá crenulatá; anfractibus 9 planis, ultimo $\frac{1}{3}$ longitudinis subæquante; columellá strictiusculá, breviter truncatá; aperturá oblongá; peristomate simplice.*
 Long. 13, diam. $3\frac{1}{2}$ mill.

7. *ACHATINA ADAMSII*, Pfr. (*Bul. costulatus*, Adams). *Ach. testá fusiformi-turritá, longitudinaliter distinctè costatá, inter costas basi anfractús ultimi evanescentes subtilissimè striatá, corneá, strigis rufis irregulariter ornatá; spirá turritá, apice acuto; anfractibus 8 convexis, ultimo $\frac{1}{3}$ longitudinis subæquante; columellá subrectá, basi obliquè truncatá; aperturá subrhombéa.*
 Long. 7, diam. $2\frac{1}{2}$ mill.

8. *ACHATINA GOSSEI*, Pfr. *Ach. testá subulatá, tenui, diaphaná, cereá, remotè costatá, inter costas in anfractibus ultimis deorsum obsolescentes subtilissimè striatá; anfractibus 9—10 convexiusculis, ultimo $\frac{1}{4}$ longitudinis vix superante; columellá obliquá, basin aperturæ attingente, breviter truncatá; aperturá angustá, oblongá; peristomate simplice, margine dextro deorsum dilatato.*
 Long. 12, diam. $2\frac{2}{3}$ mill.

9. *ACHATINA ABERRANS*, Pfr. *Ach. testá subulatá, tenui, nitidá, lineis impressis longitudinalibus, regulariter distantibus notatá, pallidè succineá, strigis rufulis, angustis, obliquis, sparsis ornatá; spirá subulatá, apice acutiusculo; suturá leviter crenulatá; anfractibus 7 planiusculis, ultimo $\frac{1}{3}$ longitudinis æquante; columellá callosá, torto-subtruncatá; aperturá oblongá; peristomate simplice.*
 Long. 7, diam. 2 mill.

This species belongs to a peculiar aberrant group of the genus *Achatina*, of which the type seems to be *Ach. columnaris*. The columella is not exactly truncated, but rather contorted, and forms a prominent angle, which appears similar to the truncated columella of the true *Achatinas*. To this same group may be referred another very distinct and beautiful species, collected by Mr. Latre in Central America, and making, like all formerly described species, part of the rich collection of Mr. Cuming.

10. *ACHATINA LATTREI*, Pfr. *Ach. testá glandiformi, lævissimá, nitidá, fulvá, strigis castaneis leviter arcuatis irregulariter ornatá; spirá brevi, conoidéa, acutiusculá; anfractibus 7 planis, ultimo $\frac{3}{4}$ longitudinis ferè æquante; columellá callosá, contortá, extus subtruncatá; aperturá angustissimá, basi dilatatá; peristomate simplice, obtuso, margine dextro antrorsum leviter arcuato.*
 Long. 38, diam. 14 mill.

A paper by Dr. Philippi was then read, containing "Descriptions of a new species of *Trochus*, and of eighteen new species of *Littorina*, in the collection of H. Cuming, Esq.":—

TROCHUS CUMINGII. *Tr. testá latè conicá, umbilicatá, acutá, car-*

neo-cinerea; anfractibus convexiusculis, transversè striatis, et serie triplici spinularum ornatis; spinis supremis solidis compressis, medianis fornicatis majoribus, infimis fornicatis confertissimis; aperturâ suborbiculari, violacescente; margine umbilici acuto, prominente.

Altit. 8, diam. 8, altit. aperturæ $4\frac{3}{4}$ lin.

Hab. Guimaras, insula Philippinarum.

This very interesting species was found on rocks at high watermark; its operculum is orbicular, horny, and consists of 5-6 volutions.

1. *LITTORINA LEMNISCATA.* *Lit. testâ parvâ, ovato-oblongâ, nigrâ, striis transversis et lineâ triplici, elevatâ, moniliformi sculptâ; anfractibus planiusculis; basi nodulosâ; aperturâ spiram non æquante, nigrâ, basi albo-fasciatâ; columellâ depressâ, basi subeffusâ.*

Altit. $4\frac{1}{2}$, diam. 3, altit. aperturæ $2\frac{1}{2}$ lin.

Hab. Cuba?

2. *LITTORINA ASPERA.* *Lit. testâ oblongâ, acutâ, crassâ, fuscescente, lineis nigricantibus longitudinalibus obliquis pictâ, ad basin subangulatâ; anfractibus parùm convexis, liris elevatis transversis sculptis; aperturâ ovatâ, fuscâ, fasciis duabus albidis; labro intus albido, fusco-punctato.*

Altit. 8, diam. $5\frac{1}{2}$, altit. aperturæ $4\frac{1}{2}$ lin.

Hab. Ad oram occidentalem Americæ borealis (from Sitka, New Albion, found on rocks at low water by Mr. Barclay; from Mexico, found by Hegewisch; from Conchagua, province of San Salvador, Central America, Cuming). By the character of its aperture, this species belongs to the group of *L. ziczac*, *L. zebra* (*Phasianella peruviana*, Lamarck), and is easily distinguished from all allied species by its sculpture.

3. *LITTORINA PICTA.* *Lit. testâ parvâ, ovatâ, acutâ, basi obscure angulatâ, transversim striatâ; fasciâ ad partem superiorem anfractuum, aliâque ad basin albis, lineis fuscis longitudinalibus pictis; aperturâ semiorbiculari, fuscâ, basi albo-fasciatâ; columellâ satis compressâ ferè rectilineâ.*

Altit. 4, diam. 3, altit. aperturæ $2\frac{1}{2}$ lin.

Hab. ad insulas Sandwich.

Var. β . *Anfractibus supernè angulatis, parte medianâ anfractûs ultimi albido-marmoratâ.*

This species has nearly the shape and size of *L. Basteroti* (*Turbo petræus*, *Turbo cærulescens*, etc.), which I believe the true *Turbo neritoides* of Linnæus, and the colouring of the interrupted variety of *L. ziczac*.

4. *LITTORINA PORCATA.* *Lit. testâ parvâ, ovatâ, obtusiusculâ, umbilicatâ, è cærulescente-albidâ, lineis elevatis distantibus porcatâ; aperturâ magnâ, ovatâ, semiorbiculatâ; faucibus fuscis, albo-bifasciatis; limbo labri albo.*

Altit. 3, diam. $2\frac{1}{2}$, altit. aperturæ 2 lin.

Hab. ad insulas Gallapagos (on high exposed rocks); Cuming.

5. *LITTORINA SITKANA*. *Lit. testá transversim ovatá, obtusiusculá, castaneá, transversim grossè sulcatá; anfractibus rotundatis, ultimo dilatato; aperturá ovatá, patulá; columellá albá, vix dilatá, sulco umbilicari exaratá.*

Altit. 6, diam. 6, altit. aperturæ $4\frac{1}{2}$.

Hab. ad Sitka, Nova Albion (on rocks, half-tide); collected by Mr. Barclay.

Very nearly allied to *L. groenlandica*, but more depressed, blunt, the aperture more dilated. The elevated transverse lines are three in number on the upper volutions, about twelve on the last.

6. *LITTORINA GLABRATA*. *Lit. testá ovato-oblongá, acutá, albido-carnedá, strigis pallidè fuscis obliquis pictá; anfractibus parùm convexis, lævibus, supremis sub lente lineis impressis 6-8 exaratis, ultimo basi angulato; aperturá ovatá, rufá; columellá depressá, violaceá.*

Altit. $8\frac{1}{2}$, diam. 6, altit. aperturæ $4\frac{1}{2}$ -5 lin.

Hab. ad Payta Peru (on rocks, half-tide); Cuming. Ad Caput Natale (Wahlberg).

Perhaps only a variety of *L. obesa*, Sow., though easily distinguished by the pale oblique longitudinal lines: very like *L. ziczac*, D'Orb. (non Chemn.)

7. *LITTORINA LÆVIS*. *Lit. testá ovato-oblongá, acutá, albidá, cinereo-marmoratá; anfractibus parùm convexis, lævissimis (sub lente fortiori vix tenuissimè striatis); ultimo basi obscure angulato; aperturá ovatá, fusco-violaceá, basi albido-fasciatá; columellá depressá, violaceá.*

Altit. $8\frac{1}{2}$, diam. 6, altit. aperturæ 5 lin.

Hab. Unknown.

This species scarcely differs, except in colouring, from *L. obesa*.

8. *LITTORINA DEBILIS*. *Lit. testá parvâ, ovato-oblongá, acutá, tenui, cærulescente-albidá, interdum lineis obliquis pallidissimè fuscis pictá, apice obscuro; anfractibus læviusculis (sub lente lineis confertis impressis sculptis), ultimo basi angulato; aperturá ovato-oblongá, rufá, basi productá et subangulatá; columellá parùm depressá, fuscescente.*

Altit. $4\frac{1}{2}$, diam. 3, altit. aperturæ $2\frac{1}{2}$ lin.

Hab. Unknown.

A *L. glabrata* in miniature; it differs however essentially from that species by its aperture, which is produced into a distinct angle at the base.

9. *LITTORINA SAYI*. *Lit. testá ovato-oblongá, acutá, solidiusculá, transversim multisulcatá, albá, punctis pallidè rufis ornatá; spirá violacescente; anfractibus convexiusculis, suturá profundá divisis; aperturá ovato-orbiculari; columellá rufá; labro intus albo.*

Altit. 9, diam. $6\frac{1}{2}$, altit. aperturæ 5 lin.

Hab. ad Floridam (communicated by Say).

Very nearly allied to *L. irrorata*, but thinner, more slender, the aperture not narrowed, nor the outer lip mottled within.

10. LITTORINA MODESTA. *Lit. testá ovato-oblongá, acutá, tenuiusculá, albidá, aut obsolete rufo-punctatá, profundè transversim sulcatá; anfractibus convexiusculis, suturá profundá divisis, ultimo haud carinato; aperturá semiorbiculari, luteá vel fusco infuscatá; columellá ferè rectilineá, dilatatá, depressá, infuscatá; anfractu ultimo ad columellam eroso.*

Altit. 8, diam. 6, altit. aperturæ 5 lin.

Hab. ad Sitka, Nova Albion (on rocks, half-tide), Mr. Barclay; ad insulam Mauritii, Capt. Caldwell.

This species has the sculpture of *L. aspera*, the shape and colour of *L. Sayi*.

11. LITTORINA INTERMEDIA. *Lit. testá oblongo-conicá, basi ventricosá, tenui, varii coloris, lineis impressis circa 8 in anfractu penultimo exarátá, lævi; anfractibus convexis, ultimo rotundato haud carinato; aperturá ovatá; columellá albá vel violaceá, foveá exarátá.*

Altit. 10, diam. $7\frac{1}{2}$, altit. aperturæ $5\frac{1}{2}$ lin. et minor.

Hab. Mare Rubrum, ad oram Natal; Swan Point, in Novâ Hollandiâ boreali; Jimamailan, in insula Negrorum; Tahiti; insula Elisabeth in Oceano Pacifico (Cuming).

This species is intermediate between *L. scabra* (*Helix scabra*, L. not auct.) and *L. angulifera*, Lamk., not Quoy and Gaim.; it has the shape and colouring of the latter, which is easily known by its very numerous impressed spiral lines. With *L. scabra* it agrees in the number of the impressed lines, but differs by its smoothness to feeling and by the absence of the basal keel. This latter character distinguishes it from *L. luteola*, Q. et G., a species which, however, I have not seen in nature. It is very variable in colouring, and we may distinguish principally the following varieties:—

1. punctata, testá lutescente aut rufescente, lineis transversis fuscis irregulariter interruptis punctatá.

2. articulata, testá interstitiis sulcorum regulariter albido et fusco articulatis. (From Swan Point; only 6 lin. high.)

3. strigata, testá in fundo flavescente strigis latis, irregularibus nigris ornátá. (From Jimamailan; only 6 lin. high.)

12. LITTORINA CONICA. *Lit. testá tenuissimá, oblongá, exactè conicá, basi carinatá, confertim et obsolete transversim striatá, albidá, unicolore vel fusco pictá; aperturá ovatá, perobliquá; columellá basi rectá, excavatá.*

Altit. 10, diam. $7\frac{1}{2}$, altit. aperturæ 6 lin.

Hab. Insula Java.

13. LITTORINA TENUIS. *Lit. testá ovato-oblongá, acutá, tenuissimá, tenuissimè transversim striatá, carneo-albidá, lineis angulatis rufis pallidissimis pictá; suturá sæpius infuscatá; anfractibus planius-*

culis, ultimo basi rotundato, minimè angulato; aperturá ovatá, concolore; columellá arcuatá, vix compressá.

Altit. 7, diam. $4\frac{2}{3}$, altit. aperturæ $3\frac{2}{3}$.

Hab. Insula Ticao, Philippinarum (on rocks, high water; Cuming).

14. LITTORINA PALLESCENS. *Lit. testá oblongá, subturritá, solidá, albídá; anfractibus convexiusculis, superioribus lineis impressis novem, ultimis lineis elevatis obtusis (circa quatuor in anfractu penultimo) sculptis; aperturá patulá, semiorbiculari; columellá brevi, compressá.*

Altit. 10, diam. 7, altit. aperturæ $5\frac{1}{2}$ lin.

Hab. Insula Mindanao (Cagayan, province of Misamis, found on mangrove-trees; Cuming).

This species differs from *L. filosa*, Sow., in being much more solid, in its broader and blunter elevated transverse lines and broad compressed columella.

15. LITTORINA SIEBOLDII. *Lit. testá oblongá, subturritá, tenuiusculá, flavescente, subunicolore; anfractibus convexiusculis, supremis lineis impressis, inferioribus lineis elevatis confertis, acutiusculis (circa 9 in anfractu penultimo) sculptis; aperturá patulá, semiorbiculari; columellá compressá, subcanaliculatá, albá.*

Altit. 13, diam. 8, altit. aperturæ 7 lin.

Hab. Japonia, Siebold.

Perhaps only a variety of *L. scabra*, from which it differs almost only in its high raised transverse ridges and very obscurely angulated base.

16. LITTORINA CINGULATA. *Lit. testá oblongá, acutá, tenui, pallidè grised, apice obscuro; anfractibus convexiusculis, suturá profundá divisis, sulcatis; ultimis cingulis elevatis croceis ornatis; basi haud carinatá; aperturá ovatá, patulá; columellá arcuatá, albá, haud compressá; faucibus albis, rufo-lineatis.*

Altit. 9, diam. $6\frac{1}{2}$, altit. aperturæ $4\frac{1}{2}$ lin.

Hab. Ad oram borealem Novæ Hollandiæ (found on the mangrove-trees by I. E. Dring, Esq.).

17. LITTORINA SULCULOSA. *Lit. testá oblongá, acutá, tenui, flavescente, fasciis transversis pallidè fuscis pictá; anfractibus convexiusculis, suturá profundá divisis et sulcis 3-4 exaratis; ultimo subangulato; aperturá semiorbiculari, albá; faucibus fusco-fasciatis; columellá parùm arcuatá, compressiusculá.*

Altit. $8\frac{1}{2}$, diam. $5\frac{1}{4}$, altit. aperturæ $4\frac{1}{2}$ lin.

Hab. in orâ boreali Novæ Hollandiæ (found on the mangrove-trees by I. E. Dring, Esq.).

The sculpture of this species is exactly like that of *Trochus rostratus*, Gm.

18. LITTORINA? ABERRANS. *Lit. testá elongatá, subturritá, subperforatá, tenui, obsoletè striatá, albídá; anfractibus rotundatis, suturá profundá divisis, ultimo ventricosó; aperturá patulá, orbi-*

culari-ovatâ, intus nigro-marginatâ ; columellâ brevi, tereti, extus reflexâ.

Altit. 8, diam. 5, altit. aperturæ $3\frac{3}{4}$ lin.

Hab. Panama (found on the rocks, half-tide, Cuming).

This species differs by its aperture so much from the other species of *Littorina*, and so nearly resembles a *Bulimus*, that I am very doubtful whether it be placed in its right genus.

December 23, 1845.

No Meeting was held.