

PROCEEDINGS

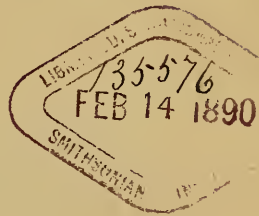
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species; by this means the creatures are rendered unnatural, and consequently dependent on man. Different varieties would doubtless be produced, according to the manner in which they were crossed, and permanent varieties would be thus established. Such is the opinion, at which I have arrived, after a long and mature consideration of this extremely interesting subject.

2. DESCRIPTIONS OF THIRTY-ONE NEW SPECIES OF LAND-SHELLS, FROM MR. CUMING'S COLLECTION.

By DR. L. PFEIFFER.

1. *HELIX SUBDECUSSATA*, Pfr. *Testa perforata, turbinata, tenuis, irregulariter plicato-striata, superne striis spiralibus obsolete decussata, pellucida, virenti-hyalina; spira conica, apice obtusula; anfr. 6 convexiusculi, ultimus non descendens, peripheria subcarinatus, basi convexior, nitidus; apertura obliqua, late lunaris; perist. simplex, rectum, marginibus remotis, columellari superne vix reflexiusculo.*

Diam. maj. 14, min. 12, alt. 9 mill.

Hab. Bombay.

2. *HELIX GRANUM*, Pfr. *T. perforata, turbinato-globosa, tenuis, confertissime costulato-striata, pullide cornea, rufulo irregulariter variegata; spira conoidea, acutiuscula; anfr. 5½ convexi, ultimus non descendens, prope suturam turgidulus; apertura vix obliqua, late lunaris; perist. simplex, rectum, marginibus subconvergentibus, columellari vix patulo.*

Diam. maj. 4, min. 3¾, alt. 3 mill.

Hab. New Zealand.

3. *HELIX FATUA*, Pfr. *T. perforata, turbinata, tenuiuscula, irregulariter striata, vix nitidula, fulva; spira conoidea, acutiuscula; anfr. 5-5½ modice convexi, ultimus non descendens, peripheria subcarinatus, basi convexiusculus; apertura parum obliqua, lunaris; perist. simplex, rectum, margine columellari subatridge declivi.*

Diam. maj. 5, min. 4½, alt. 2½ mill.

Hab. New Zealand.

4. *HELIX BIRMANA*, Pfr. *T. perforata, depressa, suborbicularis, tenuiuscula, lævigata, subdiaphana, alba, fascia 1 lutea supra medium ornata; spira brevissime conoidea, vertice sensim prominulo; sutura levis, marginata; anfr. fere 7 modice convexi, lente accrescentes, ultimus rotundatus, non descendens; apertura vix obliqua, late lunaris; perist. rectum, intus subincrassatum, margine dextro brevi, basali fere rectilineari, superne vix dilatato.*

Diam. maj. 26, min. 23½, alt. 12¼ mill.

Hab. Mergui, Burmah.

5. *HELIX DECIDUA*, Pfr. *T. umblicata, depresso-turbinata, tenuis, costulis membranaceis, deciduis sculpta, corneo-lutescens, rufulo obsolete et angulatim strigata; spira subregulariter conoidea; anfr. 5 convexiusculi, lente accrescentes, ultimus non descendens, periphæria subangulatus; umbilicus angustus, pervius; apertura obliqua, lunato-rotundata; perist. simplex, rectum, marginibus convergentibus, columellari vix patulo.*

Diam. maj. $3\frac{1}{2}$, min. $3\frac{1}{4}$, alt. 2 mill.

Hab. New Zealand.

6. *HELIX VENULATA*, Pfr. *T. imperforata, depressa, tenuis, confertim plicato-striata, sericina, corneo et rufulo strigatim et maculatim variegata; spira vix elevata; anfr. $4\frac{1}{2}$ convexi, sensim accrescentes, ultimus non descendens, basi medio impressus; apertura verticalis, elongato-lunaris; perist. simplex, margine dextro recto, basali reflexiusculo, columellari declivi, subcalloso, adnato.*

Diam. maj. 6, min. 5, alt. 3 mill.

Hab. New Zealand.

7. *HELIX SCIADIUM*, Pfr. *T. umblicata, conoideo-semiglobosa, solidula, subarcuato-striata, fulva, rufulo obsolete variegata; spira convexo-conoidea, apice acutiuscula; sutura marginata; anfr. $5\frac{1}{2}$ vix convexiusculi, ultimus non descendens, periphæria acute carinatus, basi paulo convexior; umbilicus $\frac{1}{4}$ diametri fere æquans; apertura vix obliqua, angulato-lunaris; perist. simplex, rectum, margine columellari vix patulo.*

Diam. maj. $5\frac{1}{3}$, min. 5, alt. 3 mill.

Hab. New Zealand.

8. *HELIX NIPHAS*, Pfr. *T. imperforata, globoso-conica, solida, plicato-striata, alba; spira convexo-conica, apice obtusa; anfr. $5\frac{1}{2}$ convexiusculi, lente accrescentes, ultimus non descendens, basi parum convexus; apertura obliqua, lunaris; perist. rectum, marginibus remotis, dextro brevi, simplice, basali versus inscriptionem sensim incrassato, tandem breviter ascendente.*

Diam. maj. 11, min. 10, alt. 8 mill.

Hab. S. Miguel, Azores.

9. *HELIX LUTACEA*, Pfr. *T. umblicata, conoideo-depressu, solida, striatula et striis confertissimis spiralibus decussatula, parum nitens, fusco-lutescens; spira conoidea, obtusula; anfr. $4\frac{1}{2}$ convexiusculi, sensim accrescentes, ultimus subdepresso-rotundatus, obsolete angulatus, antice vix descendens; umbilicus angustus, pervius; apertura diagonalis, rotundato-lunaris; perist. crasse albo-labiatum, marginibus subconviventibus, dextro expanso, basali reflexo, juxta umbilicum dilatato.*

Diam. maj. 23, min. fere 20, alt. 12 mill.

Hab. — ?

10. *HELIX EXARATA*, Pfr. *T. umblicata, conoideo-depressu,*

solidula, undique malleato-rugulosa, lutescens, fascia 1 castanea cincta; spira breviter conoidea, acutiuscula; anfr. 7 parum convexi, lente accrescentes, ultimus latior, rotundatus, antice vix descendens, circa umbilicum mediocrem, apertum subcompressus; apertura obliqua, late lunaris; perist. leviter albo-labiatum, marginibus vix convergentibus, dextro breviter expanso, columellari superne triangulatim dilatato, patente.

Diam. maj. 30, min. 25, alt. 16 mill.

Hab. California?

11. *HELIX MORMONUM*, Pfr. *T. umbilicata, depressa, tenuiuscula, arcuato-striatula, pallide rufescens; spiru vix conoideoclerata; anfr. 6 vix convexiusculi, lente accrescentes, ultimus utrinque convexior, antice turgidulus, vix descendens, supra medium fascia castanea, utrinque albedo-marginata cinctus, basi convexus; umbilicus mediocris, conicus; apertura perobliqua, auriformi-lunaris; perist. albo-labiatum, marginibus convergentibus, dextro perarcuato, expanso, columellari arcuato-declivi, reflexo, superne dilatato.*

Diam. maj. 29, min. 24½, alt. 12½ mill.

Hab. Mormon Island, California.

12. *HELIX PROPINQUA*, Pfr. *T. umbilicata, globoso-depressa, tenuis, striatula, albida vel pallide fuscata, fascia 1 angusta supra medium ornata; spira brevissime conoidea; anfr. 4-5 convexiusculi, ultimus rotundatus, antice deflexus; umbilicus angustus, percus; apertura diagonalis, lunato-subcircularis; perist. album, sublabiatum, marginibus convergentibus, undique late expansis.*

Diam. maj. 16-19, min. 13-15½, alt. 7½-9½ mill.

Hab. Bombay.

13. *HELIX BICRURIS*, Pfr. *T. umbilicata, depressa, tenuis, striatula, parum nitida, corneo-lutescens; spiru parum elevata; sutura submarginata; anfr. 5 convexiusculi, ultimus antice vix deflexus, basi convexior, pone aperturam subconstrictus; umbilicus vix percus, antice rimiformis; apertura diagonalis, lunaris, dente libero longe bicruri parietis coarctata; perist. breviter reflexum, album, margine basali bidentato; dente dextro usque ad marginem superum ascendente.*

Diam. maj. 9, min. 8, alt. 4½ mill.

Hab. Mexico.

14. *BELIMUS FAIRBANKI*, Pfr. *T. anguste et compressae umbilicata, orato-conica, tenuiuscula, conferte striata et costis irregulariter distantibus, compressis, subarcuatis sculpta, sub lente exilissime spiritaliter striata, haud nitens, fulvescenti-albida; spira conica, apice obtusa; anfr. 6 convexi, ultimus spira vix brevior, juxta umbilicum compressus; apertura parum obliqua,*

elliptico-ovalis; *perist. album, marginibus conniventibus, dextro mediocriter expanso, columellari stricto, late patente.*

Long. 19, diam. $9\frac{1}{2}$ mill.

Hab. Ahmednugger, India (*Fairbank*).

15. *PARTULA MASTERSI*, Pfr. *T. dextrorsa, anguste umbilicata, ovato-conica, solidula, spiraliter subconferte sub lente striata, lutea, carnea vel violacea, in anfractibus superioribus interdum fusco-fasciata; spira conica, acutiuscula; anfr. 5 convexiusculi, ultimus spiram subæquans, deorsum turgidus; columella superne subinflata, recedens; apertura obliqua, truncato-oblonga; perist. callosum, undique subæqualiter expansum, subplanum, album vel fusco-carneum.*

Long. 18, diam. $9\frac{2}{3}$ mill.

β. Carnea, anfr. ultimo pone peristoma striga lata violacea notato, dente parvulo albo profundo in ventre anfr. penultimi.

Hab. Isle of Guam.

16. *SUCCINEA GUAMENSIS*, Pfr. *T. conico-ovata, tenuis, ruguloso-plicata et subgranulata, semipellucida, pallide cornea, albo irregulariter eroso-punctulata; spira brevis, vertice subpunctiformi; anfr. vix $2\frac{1}{2}$, penultimus convexus, ultimus $\frac{3}{4}$ longitudinis subæquans, basi vix angustatus; apertura obliqua, ubique incumbens, angulato-ovalis; perist. simplex, marginibus callo tenui junctis, columellari leviter arcuato, filari.*

Long. 12, diam. 7, alt. $5\frac{1}{2}$ mill. (*Helix putris*, Fér. Hist. t. 10 A. f. 10.)

Hab. Isle of Guam.

17. *SUCCINEA CHINENSIS*, Pfr. *T. ovato-conica, solidula, leviter plicata, semipellucida, rubello-cornea; spira mediocris, vertice subtili; anfr. vix 3, penultimus convexus, ultimus $\frac{5}{7}$ longitudinis fere æquans, medio ventrosus; apertura obliqua, superne non incumbens, angulato-ovalis, intus submargaritacea; perist. simplex, marginibus callo tenuissimo junctis, columellari angulum obsoletum formante.*

Long. $8\frac{2}{3}$, diam. $5\frac{1}{3}$, alt. 4 mill.

Hab. Hong Kong, China (*Mr. Browning*).

18. *SUCCINEA BERMUDENSIS*, Pfr. *T. oblongo-conica, gracilis, striatula et impresso-punctata, parum nitida, carneo-albida, sparse pellucide strigata; spira conica, acuta; anfr. $3\frac{1}{2}$ convexiusculi, ultimus $\frac{3}{5}$ longitudinis subæquans; apertura obliqua, subregulariter acuminato-ovalis, ubique incumbens; columella leviter arcuata, superne subcallosa; perist. simplex, rectum, margine dextro superne obsolete sinuato.*

Long. $10\frac{1}{2}$, diam. $5\frac{1}{2}$, alt. $4\frac{1}{3}$ mill.

Hab. Isle of Bermuda.

19. *CYLINDRELLA MACROSTOMA*, Pfr. *T. profunde rimata, fusiformi-oblonga, truncata, solida, conferte striata, alabastrina; spira ventrosa, sursum attenuata, late truncata; anfr. superst. 7 vix convexiusculi, ultimus antice ascendens, basi distincte carinatus; apertura subverticalis, oblonga, plica medio-cri columellæ cœrectata; perist. album, late expansum, marginibus convergentibus, callo junctis.*

Long. 19, diam. 7 mill.

Hab. Isle of Jamaica.

20. *TRUNCATELLA CALIFORNICA*, Pfr. *T. non rimata, turritocylindracea, truncata, tenuiuscula, leviter striata, purum nitens, pallide rubello-cornea; spira sursum vix attenuata; sutura simpliciter marginata; anfr. superst. 4 convexi, sensim accrescentes, ultimus basi non compressus; apertura verticalis, oralis, superne vix angulata; perist. simplex, continuum, margine dextro expanso, superne subrependo, columellari adnato.*

Long. 4½, diam. 1½ mill.

Hab. San Diego, California.

21. *LUCIDELLA NANA*, Pfr. *T. conoidea, solidula, carinata, concentricè lirata, opaca, albida; spira conoideo-semiglobosa; anfr. fere 5 convexiusculi, ultimus basi lævior, medio impressus; apertura perobliqua, subtriangularis; perist. subincrassatum, margine supero leviter, basali prope insertionem valide dentato.*

Diam. maj. 3, min. 2½, alt. vix 2 mill.

Hab. Isle of Jamaica.

22. *HELICINA SPRUCEI*, Pfr. *T. globoso-turbinata, tenuis, lævigata, diaphana, carneu vel pallide lutescens, albido interdum interrupte fasciata; spira convexiusculo-conoidea, acuta; anfr. 5 convexiusculi, ultimus rotundatus, spiram æquans; columella breviter recedens, subincrassata, basi subdentata, callum emit-tens tenuem, albidum; apertura obliqua, semiovalis; perist. breviter expansum, margine basali flexuoso, sinu levi a columella separato.*

Diam. maj. 9, min. 8, alt. 6½ mill.

Hab. Tarapoto, Andes of Peru (Spruce).

23. *HELICINA MERGUIENSIS*, Pfr. *T. depresso-turbinata, tenuiuscula, oblique striata et spiraliter confertissime sulcata, nitidula, carnea; spira conoidea, apice lutea, acutiuscula; anfr. 4½ planulati, ultimus compressæ et acute carinatus, basi modice convexus, callo centrali nitido, granulato munitus; columella brevissima, basi obsolete tuberculata; apertura diagonalis, triangularis; perist. album, breviter expansum, margine basali cum columella subangulatim juncto.—Operc. margarita-cœum.*

Diam. maj. 7½, min. 6½, alt. 4 mill.

Hab. Mergui, British Burmah.

24. *CYCLOSTOMA (LEPTOPOMA) WALLACEI*, Pfr. *T. perforata, globoso-turbinata, tenuis, oblique striata et carinis 5-6 sub-acutis, lirisque minoribus spiralibus munita, diaphana, albida, fasciis fuscis varie signata; spira elato-turbinata, acutiuscula; anfr. 5 perturgidi, subangulati, ultimus basi albidus; apertura obliqua, subcircularis; perist. simplex, album, breviter interruptum, margine dextro æqualiter patente, sinistro superne sinuato, tum subangulatim producto.—Operc. pallide corneum.*
 Diam. maj. 11, min. 9, alt. 9 mill.
Hab. Borneo (*Wallace*).

25. *CYCLOSTOMA (CYCLOPHORUS?) ÆQUIVOCUM*, Pfr. *T. imperie umbilicata, globoso-turbinata, solida, sublævigata (detrita) rubella, castaneo obsolete trifusciata; spira turbinata, acutiuscula; anfr. 5½ convexi, ultimus turgidus, infra medium obsolete angulatus; apertura verticalis, circularis; perist. duplex: internum porrectum, igneo-fuscum, externum lutiusecule et horizontaliter patens, ad anfr. contiguum excisum.*
 Diam. maj. 28, min. 20, alt. 20 mill.
Hab. Madagascar.

26. *CYCLOSTOMA (CYCLOPHORUS?) LIGNARIUM*, Pfr. *T. anguste umbilicata, turbinata, tenuiuscula, oblique irregulariter striata, sub epidermide opuca lignaria rufa; spira conica, convexiuscula; anfr. 5½ convexi, ultimus basi subplanatus; apertura diagonalis, ovali-rotundata; perist. duplex: internum album, adnatum, subcontinuum, externum, membranaceum, anguste expansum, ad anfr. contiguum excisum.*
 Diam. maj. 5, min. $4\frac{2}{3}$, alt. 4 mill.
Hab. New Zealand.

27. *HYDROCENA CHINENSIS*, Pfr. *T. perforata, ovato-turrita, vix striatula, nitida, livido-fusca; spira elongato-conica, acutiuscula; anfr. 7 convexiusculi, ultimus $\frac{1}{3}$ longitudinis paulo superans, infra peripheriam angulatus, basi subplanatus; apertura parum obliqua, tetragono-ovalis; perist. simplex, rectum, margine columellari subdilutato, patente.—Operc. membranaceum, pallidum.*
 Long. 15, diam. 8 mill.
Hab. China.

28. *HYDROCENA VULPINA*, Pfr. *T. perforata, globoso-conica, solida, lævigata, rubella; spira conica, acutiuscula; anfr. 5 modice convexi, ultimus spiram æquans, rotundatus; apertura parum obliqua, angulato-ovalis; perist. subcontinuum, adnatum, margine dextro subinflexo, columellari calloso.—Operc. tenue, castaneum, paucispirum.*
 Long. 8, diam. 6 mill.
Hab. Fox Islands.

29. *HYDROCENA (OMPHALOTROPIS) CEREÆ*, Pfr. *T. vix per-*

forata, orato-conica, solidula, lævigata, vix nitidula, cerea; spira convexo-conica, acuta; anfr. 5½ vix convexiusculi, ultimus ½ longitudinis paulo superans, rotundatus, perforationem punctiformem carina callosa obtusa cingens; apertura parum obliqua, angulato-oralis; perist. simplex, rectum, margine columellari brevissime fornicato-patente.

Long. $4\frac{1}{2}$, diam. $2\frac{3}{4}$ mill.

Hab. Norfolk Islands.

30. *HYDROCENA (OMPHALOTROPIS) GUAMENSIS*, Pfr. *T. perforata, orato-conica, solidula, conferte striata, opaca, carnea, rufo submarmorata et fuscata; spira conica, acuta; sutura subcanaliculata; anfr. 5½ planiusculi, ultimus spira vix brevior, infra medium carinatus, circa perforationem carina compressa munitus; apertura parum obliqua, oralis; perist. tenue, margine dextro expansiusculo, basali in carinam umbilicalem producto, columellari vix dilatato.*

Long. $6\frac{1}{2}$, diam. 4 mill.

Hab. Isle of Guam.

31. *HYDROCENA (OMPHALOTROPIS) NAVIGATORUM*, Pfr. *T. anguste perforata, orato-turrita, solidula, fusca, costis subdistantibus, albis, undulatis munita; spira elongato-conica, acutiuscula; anfr. 6 convexi, prope suturam filocarinati, ultimus ¾ longitudinis subæquans, supra carinam impressus, circa perforationem carina compressa munitus; apertura vix obliqua, subelliptica; perist. simplex, rectum, margine columellari vix patulo.*

Long. $6\frac{1}{2}$, diam. $3\frac{3}{4}$ mill.

Hab. Navigators' Islands.

3. ON THE ANIMAL AND BARK OF THE GENUS *ANTIPATHES*. BY
DR. J. E. GRAY, F.R.S., F.L.S., V.P.Z. AND ENT. SOC. ETC.

(Radiata, Pl. VI.)

In the 'Proceedings' of the Society for 1832, p. 41, I described for the first time the bark and animal of *Antipathes dichotoma* from Madeira.

It is to be observed that this species has been separated from the others of the genus because the surface of the axis is smooth and not covered with a number of minute, uniform, cylindrical spines like the true *Antipathes*, and has been called for that reason *Leiopathes*; and it has been further stated, that though *Leiopathes* has a distinct bark and animal like *Gorgoniada*, this may not be the case with the normal species of the genus, some of which had been described by Ellis as having a very peculiar kind of animal.

To set this question at rest, I have carefully examined all the specimens of *Antipathes* which have come under my observation, and