

THESAURUS ENTOMOLOGICUS OXONIENSIS;

OR,

ILLUSTRATIONS OF NEW, RARE, AND INTERESTING
INSECTS,

FOR THE MOST PART CONTAINED IN THE COLLECTIONS PRESENTED TO
THE UNIVERSITY OF OXFORD

BY THE REV. F. W. HOPE, M.A., D.C.L., F.R.S., &c.

WITH FORTY PLATES FROM DRAWINGS BY THE AUTHOR;

BY

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"We should be apt to think too meanly of the attributes of our Creator, should we be able to come to an end of all His works, even in this sublunary world. And therefore I believe never any man yet did, never any man shall, so long as the world endures, by his utmost industry, attain to the knowledge of all the species of Nature."—JOHN RAY.

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M.DCCC.LXXIV.

A D V E R T I S E M E N T.

THE donation made to the University of Oxford by the late REV. F. W. HOPE, of his entire Collections and Library of Natural History, and the subsequent acquisition of the Burchell, Wells, and other Collections, including also my own, have enriched the University Museum with a large number of new and rare species of Insects, from which it has been considered advisable that a selection should be made for illustration in a manner worthy both of the donor and the University.

In making this selection I have considered that it would be most beneficial to illustrate certain Groups or Families rather than isolated Species.

With this view the Groups of Goliathidæ and Cremastocheilidæ have been selected; a complete Monograph of the latter being given, with figures of upwards of one hundred Species. Of the singular Family Paussidæ upwards of fifty Species are figured for the first time, together with many other curious Coleoptera. Many remarkable Groups and Species belonging to the Orders Hymenoptera, Orthoptera, Neuroptera, Hemiptera, and Lepidoptera, as well as several singular Apterous Groups, are also given.

The Plates are engraved and coloured from drawings and dissections prepared by myself.

I have considered it due to the memory of Mr. HOPE to reprint the late Dr. PETTIGREW'S Biographical Notice of him, together with a concise account of the Collections presented by him to the University of Oxford, and a list of his published Works and Memoirs.

J. O. WESTWOOD.

OXFORD, *October*, 1873.

ORDER—ORTHOPTERA.

FAMILY—PHASMIDÆ.

GENUS—HETEROPTERYX. G. R. Gray, Westw. (Mon. Phasm.)

HETEROPTERYX DILATATA.

PLATE XXXII, FIG. 1.

(*Heteropteryx dilatata*, Parkinson, Linn. Trans. iv, pl. XVIII. Westw. Mon. Phasm. p. 82.)

(Syn.: *Heter. Hopei*. Westw. Trans. Ent. Soc. Lond. Ser. iii. vol. ii. Proc. p. 16.)

Lata subdepressa: mesothorace conico: fulvo-lutea, (viridis? dum viva) tegminibus opacis pallide viridibus, alis puniceis; spinulosa, spinis parvis; capitis vertice spinis octo coronato; mesonoto in medio partis posticæ spinis duabus minutis armato; parte detecta supera oviductus segmento nono dorsali abdominis fere duplo longiori, elongato-lanceolata angusta, sensim ad apicem attenuata, apice furcato. (Fœm.)

Long. capitis lin. 6; proth. lin. 7; mesoth. lin. 9; metath. line. 9; abdom. segm. 6-basal. lin. 27; segm. 3-apical. lin. 11; oviduct. lin. 6; = long. tot. circ. unc. 6½.

Habitat; —? In Mus. Hopeiano Oxoniæ.

Closely allied to *H. Grayii* (Westw. Mon. Phasm. pl. XXX. fig. 3), but much larger, though with the spines much smaller; the tegmina and wings extend to the extremity of the second dorsal segment of the abdomen. The two anterior discoidal spines of the prothorax are smaller than the four posterior ones forming the posterior row, which are much more numerous and still smaller in *H. Grayii*. The mesothorax has the square central dorsal part armed with three marginal spines on each side, three pairs of distant spines on its disc, and only two approximatory spines in the place of the posterior coronet of spines in *H. Grayii*; the tegmina are comparatively larger, and extend to the extremity of the second abdominal segment.

The sides of the body and the femora are much less strongly spined than in *H. Grayii*, but the tibial spines are very robust.

The exposed portion of the dorsal piece of the ovipositor (fig. 1 *a, g*) is elongate-lanceolate, narrow, gradually pointed to the tip, where it is slightly furcate, and is half as long again as the terminal dorsal segment (*). Fig. 1 *a* represents the four terminal segments of the body of the female lying on its back, with the parts of the ovipositor raised and separated, and fig. 1 *b* the ventral surface of the ovipositor, the lettering of the different parts being the same in both figures; the * representing the ninth or terminal segment of the abdomen.

a represents the large boat-shaped piece arising at the base of the seventh segment, and shutting in the other parts when at rest; *b*, a pair of curved horny blades, each arising from a broad basal piece, *c*; *d*, two shorter horny bifid plates, which unite with *b* to form a concave bed for the reception of the larger eggs; *e*, the under lining of the basal part of the last segment; *f*, a pair of straight horny conical appendages, at the base of each of which is seen a minute conical style; *g*, the under side of the upper portion of the sheath of the ovipositor, and † the entrance of the anus.

I had named the specimen of this species, figured in plate XXXII, in memory of the late Rev. F. W. Hope, the munificent founder of the Chair of Zoology in the University of Oxford, to whom these curious insects were especial objects of interest, having never seen the original type of *H. dilatata*, the Hopeian specimen being in spirits and discoloured. The Saundersian Collection, however, now added to the Hopeian Museum by the liberality of Mrs. Hope, contains a dried specimen, and has enabled me to identify the species.

HETEROPTERYX CASTELNAUDII.

PLATE XXXII, FIG. 3.

Obscure lutescens, fusco-variegata: capite postice elevato-conico utrinque spinis armato, coronaque e spinis sex (duabus anticis minoribus) formata terminato; antennarum articulo basali depresso, secundo brevi, tertio quarto longiori; apicali longo¹; prothorace subquadrato parce spinoso; mesothorace dorso medio oblique elevato lateraliter spinoso, spina ultima laterali ad basin tegminum rudimentalium majori; lateribus valde dilatatis et serratis; metanoti lateribus valde rotundato-dilatatis serratis, dorso alis duabus rudimentalibus instructo, spinis duabus dorsalibus; segmentis quinque basalibus abdominis ad latera dilatatis, margine spinosis; pedibus brevibus crassis spinosis, femoribus omnibus ante apicem supra lobo angulato instructis; tibiis posticis intus spinis validis curvatis armatis.

OBS.—Insectum vix omnino declaratum.

Long. corp. unc. $2\frac{1}{4}$.

Habitat; Tringany (Comte de Castelnaud). In Mus. Hopeiano Oxoniæ.

GENUS—EXTATOSOMA. G. R. Gray.

EXTATOSOMA BUFONIUM.

PLATE XXXII, FIG. 2.

Fulvescens, brunneo-variegata: capite postice supra conico valde spinoso; antennis brevibus, articulis tertio ad nonum dilatatis, 10–16 alternatim longioribus nigris et brevioribus albidis (fig. 2 *b*); apicalibus 4 albidis gracilibus, ultimo longiori; mesonoto lateribus postice dilatato rotundatis spinosis, spinis duabus in medio antice, coronula spinarum postice armato; metathoracis lateribus dilatatis, dorso in medio valde spinoso et postice spinis foliaceis laciniatis armato; segmentis sex basalibus abdominis, præsertim quarto et quinto, lateribus foliaceo-dilatatis spinosis, dorso spinis foliaceis laciniatis erectis; pedibus brevibus crassis, lobis laciniatus numerosis spinisque instructis; tibiis omnibus absque membrana marginis interni; lobis conicis interdum bifidis externe armatis (fig. 2 *a* caput, pro- et mesothorax e latere visa).

Long. corp. unc. $1\frac{5}{8}$.

Habitat; Australia. In Mus. Hopeiano Oxoniæ (olim Saunders).

GENUS—CEROYS. Serville.

CEROYS LACINIATUS.

PLATE XXXII, FIG. 4.

Fusco-luteus, spinosissimus: capite utrinque lobo magno membranaceo laciniato armato; antennis gracilimus circiter 35-articulatis, articulis alternis (in medio antennarum) brevioribus et ad apicem paulo incrassatis; prothoracis dorso utrinque serie spinarum brevium armato; mesonoti dorso duplici serie spinarum laciniatarum, lateribusque lobis magnis foliaceis spinosissimis, serieque transversa postica spinarum minorum (ut in metonoto et segmentis abdominalibus); metonoti dorso spinoso lateribusque spinis compositis armatis; abdomine segmentis 5 basalibus dilatatis, spinis numerosis in seriebus transversis dispositis, armatis, omnibus (tribus ultimis exceptis) utrinque lobo magno subrotundato membranaceo valde sinuato et laciniato instructis, magnitudine e segmento tertio decrescenti; pedibus triquetris longis gracilibus, lobis numerosis ex angulis femorum et tibiaram prodeuntibus membranaceis, magnitudine diversis, in medio femorum majoribus, his multi-sinuatis; tibiis 4 anticis margine interno membrana trigona, posticis 2 tribus minoribus instructis.

Long. corp. unc. 3.

Habitat; Nicaragua. In Mus. Britann., Hopeiano Oxoniæ, et W. W. Saunders (olim).

¹ The intermediate joints of the antennæ in the unique specimen in our Museum have been injured, so that I am not clear as to their real length. They were, however, probably longer than represented in my figure.

FAMILY—LOCUSTIDÆ.

GENUS NOVUM—PHYSOPHORINA.

Insectum Pneumoræ affine: pedibus posticis simplicibus vix saltatoriis; caput verticale rugulosum, vertice inter oculos transverso acuto; mandibulæ validæ apice truncato denticulato; maxillarum galea magna, mandone bidentato; palpi omnes graciles breves; antennæ breves filiformes 15-articulatæ, articulo primo brevissimo, secundo longiori, septem proximis brevioribus æqualibus, ultimis 6 parvis, coalitis; prothorax maximus inflatus, totum corpus tegens, parte postica tegmina dua, sutura recta coalita apice acuminata simulanti, dorso carinata; lateribus in medio costa elevata curvata tuberculata instructis, infra inflexis thoracis et abdominis latera amplectentibus; prosternum simplex; mesosternum elevatum semicirculare; inter pedes intermedios paullo porrectum; metasternum transversum; pedibus posticis lateraliter insertis; abdomen angustum ventre sensim angustatum, segmentis 8, ultimo (sc. operculo oviductus) acuto; dorso ut videtur 11-articulato, octavo et nono singulatim arcum angustum formantibus, decimo et undecimo paullo longioribus, oviductum formantibus; processu elongato trigono corneo inter decimum et undecimum et octavum ventralem utrinque interposito, utrinque stylo minuto exarticulato ad basin ejus instructo; tegmina et alæ obsoleta; pedes satis breves et graciles, postici paullo longiores, femoribus posticis infra longitudinaliter sulcatis; tibiis posticis extus spinis minutis armatis; tarsi triarticulati, articulo basali infra tribus paribus, secundo pari unico, pulvillorum, instructis.

SPECIES UNICA—PHYSOPHORINA LIVINGSTONII.

PLATE XXXII, FIG. 5.

Viridis: corpore et lateribus pronoti fulvescentibus; facie et pronoto tuberculis minimis albidis instructis, his in lineas curvatas dispositis reticulationem tegminum simulantibus; mandibulis apice nigricantibus.

Long. corp. unc. $1\frac{1}{2}$.

Habitat; Zambesi. In Mus. Hopeiano Oxoniæ.

GENUS NOVUM—TETRICODINA.

E Tetricibus genuinis differt capitis vertice in collum longum oblique elevato ut in genere Proscopia; oculi semi-globosi in apicem verticis inserti, spatio frontali inter-oculari angusto, in medio carinato; ocellis duobus inter medium oculorum; antennisque inter partem inferiorem oculorum insertis; antennæ longæ graciles pauci-articulatæ, articulis basalibus brevibus, intermediis sensim longioribus; palpi maxillares articulis duobus ultimis magnis foliaceis ovalibus; prothorax in scutellum magnum supra abdomen et ultra ejus apicem extensus; pedes longi graciles, postici incrassati saltatorii.

SPECIES 1—TETRICODINA LIMOSINA.

(Snellen von Vollenhoven, Trans. Ent. Soc. Holland, 1865, p. 66, pl. I, fig. 6-8.)

Fusca, opaca: prothorace omnino concolori; lateribus deflexis prothoracis inter pedes anticos et intermedios angulato-productis; prothoracis carina antice obsoleta; antennis longis gracillimis 15-articulatis, filiformibus (pl. XXXII, fig. 6).

Long. corp. lin. 7.

Habitat; Waigiou. In Mus. Reg. Lugdunens. et Hopeiano Oxoniæ. Mecum commun. Dom Snellen von Vollenhoven.

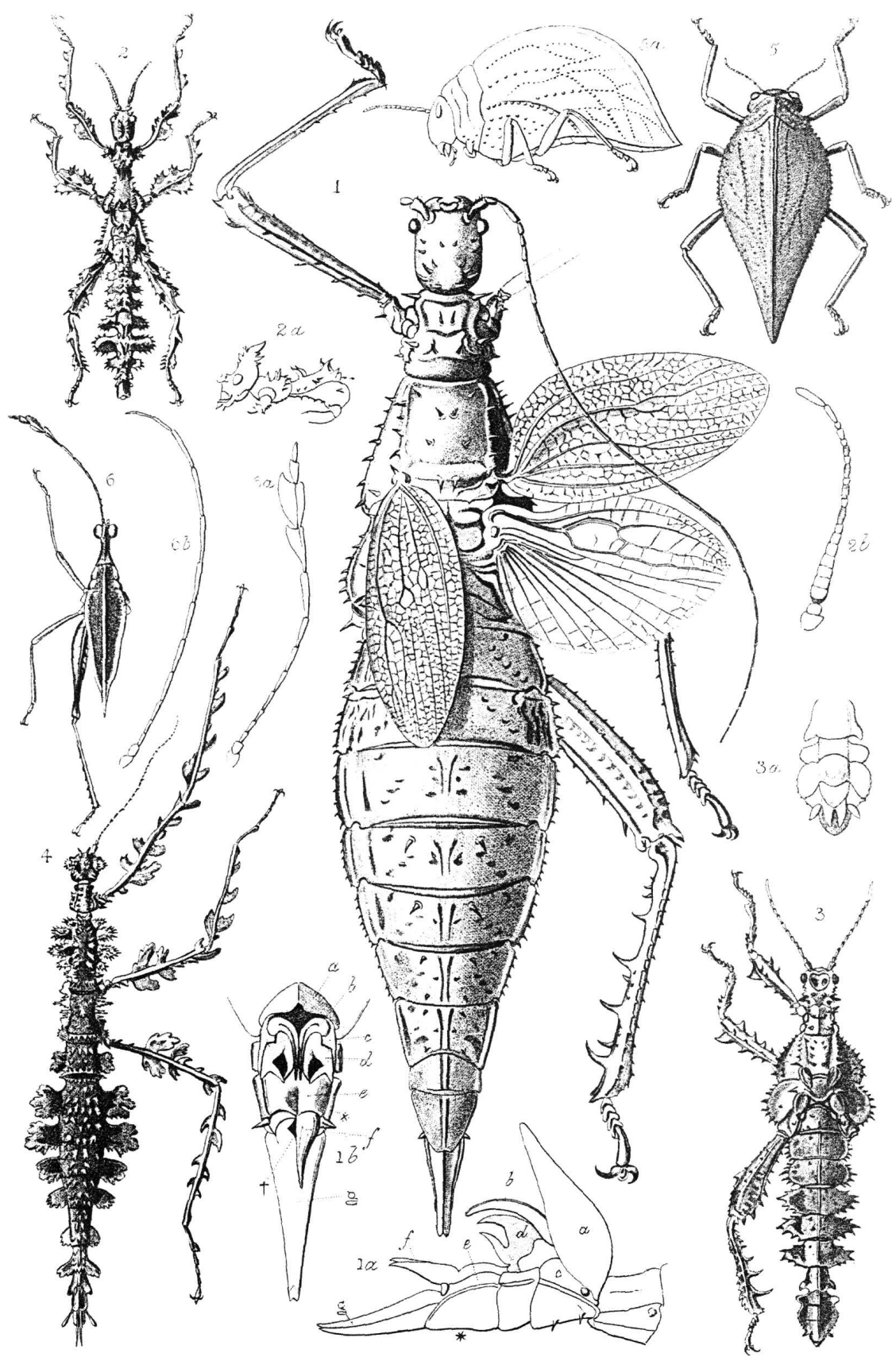
SPECIES 2—TETRICODINA LUTEO-MARGINATA.

PLATE XXXII, FIG. 6.

Tota fusca, opaca, delicate granulata: prothoracis carina integra media lateribusque angulatis luteis, lateribus inter pedes quatuor anticos inermibus; antennis longis 15-articulatis articulis duobus basalibus brevibus crassioribus, tertio ad nonum gracilibus sensim longitudine crescentibus, decimo ad duodecimum valde depressis dilatatis, clavam depressam formantibus; tribus apicalibus sensim decrescentibus (fig. 6*a*); femoribus omnibus supra linea lutea notatis. (Mas et fœm.)

Long. corp. lin. 6.

Habitat; Menado et Dorei, New Guinea (Wallace). In Mus. Hopeiano Oxoniæ.



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