

# PROCEEDINGS

OF THE

SCIENTIFIC MEETINGS

OF THE

# ZOOLOGICAL SOCIETY

## OF LONDON

FOR THE YEAR

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2, QUERSTRASSE.

*reflexum, dextro sublate patens, superne cucullatim dilatatum et subdeflexum. Operc. planiusculum, calcareum, marginibus anfractuum infundibuliformiter elevatis.*

Diam. maj. 18, min. 14, alt. 5 mill.

*Hab.* In insula Labuan (*Mr. H. Low*).

13. *PTEROCYCLOS LOWIANUS*, Pfr. (1 b). *T. late umbilicata, subdiscoidea, tenuiuscula, subtiliter striatula, sericina, fulva, flammis saturate castaneis amœne picta; spira planiuscula, vertice submucronato; anfr. 4½, convexi, regulariter accrescentes, ultimus teres, antice paululum descendens; apertura diagonalis, circularis; perist. duplex; internum brevissime porrectum, juxta anfr. contiguum vix sinuatum; externum latere sinistro angustissimum, dextro breviter patens, superne dilatatum et protractum, vix concavum. Operc. præcedentis.*

Diam. maj. 15½, min. 12½, alt. 5½ mill.

*Hab.* In insula Labuan (*Mr. H. Low*).

14. *PUPINA MERIDIONALIS*, Pfr. (4 a). *T. oblonga, tenuiuscula, levissime striatula, subpellucida, succineo-cornea; spira sensim in conum acutiusculum attenuata; sutura levis, simplex; anfr. 7, summi convexiusculi, sequentes planiores, penultimus longus, ultimus antice subascendens, basi axin excedens; apertura obliqua, circularis, bicanaliculata; callus parietalis arcuatus, latere dextro in linguam triangularem, sinistro in linguam latam transverse truncatam abiens; perist. subincrassatum, breviter expansum, cum lingua sinistra directione parallelâ recedens.*

Long. 13, diam. 6 mill.

*Hab.* North Australia.

15. *PUPINA PLANILABRIS*, Pfr. (4 b). *T. subrimata, oblongo-conica, tenuiuscula, sub lente striatula, subsericea, carneo-fuscula; spira conica, apice acutiuscula; sutura simplex; anfr. 7, convexiusculi, penultimus longus, latere aperturae subplanulatus, ultimus brevis, descendens; apertura subverticalis, circularis, lineariter bicanaliculata; callus parietalis planus, subsolutus, latere dextro breviter ligulatus, sinistro infra medium oblique resectus; perist. plane expansum, utrinque cxtus cum linguis junctum et infra rimam umbilicalem cristulam e canali punctiformi exeuntem formans.*

Long. 12½, diam. 5½ mill.

*Hab.* North Australia.

5. DESCRIPTIONS OF TEN NEW SPECIES OF LAND-SHELLS, FROM THE COLLECTION OF GEORGE FRENCH ANGAS, ESQ. BY DR. LOUIS PFEIFFER.

1. *HELIX INCLINATA*, Pfr. (387 b). *T. subclause perforata, conoideo-depressa, solida, carinata, superne conferte rugoso-striata,*

*nitidula, pallide fusca; spira regulariter conoidea, vertice minuto obtusulo; sutura marginata, carina subprominula; anfr. 6, vix convexiusculi, lente accrescentes, ultimus non descendens, acute carinatus, basi convexus, substriatus, nitidior, medio pallidior, impressus; apertura fere diagonalis, angulato-lunaris, intus margaritacea; perist. rectum, margine supero simplici, basali regulariter arcuato, versus perforationem subincrassato, eam lamina triangulari claudente.*

Diam. maj. 30, min.  $26\frac{1}{2}$ , alt. 14 mill.

Hab. Louisiade Group, New Caledonia. *Guinea*

2. *HELIX LINCOLNIENSIS*, Pfr. (564 a). *T. umbilicata, subconoideo-depressa, tenuis, superne conferte rugoso-striata et subtilissime granulata, pellucida, unicolor castanea; spira subconoideo-elevata, vertice obtusulo; anfr. 5, convexiusculi, ultimus subdepresso-rotundatus, antice non descendens, subtus circa umbilicum angustum leviter radiato-striatus; apertura obliqua, rotundato-lunaris; perist. simplex, rectum, marginibus convergentibus, columellari superne in laminam reflexam fuscam dilatato.*

Diam. maj. 22, min. 19, alt. 12 mill.

Hab. Port Lincoln.

3. *HELIX MURRAYANA*, Pfr. (654 a). *T. umbilicata, depressa, tenuiuscula, confertissime filoso-plicata, vix nitidula, fusca; spira plana; anfr. 5, convexiusculi, regulariter accrescentes, ultimus rotundatus, non descendens; umbilicus  $\frac{1}{4}$  diametri subæquans; apertura parum obliqua, rotundato-lunaris; perist. simplex, rectum, marginibus conniventibus, columellari juxta umbilicum vix dilatato.*

Diam. maj. 7, min. 6, alt. 3 mill.

Hab. Murray Cliffs, South Australia.

4. *HELIX CASSANDRA*, Pfr. (1080 b). *T. mediocriter umbilicata, globoso-depressa, tenuis, striatula et minutissime granulata, parum nitens, superne pallide isabellina, fasciis nonnullis saturatioribus obsolete notata, subtus albida; spira breviter conoideo-elevata, vertice minuto; anfr. 5, regulariter accrescentes, superi vix convexiusculi, ultimus inflatus, antice vix deflexus; apertura parum obliqua, rotundato-lunaris, intus submargaritacea; perist. simplex, tenue, margine dextro recto, basali reflexiusculo, juxta umbilicum in laminam triangularem fornicatam dilatato.*

Diam. maj. 26, min. 22, alt. 15 mill.

Hab. Murray Cliffs, South Australia.

5. *HELIX ZENOBIA*, Pfr. (1131 a). *T. sublata umbilicata, conoideo-lenticularis, solida, superne ruditer et conferte plicata, acute carinata, rufa; spira breviter conoidea, apice obtusa; sutura submarginata; anfr.  $5\frac{1}{2}$ , convexiusculi, lente accrescentes, ultimus non descendens, supra carinam convexior, basi leviter radiato-striatus, sensim in umbilicum transiens; apertura perobliqua,*

*subrhombeo-lunaris; perist. rectum, marginibus subconvergentibus, supero antrorsum arcuato, basali incrassata.*

Diam. maj. 22, min. 20, alt. 9 mill.

*Hab.* New Georgia.

6. *HELIX EVANDALEANA*, Pfr. (1167 b). *T. subanguste umbilicata, depressa, solidula, carinata, superne rugoso-striata et granulata, pilis brevibus obsita, subpellucida, fusca; spira parum elevata, vertice obtuso; sutura profunda, carina magis minusve prominente marginata; anfr. 4, convexi, ultimus supra medium carina funiformi et interdum angulo secundo obsolete circumdatus, basi levius striatus, plano-convexus; apertura obliqua, late lunaris; perist. simplex, marginibus vix convergentibus, dextro recto, basali reflexiusculo, juxta umbilicum subdilatato.*

Diam. maj.  $17\frac{1}{2}$ , min. 15, alt. 9 mill.

*Hab.* Evandale, South Australia.

7. *HELIX PERINFLATA*, Pfr. (1601 a). *T. umbilicata, globosa, solida, striis incrementi rugosis et lineis impressis antrorsum descendentibus decussata, isabellino-albida; spira convexo-conoidea, apice obtusa; anfr.  $4\frac{1}{2}$ , ultimus magnus, ventrosus, subtus perinflatus, striis spiralibus obsolete sculptus, antice deflexus; apertura diagonalis, lunari-rotundata; perist. breviter expansum, margine columellari supra umbilicum angustum fornicatim dilatato.*

Diam. maj.  $23\frac{1}{2}$ , min. 20, alt. 20 mill.

*Hab.* McDonnell Ranges, Central Australia; found by Mr. Waterhouse on Stuart's Expedition.

8. *HELIX CARCHARIAS*, Pfr. (1606 a). *T. subobtecte perforata, conoideo-globosa, solidula, sub lente minutissime granulata, carnea; spira conoidea, vertice levigato obtusulo; anfr. 5, convexiusculi, superi irregulariter tuberculato-plicati, ultimus ventrosus, superne levius plicatus, subtus radiato-striatus, albidus, antice profunde deflexus; apertura diagonalis, subcircularis; perist. simplex, tenue, anguste expansum, marginibus approximatis, columellari fornicatim supra umbilicum late reflexo.*

Diam. maj. 17– $19\frac{1}{2}$ , min.  $13\frac{1}{2}$ –16, alt.  $10\frac{1}{2}$ –14 mill.

*Hab.* Sharks' Bay, N. W. Australia.

9. *HELIX CURTISIANA*, Pfr. (1681 a). *T. anguste umbilicata, conoideo-semiglobosa, solida, striata, castanea; spira conoideo-convexa, superne albida, vertice obtusulo; sutura albo filosa; anfr. 6, lente accrescentes, ultimus magnus, convexus, supra medium subangulatus, basi planiusculus, antice descendens; apertura fere diagonalis, rotundato-lunaris; perist. vix incrassatum, anguste expansum, margine columellari superne triangulatim dilatato.*

Diam. maj. 29, min. 25, alt. 17 mill.

*Hab.* Port Curtis, N. E. Australia.

10. *BULIMUS ANGASIANUS*, Pfr. (773 a). *T. imperforata, ovato-conica, tenuis, plicis longitudinalibus confertis, sulcis spiralibus*



*interruptis sculpta, castanea, fasciis 2 albis ornata; spira convexo-conica, apice obtusulo alba; anfr. 5, modice convexi, ultimus spiram superans, infra medium leviter striatus, basi rotundatus; apertura parum obliqua, angulato-ovalis, intus margaritacea, albo fasciata; perist. simplex, rectum, margine dextro antrorsum subcurvato, columellari albo-callosa, arcuato, intrante.*

Long.  $25\frac{1}{2}$ , diam. 14 mill.

*Hab.* Port Lincoln, South Australia.

6. ON THE BREEDING OF THE GREEN SANDPIPER (*HELODROMAS OCHROPUS*). BY ALFRED NEWTON, M.A., F.L.S., F.Z.S.

Ornithologists are aware of the very different positions often chosen for their nests by birds of the same species. Thus Eagles may be found sometimes building their eyries upon trees, at others on cliffs, and again sometimes absolutely upon the flat ground. The same may be said of some species of Falcons and of some Herons. Certain Crows also and the Stock-Dove (*Columba cænas*) exhibit a like disparity of habit. Even among the members of the Gallinaceous order a similar diversity is occasionally, though rarely, to be observed. I have been told, on authority I cannot question, of a common Pheasant (*Phasianus colchicus*) and of a Capercally (*Tetrao urogallus*) each choosing a nest in a tree wherein to lay its eggs. Instances of the common Wild Duck (*Anas boschas*) breeding in hollow stumps of trees are very frequent; and with the Ducks of the genus *Aix* this seems to be the normal mode of nidification. But, excepting in the last case, this peculiarity in the selection of a site for the nest seems to result from the particular fancy (or instinct, it may be) of the individual; and in that exceptional case the general habits of the birds are so essentially arboreal that we need not wonder at the fact of their using trees for their nurseries as well as for their usual places of lodging. The only instances parallel to the one I am going to adduce are, so far as I can call to mind, those of the Golden-eye (*Clangula glaucion*), the Goosander (*Mergus serrator*), and the Smew (*Mergus albellus*). Each of these three birds departs from the manner of nidification which obtains among its brethren, just as I shall show that the Green Sandpiper (*Helodromas ochropus*\*) does.

Though I do not pretend to lay before you any novel facts this evening, yet it will be, I think, admitted that hitherto we have had in England but little positive information on the mode of breeding of the Green Sandpiper; such as it is, however, I will proceed to notice it. First, I must say that I think the story of the nest of this bird "by the side of a clay-pit" in Norfolk, as told in Mr. Yarrell's 'British Birds' (vol. ii. p. 529) and in Mr. Lubbock's

\* The osteology of the *Tringa ochropus*, Linn., presents such a marked deviation from that of the other *Totani* which I have examined, that I do not hesitate in this case to follow Dr. Kaup in considering it the type of a distinct genus.