

PROCEEDINGS
OF THE
ZOOLOGICAL SOCIETY
OF LONDON.



PART XIV.

1846.

PRINTED FOR THE SOCIETY,
BY R. AND J. E. TAYLOR, RED LION COURT, FLEET STREET.

mine several of the fishes, nor have I yet had leisure to compare my notes with authorities on the subject, to make out the species. The size of the particles of *all* the cartilaginous fishes is very much larger than of the osseous; the particles were few in number, transparent, soft, readily changing their shape from slight pressure; *nuclei distinct*.

I have given the dimensions just as I noted them down. All the fishes were fresh. J. D.

Constantinople, Jan. 8, 1842.

I have had a Humming Bird killed and instantly brought to me; its blood-corpuscles were beautifully definite, regular and uniform. The disc very thin, perfectly flat, the nucleus slightly raised, and the two corresponding in outline. The corpuscle 1-2666th by 1-4000th of an inch; the long diameter of the nucleus very nearly 1-4000th. The blood was small in quantity, as I apprehend is the blood of birds generally, but not deficient in red corpuscles. I have found its temperature to be about 105°. Whilst its solid food is insects, I believe its drink is the sweet juice of flowers. I have not a book to refer to for the species. Tail-feathers black; head green; rump green; wings brownish, almost black. J. D.

Barbadoes, Jan. 7, 1846.

The next paper was entitled "Descriptions of thirty new species of *Helicea*, belonging to the collection of H. Cuming, Esq.," by Dr. L. Pfeiffer:—

1. *HELIX SWAINSONI*, Pfr. *Hel. testá umbilicatá, utrinque depressissimá, tenui, pellucidá, subarcuatim ruguloso-striatá, virescentifuldá, lineis 2 rufis ornatá; anfractibus 5 depressis, medio convexiusculis, carinatis; cariná rufescente, acutá, breviter prominente, subrugulosá; umbilico mediocri, profundo; aperturá perobliquá, depressè securiformi; peristomate simplice, recto, margine columellari subincrassato.*

Diam. 16, alt. 5 mill.

From Tahiti; under stones (B. W. Tucker, Esq.).

2. *HELIX STENOSTOMA*, Pfr. *Hel. testá imperforatá, globuloso-depressá, solidá, sublævigatá, nitidá, albá, fasciá unicá fuscá ad peripheriam et seriebus 2 macularum aurantiarum ornatá, punctisque griseis obsoletè aspersá; anfractibus 4½ vix convexiusculis, ultimo ventroso, anticè abruptè deflexo; aperturá subhorizontali, ellipticá; peristomate albo, labiato, marginibus approximatis, supero breviter expanso, basali arcuato, appressè reflexo.*

Diam. 13-15, alt. 8½-9 mill.

Locality unknown.

3. *BULIMUS HOLOSTOMA*, Pfr. *Bul. testá rimato-perforatá, cylindraceá, apice obtuso, opaco, carneo-cinereo, obliquè et validè plicato-costato; anfractibus 7 subplanulatis, deorsum attenuatis, superne subangulatis, ultimo ¼ longitudinis subæquante; aperturá*

verticali, oblongâ, integrâ; peristomate simplice, acuto, marginibus subparallelis, supero breviter soluto.

Long. 9, diam. $2\frac{2}{3}$ mill.

From Cobija, Bolivia, on the hills under bushes (H. Cuming). The same species brought from the Sandwich Islands by B. W. Tucker, Esq. ?

4. *BULIMUS LEAI*, Pfr. *Bul. testâ imperforatâ, ovato-conoided, obtusâ, solidulâ, obliquè tenuiter striatâ, nitidâ, fulvescenti-albâ; anfractibus $5\frac{1}{2}$ convexiusculis, ultimo spirâ breviorè, basi subgloboso; columellâ strictiusculâ, declivi, perdilatâ, subplanatâ, basi subtruncatâ; aperturâ obsoletè subtetragono-rotundatâ, intus albâ; peristomate breviter expanso, subincrassato.*

Long. 37, diam. 24 mill.

From the Philippine Islands (H. Cuming).

Nearly allied to *Bul. cincinniformis*.

5. *BULIMUS FENESTRATUS*, Pfr. *Bul. testâ perforatâ, subfusiformi-oblongâ, solidulâ, longitudinaliter profundè undulato-sulcosâ, albâ, fasciis infra 65, et strigis undulatis nigricanti-castaneis fenestratâ; suturâ crenulatâ; anfractibus $6\frac{1}{2}$ convexiusculis, ultimo spiram conicam, acutam paulò superante; columellâ subplicatâ, obliquè recedente, lilacè; aperturâ oblongo-semiovali, intus lilacind; peristomate expanso, margine columellari supernè angulatim reflexo, subappresso.*

Long. 45, diam. 18 mill.

From Mexico.

6. *BULIMUS DARWINI*, Pfr. *Bul. testâ profundè rimatâ, ovato-conicâ, solidulâ, rugis nodulatis et crispis, validè sculptis, sordidè albidis; spirâ conicâ, apice acutiusculo, corneo; anfractibus 6 convexis, 3 supremis sublævigatis, ultimo spiram subæquante; columellâ subtortâ, subverticali; aperturâ latâ, subovali, intus nitidulâ, albâ, tuberculo calloso, profundo in ventre anfractûs penultimi coarctatâ; peristomate simplice, recto, margine dextro supernè arcuato, columellari perdilatato, patente.*

Long. 17, diam. 19 mill.

From the Gallapagos Islands; found on bushes (C. Darwin, Esq.).

7. *BULIMUS SCULPTURATUS*, Pfr. *Bul. testâ perforatâ, ovato-turritâ, tenuiusculâ, longitudinaliter subremotè et validè undulato-rugosâ, interstitiis rugarum spiraliter argutè striatâ, fusculâ, spirâ elongato-conicâ, apice acutiusculo, corneo; anfractibus 7 convexis, ultimo $\frac{2}{3}$ longitudinis subæquante; columellâ strictâ, basin aperturæ attingente; aperturâ ellipticâ, basi angulatâ; peristomate simplice, acuto, margine columellari fornicatim reflexo, libero.*

Long. 14, diam. $6\frac{1}{2}$ mill.

From the Gallapagos Islands; found on bushes (Darwin).

8. *BULIMUS HONDURASANUS*, Pfr. *Bul. testâ apertè perforatâ ovato-conicâ, lævigatâ, nitidâ, flavescenti-albidâ, fasciis 3 arèdque umbilicali fusco-roseis ornatâ; anfractibus 6 vix convexiusculis,*

ultimo spirá conicá, acutá paulò brevioré; columellá strictá, verticali; aperturá ovali-oblongá, intus concolore; peristomate simplice, recto, margine columellari in laminam triangularem subfornicatam expanso.

Long. $18\frac{1}{2}$, diam. 10 mill.
From Honduras (Dyson).

9. *BULIMUS SARCODES*, Pfr. *Bul. testá apertè perforatá, oblongo-conicá, tenui, striatulá, lineis spiralibus sub lente obsoletissimè decussatá, carneá; spirá conicá, acutiusculá; anfractibus 6 convexiusculis, ultimo $\frac{4}{9}$ longitudinis subæquante; columellá leviter arcuatá; aperturá ovali, intus nitidá; peristomate recto, acuto, margine dextro arcuato, columellari dilatato, fornicatim patente.*

Long. $17\frac{1}{2}$, diam. 8 mill.
From Honduras (Dyson).

10. *BULIMUS TUCKERI*, Pfr. *Bul. testá perforatá, cylindraco-subulatá, tenui, longitudinaliter distinctè striatá, nitidulá, cered; spirá elongatá, apice acutiusculo; anfractibus 9 convexiusculis, ultimo $\frac{1}{4}$ longitudinis vix æquante; columellá obliquè recedente; aperturá ovali-oblongá; peristomate simplice, acuto, margine columellari supernè dilatato, patente.*

Long. 9, diam. $2\frac{3}{4}$ mill.

From Sir Charles Hardy's Island, Pacific Ocean (B. W. Tucker, Esq.).

11. *BULIMUS GRUNERI*, Pfr. *Bul. testá angustè perforatá, cylindraco-turritá, lævigatá, nitidá, albidá unicolore vel fusco obliquè strigatá vel macularum spadicearum seriebus nonnullis cingulatá; spirá elongatá, apice acuto; suturá albo-marginatá; anfractibus 7-8 planis, ultimo $\frac{1}{3}$ longitudinis æquante; columellá subtortá; aperturá ovali-oblongá; peristomate simplice, recto, margine columellari basi subexpanso, supernè fornicatim reflexo.*

Long. 28, diam. 10 mill.

β. *Perforatione apertá, margine peristomatis fornicatim patente.*
From Mexico.

12. *BULIMUS VINCENTINUS*, Pfr. *Bul. testá subperforatá, fusi-formi, tenui, lævigatá, lineis concentricis leviter impressis sculptá, nitidá, pellucidá, lutescenti-hyaliná, fasciis 5 subæqualibus violaceo-fuscis ornatá; spirá conicá, apice acutiusculo, nigro; anfractibus 6 planiusculis, ultimo spiram subæquante, basi attenuato; columellá paulò recedente; aperturá obliquá, ovali-oblongá, intus concolore; peristomate tenui, margine dextro breviter expanso, supernè dilatato, columellari in laminam triangularem angulatim reflexo, perforationem ferè claudente.*

Long. 30, diam. $11\frac{1}{2}$ mill.

β. *unicolor citriná vel stramineá, paulò gracilior.*

Long. 30, diam. $10\frac{1}{2}$ mill.

From the Island of St. Vincents (Rev. L. Guilding): var. β. from Venezuela; on bushes (Linden).

13. *BULIMUS ORBIGNYI*, Pfr. *Bul. testá umbilicatá, oblongo-turritá, tenui, regulariter et confertim plicatá, albá; spirá turritá, acutá; anfractibus 7½ convexiusculis, ultimo ¾ longitudinis subæquante; umbilico angusto, aperto; columellá vix arcuatá; aperturá oblongá; peristomate simplice, acuto, marginibus subparallelis supernè conniventibus, columellari subfornicato, patente.*

Long. 19, diam. 8 mill.

Locality unknown.

14. *BULIMUS PETITI*, Pfr. *Bul. testá perforatá, ovato-conicá, solidulá, longitudinaliter rugoso-striatá, striis concentricis, irregularibus obsoletissimè subdecussatá, fuscá; spirá conicá, apice obtuso, pallido; suturá crenulatá, albido-marginatá; anfractibus 6 planiusculis, ultimo spiram pauld superante; columellá leviter arcuatá; aperturá acuto-ovali, intus nitidulá, lividá; peristomate simplice, recto, margine dextro acuto, columellari dilatato, albido, liberè reflexo.*

Long. 26, diam. 16 mill.

From Peru.

15. *BULIMUS SANDWICENSIS*, Pfr. *Bul. testá perforatá, cylindraceuturritá, apice acutiusculo, tenui, striatulo, corneo, strigis albis, opacis, irregularibus, variegato; anfractibus 10 vix convexiusculis, ultimo ⅓ longitudinis non æquante, basi circa perforationem apertam subcompresso; aperturá oblongo-ovali; peristomate simplice, tenui, margine dextro leviter arcuato, expansiusculo, columellari membranaceo, fornicato, patente.*

Long. 15, diam. 4½ mill.

From the Sandwich Islands (B. W. Tucker, Esq.).

16. *PUPA PACIFICA*, Pfr. *Pup. testá profundè rimatá, ovato-cylindracedá, apice obtusiusculo, solidulo, sublævigato, fusco-corneo; anfractibus 5½ convexis, ultimo ⅓ longitudinis subæquante; aperturá semiovali, edentulá; peristomate breviter expanso, intus albolabiato, margine dextro supernè breviter curvato, tuberculo calloso interdum juxtaposito, columellari latiore, patente.*

Long. 4⅓, diam. 2⅓ mill.

From Sir Charles Hardy's Island, Pacific Ocean (B. W. Tucker, Esq.).

17. *ACHATINA CYLINDRACEA*, Pfr. *Ach. testá subcylindracea utrinque breviter attenuatá, lævigatá, nitidá, lutescenti-corned; suturá lineari, albo-marginatá; spirá brevi, conoidé, obtusiusculá; anfractibus 5 planulatis, ultimo ¾ longitudinis æquante; columellá tortá, lamíná callosá, albá, acutè prominentem, per longitudinem munitá, subtruncatá; aperturá angustá, acuminato-oblongá, basi rotundatá; peristomate simplice, margine dextro medio antrorsum dilatato.*

Long. 13, diam. 5½ mill.

From Tortilla, Central America; in damp places.

Belongs, by the formation of the columella, to that aberrant group of *A. columna*, *Lattrei*, *aberrans*, *Dysoni*, *anomala*, *splendida*, &c.

18. *ACHATINA DYSONI*, Pfr. *Ach. testá oblongo-conicá, tenuissimá, glabrá, pellucidá, nitidá, lutescenti-corned; spirá conicá, obtusiusculá; suturá simplice; anfractibus 5 convexiusculis, ultimo $\frac{2}{3}$ longitudinis subæquante, deorsum subdilato; columellá arcuatim tortá, subcallosá, vix truncatá; aperturá angustá, acuminato-oblongá, basi rotundatá; peristomate simplice, tenui, margine dextro medio antrorsum dilato.*

Long. $9\frac{1}{2}$, diam. 4 mill.

From Honduras; found under decayed leaves by Mr. Dyson.

19. *ACHATINA SANDWICENSIS*, Pfr. *Ach. testá ovato-conicá, obliquè striatá, subopacá, sordidè corned; spirá conicá, obtusiusculá; suturá lined impressá marginatá; anfractibus $6\frac{1}{2}$ planulatis, ultimo $\frac{1}{3}$ longitudinis vix superante; columellá arcuatá, plicato-tortá; aperturá latá, semiovali; peristomate simplice, margine dextro obtuso, columellari subreflexo, appresso.*

Long. 7, diam. $3\frac{1}{2}$ mill.

From the Sandwich Islands (B. W. Tucker, Esq.).

20. *ACHATINA (GLANDINA) SOWERBYANA*, Pfr. *Ach. testá ovato-fusiformi, tenuiusculá, diaphand, longitudinaliter confertim plicatá, striis spiralibus, inæqualiter distantibus decussato-granulatá, fulvorangeatá, strigis remotis, fuscis ornatá; spirá conicá, apice acutá; suturá albo-marginatá, crenulatá; anfractibus $7\frac{1}{2}$ planiusculis, ultimo $\frac{5}{9}$ longitudinis subæquante; columellá arcuatá, basi abruptè truncatá; aperturá acuminato-oblongá; peristomate simplice, marginibus callo tenui junctis, dextro repando.*

Long. 88, diam. 38 mill.

From Totontepec, Mexico; on decayed vegetable matter.

21. *ACHATINA (GLANDINA) ISABELLINA*, Pfr. *Ach. testá fusiformi-oblongá, tenui, nitidá, sub lente spiraliter confertim striatá, pellucidá, isabelliná; suturá lineá impressá marginatá; anfractibus 6 convexiusculis, ultimo spirá conicá, obtusá vix breviorè; columellá obliquá, strictiusculá, supra basin aperturæ elliptico-oblongæ breviter truncatá; peristomate simplice, obtuso.*

Long. 26, diam. medio 10 mill.

From Mexico; found in decayed trunks of trees.

22. *ACHATINA (GLANDINA) TORTILLANA*, Pfr. *Ach. testá subfusiformi-ovatá, solidulá, striis longitudinalibus, confertis regulariter sculptá, nitidá, pellucidá, pallidè corned, maculis et strigis opacis, lactescentibus irregulariter signatá; suturá submarginatá; anfractibus $7\frac{1}{2}$ convexiusculis, ultimo spiram conicam, obtusam, vix superante; columellá fortiter arcuatá, supra basin aperturæ elliptico-oblongæ abruptè truncatá; peristomate simplice, obtuso, margine dextro medio subdilato.*

Long. 20, diam. medio 8 mill.

From Tortilla, Central America; in damp places.

23. *BULIMUS AURATUS*, Pfr. *Bul. testá subobtectè perforatá, oblongo-turritá, tenui, longitudinaliter subtiliter striatá, pellucidá,*

auratá, lineis saturationibus spiralibus obsolete notatá; spirá turrítá, obtusá; suturá submarginatá, minutè crenulatá; anfractibus 7 vix convexiusculis, ultimo $\frac{2}{3}$ longitudinis vix æquante; columellá strictiusculá; aperturá ovali-oblongá; peristomate simplice, recto, margine columellari breviter reflexo, subappresso.

Long. 30, diam. 10 mill.

Locality unknown.

24. *BULIMUS PANAYENSIS*, Pfr. *Bul. testá imperforatá, subulatá, tenui, lævigatá, pellucidá, cereo-hyaliná; spirá elongatá, apice obtuso; anfractibus 8 latis, vix convexiusculis, ultimo $\frac{1}{4}$ longitudinis vix æquante; columellá brevi, strictiusculá; aperturá ovali-oblongá, basi subangulatá; peristomate simplice, recto, margine columellari breviter reflexo, appresso.*

Long. 11, diam. $2\frac{1}{2}$ mill.

From Dingle, island of Panay (Cuming).

25. *BULIMUS PERSPECTIVUS*, Pfr. *Bul. testá umbilicatá, oblongo-conicá, tenui, striatulá, pellucidá, nitidá, rufo-corned; spirá elongato-conicá, acutiusculá; anfractibus 7 convexiusculis, ultimo $\frac{2}{5}$ longitudinis æquante, basi subangulatim compresso; umbilico angusto, profundè perspectivo; aperturá oblongá; peristomate simplice, rufo, marginibus conniventibus, callo tenui junctis, dextro breviter expanso, columellari dilatato, patente.*

Long. 16, diam. $6\frac{1}{2}$ mill.

Locality unknown.

26. *BULIMUS MERIDANUS*, Pfr. *Bul. testá perforatá, oblongo-subfusiformi, striatulá, lævigatá, lutescenti-albidá, fasciis angustis cæruleo-fuscis, vel latis castaneis, strigatim interruptis ornatá; spirá turrítico-conicá, acutiusculá; anfractibus 6 planiusculis, ultimo spiram æquante; columellá leviter arcuatá; aperturá oblongo-ovali, intus concolore; peristomate simplice, margine dextro breviter expanso, columellari dilatato, fornicatim reflexo, albo, perforationem ferè occultante.*

Long. 29, diam. 11 mill.

From Merida, Andes of Bolivia.

27. *BULIMUS MONTEVIDENSIS*, Pfr. *Bul. testá perforatá, ovato-conicá, subfusiformi, tenui, obliquè striatulá, non nitente, albidá, opacá, lineis longitudinalibus crebris, pellucidis, pallidè corneis strigatá; spirá conicá, apice acuto; anfractibus 7-8 planiusculis, ultimo spirá paulò breviorè, interdum medio obsolete angulato; columellá verticali, strictá; aperturá oblongo-ovali; peristomate simplice, recto, margine columellari membranaceo, fornicatim reflexo.*

Long. 28, diam. 12 mill.

From Montevideo, Buenos Ayres.

28. *BULIMUS JUSSIEUI*, Val. Mur. *Bul. testá perforatá, ovato-conicá, striis rudibus incrementi spiralibusque minutis irregulariter decussato-granatá, corned, obliquè albido-strigatá; spirá conicá,*

acutiusculâ; anfractibus 6 convexiusculis, ultimo spiram æquante; columellâ recedente, subarcuatâ; aperturâ ovali, intus nitidè albâ; peristomate simplice, recto, margine columellari albido, dilatato, subfornicatim reflexo.

Long. 32, diam. 15 mill.

From Cusoo.

29. *BULIMUS BOLIVIANUS*, Pfr. *Bul. testâ perforatâ, oblongo-turritâ, lineis impressis sub lente minutissimè decussatâ, nitidâ, albido-rubellâ, fasciis latis, badiis, subinterruptis ornatâ; spirâ turritâ, apice acuto, rubro; anfractibus 7 planis, ultimo convexiusculo, $\frac{5}{9}$ longitudinis subæquante; columellâ torto-plicatâ, roséâ; aperturâ ovali-oblongâ, intus concolore; peristomate simplice, margine dextro breviter expanso, columellari per dilatato, reflexo, excavato, perforationem rimæformem ferè tegente.*

Long. 33, diam. 13 mill.

From Merida, Andes of Bolivia.

30. *BULIMUS OPARANUS*, Pfr. *Bul. testâ subimperfocatâ, subulatâ, longitudinuliter distinctè striatâ, tenui, hyalino-cereâ; spirâ subulatâ, acutiusculâ; anfractibus 9 vix convexiusculis, ultimo $\frac{2}{7}$ longitudinis subæquante; columellâ vix arcuatâ; aperturâ oblongo-ovali; peristomate simplice, recto, margine columellari fornicatim brevissimè reflexo, adnato*

Long. 11, diam. 3 mill. (Spec. max.)

From the island of Opara; found in earth at the roots of plants (H. Cuming, Esq.).

The following paper was also read, entitled "Descriptions of new species of Shells," by Dr. J. H. Jonas:—

CUCULLÆA GRANULOSA, JONAS. *Cuc. testâ quadrato-rhombed, turgidâ, tenuiusculâ, inæquivalvi, testaceo-albâ, violaceo-rubro posticè præsertim maculatâ et flammulatâ; lateribus supernè attenuatis, angulatis, antico breviorè, infra rotundato, postico longiorè, subangulato-declivi, umbonibus acutis incurvis, carinâ ab umbone ad angulum posticum et inferum decurrente; per longitudinem densè striatâ, liris striis transversalibus decussantibus subtiliter granulosis; ligamenti areâ mediocri, corio corneo nigro indutâ; intus albâ posticè violaceo tinctâ, margine serratâ, auriculâ internâ mediocri, cardinis dentibus lateralibus anticis tribus, posticis quatuor.*

Long. marginis ventralis, $2\frac{1}{4}$ poll.; altit. 2; crassities, $1\frac{3}{4}$ poll.

Specimina etiam majora vidi.

Hub. In Mari Chinensi.

This shell differs from the *Cucullæa concamerata*, Martini (*Cucullæa auriculifera*, Lam.), as follows: 1. It is thinner and less transversally prolonged; 2, the elevated longitudinal striæ are not flat, and not broader than the interstices, as with the other species, appearing subtly granulated by transversely crossing and very close striæ; 3, the ligamentary area is somewhat flatter; 4, the internal auricles are smaller; and 5, there are on the anterior side three and