

XVII. *On New Genera and Species of Longicorn Coleoptera.* Part III. *By F. P. PASCOE, Esq., F.L.S., &c.*

[Read 3rd August, 1857.]

*Cantharocnemis Downesii.*

*Prionus Downesii* (Moore's MS.)

*C. piceus*; prothorace medio sub-glabro; lateribus capiteque punctatis; elytris lineis duabus elevatis, apicem versus evanescentibus. Bombay.

Pitchy brown, head punctured, two confluent elevations on the vertex behind, with two shallow depressions in front and between the eyes; antennæ glabrous, reddish brown; prothorax smooth in the middle, thickly punctured at the sides; elytra very thickly but finely punctured, with two elevated nearly parallel lines on each, but gradually disappearing towards the apex; legs and abdomen beneath reddish brown.

Length 22 lines.

I am indebted to M. Chevrolat for having pointed out the extremely rare genus to which this fine insect belongs. It is dedicated to — Downes, Esq., of Bombay, to whom the museum at the India House is indebted for many fine insects.

*Cerambyx egenus.*

*C. sub-angustatus*, fuscus, parce griseo-pubescent; prothorace sub-mutico irregulariter et leviter plicato; elytris apice rotundatis; antennis mediocribus. China Borealis.

Rather narrow, dark brown, very sparingly furnished with a greyish pubescence; prothorax about equal in length and breadth, rounded at the sides, which are nearly entire, the surface with fine irregular folds; elytra a little depressed, rounded at the apex; antennæ moderate.

Length 9 lines.

*Cerambyx fulvidus.*

*C. sub-angustatus*, brunneus, fulvo-pubescent; prothorace integro leviter rugoso; elytris apice rotundatis; antennis mediocribus. China Borealis.



Rather narrow, light brown inclining to bay, with a pale buff pubescence; prothorax rather longer than broad, the sides and surface uneven, but not plicate; elytra rounded at the apex.

Length  $8\frac{1}{2}$  lines.

These two species will certainly not come into *Cerambyx*, if it be restricted to such insects as *Heros* and *miles*.

*Cerambyx micaceus*.

*C. piceus*, angustus; prothorace medio transverse corrugato, plagis griseo-lanuginosis aspersis; elytris gibbosulis nitidis irregulariter et leviter hirsutis; antennis pube griseâ densissime vestitis; pedibus brevibus pallidioribus. Borneo.

Pitchy, head rather narrow, a deep groove between the eyes, which are large and almost contiguous both above and below, the groove and the eyes above furnished with a margin of yellowish hairs; prothorax elongate, nearly elliptic, corrugated irregularly at the sides, transversely in the middle, with patches of yellowish woolly hairs interspersed; elytra lengthened, parallel, the apex rounded, the disc irregularly tumid, shining, with thin lines of hairs; antennæ pubescent, about as long as the body, flattened towards the apex, with the joints dilated on one side (♀); legs short.

Length 6 lines.

This again seems a form quite apart from anything else.

EPANIA.

Head not prolonged anteriorly; eyes lateral, sinuated above; antennæ moderate, filiform; joints, except the second, nearly equal; thorax larger than broad, margined anteriorly and posteriorly; elytra very short, rounded; legs moderate, the femora clavate.

Differs from *Tomopterus*, its nearest ally, in its narrower thorax, eyes widely apart, shortness of face, and filiform antennæ. This genus is proposed for *Odontocera*? *Sarawakensis* and *O.*? *Singaporensis* of Thomson (Arch. Ent., p. 124). There are others still undescribed.

MERIONÆDA.

Head small, transverse, lengthened behind; eyes large, prominent; antennæ short, claviform, the six or seven last joints



dilated, the first, third and fourth slender, and nearly equal; prothorax uneven, attenuated anteriorly; elytra subulate, shorter than the abdomen; anterior legs short, the posterior very long, its femora clavate, tibiæ serrated and spurred, the tarsi short.

Allied to *Necydalis*, L., but abundantly distinct in its antennæ, elytra, &c. *Molorchus Indicus* (Hope), *Heliomanes nigriceps*, (White), and other undescribed species, belong to this genus.

*Merionæda puella.*

*M. atra*; prothorace luteo; femoribus basi testaceis. Macassar.

Black, coarsely punctured; prothorax and scutellum reddish yellow; elytra two-thirds the length of the abdomen, each with a raised longitudinal line near the apex; the shoulders prominent.

Length  $3\frac{1}{2}$  lines.

*Merionæda scitella.* (Pl. XXV. fig. 3.)

*M. atra*; prothorace luteo; elytris maculâ basali, antennis articulis duobus ultimis, femoribusque posticis basi testaceis. Borneo.

Black; prothorax yellow; elytra along the inner margin, two last joints of the antennæ and posterior thighs, at the base, testaceous; in other respects closely resembles the last, but the elytra are more elongate.

Length  $2\frac{1}{2}$  to  $3\frac{1}{2}$  lines.

*Psilomerus? macilentus.*

*P. elongatus*, obscure testaceus; prothorace elytrisque obsolete fusco-marginatis. Ceylon.

Elongate, dull testaceous; prothorax and elytra with an indistinct brown or pitchy stripe externally, and across the base of the latter; antennæ very long.

Length 5 lines.

As this genus has never been published, and I have only seen an imperfect specimen of the original species in the British Museum, it is not without a doubt that I refer this insect to *Psilomerus*; it is, however, certainly very near it.

HEMILISSA.

Head broad, very short; the eyes large, slightly emarginate; antennæ moderate, the joints subequal, compressed, carinate; thorax uneven, narrower than the head, longer than broad; elytra



lengthened, parallel, sub-depressed, apiculate; legs moderate, femora clavate; tarsi short; prosternum produced.

This genus is formed for the *Acanthoptera gummosa* of Perty. What *Acanthoptera* is intended it is difficult to say, since Latreille used the word to include *Purpuricen*us, *Callichroma* and the *Stenocori* of Fabricius, but this arrangement was never adopted. *Hemilissa* is closely allied to *Piezocera*, Serv.

*Clytus Sappho.*

*C. niger*; capite prothoraceque cinereis, hâc obscure nigro-cruciato; elytris basi lineis duabus, unâ transversâ, alterâ obliquo-longitudinali, lineâ suturali a scutello, fasciâ angustâ ante medium continuâ, fasciâ posticâ et maculâ apicali virescentibus. Borneo.

Black, pubescent; head and thorax dull ashy grey, the latter with an obscure black cruciate mark dividing it into four nearly equal parts; scutellum and line continuous with it across the base of the elytra, an obliquely longitudinal line below it, and another at the centre joining a band before the middle, followed by a second below, and an oblong spot at the apex, greenish yellow; four last joints of the antennæ and tarsi whitish; metathorax and abdomen with a close white pubescence; eyes pale brown.

Length 5 lines.

A *Clytus* with something of the habit of *C. plebeius*.

*Clytus cruentatus.*

*C. sub-depressus*, ater; prothorace et maculâ magnâ circa scutellum sanguineis. Malacca.

Rather depressed, black, very thickly punctured; prothorax and central portion of the elytra about the scutellum deep blood-red, under surface paler; scutellum, breast and two first abdominal segments with a silvery pubescence; antennæ stout.

Length 4 lines.

This belongs to the same group as *C. Hardwickii*, *C. lunatus*, &c.

*Clytus mustela.*

*C. niger elongatus*; capite prothorace elytrisque basi rufo-brunneis; elytrorum lineâ basali arcuatâ fasciâ posticâ continuatâ et maculâ apicali oblongâ viridi-luteus. Borneo.

Elongate, pubescent; head, thorax and base of the elytra brownish red, rest of the elytra black, with a line curving down-



wards from the base, connected along the suture with a transverse fascia and an oblong apical spot, greenish yellow; first seven joints of the antennæ, femora and tibiæ black, the two latter with the pubescence of a greenish hue, rest of the antennæ and tarsi white beneath, with the breast pale red, the remainder dull white; antennæ testaceous, nearly as long as the body, the fourth joint slightly spined; prothorax oblong, elliptic.

Length 7 lines.

*Clytus viverra.*

*C. cinereus*, elongatus; prothorace obsolete nigro-fasciato; elytris lineâ curvatâ humerali mediâ, alterâque latâ versus apicem, nigris. Borneo.

Elongate, pubescent, cinereous grey; prothorax oblong, elliptic, with an obscure black band; elytra with a curved line near the shoulders, an arched band at the middle, and a broad one below, black; legs and antennæ black, with a sparse ashy pubescence, the latter setaceous, rather shorter than the body, with the third and fourth joints strongly spined at the apex.

Length 7 lines.

This and the above, with *C. elongatulus* and others, should probably form a distinct group, but the whole genus requires a revision.

*Rhaphuma placida.*

*R. pallide miniacea*; capite nigro; elytris apice albo-marginatis, maculis duabus nigris, altera pone medium (guttulâ albâ ante maculam), altera magna versus apicem; infra nigrâ albo-variâ. Macassar.

Pale red, inclining to orange; head black, produced anteriorly, with two rows of whitish hairs beneath the eyes; prothorax elongate, elliptic; elytra narrow, the apex truncated, bordered with white and succeeded by a large black patch, behind the middle a white spot, followed by a larger black one; beneath black, the breast covered with white hairs, the sides of the metathorax and posterior margin of the abdominal segments white; antennæ with the last six joints darker; legs pale reddish, the posterior pair nearly black.

Length 5 lines.

Very nearly allied to *Clytus quadricolor* (Lap. et Gory), and probably also to the barbarously-named *C. leucoscutellatus*. The former was the type of Dejean's genus *Rhaphium*, but as that



name has been long preoccupied by a genus of *Diptera*, I have altered it as above. It is distinguished from *Clytus* by its elongated cylindrical form, narrow thorax, and head anteriorly produced.

*Cylindrepomus peregrinus.*

C. ater; capite, prothorace marginibus, fascisque elytrorum cinereis; antennis longis; pedibus mediocribus. Borneo, Java.

Dull black, with short appressed hairs; the head, margin of the prothorax, band across the base of the elytra, a line commencing near the scutellum and extending obliquely outwards, band below this and apex, ashy grey; tarsi and lower part of posterior tibiæ white; body beneath with a silvery grey pubescence; antennæ twice the length of the body; legs (for this genus) moderately long.

Length  $6\frac{1}{2}$  lines.

*Cylindrepomus lætus.*

C. ater; capite, prothoraceque supra, scutello, fascisque elytrorum cinereis; antennis, pedibusque posticis longissimis. Malacca.

Black, finely punctured with short appressed hairs; upper part of the head and prothorax, scutellum, three bands across the elytra, the upper passing along the suture and spreading out so as to connect itself with the second and oblong apical spot, ashy grey; under surface leaden, with the sides white; palpi testaceous; legs slender, posterior pair and antennæ very long.

Length  $4\frac{1}{2}$  lines.

*Cylindrepomus comis.* (Pl. XXV. fig. 7.)

C. ruber; fronte, prothorace lateribus, elytris maculis quatuor extus (margine connexis), antennis pedibusque atris; subtus, tarsisque posticis albis. Borneo.

Pubescent, nearly impunctate, clear red, beneath but principally at the sides white; front of the head, stripe on the side of the prothorax, four large spots on the elytra externally, but connected at the margin, legs and antennæ black; posterior tibiæ at the base and tarsi white.

Length  $4\frac{1}{2}$  lines.



## ARRHENOTUS.

Head small; eyes deeply divided; antennæ distinct, slender, longer than the body, first joint shorter than the third, the fourth longest, the rest gradually diminishing; prothorax transverse, wider anteriorly (♂) than the elytra, flat, almost concave above; elytra depressed, elongate, slightly tapering towards the apex; legs slender, of moderate length; mesosternum produced, prosternum notched for its reception.

With very much the habit of *Coptomma*, this genus differs in the eyes, prosternum and other characters; from *Tmesisternus* and allied genera, it may be distinguished by its more feebly developed legs and antennæ, &c. It is geographically interesting as being, so far as we know at present, the most western representative, unless we include *Leptocera*, of a sub-family confined to New Zealand, New Guinea and the more eastern islands of the Indian ocean.

*Arrhenotus Wallacei.* (Pl. XXV. fig. 1.)

*A. niger*, nitidus, punctatus; capite prothoraceque vittis latis quatuor elytrisq[ue] guttis numerosis aureis, apice elytrorum bimucronatis. Macassar.

Black, shining, smooth, four broad stripes on the head and prothorax, and numerous spots on the elytra, formed by short golden yellow hairs; antennæ and legs pale brown; under surface with a whitish pubescence; elytra bimucronate; eye rounded above anteriorly.

Length  $7\frac{1}{2}$  lines.

*Phacellocera Batesii.*

*P. nigra*, parce flavescente-pubescent, subtus plumbea; antennis longis, articulo tertio albo-annulato, apice nodoso; elytris integris. Para.

Black, with a sparse pale yellowish pubescence, beneath plumbeous; elytra rather short, entire, punctate at the base, the pubescence here and there absent, giving them a mottled appearance; antennæ rather long, the third joint nodose at the apex, with a white ring below it.

Length, 6 lines.

I dedicate this species to Mr. Bates, to whose extensive researches and accurate observations in the valley of the Amazons, extend-



ing over a period of many years, we owe so much. It differs both from *P. plumicornis* and *P. Buquetii* in its shorter and entire elytra having none of the irregularities of surface which distinguish these, nor has it any tuft on the antennæ.

*Mesosa perplexa.*

*M. niger*, pube ochraceâ varia; elytris plagâ transversâ mediâ exteriori, albo-marginatâ. China Borealis.

Black, with an ochraceous pubescence dispersed in irregular and indistinct patches on the head and prothorax in a longitudinal direction, on the elytra more dispersed, but having about the middle a transverse larger spot towards the side, around which there is more or less of a white border; antennæ with the first joint variegated with ochre, the rest ochraceous at the base; legs varied with black and ochraceous.

Length 7 lines.

*Mesosa griseata.*

*M. fusca*, pube griseâ varia; elytris punctatis, basi granulatis, fasciâ obliquâ irregulari versus apicem, apiceque griseis; antennis annulatis. Borneo.

Dark brown, pubescent, varied with grey; space round the eye and line in front, various indistinct patches on the prothorax and elytra, and particularly an oblique band near the apex, the apex itself, and the bases of all the joints of the antennæ, a pale cinereous grey; legs and under surface with a pale pubescence, the lower parts of the tibiæ, and the last two tarsal joints, black.

Length 7 lines.

DRIOPEA.

Head short, vertical, narrower than the thorax; antennæ longer than the body, first joint moderate, shorter than the third, which, with the rest, are about equal; palpi short; prothorax narrower than the elytra; equal in length and breadth, broader behind, with a small tooth at the sides; elytra depressed, narrowing towards the apex; legs slender, moderate, the posterior longer.

The affinities of this curious little insect appear to be with *Leiopus*. In some respects it approaches *Mimorpha*.



*Driopea clytina.* (Pl. XXV. fig. 2.)

*D. atra* setosa; prothorace, scutello elytrisque maculâ lunari humerali, fasciâ pone medium et apiceque cinereis, subtus argenteo-pubescente. Malacca.

Black, with a very short pubescence; prothorax and scutellum ashy grey; elytra bimucronate, finely punctured, furnished with a few erect setose hairs, and having a large semilunar patch on each shoulder, a narrower band behind, and an oblong sutural spot at the apex, ashy grey; under surface covered with short silvery white hairs.

Length  $3\frac{1}{2}$  lines.

GYARITUS.

Head narrower than the thorax, antennæ distant ciliated, the joints thick, the first very stout, the third and fourth longest, the rest subequal; thorax short, spined at the sides and back; elytra narrow, convex, rounded at the apex, and spined at the base; legs moderate, simple.

Allied to *Pogonochærus*, from which it principally differs in its thickened antennæ, and in having the fourth joint straight, not curved.

*Gyaritus hamatus.* (Pl. XXV. fig. 6.)

*G. purpureo-ater* variegatus hispidus; prothorace dorso bispinoso, lateribus utrinque unidentatis; elytris striatis basi spinosis, fasciis obliquis duabus ante medium canis, fasciâ transversâ prope apicem albâ. Borneo.

Purplish black, with long erect setulose hairs; prothorax roughly punctate, with two transverse approximate recurved spines in the centre, and a small sharp tooth on each side; elytra with a sharp hooked spine at the base, the basal half obscurely varied with grey and purplish black, below this a broad band of the latter colour, followed by a narrower white one, the apex again purplish black; legs and antennæ reddish brown.

Length 2 lines.

PHLYARUS.

Head short, rather broad in front, not narrower than the thorax; eyes large, deeply emarginate; antennæ distant, stout,



ciliated, about as long as the body, the first joint large, the third and fourth equal, the rest gradually diminishing; prothorax uneven, with a spine at the side; elytra somewhat depressed, wider than the thorax; legs moderate, the middle and posterior tibiæ strongly toothed.

The strongly toothed middle and posterior tibiæ distinguish this genus from *Exocentrus*, which appears to be its nearest ally.

*Phlyarus basalis.* (Pl. XXV. fig. 5.)

*P. fuscus* parce pilosus; elytris striatis, basi rubris; antennis pedibusque piceis. Borneo.

Dark brown, sparingly hairy above, head and prothorax paler; elytra coarsely striated, particularly at the base, which is of a brick-red colour, passing into the brown of the remainder; antennæ and legs pitchy.

Length  $2\frac{1}{2}$  lines.

*Monohammus gravidus.*

*M. fusco-piceus*, griseo-pubescent; prothorace parvo, transverso, lateribus fortiter spinosis; elytris amplis albo-irroratis, singulis plagâ magnâ mediâ albidâ. Borneo.

Pitchy brown, with a greyish white pubescence; prothorax small, transverse, with a very strong spine on each side, and a few black granulations posteriorly; elytra large, convex, apiculate, with two slightly raised lines, and sparingly covered with short hairs, the shining surface of the elytron beneath giving them a somewhat silvery lustre, here and there the hairs more densely placed, having the appearance of spots, a very large one below the middle of the elytron being very marked; under surface with a greyish metallic pubescence; antennæ scarcely longer than the body; eyes brown; tips of the mandibles and palpi pitchy; epistoma and labrum with rusty red hairs.

Length 21 lines.

Rather different in habit from other *Monohammi*, but evidently allied to *Hammacherus marmoratus*, Westw.

*Monohammus vicinus.*

*M. olivaceo-aureus*, sericeo-undulatus; prothorace tenuiter spinoso, medio longitudinaliter impresso. China Borealis.

This is closely allied to *M. permutans*, but is smaller and narrower, with the lateral spine less produced, and arising from a



broader base, the antennæ less distinctly annulate, and the colour darker; a longitudinal impressed mark on the prothorax, not a transverse one as in *M. permutans*. It may be remarked that a little moisture permanently changes the colour of the insect into a dull brown, which is its not unfrequent state in collections.

Length  $7\frac{1}{2}$  lines.

*Monohammus curialis.*

*M. capite prothoraceque sericeo-brunneis; elytris punctatis canescentibus, maculâ basali fuscâ pone medium, fasciâ obliquâ, extus latiore, brunneâ; antennis (♂) annulatis articulis 1—5 incrassatis. China Borealis.*

Head and prothorax rich silky brown; elytra rather sparingly punctured, without granulations at the shoulders, a dark brown spot at the base, and an oblique band behind the middle, broader at the sides on each, the apex with a slightly reddish tinge; eyes black; antennæ rich brown, the first five joints in the male thickened, the fourth to the tenth pale at the base; legs grey, thighs, lower part of the four posterior tibiæ, tarsi and claws brown.

Length 9 lines.

*Monohammus sobrius.*

*M. obscure brunneus; prothorace subpunctato fortiter spinoso; scutello concolore; antennis annulatis. China Borealis.*

Dull brown, sparingly clothed with short hairs; prothorax feebly punctured, narrow, with a strong spine on each side; elytra rather thickly punctured, not granulated; antennæ with the joints from the fourth to the ninth paler at the base.

Length 6 lines.

*Monohammus proletarius.*

*M. fuscus, dense cinereo-pubescent; prothorace lineâ sub-elevatâ mediâ longitudinali; elytris sub-angustis; antennis longis (♂) articulo octo incrassato. Macassar.*

Brown, with a fine thickly set ashy-grey pubescence; prothorax rather narrow, with a strong spine at the side and a slightly elevated smooth longitudinal median line; elytra narrow, finely



punctured, without granulations; antennæ with the eighth joint thickened.

Length 6 lines.

This and the last are allied to *M. fistulator*, Germ.

#### ACALOLEPTA.

Head rather broad, the antennæ long, distant at the base; prothorax rounded, equal, toothed at the sides; elytra rather small; legs moderately strong.

In deference to the high authority of M. Chevrolat I propose this genus for a little insect, which, except that the antennæ are more distant at the base, and with rather a different habit, has little generically to distinguish it from *Monohammus*.

#### *Acalolepta pusio*. (Pl. XXV. fig. 4.)

*A. obsкуро-brunneus*; prothorace spinâ laterali minutâ; elytris apice rotundatis; pedibus flavo-brunneis; antennis 3—10 basi pallidis. Borneo.

Dull brown; prothorax rounded, the lateral spine small; elytra pubescent, regularly punctured; legs light brown; antennæ with the joints from the third to the tenth pale at base.

Length 3 lines.

#### *Ærenea trigona*.

*Æ. fusca*; maculâ magnâ triangulari (apice versus scutellum) prothorace verticeque communi, brunneâ; elytris basi tuberculatis, dein punctatis, parce hirsutis, maculâ laterali scutelloque brunneis. Brasilia.

Dark brown, a large triangular patch commencing between the eyes and extending over the prothorax, with the apex at the scutellum pale cinnamon brown; elytra with tubercles at the base, the rest punctured with short stiff hairs scattered over the surface, a patch at the side, and the scutellum pale brown; antennæ and legs brown, annulated; under surface dark brown, the three middle abdominal segments cinnamon.

Length 5 lines.

#### ROPICA.

Head moderate; eyes deeply divided; antennæ distant, naked, as long as the body, the third joint longest, the rest gradually



diminishing; scutellum transverse; thorax unarmed, the sides nearly parallel, and about equal in length and breadth; elytra convex, rather broader behind, and sloped towards the apex; legs very short, mesotibiæ toothed.

This genus must, I think, be referred to the vicinity of *Praonetha*.

*Ropica piperata*.

*R. grisea*, punctata; elytris nigro-irroratis, maculis parvis albis conspersis; antennis pedibusque fuscis. Borneo.

Brownish grey, thickly punctured above; elytra with numerous black points, and a few small patches, among which, principally at the suture and apex, are a few small white spots; legs and antennæ dark brown.

Length 3 lines.

*Ropica posticalis*. (Pl. XXVI. fig. 4.)

*R. fusca*; elytris striato-punctatis, maculâ magnâ apicali obscurè griseâ. Hong Kong.

Dark brown; head and prothorax thickly punctured, the latter with a longitudinal greyish spot on each side at the base; elytra punctate-striate, an obscure irregular greyish patch at the shoulder, and another larger, but more clearly defined, covering the sloping portion of the elytra.

SYNELASMA.

Head narrower than the thorax; the antennæ distant, short, the first four joints twice the length of the rest together, these last furnished beneath with a row of thickly set hairs; eyes small, deeply emarginate; thorax transverse, wider behind, uneven, with a tubercle on each side anteriorly; elytra convex, broader than the thorax, the sides parallel, apex rounded; legs stout.

This curious genus ought, I think, to be referred to the neighbourhood of *Praonetha*; it is very likely that the comb-like appendages of the antennæ are merely sexual.

*Synelasma bufo*. (Pl. XXVI. fig. 1.)

*S. fusca*, rugosa, griseo-lanuginosa; elytris tuberculatis, basi ferrugineis, lateribus ante medium plagâ magnâ ochraceâ ornatâ; antennis annulatis. Borneo.

Brown, with a grey woolly pubescence, which is very sparse, except on the elytra; head rounded above, broad and flat in front;



prothorax rough, with black irregular crowded tubercles; scutellum transverse; elytra uneven, with numerous granulated tubercles, some bearing a short stiff hair, and having three or four elevated lines on the disc and towards the shoulder, where it almost forms a crest, at the side and before the middle a large irregular ochraceous patch, the base and scutellum ferruginous brown; antennæ with the tips of the third and fourth and last seven joints black, the base of the fourth white on one side; mesosternum slightly produced.

Length  $6\frac{1}{2}$  lines.

#### MORON.

Head narrower than the thorax; antennæ short, distant, the first four joints longer than the rest together; eyes small, widely emarginate; thorax narrow in front, entire; elytra wider than the thorax, tuberos at the base, gradually diminishing at the sides; legs stout.

Near *Praonetha*, which differs in the prothorax narrowed behind, elytra, &c.

#### *Moron distigma.* (Pl. XXVI. fig. 2.)

*M. piceus*, crasse punctatus, pube griseo-ochraceâ parce vestitus; elytris basi tuberoque granulatis, maculâ rotundâ ochraceâ pone medium; antennis articulo quarto basi pallidis. Borneo.

Pitchy, with very coarse punctures, the intervals covered with short greyish yellow hairs; elytra granulated at the base and on the tubers, behind the middle a round ochraceous spot; antennæ brown, the tips of the third and fourth joints, and all of the remainder black, the fourth pale ochre at the base.

Length 6 lines.

#### *Cacia picticornis.*

*C. fusca* flavo-guttata; antennis pedibusque atris albo-maculatis, articulo quarto subtus barbato. Borneo.

Pubescent, brown; head, below the eye, with a large triangular whitish patch; prothorax and elytra with several well-defined buff-coloured spots; antennæ black, base of the third and fourth (which is strongly bearded beneath), and the whole of the fifth joint, pure white; legs black, annulated; the two first joints of



all the tarsi white; mandibles and legs black; under surface greyish.

Length 5 lines.

*Symphyletes maculicornis.*

*S. atra*, pube densissimâ griseâ fulvo-variâ; unguibus atris nitentibus; antennis albo-maculatis. Flumen Cygnorum.

Densely covered with short appressed hair, except the claws and mandibles, which are glossy black; general colour light greyish brown, with three or four fulvous yellow bands on the prothorax, and numerous irregular spots in transverse rows on the elytra, which have also two or three large whitish patches along the suture; under surface light grey, the margins of the abdominal segments yellow; eyes brown.

Length 11 lines.

*Symphyletes lateralis.*

*S. atra*, dense brunneo-pubescens, supra cano-varia; elytris lateribus argenteo-sericeis; antennis nigris albo-pilosis. Flumen Cygnorum.

Covered with a short dense pubescence; upper surface, palpi, and sides of the breast and abdomen beneath, light brown; face, patch behind the eye and one on the side of the prothorax, scutellum, a large blotch below it, and three or four spots near the apex, pale greyish; sides of the elytra rich silvery white; under part of the femora and sides of the tibiæ more or less whitish; middle of the mesosternum and abdomen silky white; antennæ whitish, with long hairs beneath.

Length 8 lines.

In both these species of *Symphyletes* the elytra have several small black shining tubercles, particularly on their basal half.

ECTHÆA.

Body oblong, sub-cylindrical; head broad but very short, concave in front (♂ horned); eyes small, deeply emarginate; antennæ distant, arising from a short peduncle, and scarcely longer than the body, the first joint moderate, the third longest, the remainder gradually diminishing; thorax rough; elytra widest at the base, decreasing slightly towards the apex, which is somewhat dilated; legs stout, short, the anterior longest; the tarsi short, with the last joint large.



This genus is founded for the reception of the *Cerambyx quadricornis* of Olivier, the *Sthenias signatifrons*, Dej. Its characters approximate it to *Oncideres* and *Eudesmus*.

*Sthenias dorsalis*.

*S. fuscus*, hirtus; elytris basi cristatis, fasciâ mediâ latâ, extus dilatatâ, albâ. India.

Dark brown, covered with short appressed hair; head between the eyes produced, with a short spine at the base of each antenna; prothorax coarsely punctured; elytra with a short longitudinal crest at the base of each and a broad white band below, much dilated towards the external margins, the apex obliquely truncate; legs short, brown; the posterior femora and tarsi varied with white; under surface brown.

Length 7 lines.

*Eumathes undatus*.

*E. fusco-piceus*, griseo-pubescent; elytris sub-depressis ad suturam concavis, punctatis, hirtis, fusco-undatis. Espiritu Santo.

Pitchy brown, with a grey pubescence; prothorax slightly pointed at the sides; elytra rather depressed and hollowed out towards the suture, irregularly punctured, the punctures with a short stiff hair arising from the bottom of each, and having the pubescence varied with dark irregular somewhat waved transverse lines or patches; antennæ longer than the body, sparingly ciliated beneath, and with the apices brown; beneath and legs hairy; prosternum produced.

Length  $5\frac{1}{2}$  lines.

*Alphitopola maculosa*.

*A. piceo-fusca*, albo-pubescent; capite prothoraceque lineolatis; elytris maculis magnis albis subconfluentibus; palpis rufo-brunneis. Natal.

Pitchy brown, pubescent; eyes, labrum and antennæ brown; palpi pale reddish brown; head and prothorax with five narrow stripes; elytra with rather obscure large tessellated and sometimes nearly confluent white spots; under surface pure white; legs pale brown, with a slight whitish pubescence.

Length 5 lines.



*Dorcadion? spinipenne.*

*D. nigrum*, rugosum, parce pubescens; prothorace creberrime punctato, lateribus spinâ tenui armatis; elytris basi tuberculatis, humeris bispinosis; antennis corpore longioribus. Africa Australis.

Brownish black, sparingly pubescent, the prothorax nearly as broad as the elytra, with a slender spine at the side, and very thickly punctured; elytra widest about the middle, then tapering to the apex, tuberculate at the base, with two strong spines, one at the angle, the other near the suture; legs rather slender; eyes small; antennæ longer than the body in both sexes; pro- and mesosternum simple; scutellum nearly obsolete.

Length 6 lines.

If a *Dorcadion* at all, this can only be regarded as a very aberrant species, but it will probably be eventually elevated into a genus; the *Dorcadion Indicum* of Guérin is not unlikely to be congeneric.

## BUMETOPIA.

Body oblong, oval, depressed; head very broad, low in front; eyes lateral, small, deeply emarginate; mandibles very large; palpi short; antennæ moderate, widely apart, the third and fourth joints longer than the first, the rest shorter; prothorax transverse, entire; elytra nearly ovate; legs moderate.

In many of its characters this genus accords with *Talæpora* and *Apomecyna*, but the great breadth of the head and largely developed jaws will at once distinguish it.

*Bumetopia oscitans.* (Pl. XXVI. fig. 7.)

*B. fusca*, pube grisescente tecta; elytris punctatis, versus apicem obsolete trimaculatis. Hong Kong.

Brown, with a greyish or greyish buff pubescence, and with the whole upper surface irregularly punctured; prothorax very slightly toothed at the side; elytra at its lower third with three buff-coloured obscure spots.

Length 6 lines.

*Hathlia zebrina.*

*H. alba*; capite prothoraceque vittis tribus nigris; elytris maculis albis punctisque nigris variegatis. India.



Densely covered with short thick appressed hairs ; head and prothorax white, a black line behind each eye and another between, continued on the prothorax ; elytra varied with black and white, on the disc a few curved white patches and small rounded spots, principally at the suture, the apex white with a few black points and impressed punctures ; antennæ and legs black, under surface whitish.

Length  $6\frac{1}{2}$  lines.

*Apomecyna binubila.*

A. fusca, punctata, pubescens ; capite, prothorace, elytris que ferrugineis, brunneo-variis, his plagis magnis griseis, longitudinaliter dispositis ; antennis annulatis. Natal.

Dark brown, coarsely punctured with a ferruginous pubescence, varied with brownish and having two large clouded grey patches on each elytron, one near the base, the other towards the apex ; antennæ and legs dull brown, the former with the joints grey at base and apex ; elytra truncate at the apex.

Length 5 lines.

*Apomecyna atomaria.*

A. fusca, pube griseo-varia, obscure albo-irrorata, et crasse punctata ; antennis pedibusque fuscis. Natal.

Dark brown, sparingly pubescent, strongly and coarsely punctured ; the whole upper surface greyish brown, very obscurely spotted with white ; elytra divaricate and obtusely pointed at the apex.

Length  $4\frac{1}{2}$  lines.

DASYO.

Head moderate, the width of the thorax ; antennæ distant, not longer than the body, the joints thickened, having the first and third about equal and longest, the rest gradually decreasing ; palpi short ; thorax not spined, equal but wider in the middle ; elytra depressed, nearly parallel, the apex rounded ; legs short.

This genus should be placed near *Ptericoptus*, Dej. ; it has the habit of some *Hebestolæ*.



*Dasyo lineata.* (Pl. XXVI. fig. 8.)

D. fusco-picea, hirsuto-pilosa; prothorace scutelloque lineâ pallidâ communi longitudinali; antennis valde incrassatis longe pilosis; mandibulis piceis. Natal.

Brown, inclining to pitchy, covered with short hairs and having numerous longer ones interspersed, particularly on the elytra; prothorax with a fine brownish white line extending to the scutellum; under surface with short appressed hairs; mandibles pitchy.

Length  $4\frac{1}{2}$  lines.

*Dasyo improba.*

D. fusco-picea, hirsuta, pilosa; prothorace scutelloque concoloribus, antennis mediocribus parce pilosis, mandibulis fuscis. Natal.

Brown, inclining to pitchy, pubescent, with numerous semi-erect hairs; antennæ rather shorter than the body, the joints moderately thick and hairy; mandibles brown; under surface slightly hairy.

Length  $3\frac{1}{2}$  lines.

IOLÉ.

Body short, oblong; head wider than the thorax; antennæ much longer than the body, simple, with the joints sub-equal (except the second); eyes deeply emarginate; prothorax equal in length and breadth; elytra parallel, convex, wider than the thorax; legs moderate; tarsi short.

Nearly allied to *Serixia*, from which it is principally distinguished by its smooth antennæ and more convex body.

*Iole prolata.*

I. validiuscula, rubro-fulva; antennis mediocribus; prothorace marginato. Borneo.

Tawny yellow, with a reddish tint; eyes and tips of the mandibles black; antennæ from the extremity of the fourth joint brown; prothorax margined, the disc sinuated posteriorly on either side; elytra punctate-striate, pubescent, with semi-erect hairs interspersed.

Length 4 lines.



*Iole longicornis.*

I. fulvo-testacea; antennis longioribus, articulis duobus primis nigris. Malacca.

Rather dull testaceous yellow; eyes, first and second joints of the antennæ, and tips of the third to the sixth, black, the remainder brown; prothorax obscurely margined; elytra punctate-striate, slightly hairy.

Length  $2\frac{1}{2}$  lines.

*Iole literata.* (Pl. XXV. fig. 9.)

I. fulvo-testacea; prothorace vittâ laterali fuscâ; elytris lineis duabus unâ transversâ basali, alterâ ad marginem nigris; antennis longis. Macassar.

Dull testaceous yellow; eyes and tips of the mandibles black; antennæ long, becoming darker towards the end; prothorax with a broad but rather obscure stripe at the side; elytra punctate-striate, somewhat silky, particularly at the apex; a narrow black line across the base, and another united to it at a right angle, extending half way down the side and near the margin.

Length 3 lines.

*Iole nigripes.*

I. testaceo-brunnea; oculis, antennarum articulis primis tribus, corpore infra, pedibusque nigris. Malacca.

Dull testaceous brown, darker on the head; prothorax slightly margined and delicately punctured; elytra punctate-striate with a very thin pubescence; eyes, three first joints of the antennæ, legs and body beneath, black.

Length  $3\frac{1}{2}$  lines.

ANOMÆSIA.

Body oblong, sub-depressed; head rather broad in front; antennæ longer than the body, the third joint very short, the rest, second excepted, more or less equal; eyes lateral, deeply emarginate; prothorax narrow, unarmed; elytra broader than the thorax, parallel, slightly depressed, the apex rounded; legs moderate.

A genus of the Saperdoid group, but with the remarkable character of having the third antennal joint very short.



*Anomæsia fulvida.* (Pl. XXV. fig. 8.)

A. rubro-testacea, pube subsericeâ fulvâ ; oculis, antennis, pedibusque nigris. Natal.

Pale reddish or orange, with a somewhat silky pubescence, antennæ, eyes, and legs black, under surface silvery.

Length 3 lines.

*Amphionycha albina.*

A. brunnea dense griseo-albo-pubescentis ; antennis, prothorace maculis quatuor, pedibusque nigris, his albo-pubescentibus. Guatemala.

Light brown, with a greyish white pubescence ; antennæ, four spots on the prothorax—two anterior and two posterior—and legs black ; body beneath with a white pubescence, the breast leaden.

Length  $4\frac{1}{2}$  lines.

*Amphionycha vittata.*

A. testaceo-brunnea, pube pallide-viridi-flavâ tecta ; elytris basi bivittatis, antennis piceis. Espiritu Santo.

Testaceous-brown, covered with a pale greenish yellow pubescence, on the prothorax more nearly the colour of sulphur ; elytra each with two broad stripes, caused by the absence (or nearly so) of pubescence, one sutural the other lateral, and gradually disappearing before the apex ; antennæ pitchy ; eyes black.

Length  $6\frac{1}{2}$  lines.

*Phœa acromela.*

P. nigra, nitida ; capite prothoraceque coccineis, hoc maculâ nigrâ ornatâ. Mexico.

Black, shining, with a few long hairs scattered over the body ; head and thorax bright vermilion, the latter with a central black spot ; elytra coarsely punctate.

Length  $4\frac{1}{2}$  lines.

*Phœa miniata.*

P. miniata, nitida ; oculis, antennis, articulo primo basi excepto, tibiis tarsisque nigris. Venezuela.



Bright vermilion, with a few longish hairs ; eyes, antennæ, except the basal part of the first joint, tibiæ and tarsi, black ; prothorax and elytra finely punctured ; front below the eyes produced.

Length 4 lines.

*Amphionycha cephalotes.*

A. fulvo-testacea ; elytris subsericeo-grisescens, marginibus, antennis, articulis quatuor apicalibus exceptis, tibiisque posticis nigris. Para.

Head and thorax testaceous yellow ; elytra somewhat silky, greyish, the external margins black ; under surface and legs testaceous, except the posterior tibiæ, which, with the eyes and antennæ, are black, the four last joints of the latter, however, being pale yellow.

Length  $3\frac{1}{2}$  lines.

Head rather wider than the thorax, which is somewhat narrower than the elytra, the latter slightly contracted in the middle and rounded at the apex.

*Saperda erythaca.*

S. nigra ; capite luteâ, prothoraceque subtilissime punctatis ; elytris fuliginosis, disco pallidiori. Natal.

Head luteous red, and with the thorax very finely punctured, the latter, eyes, antennæ, body beneath, and legs dull black ; elytra coarsely punctured, smoky black, with the disc paler.

Length 4 lines.

*Saperda Bohemani.*

S. atra, cinereo-pubescent ; capite, prothoraceque mediocriter punctatis, hoc utrinque trituberculato ; elytris punctatis, punctis magnis nigro-nitidis ; antennis annulatis. Natal.

Black, with a cinereous pubescence ; prothorax with six shining black tubercles, two near the anterior margin and two on each side ; elytra covered with large black shining punctures, caused by the absence of pubescence ; antennæ black, the basal half of each joint, from the third to the last inclusive, and under surface and legs, cinereous.

Length 5 lines.

This is the *S. irrorata*, Boh. of collections, but as there is already a Fabrician *Saperda* of that name, and, moreover, it has not been published, I have altered it as above, and dedicated it to the well



known Swedish naturalist. This and the *S. erythaca*, described above, differ from the true *Saperdæ* in the antennæ being claviform, with the third joint not longer than the first or following ones.

*Glenea collaris.*

*G. nigra* ; fronte prothoraceque fasciâ posticâ pallide-ochraceis ; elytris fusco-olivaceis sub-lævigatis, lineis duabus, una suturali altera exteriori griseis ; palpis, femoribus tibiisque basi testaceis. Borneo.

Front of the head and cheeks, and broad band on the prothorax behind, pale ochre yellow ; elytra olive brown, with a narrow stripe along the suture, and another from the shoulder to the apex, dull greyish ; palpi, femora, and upper part of the tibiæ, testaceous.

Length 6 lines.

*Glenea extensa.*

*G. olivacea*, nigro-pubescent ; capite, prothorace elytrisque lineis ochraceis, corpore subtus vittis albis ornatis ; antennis articulo tertio apice albo. Borneo.

Olive, with a black velvety pubescence ; head, thorax and elytra with longitudinal distinct buff yellow lines, one behind the eye, another in front ascending to the vertex, where it nearly unites with its fellow ; on the prothorax five, the lowermost rather indistinct ; on the elytra an interrupted line on the suture, and another from the shoulder to the apex, between these, one short and oblique at the base, and in the middle a transverse lunar mark ; body beneath with two white stripes ; antennæ black, apex of the third joint snowy white.

Length 8 lines.

Allied to *G. versuta*, Newm.

*Glenea relictæ.*

*G. atra*, sub-nitida ; capite, scutello, corpore subtus, prothoraceque lineis tribus albis ; elytris olivaceis, albo-guttatis ; pedibus fuscis. China Borealis.

Black, slightly shining ; face, scutellum and body beneath with a white pubescence, vertex and prothorax black, the latter with three white stripes ; elytra olive brown, coarsely punctured with five white spots on each ; antennæ and legs dark brown, the four posterior femora testaceous at the base, tarsi with a white pubescence.

Length 4 lines.

Affinity with *G. novem-maculata*, Dj.



*Glenea blandina.*

*G. atra*, subtus parce albo-pubescent; prothorace lineis, elytrisque maculis cæruleis ornatis; subtus pedibusque testaceis. Borneo.

Black; cheeks and stripe in front of each eye, three lines on the prothorax, and occasionally its posterior margin, scutellum and five or six small round spots on each elytron, cobalt blue; legs and under surface testaceous, the latter and tarsi with a white pubescence; antennæ with the first three joints blue internally.

Length 6 lines.

Near *G. novem-maculata*, Dj.

*Glenea despecta.*

*G. nigra*; fronte, prothorace, lineis tribus cum scutello et corpore subtus albis; elytris fuscis, sub-lævigatis, obscure lineatis; antennis nigris, articulis tribus ultimis albis; pedibus testaceis. Borneo.

Black; front, cheeks, three stripes on the prothorax, scutellum, and body beneath, white; elytra dark brown, finely punctured, nearly smooth, with an obscure line on the suture, another externally between them, a shorter one at the base, a spot about the middle, and another at the apex, all a pale greyish white; legs testaceous; antennæ black, the three last joints white.

Length 4 lines.

*Glenea detrita.*

*G. fusca*; prothorace lineis quinque elytrisque suturâ, lineâ interruptâ extus et maculis obscure-griseis; pedibus brunneis; corpore subtus pallide citrinis. Macassar.

Brown; head with the face and body beneath pale lemon yellow; prothorax with five and elytra with the suture, an external interrupted line and six or seven irregular spots, a very dull greyish white; legs pale brown, the tarsi black, but covered, as well as the lower part of the tibiæ, with white hairs.

Length 5 lines.

*Glenea rufina.*

*G. rufo-castanea*; antennis tarsisque nigris, elytris parce punctatis dense griseo-pubescentibus. Burmah.



Reddish chesnut; eyes, antennæ and tarsi black; elytra sparingly punctured, with three slightly elevated lines at the base and covered with a dense grey pubescence.

Length 7 lines.

*Glenea pulchella.*

*G. atra*, pubescens; fronte, prothorace lateribus, elytrisque basi et maculis duabus communibus sulphureis; antennis—articulis duabus primis exceptis—pedibusque testaceis. Malacca.

Black, densely pubescent; front, cheeks, sides of the thorax, scutellum, base and two large confluent spots on the elytra, sulphur yellow; sides of the mesothorax and three middle abdominal segments paler; antennæ (the first two joints black) and legs testaceous.

Length 4 lines.

*Glenea vexator.*

*G. fulvo-testacea*; antennis, apice elytrorum, pedibus quatuor posticis, metathorace, abdomineque infra nigris. Ceylon.

Fulvous yellow, inclining to testaceous; antennæ, eyes, apex of the elytra, four posterior legs, and body below (except the prosternum), black. Elytra with a few scattered hairs, and punctured in about six rows; head short, broad and rounded in front, labrum nearly naked.

Length 5 lines.

*Phæbe cretifera.*

*P. fulvo-castanea*, guttis magnis niveis ornatis; antennis articulo primo nigro. Brasilia.

Yellowish chesnut, pubescent; head, several large spots above and sides of breast and abdomen, snowy white; basal joint of antenna and eyes black, the former with white hairs on one side; gibbosities in front brown (♂ only); prothorax with four spots and two on each side below, each elytron with seven spots, including two also at the side and towards the base.

Length 7 lines,

A well known Rio insect, hitherto, I believe, undescribed.



*Oberea annulicornis.*

*O. elongata*, brunnea; elytris apicem versus lateribusque nigris; antennis nigris, articulo septimo carneo. Macassar.

Elongate, light brown, inclining to testaceous; head and prothorax finely punctured; elytra coarsely punctured, shading into black towards the apex, the sides wholly black; eyes and antennæ black, the latter with the seventh joint flesh-coloured; mesothorax and abdomen beneath silky, black.

Length 7 lines.

*Oberea rubetra.*

*O. elongata*, rubro-brunnea; elytris (sutura pallidiori), antennis pedibusque nigris. Sumatra, Borneo, &c.

Elongate, light brown, with a reddish tint; head and prothorax very delicately and sparingly punctured; elytra coarsely punctured, black, lighter or smoke-coloured along the suture; eyes, antennæ, body beneath, and legs black.

Length  $8\frac{1}{2}$  lines.

*Oberea inclusa.*

*O. nigro-cinerea*; prothorace, elytris (circa scutellum) pedibusque testaceo-brunneis, oculis antennisque nigris. China Borealis.

Blackish grey; prothorax, scutellum, base of the elytra near it and legs testaceous brown; antennæ and eyes black; elytra coarsely punctured, with a faintly raised line in the middle.

Length 6 lines.

*Oberea sylvia.*

*O. testaceo-brunnea*; elytris brunneis, lateribus nigris; capite, oculis, antennisque fuscis; segmento ultimo abdomine nigro. China Borealis.

Testaceous brown; head, antennæ and eyes dark brown; elytra light dull brown, paler at the base, the external margins and last segment of the abdomen black.

Length  $6\frac{1}{2}$  lines.

All the above have the thorax about equal in length and breadth; the three species which follow have the thorax longer than wide.



*Oberea ophidiana.*

*O. elongata*, linearis, testaceo-fusca; capite antennisque nigris; prothorace cervino; pedibus nitentibus fuscis, femoribus anticis rufis. Borneo.

Long, linear and very narrow; head, antennæ and eyes black; prothorax brownish yellow; elytra and abdomen dull testaceous; legs dark brown, shining, the anterior femora brownish red; last abdominal segment black.

Length 8 lines.

*Oberea viperina.*

*O. elongata*, linearis, fusca; capite, pedibus antennisque nigris; prothorace cervino. Burmah.

Linear, elongate, narrow, blackish brown; head, legs, antennæ and last abdominal segment black; prothorax brownish yellow; elytra obscurely punctured.

Length  $6\frac{1}{2}$  lines.

*Oberea umbrosa.*

*O. linearis*, testaceo-brunnea; elytris extus nigro-limbatis; oculis anoque nigris; antennis fuscis, articulo septimo testaceo. Macassar.

Linear, testaceous brown; from the external margin of the elytron a black border, which gradually increasing in breadth, covers obliquely the apex; eyes and posterior half of the last abdominal segment black; antennæ dark brown, the seventh joint testaceous; elytra strongly punctured.

Length 6 lines.

Some of the above may be referrible to *Isosceles* Newman, but I cannot distinguish that genus from *Oberea*.

DIRPHYA.

Head vertical, narrower than the thorax, short and rounded in front; antennæ longer than the body, the joints cylindrical, the third longest, the rest sub-equal; palpi slender; prothorax equal in length and breadth, its disc uneven; elytra long and narrow, spatulate and rounded at the apex; legs robust.



Instituted for the reception of *Necydalis nigricornis* of Olivier ; with *Necydalis*, however, it has nothing to do, belonging to quite another group, and, in fact, is not far removed from *Oberea*.

*Carterica cinctipennis*.

*C. atra* ; capite lineâ frontali, prothorace vittâ laterali, elytris plagâ humerali fasciâque latâ pone medium, croceis. Para.

Deep black ; line between the eyes, stripe on the prothorax at the side extending to the shoulder, and broad band across the elytra, behind the middle, rich saffron yellow ; antennæ very slender, black, more than twice the length of the body ; elytra rounded internally towards the apex, externally produced into a spine, and with three elevated lines disappearing towards the apex.

Length 5 lines.

The *Saperda mucronata*, Ol. (1, f. 10), appears to be allied to this species.

*Onocephala picta*.

*O. fusca* ; elytris seriatim punctatis, lineis duabus, una humerali altera suturali, maculis quinque scutelloque, læte ochraceis ; antennis hirtis, articulo tertio elongato. Espiritu Santo.

Dark chocolate brown, a line of hairs on the cheek and patch on the mandibles, pale yellow ; epistome, labrum and palpi reddish brown ; antennæ hairy, particularly the third, fourth, and fifth joints, the third very long ; prothorax longer than broad, very minutely plicate ; elytra regularly punctate, stripe at the shoulder, another along the suture, three spots below and two at the sides composed of very short hairs, and scutellum bright ochre yellow ; body beneath pitchy brown.

Length 8 lines.

*Onocephala ? metallica*.

*O. viridi-ænea*, nitidissima ; elytris punctato-hirtis ; antennis chalybæis (prothorace lateribus denticulato ; scutello triangulari). Para.

Brassy, shining with a tinge of green, and more or less covered with setulose hairs ; prothorax about equal in length and breadth, with a very small but distinct tooth at the side ; elytra regularly punctate, a short stiff hair arising from each puncture ; antennæ dark blue-black, with a few short hairs ; legs and body below blueish-black ; mesosternum produced, bilobed in front ; scutellum triangular.

Length 6 lines.



In the poststernal process and triangular scutellum this species departs from the rest of the genus ; the colour is also peculiar.

#### DORCASTA.

Head narrow, the face inferior, eyes deeply emarginate, the upper portion very narrow, antennæ approximate, as long as the body, the joints gradually diminishing from the first (second excepted), thickened throughout and ciliated beneath ; thorax narrow, longer than wide ; elytra scarcely wider than the thorax, slightly dilated at the side, apiculate externally ; legs very short, meso-tarsus toothed.

Very nearly allied to *Spalacopsis*, Newman, but differs in the undivided although deeply emarginate eye. With *Systeme*,\* *Aprosopus*, *Tetraglenes* and *Eucomatocera* these insects form a small natural group, distinguished by their thickened antennæ, very generally divided eyes, inferior face, and narrow linear form. *Ectatosia* is, perhaps, an aberrant genus of the same group.

#### *Dorcasta oryx*.

*D. angusta*, sub-parallel, hirsuta, fusca, albo-lineata ; elytris thorace vix latioribus. Para.

Narrow, brown, pubescent ; head, thorax and elytra nearly parallel, with rows of short oblique hairs ; from behind the eye and extending along the sides of the prothorax and elytron two whitish lines, which on the latter are accompanied by two obscurer intermediate ones ; legs and antennæ dark brown.

Length  $3\frac{1}{2}$  lines.

#### *Dorcasta crassicornis*. (Pl. XXVI. fig. 5.)

*D. validiuscula*, hirsuta, albo-lineata ; elytris thorace latioribus. Brasilia ?

Closely resembling the former but stouter, the elytra wider than the thorax, the antennæ very much thicker and more strongly ciliated ; a longitudinal groove on the vertex, and a narrow line on the middle of the prothorax, which extends to the scutellum.

Length 4 lines.

In Mr. Saunders's collection, without a locality.

#### OCALEMIA.

Head prolonged in front, eyes very large, round, antennæ of

\* Substituted for *Eutheia*, Guér., which had been previously used for a genus of *Scydmanidæ*.



eleven joints, the fifth to the tenth produced at the apex on one side; prothorax smooth, very narrow in front, dilated behind; elytra narrow, gradually diminishing from the base; legs long, the posterior compressed.

Nearly allied to *Strangalia*, but the antennæ will at once distinguish it.

*Ocalemia vigilans.* (Pl. XXVI. fig. 3.)

*O. atra*, nitida, prothorace iridescente; elytris subtiliter punctatis, singulis maculis tribus flavis basi longitudinaliter dispositis. Malacca.

Black, shining; eyes very large, head beneath much produced; antennæ as long as the body, the joints from the fifth to the tenth dilated on one side at the apex; prothorax iridescent, changing to blue and purple, the base with three obscure yellowish spots; elytra finely punctate, biapiculate, with three yellowish spots at the base placed longitudinally; sides of the mesothorax with an olive pubescence; abdomen and legs blue-black; posterior tarsi very much compressed, the first joint longer than the rest together and cultriform.

Length 10 lines.

*Strangalia Fortunei.*

*S. atra*, sub-nitida; capite, prothorace, elytris basi, antennis et corpore subtus, luteis; pedibus discoloribus. China Borealis.

Smooth and shining; antennæ, eyes, elytra except at the base, middle tibia and tarsus, lower part of the posterior femora, tibia at the extremity, tarsus and last abdominal segment, black; the rest brownish yellow.

Length 7 lines.

A true *Strangalia*, which I am happy to dedicate to the well known Chinese traveller, to whom we are indebted for this and many other novelties.

CAPNOLYMMMA.

Head elongate, narrow; eyes nearly entire, antennæ approximate, inserted below the eyes, as long as the body; palpi long, the last joint longest, ovate and pointed; prothorax nearly entire, parallel behind, elongate in front; elytra short, pointed at the shoulder; legs long, robust, the femora mutic, pro-tibiæ serrated below.



The palpi alone will at once distinguish this genus from *Toxotus*, *Strangalia*, &c., its nearest allies.

*Capnolymma Stygia*. (Plate XXII. fig. 6.)

*C. nigra*, opaca; prothorace lineâ mediâ longitudinali et postice plagis duabus lateralibus cinereis; elytris confertim punctatis, fusco-fuliginosis, basi fasciâque mediâ pallidioribus. Borneo.

Black, opaque; head with a stripe from each antennæ, united on the vertex, a longitudinal line on the prothorax, and a patch on each side, ashy grey; elytra thickly punctured, smoky black, the base, suture, and zig-zag line across the middle, paler; eyes and lower part of the front testaceous brown; external maxillary lobes greatly developed, labrum rounded below.

Length 11 lines.

NOTE.—A genus of birds having been recently named *Iole*, the reader is requested to alter that word at pages 254-5, into *Iolea*.

DESCRIPTION OF THE FIGURES.

PLATE XXV.

Fig. 1. *Arrhenotus Wallacei*.

2. *Driopea clytina*.

3. *Merionæda scitella*.

4. *Acalolepta pusio*.

5. *Phlyarus basalis*.

6. *Gyaritus hamatus*.

7. *Cylindrepomus comis*.

8. *Anomæsia fulvida*.

9. *Iolea literata*.

PLATE XXVI.

Fig. 1. *Synelasma bufo*.

2. *Moron distigma*.

3. *Ocalemia vigilans*.

4. *Ropica posticalis*.

5. *Phlyarus basalis*.

6. *Capnolymma Stygia*.

7. *Bumetopia oscitans*.

8. *Dasyo lineata*.



XVIII. *On the aberrant Species hitherto placed in the Genus Elachista.* By H. T. STANTON, Esq.

[Read December 7th, 1857.]

IN my volume of the "Insecta Britannica" I placed in the genus *Elachista* three species, which at that time appeared somewhat out of place there, and further investigation has shown that these species, *Pfeifferella*, *Treitschkiella* and *Brunnichella*, must be removed. The habit and structure of the larvæ confirm the propriety of this step.

The species *Pfeifferella* and *Treitschkiella* are distinguished in the larva state by their total absence of legs, and by their peculiar form of mine; Herrich-Schäffer has constructed for these species the genus *Antispila*, which I propose to retain.

*Brunnichella* has an ordinary 16-legged larva, but it mines blotches in the leaves of a labiate plant, and constructs a cocoon, therein differing from the remaining *Elachistæ*, which mine the leaves of the *Gramineæ* and *Cyperaceæ*, and do not construct cocoons. Of *Brunnichella* I propose to form a new genus, and as the insect was once named *Stephensella*, in honour of the late J. F. Stephens, Esq., I propose for the new genus the name *Stephensia*.

ANTISPILA, Herrich-Schäffer, Frey.

This genus is readily distinguished from *Elachista* by the shorter drooping palpi, by the shorter antennæ, by the greater breadth of the posterior wings, and in the neurulation of the latter by the far broader costal cell. A due consideration of these differences will show that the true position of *Antispila* is in the family *Glyphipterygidae*, between *Perittia* and *Tinagma*.

Having arrived at this conclusion solely from a consideration of the structure of the perfect insect, we find a wonderful corroboration in the larva. The larvæ of *Pfeifferella* and *Treitschkiella*, both perfectly apodal, mine in blotches the leaves of the dogwood, and cut out flat oval cases.

The larvæ of *Tinagma resplendellum* (the only one of that genus yet known) is likewise apodal, and mines the leaves of alder, cutting out a flat oval case; the peculiarity of this latter larva



being that it does not mine a large blotch, but mines at first mysteriously down the mid-rib and up again, and only making a blotch of sufficient size to furnish the materials for its case.

The genus *Antispila*, besides the two well-known *Pfeifferella* and *Treitschkiella*, contains the still latent Maltese *Rivillei*, to which I have previously called attention.\*

### 1. *Antispila Pfeifferella*, Hübner.

In the golden brown anterior wings, with a golden fascia before, and golden opposite spots, beyond the middle, this has an extreme resemblance with *A. Treitschkiella*, being mainly distinguished by its larger size. And it is not a little singular that two species so similar should both feed on the same plant; the larvæ are, however, very different, and can readily be distinguished whilst still within the mine.

Expansion of the wings  $4\frac{1}{4}$  lines; head, face and palpi golden brown; antennæ fuscous; anterior wings glossy golden brown, towards the hind margin rather coppery; before the middle is a slender angulated bright golden fascia, broadest on the inner margin, where it is nearest the base of the wing; beyond the middle are two triangular golden spots, one on the inner margin, the other posterior to it on the costa; cilia rather coppery, the tips pale grey; posterior wings greyish purple, with paler cilia.

The larva, which mines the leaves of the dogwood in June and July, is very pale greyish green, the dorsal vessel greener; *the head is pale brown*, and the second segment of the same colour, only a little darker at the sides; there are *no black spots* on the under side.

When the larvæ are full-fed they cut out a flat oval case, formed of the two skins of the leaf, which they fortify with silk and descend to the ground; the following May the perfect insect appears, and delights to fly round the twigs of the dogwood in the bright sunshine.

### 2. *Antispila Treitschkiella*, Fischer.

Very like the preceding, only much smaller; the anterior wings rather darker, the apex less coppery, and the fascia less angulated. The larva is well distinguished by the *black head and the row of*

\* Transactions of the Entomological Society of London, vol. iii. New Series, p. 87—89; Annales de la Société Entomologique de France, Troisième série, vol. iii. p. 211—213.



*black spots beneath.* Both larva and perfect insect appear rather later in the season than those of *A. Pfeifferella*.

Expansion of the wings 3 lines; head, face and palpi golden brown; antennæ fuscous, with whitish annulations; anterior wings dark golden brown, with a faint purple tinge towards the hind margin; before the middle is a slender, oblique, hardly angulated pale golden fascia, nearest the base of the wing on the inner margin, but not expanded there; beyond the middle two triangular pale golden spots, one on the inner margin, and the other rather posterior to it on the costa; cilia purplish golden brown, at the tips grey; posterior wings brownish grey, with paler cilia.

The larva, which mines the leaves of the dogwood in August and September, is greyish white;\* *the head and the second segment are black; all the other segments, except the penultimate, have a black spot beneath.*

The habit of the larva is precisely similar to that of *A. Pfeifferella*, but the mine and case are rather smaller, as might have been anticipated from the smaller size of the insect. The perfect insect appears in June.

### 3. *Antispila Rivillei*, Stainton.

“The ground-colour of the wings is a beautiful black; each is adorned with four triangular silver spots, of which two are on the inner margin, two on the costa.” Naturforscher, iv. 21. Hence this insect should be readily distinguished from its congeners by the *black* (not brown) anterior wings, by the fascia being interrupted and by the markings being *silvery* (not golden).

The larva mines the leaves of the vine in July, forming large blotches, in which it cuts out a flat oval case, which it suspends to the leaves or stems of the vine. The perfect insects make their appearance in the following month.

This insect was observed in the island of Malta prior to 1750, and has not been seen since, though M. Millière, of Lyon, believes that he has seen vine leaves blotched and with holes cut in them (as though by a larva of this genus); since, however, M. Millière’s attention has been called to the subject he has not been able to meet with any indications of it.

### STEPHENSIA, n. g.

This genus is far more nearly allied to *Elachista*, but the palpi are short and drooping, and the outline of the anterior wings is

\* See figure in Annales de la Société Entomologique de France, Troisième série, vol. iii. pl. 11, fig. iii.



very peculiar, owing to the costa being slightly indented beyond the middle.

In the neuration of the posterior wings the forked apical vein is branched all the way from the cell, whereas in every *Elachista* that I have examined this vein is not forked till long after it leaves the cell, nor indeed till it is very near the apex.

This genus only contains a single species, *Brunnichella*, for much as *Elachista Magnificella* resembles *Brunnichella* in markings, the longer palpi and unindented costa of the anterior wings of *Magnificella* are reasons with me for referring it still to the genus *Elachista*.

### 1. *Stephensia Brunnichella*, Linneus.

This insect has a considerable likeness to *Elachista Gleichenella* and *E. Magnificella*. From the former it is best distinguished by the position of the apical spots; in *Brunnichella* the spot at the anal angle is placed perpendicularly, the costal spot is considerably beyond it and points backwards to the dorsal spot, whereas in *Gleichenella* the spots are almost opposite, and are united by an intermediate third spot placed a little posteriorly, with which they form an angulated fascia; in *Magnificella* the spots, it is true, are not united, the costal spot is posterior to the dorsal spot, but it is almost perpendicular, and does not slope backwards; besides, in *Magnificella* the central fascia stops short before it reaches the costa.

Expansion of the wings  $3-3\frac{1}{2}$  lines. Head, face and palpi golden brown; antennæ dark fuscous, with a broad white ring before the apex. Anterior wings dark golden brown, with a golden fascia close to the base, a slender bright golden fascia in the middle, and two brilliant golden spots towards the hind margin, one perpendicularly placed at the anal angle, the other beyond it and pointing inwards on the costa; cilia purplish-grey; posterior wings greyish-brown, with grey cilia.

The larva, which mines the leaves of *Clinopodium vulgare* in April and July, forming large, brown, slightly puckered blotches, is greenish-white, with dark green dorsal vessel; the head is dark brown, almost black, and the second segment bears on the back a plate of the same colour, divided in the middle by a central pale line. The six anterior legs, eight ventral and two anal prolegs, are of the colour of the body.

The perfect insect appears in May and August.



The Linnean description of *Brunnichella* (Syst. Nat. Ed. 12, i. 2, p. 898, No. 448) is as follows:—

“Corpus minutum, lineare, planiusculum, atrum. Antennæ corpore breviores, infra apicem albæ. Alæ atræ fasciis tribus violaceis sive chalybis candefacti colore, quarum prima ad basin, secunda in medio, tertia curva ad apicem. Cilia postice inter alarum apices, subulata in plures dentes.”

To this it may be objected that the antennæ, though “infra apicem albæ,” are not “corpore breviores;” that the wings are not “atræ,” and the cilia are not “subulata in plures dentes.”

The position of the markings described is in wonderful accordance with the insect we are considering, the basal fascia of which frequently, if the specimens are at all worn, assume more or less of a coppery or violet tint. I think, when it is further borne in mind how very few species there are to the antennæ of which the “infra apicem albæ” will apply, the coincidence of the agreement in that respect and in the markings of the anterior wings is more than can result from accident.

*Quadrella* is no doubt rather an aberrant species of *Elachista*, and in the larva changing to a pupa within the mine is quite singular, but the neuration of the wings and the structure of the palpi both tend to show that it ought not to be removed from the remaining species of the genus, and it is far better to admit a few semi-discordant species than to multiply genera unnecessarily.

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XIX. *On the Habits and Transformations of a Species of Ornithoptera, allied to O. Priamus, inhabiting the Aru Islands, near New Guinea. By ALFRED R. WALLACE, Esq., Corr. Memb. Ent. Soc., London.*

[Read 7th Dec. 1857.]

THIS beautiful insect is very closely allied to *O. poseidon*, Doub., of which it may be a variety. It is not uncommon in Aru, but the males fly high and rest in high trees, so that it is very difficult to capture them. The females generally fly much lower and more slowly, and it is only when the males are in pursuit of them that the former can be easily taken. It is a beautiful sight to watch a pair of these noble insects fluttering among the thick underwood, the male following every movement of his companion, generally hovering immediately over her, the golden green of his wings absolutely luminous with a brilliancy which nothing in animated nature can surpass, while the other portions are of an intense and perfect blackness in all lights, equally extraordinary and unique. The males are generally about  $6\frac{1}{2}$  to 7 inches in expanse of wings; the females 9 inches, and sometimes even  $9\frac{1}{2}$  inches. The genus is admirably named, for no insects resemble birds in their flight so much as these, and as they sail majestically over head they may often be momentarily mistaken for such. They frequent the damp and lofty forests; often, however, coming out into the open patches and pathways.

The larva exactly resembles in form that of *O. Heliacon*, figured by Dr. Horsfield, except that the fleshy processes are much longer and more acute, the two dorsal rows being half an inch long. The colour is a rich purple or vinous black. On the seventh segment is an oblique reddish-white band, from the spiracle to the base of the dorsal process, which it incloses. The basal half of all these processes is crimson. The retractile tubercles at the back of the head are short, obtuse, Y-shaped, and of a transparent blood-red colour. They are exerted as in *Papilio*, and have no *separate sheaths*, a character which has been given by Boisduval to the genus *Ornithoptera*, on Dr. Horsfield's authority, in the case of *O. Heliacon*.



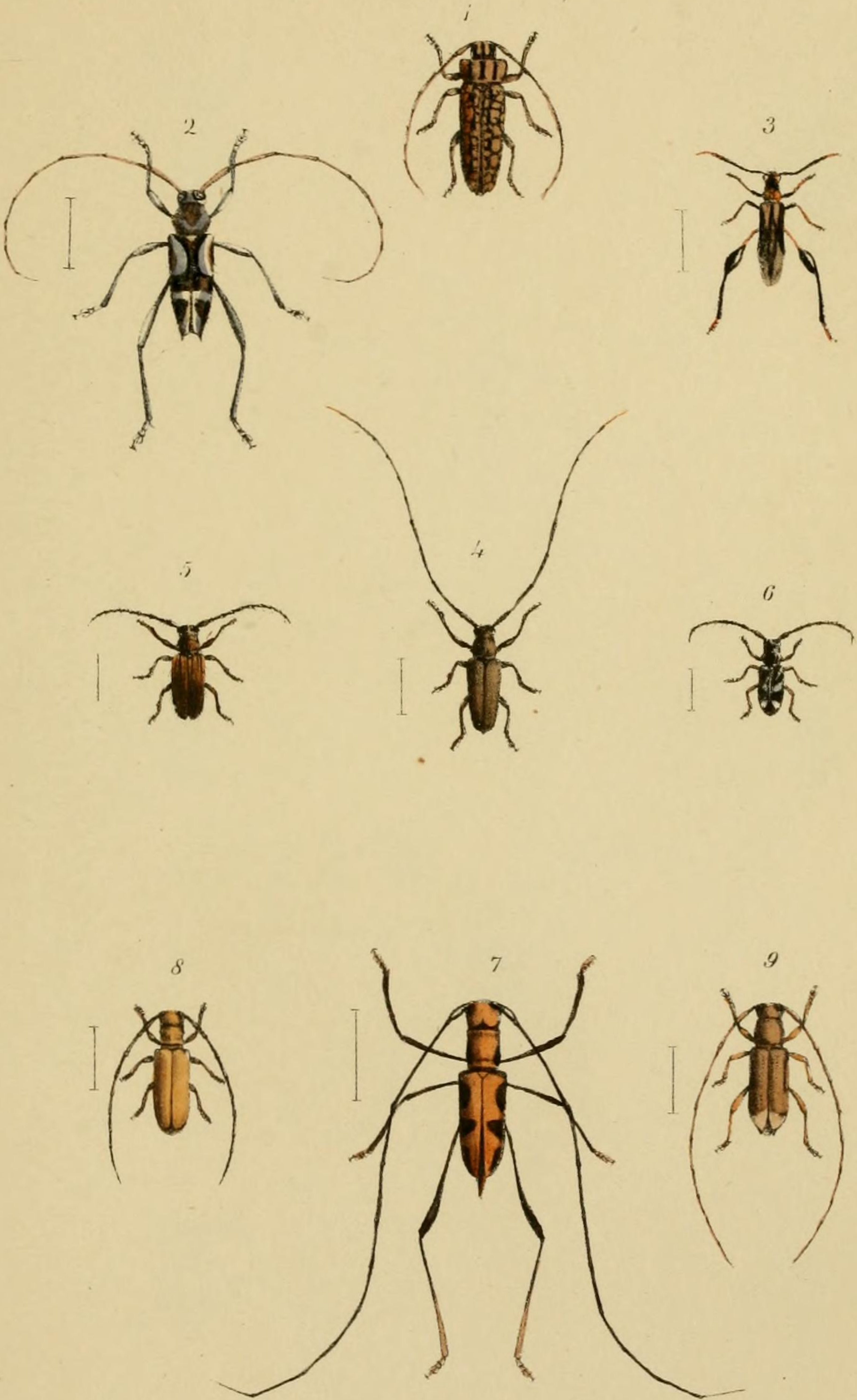
The larva feeds on a climbing plant, not observed in flower, but which has the habit and foliage of an *Aristolochia*.\* It is sluggish in its movements, and feeds at intervals day and night. When about to change its form it seeks some neighbouring tree or shrub with a stronger and more rigid leaf, from the under surface of which it suspends itself in an inclined position approaching to horizontal. The two ends of the suspending thread are fastened at the same point on the midrib of the leaf, and the loop passes completely round the insect, as in all other *Papilionidæ*, and is not fastened to a tubercle on each side of the pupa, as stated by Boisduval, on the authority, I presume, of Dr. Horsfield. As the larva makes the thread and attaches it before escaping from its skin, any other mode than the usual one would seem to be impossible. The mistake has probably arisen from the weight of the pupa causing the fine sharp thread to be almost buried and hidden in its newly-formed soft skin. In the pupa case, which I have preserved, it may be distinctly traced round the back, forming a perfect loop.

The pupa is of a rich brown colour, on the back ochre-yellow, with the points and tubercles nearly black. It is very bulky, and nearly 3 inches long. Two specimens which I bred both produced females, and a third, also a female, was unable to free itself from the pupa case. Its duration in the pupa state is exactly a month (twenty-nine or thirty days), a very long period for a diurnal *Lepidoptera* in the tropics.

It would thus appear that there are no characters in the larva or pupa to separate *Ornithoptera* from *Papilio*; but the large size of the perfect insects, their long and powerful legs, the large anal valve of the males, their uniform and characteristic form, their striking colours and their limited geographical range, are, I think, sufficient reasons why the genus should be kept distinct.

\* I have since seen the flower. It is an *Aristolochia*.





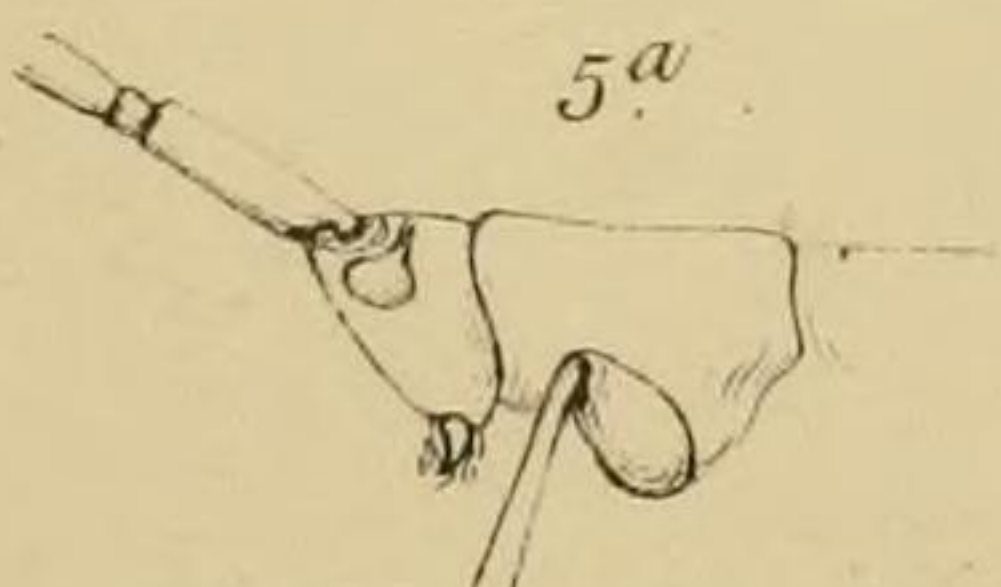
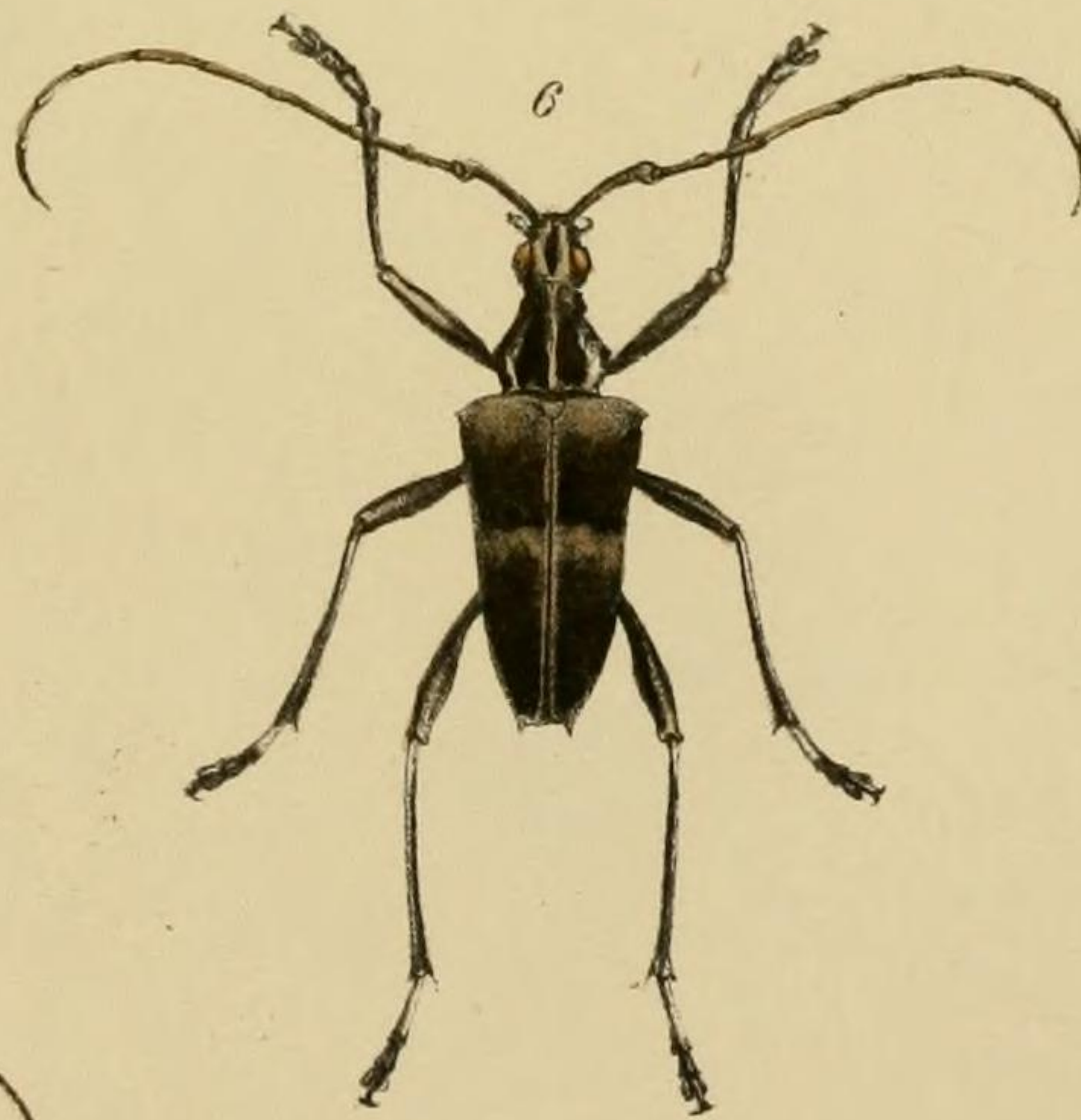
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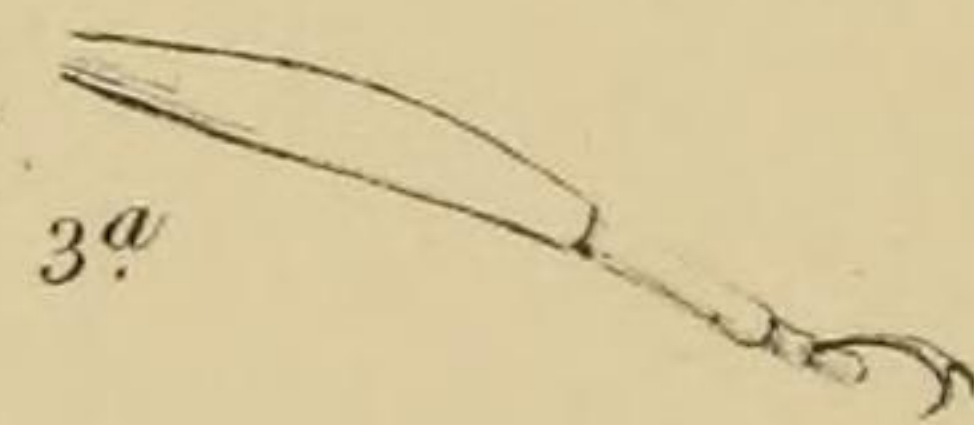
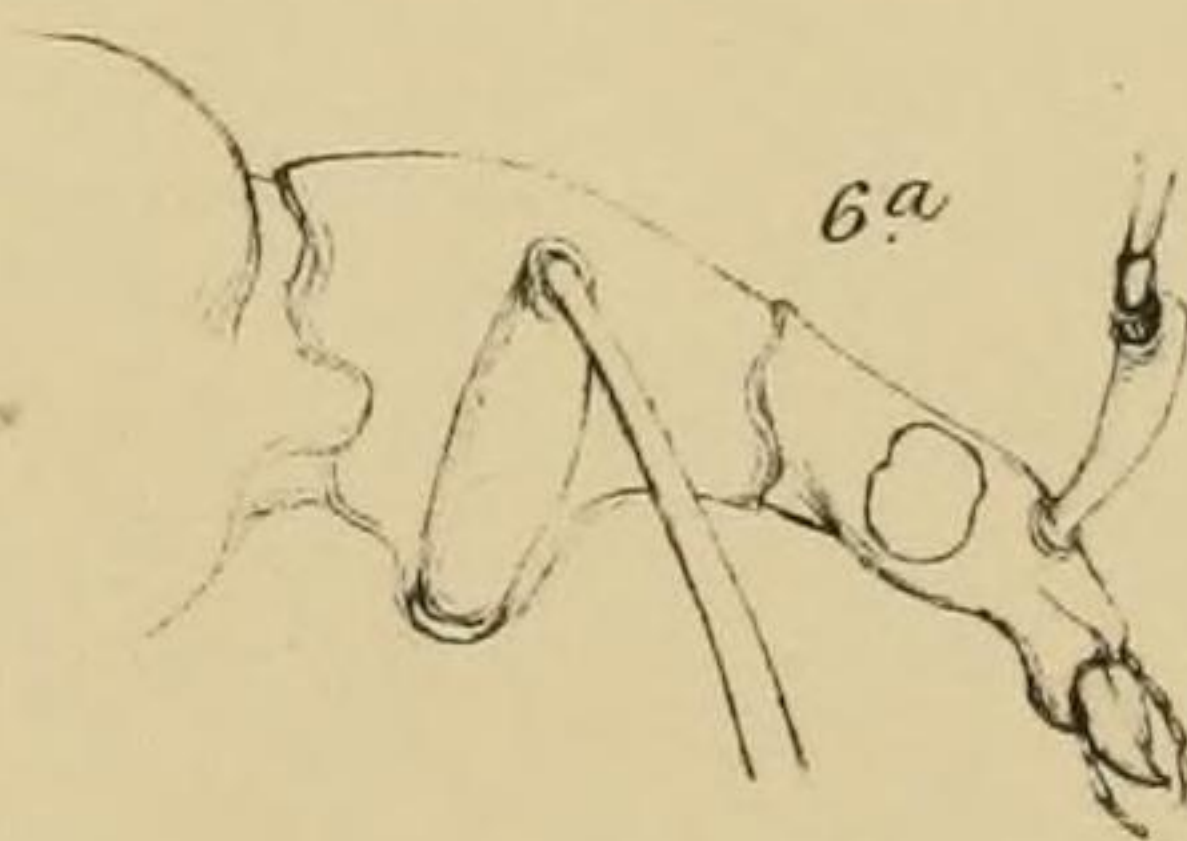
C.H. Ford.

W. West Imp.





G. H. Ford



W. West. Imp.