

fortunately, lost its abdomen, and the prolegs in both sexes of *Hypna* are exceedingly similar in construction.

## DESCRIPTION OF PLATE XXIII.

- |                                |  |                              |
|--------------------------------|--|------------------------------|
| Fig. 1. <i>Hypna globosa</i> . |  | Fig. 5. <i>Hypna velox</i> . |
| 2, 3. — <i>huebneri</i> .      |  | 6. — <i>rufescens</i> .      |
| 4. — <i>huebneri</i> , var.    |  | 7. — <i>elongata</i> .       |

May 8, 1866.

Dr. J. E. Gray, F.R.S., V.P., in the Chair.

Mr. Selater called the attention of the Meeting to several interesting species of Mammals and Birds observed during his recent visit to the Gardens of the Société Zoologique d'Acclimatation of Paris. Amongst these were particularly noticed an example of the *Oryx beisa* of Rüppell, being the only living specimen Mr. Selater had seen of this fine Antelope, and some examples of the new variety of the Scæmmering's Pheasant lately described by Mr. Gould (Ann. N. II. ser. 3. vol. xvii. p. 150) as *Phasianus (Graphophasianus) scintillans*. It appeared that this variety had been received from Yokohama, Japan, while the ordinary *Phasianus scæmmeringii* was stated to be found near Simoda, so that the probability was that these two birds were representative forms inhabiting different islands.

Mr. Alfred Newton exhibited from the collection of William Borrer, Esq., F.L.S., a specimen of the *Sylvia aquatica* of Latham, which had been obtained in England, as certified by the following note from that gentlemen:—

“My specimen was shot on the 19th of October, 1853, in an old brick-pit a little to the west of Hove, near Brighton, and was stuffed by Mr. H. Pratt of that place. I saw it just after it was skinned. It was observed creeping about amongst the old grass and reeds.”

Mr. Newton remarked that, though the species had not hitherto been recorded as occurring in this country, the fact of the marshes near Dieppe being especially mentioned as a locality for it made the probability of its being a voluntary visitor to this side of the Channel much greater.

Mr. Gould exhibited a specimen of the Andalusian Hemipode (*Turnix sylvatica*, Desfont.) from the collection of Mr. Alfred Beaumont. The specimen was stated to have been purchased of two Irishmen (one of whom had caught it alive) for sixpence, by a boy, the son of S. Mosley, a bird-stuffer of Huddersfield. It had been taken near Fartown-bar, April 7, 1865.





M & N. Hannay, imp

SCOTOPHILUS WELWITSCHII

J. Smith lith.

The following papers were read :—

1. Notice of a New Bat (*Scotophilus welwitschii*) from Angola. By Dr. J. E. GRAY.

(Plate XXIV.)

Among an interesting series of Bats from Angola, collected by Dr. Welwitsch, and most kindly presented to the British Museum, is a very interesting and ornamental species of *Scotophilus*, with the wings coloured like *Vespertilio pictus* of Pallas.

This coloration of the wings seems common to several Bats belonging to different genera; but I have not before observed it in a species of *Scotophilus*.

SCOTOPHILUS WELWITSCHII. (Pl. XXIV.)

Brown, paler beneath; hair of the back black, with brown tips, which are longer and paler on the hairs of the under surface. The ears rather elongate, longer than head, tip rather acute; tragus elongate, lanceolate, acute, nearly half as long as the ear. The wings blackish brown, yellow-dotted, and yellow (or red brown perhaps when alive) near the body, and on and near the arms and fingers, and between the shoulders and arm-bone; interfemoral membrane yellow, black-dotted, and with a dark hinder edge, the upper surface near the base of the tail hairy; heel-bone elongate, as long as the shin. Feet pale yellow; toes black at the end; wings to the base of the toes. Thumb—upper joint black, much longer than the lower, which is yellow. The face hairy to the end of the nose, just above the nostrils. Upper cutting-teeth 1.1?, large, blunt; premolars  $\frac{2}{1} \frac{2}{1}$ , the front upper large, triangular; the hinder small, rudimentary. Forearm-bone 2 inches 1 line long.

*Hab.* Angola (*Dr. Welwitsch; B.M.*).

2. Notes on the Skulls of Dolphins, or Bottlenose Whales, in the British Museum. By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S., &c.

Having had occasion to examine and determine a considerable number of skulls of Dolphins since the manuscript of the second edition of the 'Catalogue of Seals and Whales in the British Museum,' which has just been published, was sent to the press, I was induced to reexamine the whole series of them in the British Museum for the purpose of determining what were desiderata. The usual consequence followed, that I observed the importance of some characters that had been before overlooked, and thought that I could improve the manner in which the species were grouped together, so that they could be more easily distinguished from each other.

This has been my universal experience : no sooner has a monograph of a group of animals been put into print, than on the reexamination of the group, you find it might have been improved. I have therefore sent to the Society the result of this reexamination and reconsideration of the subject, and hope that it may facilitate the determination of the species of these little-known animals. I may add that, from the experience I have had, I have no doubt that the skull affords the best means of arranging the species into groups ; but I am by no means sure that what I have considered a single species by the study of the skull may not be found to be a group of several species when we are able to examine the rest of the skeleton and the external coloration of the animals which have a skull of the characters described.

The genera of the Bottlenoses may be arranged according to the skulls thus :—

A. *Beak of the skull elongate, compressed. Nasal triangle short. Symphysis of the lower jaw elongate.*

PONTOFORIA. Beak of the skull high, compressed. Symphysis of the lower jaw very long.

STENO. Beak of the skull compressed, higher than broad. Symphysis of the lower jaw long.

B. *Beak of the skull elongate, depressed, broad, shelving on the sides. Nasal triangle short. Symphysis of the lower jaw short, sloping.*

\* *Palate with a deep groove on each side behind.*

DELPHINUS. Beak elongate. Dorsal fin distinct. Teeth small, slender.

\*\* *Palate flat behind, without any lateral grooves.*

CLYMENE. Beak of skull elongate, depressed. Teeth small, slender. Nasal triangle moderate. Dorsal fin distinct.

DELPHINAPTERUS. Beak of skull elongate, depressed. Teeth small, slender. Dorsal fin none.

TURSIO. Beak of the skull only rather longer than the brain-case, conical, convex above, rounded. Teeth large. Skull high.

EUTROPIA. Beak of the skull only rather longer than the brain-case. Skull depressed. Teeth small.

C. *Beak of the skull broad, flat above, edges slightly reflexed and bent up in front of the notch. Nasal triangle elongate. Symphysis of the lower jaw short.*

LAGENORHYNCHIUS. Beak as long as or rather shorter than the length of the brain-case.

## STENO.

*Steno*, Gray, Cat. of Seals & Whales, p. 232.

The species may be arranged by their skulls thus. The number refers to the number of the species in the above Catalogue:—

a. *Skull large, solid, the beak compressed, high. Teeth large, conical, about two in an inch of the length of the margin of the jaw.*

3. STENO FRONTATUS. Beak of the skull short; the front part thick, high, and blunt. Teeth 24/24, large, two in an inch.

4. STENO COMPRESSUS. Beak of the skull elongate, compressed, attenuated in front. Teeth 26/26, large, two in an inch (Zool. E. & T. t. 27).

*Steno rostratus* appears to belong to this section.

b. *Skull small, rather spongy. Teeth small, slender, attenuated, about four or five in an inch of the length of the margin of the jaw.*

\* *Beak of the skull elongate, compressed, much attenuated and acute in front. Teeth four in an inch. Sousa.*

4\*. STENO CAPENSIS.

4\*\*. STENO LENTIGINOSUS.

The skull of *Steno roseiventris*, according to the figure, appears to belong to this section of the genus.

\*\* *Beak of the skull short, compressed, much attenuated and acute in front. Teeth five in an inch. Tucuxa.*

7. STENO TUCUXI.

\*\*\* *Beak of the skull elongate, rather depressed, broad, slightly compressed on the sides. Teeth small, five in an inch. Stenella.*

5. STENO ATTENUATUS. The beak of the skull flattened (Zool. E. & T. t. 28).

This last section is nearly intermediate between *Steno* and *Clymene*.

## DELPHINUS.

The species referred to *Delphinus*, Section b, in the 'Catalogue of Seals and Whales,' belong to this genus. The teeth are small and slender, five or six in an inch.

\* *Beak of skull twice as long as the brain-case. Teeth  $\frac{55}{55}$  or  $\frac{56}{56}$ .*

2. DELPHINUS LONGIROSTRIS,

\*\* *Beak of skull once and a half the length of the brain-case.*

*Teeth  $\frac{45}{45}$  to  $\frac{50}{50}$ .*

3. DELPHINUS DELPHIS.

3\*. DELPHINUS MOOREI.

3\*\*. DELPHINUS MAJOR.

3\*\*\*. DELPHINUS WALKERI.

5. DELPHINUS JANIRA, Zool. E. & T. t. 23.

#### CLYMENE.

Skull elongate, slender; brain-case spherical; beak slender, elongate, longer than the brain-case; intermaxillaries convex. Teeth small, slender, five or six in an inch. The symphysis of the lower jaw short. The blowers are moderate. See *Clymene*, Gray, P. Z. S. 1864, p. 237.

\* *Beak of the skull twice as long as the brain-case. Teeth five in an inch.*

CLYMENE STENORHYNCHA. *Delphinus stenorhynchus*, Cat. of Seals & Whales, p. 396.

\*\* *Beak of the skull once and three-quarters the length of the brain-cavity. Teeth six in an inch. Euphrosyne.*

1. CLYMENE MICROPS. *D. microps*, Gray, Cat. p. 240; Zool. E. & T. t. 25.

16. CLYMENE ALOPE. *D. alope*, Gray, Cat. p. 252.

18. CLYMENE EUPHROSYNE. *D. euphrosyne*, Gray, Cat. p. 251; Zool. E. & T. t. 22.

\*\*\* *Beak of the skull once and one-half or once and one-third the length of the brain-cavity. Teeth five or six in an inch. Clymene.*

CLYMENE NORMALIS. Beak of the skull once and one-half the length of the brain-case, and as long as twice and one-half the width at the notch. Teeth 40, nearly six in an inch. *Delphinus clymene*, Gray, Cat. p. 249.

CLYMENE DORIS. Beak of the skull once and one-half the length of the brain-case, and as long as twice and a half the width at the notch. Teeth five in an inch. *Tursio doris*, Gray, Cat. Seals & Whales, p. 255; Zool. E. & T. t. 20.

CLYMENE DORIDES. Beak of the skull once and one-third the

length of the brain-case, and as long as twice and one-third the width at the notch. Teeth five in an inch. *Tursio dorcides*, Gray, Cat. of Seals & Whales, p. 400.

CLYMENE OBSCURA. Beak of the skull once and one-sixth the length of the brain-case, and as long as twice and one-half the width at the notch. Teeth five or six in an inch. The aperture of the blower large. *Tursio obscurus*, Gray, Cat. Seals & Whales, p. 264; Zool. E. & T. t. 16.

These skulls are somewhat like those of the genus *Tursio*, but the teeth are small.

#### TURSIO.

The skull large, thick, heavy, with a high swollen brain-cavity. The beak longer than the brain-case, broad, conical, stout, shelving on the sides. Teeth large,  $\frac{22}{22}$  or  $\frac{25}{25}$ . The blower large. Nasal triangle produced considerably before the notch.

3. TURSIO METIS, Zool. E. & T. t. 18.

4. TURSIO CYMODOCE, Zool. E. & T. t. 19.

6. TURSIO TRUNCATUS. North Sea and Mediterranean.

8. TURSIO EURYNOME, Gray, Zool. E. & T. t. 17. South Sea; India?

10. TURSIO CATALANIA. North-west coast of Australia.

These skulls are all so much alike that they may only be varieties.

#### EUTROPIA.

Skull depressed, thick, with the sides rather bent down behind the notch. The beak depressed, broad, rounded on the sides, rather longer than the length of the brain-case; the intermaxillaries flat, rather broad. Teeth small, slender, five or six in an inch.

*Eutropia*, Gray, P. Z. S. 1862, p. 145; Cat. Seals & Whales, p. 262.

EUTROPIA DICKIEI. *Tursio eutropia*, Gray, P. Z. S. 1862, p. 145; Cat. Seals & Whales, p. 262. Chili.

EUTROPIA HEAVISIDII. *Tursio heavisidii*, Gray, Cat. Seals & Whales, p. 263. From the Cape Seas.

The *D. cephalorhynchus* of F. Cuvier, judging from the figure of the skull given by Schlegel, appears also to belong to this genus.

The skull bears a considerable affinity to the skulls of *Phocaena*, *Neomeris*, *Beluga*, and *Monodon* in the bending down of the sides.



## LAGENORHYNCHIUS.

The skulls of the species in the British Museum may be thus arranged :—

I. *The beak of the skull very flat above, with the edges in front of the notches bent up. Teeth-line stopping considerably short of the notch. Electra.*

† *Beak of the skull rather longer (about one-third) than the length of the brain-case. Teeth moderate, four in an inch, those in the lower jaw rather larger.*

1. LAGENORHYNCHUS ELECTRA. Beak rounded in front (Zool. E. & T. t. 13).

3. LAGENORHYNCHUS ASIA. Beak attenuated, acute in front (Zool. E. & T. t. 14).

4. LAGENORHYNCHUS ACUTUS, according to Schlegel's figure of the skull, should be arranged in this section.

†† *Beak of the skull rather shorter than the length of the brain-cavity. Teeth small, five or six in an inch.*

5. LAGENORHYNCHUS CLANCULUS. Beak of the skull broad behind, once and three-fourths the width of the notch in length. Teeth five in an inch.

7. LAGENORHYNCHUS THICOLEA. Beak of the skull narrow behind, twice as long as the width at the notch. Teeth small, six in an inch.

II. *Beak of the skull rather flat above and elongate, bent up on the edge in front of the notch. Teeth-line reaching nearly to the notch.*

\* *Beak of the skull narrow behind, as long as or slightly longer than the length of the brain-case. Teeth small, five in an inch. First and second cervical vertebræ united by their bodies; third and fourth by the spinous processes. Leucopleurus.*

9. LAGENORHYNCHUS LEUCOPLEURUS. Beak of the skull twice as long as the width at the notch. Teeth small, five in an inch.

\*\* *Beak of the skull broad behind, rather shorter than the length of the brain-case. Teeth large, three in an inch. First and second cervical vertebræ united by their bodies; the third, fourth, fifth, six, and seventh free. Lagenorhynchus.*

8. LAGENORHYNCHUS ALBIROSTRIS. The beak of the skull once and one-half as long as the width at the notch.

3. Additions to the List of the Avifauna of Australia, with Descriptions of Three New Species. By JOHN GOULD, Esq., F.R.S., &c.

The following birds have been lately transmitted to me by my brother-in-law, Mr. Charles Coxen of Brisbane in Queensland, and were, I believe, collected by John Jardine, Esq., late Commissioner of Crown Lands in the Cape York district, a portion of Australia so near to New Guinea and the Aru Islands that we need not be surprised if some of the species prove to be identical with, or offer a close resemblance to, species previously described as inhabitants of those but partially explored islands.

The first species is an additional member of those insect-loving little birds known under the generic title of *Gerygone*, and exhibits such strongly marked distinctive characters that it cannot for a moment be confounded with any of its allies.

GERYGONE PERSONATA.

Crown and all the upper surface olive-green; throat and chest deep olive-brown; behind each nostril a spot of white; a stripe of white also descends from the base of the bill down each side of the neck, and separates the deep olive-brown of the throat from the lighter olive of the ear-coverts; axillæ, all the under surface of the body, and the under tail-coverts delicate jonquil-yellow; wings and tail olive-brown; bill and legs olive-black.

Total length  $3\frac{3}{4}$  inches, bill  $\frac{1}{2}$ , wing  $2\frac{3}{8}$ , tail  $1\frac{3}{4}$ , tarsi  $\frac{3}{4}$ .

*Hab.* The Cape York district of Queensland.

The second bird has many characters in common with the *Ptilotis chrysotis* of the south-eastern portion of Australia and the *Ptilotis similis*, a bird brought from Dorey by Mr. Wallace; but it differs from both in the greater slenderness of its form, in its diminutive size, and, especially from the former, in the uniform colouring of its throat and abdomen.

PTILOTIS GRACILIS.

Bill deep olive-brown, with a naked yellow fleshy gape, posterior to which is an obscure narrow line of yellow; a well-defined patch of pale yellow on the ear-coverts; crown and all the upper surface olive, the uniformity of which is only broken by a slight edging of wax-yellow on the outer edges of the primaries and tail-feathers; axillæ and the inner webs of the primaries and secondaries pale buffy yellow; primaries and tail-feathers brown; feet dark olive-brown.

Total length  $5\frac{1}{2}$  inches, bill  $\frac{7}{8}$ , wing  $2\frac{3}{4}$ , tail  $2\frac{1}{2}$ , tarsi  $\frac{3}{4}$ .

*Hab.* The Cape York district of Queensland.

MONARCHA ALBIVENTRIS.

This Cape York bird is very nearly allied to the more southern *M. trivirgata*, but differs not only from that species, but from

another, of which examples are contained in my own and Mr. Wallace's collections from Timor, and a fourth from Batchian. Although these four birds are intimately allied, they possess distinctive characters by which each of them may be readily recognized. As I have here only to deal with the Australian members of the genus, I shall content myself with remarking that this new species is to be distinguished from the southern *M. trivirgata* by the unsullied whiteness of its axillaries, abdomen, and lower part of its flanks, by the black of the forehead and throat being somewhat more extensive, and by the larger size of the white terminal portion of the outer tail-feathers.

Bill and legs olive lead-colour; forehead and a narrow stripe above the eye, upper portion of the ear-coverts, and the throat jet-black; cheeks, lower part of the neck, and the chest bright ferruginous; abdomen, axillaries, and a considerable portion of the under surface of the wing snow-white; crown of the head, back of the neck, and back bluish grey; primaries greyish brown; upper tail-coverts and tail black, the three outer feathers of the latter largely tipped with white.

Total length  $5\frac{7}{8}$  inches, bill  $\frac{3}{4}$ , wing 3, tail  $2\frac{7}{8}$ , tarsi  $\frac{3}{4}$ .

*Hab.* The Cape York district of Queensland.

I am also enabled to add to the list of Australian Birds, published by me in my lately issued 'Handbook to the Birds of Australia,' the following species—

RALLINA TRICOLOR, G. R. Gray, P. Z. S. 1858, p. 188,  
a bird brought by Mr. Wallace from the Aru Islands.

Of this species of Water-Rail, which appears to be common in the New Guinea group of islands, an example has been sent to me from the Cape York district, and the bird will doubtless be hereafter found in other parts of northern Australia.

HYDROCHELIDON LEUCOPTERA (Meisn. & Sch.).

Schlegel having, I believe, given Celebes as one of the localities of this species, it will not be a matter of surprise that two examples should occur in the Cape York collection. Of these one is certainly immature, the other in a dress which is probably that of winter.

#### 4. On a New Genus and Species of Birds from Madagascar. By Dr. G. HARTLAUB, F.M.Z.S.

EROESSA, n. g.

Char. Gen.—*Rostr. longiusculum, gracillimum, rectum, acutum, vix emarginatum, apicem versus magis magisque compressum, culmine valde carinato, dimidio apicali parum arcuato; gonyde recta; vibrissis vix ullis; naribus lamella cornea clausis. Alæ quadrato-obtusæ, caudæ medium superantes; remige primo*





M & N Harberling

HALMATURUS COXENII

J. Smith. Lith.

*spurio, secundo multo longiore, 3<sup>o</sup>-6<sup>m</sup> subæqualibus longissimis, septimo parum brevior. Cauda debilis, mediocris, subrotundata; rectrices angustæ, molles. Pedes pro mole satis robusti; tarsi antice scutellatis; ungues parvi, valde curvati. Ptilosis mollis.*



*Eroessa tenella*, Hartlaub.

*EROESSA TENELLA*, Hartl., sp. nov.

*Supra olivaceo-viridis, remigibus nigris, dorsi colore marginatis; nucha et regione parotica distincte cinereis, virescente lavatis; gutture, plumulis supranasalibus, periophthalmiis et flexura alæ pure flavis; pectore et abdomine, subcaudalibus et subalaribus, albidis, flavo variegatis; rostro brunnescente, mandibula pallidiore; pedibus pallidis. (♀.)*

Long. 3'' 3''', rostr. a fr. 8''', al. 1'' 8''', caud. 1'' 3''', tars. 6½'''.

*Hab.* Madagascar (Gerrard).

This specimen was sent to me for examination by Mr. Alfred Newton, having been received by him through his brother from Mr. W. T. Gerrard. The species belongs to the family *Sylviidæ*, and comes generically nearest to *Camaroptera*, the curious structure of the wings being almost the same in these two genera. The proportionately large feet are also peculiar to both. The bill, however, is very different, and reminds one most of the genus *Zosterops*; but this last differs totally in its wings, having no spurious first primary, &c. &c. The generic place of *Eroessa* is decidedly near *Camaroptera*.

5. Notes on some Mammalia from Port Albany (Cape York Peninsula), North Australia, with the Descriptions of some New Species. By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S., &c.

(Plate XXV.)

The British Museum has received from Mr. Charles Coxen a series of Mammalia from Port Albany (Cape York Peninsula), North Au-

stralia, which are interesting as containing some species which have not before been recorded as natives of Australia.

*HIPPOSIDEROS ALBANENSIS.*

Black brown; hair white, with minute black tips; beneath greyish black, hair nearly one-coloured. Wings from base of shin. Fore-arm-bone  $1\frac{1}{2}$  inch long.

*Hab.* North Australia, Port Albany.

*NYCTOPHILUS GOULDI?*

*Hab.* North Australia, Port Albany.

*DACTYLOPSILA TRIVIRGATA*, Gray, P. Z. S. 1858, p. 110. f. 1, 5; Gerrard, Cat. Bones B. M. p. 121.

Var. Tip of the tail white.

*Hab.* Port Albany, North Australia.

This animal was originally described from a specimen collected by Mr. Wallace in the Aru Islands.

*CUSCUS MACULATUS*, var. *ochropus*.

*Male.* Grey; hair black, with grey tips; the chin, throat, chest, belly, scrotum, and some spots on the side of the back white; tail yellowish white; feet yellow.

*Female.* Larger, nearly uniform dark grey; the hairs black, with short grey tips; chin, chest, and the middle of the belly to the vent white, with a well-defined black streak on each side of the belly; tail yellowish white; feet pale yellow.

*Hab.* North Australia, Port Albany.

A large female in the British Museum, which I described in my paper in the 'Proceedings of the Zoological Society' under the name of *C. maculatus*, agrees in many respects with the female from Port Albany. The white on the abdomen is narrow and straight-edged; the dark colour near the white is well marked, but not so distinctly as in those from Port Albany. It chiefly differs from the latter in the feet not being yellow or reddish, which was common to all the three specimens which I have seen from North Australia.

The specimen of the two-thirds-grown female, described as *Cuscus brevicaudatus*, which was brought by Mr. John Macgillivray from Cape York, has a nearly uniform dark-grey fur, with the chin, chest, and underside of the body white. It differs from the adult female of Mr. Coxen's in the white on the under part of the body being wider; and there is no appearance of the broad black streak which margins the white in the specimen from Port Albany. The fore feet are grey like the back, and not yellow as they were in all the three specimens, which include two males and one female, sent home by Mr. Coxen.

*HALMATURUS COXENII*, sp. nov. (Pl. XXV.)

Fur brown, minutely grizzled; the nape and back between the

shoulders darker; side of the head, near base of ears, and body pale reddish; shoulders outside of fore and hind legs paler bay; streak on cheek and upper part of thigh white.

*Hab.* North Australia, Port Albany (*Coxen*).

This species is very like *H. agilis*; but the tail and hind feet are much shorter. The fur is darker, and especially on the nape and upper part of the middle of the back. The sides of the body and face, and especially the head round the base of the ears, and the legs are bright rufous. The white mark on the thigh is as distinct as in *H. agilis*.

The *Halmaturus* with a well-marked oblique white streak across the thigh may be thus divided:—

\* *Tail and feet elongate; the front and hinder cutting-teeth large, the second one moderate.*

### 1. HALMATURUS DORSALIS.

The back with a narrow well-defined dorsal streak. The second or central cutting-tooth on each side small, smooth. The hind foot  $8\frac{3}{4}$  inches long.

### 2. HALMATURUS AGILIS.

The back on each side darker than the sides. The second or central cutting-tooth on each side with a central ridge. The hind foot  $8\frac{3}{4}$  inches long.

\*\* *Tail and feet short, thick; the front and hinder cutting-teeth moderate, the second one small.*

### 3. HALMATURUS COXENII.

Back darker than the sides. The hind feet  $5\frac{1}{2}$  inches long.

I have named this fine species after Mr. Charles Coxen, the brother of the late Mrs. Gould, the discoverer of several very interesting animals in Australia.

### MUS MACROPUS.

Yellow grey brown; middle of the back blackish, from the black tips of the longer hairs; the mouth, throat, chest, belly, inside of the legs, and the upper surface of the feet white; whiskers very long, stiff, black; tail naked, with rings of square scales, yellow, basal third black. The feet nearly naked. The cutting-teeth flat, smooth, yellow in front. Ears nakedish, with short scattered hairs. Length of body and head  $10\frac{1}{2}$ , tail  $10\frac{1}{2}$  inches; hind feet 2 inches 5 lines.

There are three species of *Mus* in the Museum with the tails more or less varied with yellow, which differ in the size of the cutting-teeth and feet. The one from North Australia differs from the other two in having very much larger feet.



6. Catalogue of Longicorn Coleoptera, collected in the Island of Penang by James Lamb, Esq. By FRANCIS P. PASCOE, F.L.S., F.Z.S., &c., late Pres. Ent. Soc.

(Part I.)

(Plates XXVI., XXVII., XXVIII.)

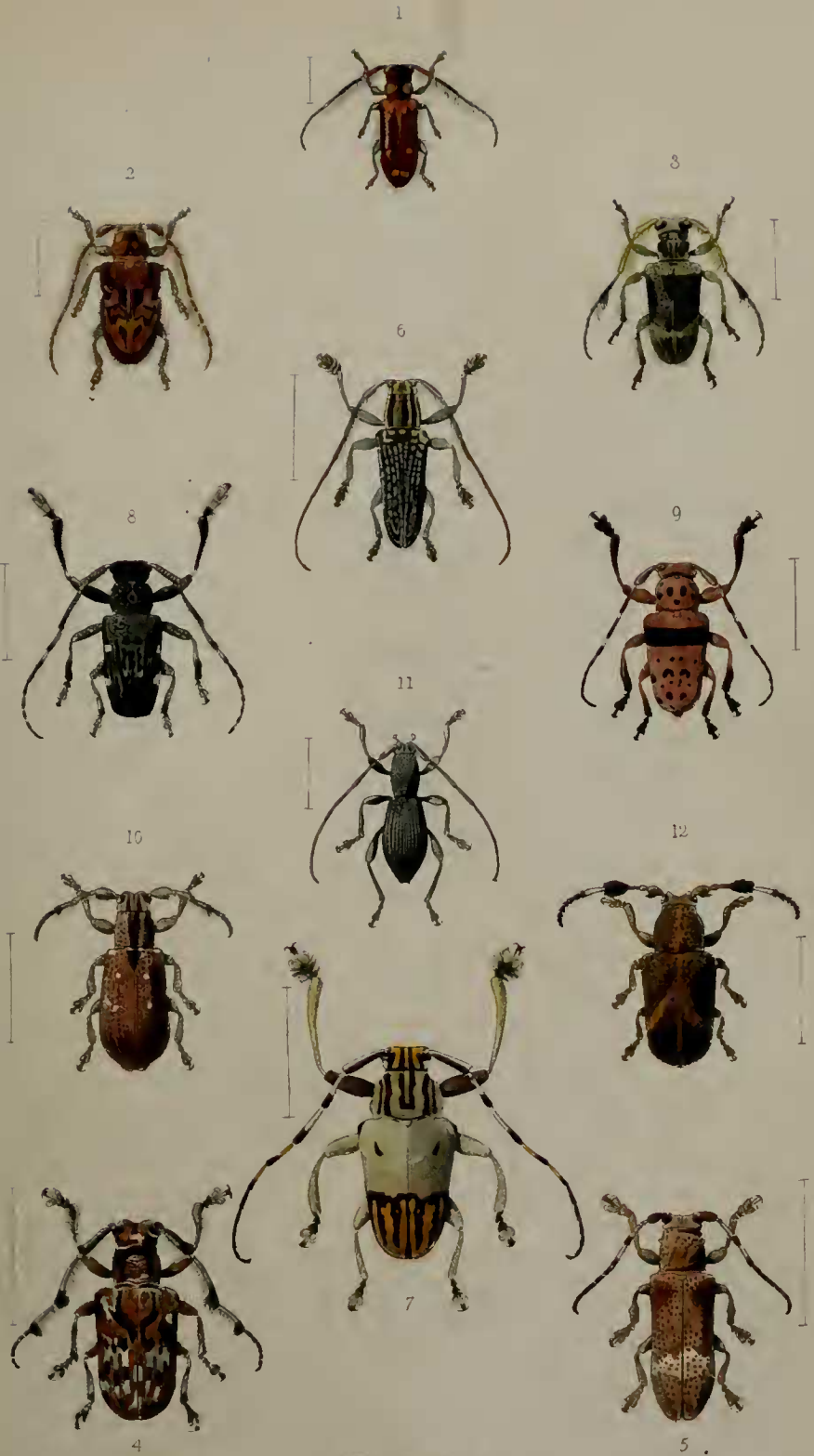
Penang is a small island about sixteen miles long, in latitude between  $5^{\circ}$  and  $6^{\circ}$  N., separated from the mainland of Malacca by a channel two miles in breadth. A narrow strip of the coast opposite the island is known as "Province Wellesley;" and it is within the limits of these two that this collection was formed. The insects are not ticketed; so it is impossible for me to say which came from the mainland and which from the island.

The total number of species in the collection is about 212; but as some of these are single specimens, which are either very obscure or in a poor condition, I have had to content myself with merely indicating their places in the catalogue.

If we consider that the Longicorns in their perfect state are generally short-lived, and that a great majority of the species frequent particular plants or families of plants, so that only where these plants occur can we expect to find the insects, it will be readily understood how this limited range and brief existence must make it almost impossible for any collector to obtain more than a portion of those that inhabit even a moderately extensive district. And thus it is that sometimes perhaps half the species of a large collection are represented each by one or two individuals only. The number of species, therefore, and the many superb novelties which Mr. Lamb has had the good fortune to capture, whilst it excites our admiration, shows us how much more might be expected if all those rich tropical lands were as thoroughly worked by entomologists as Europe has been.

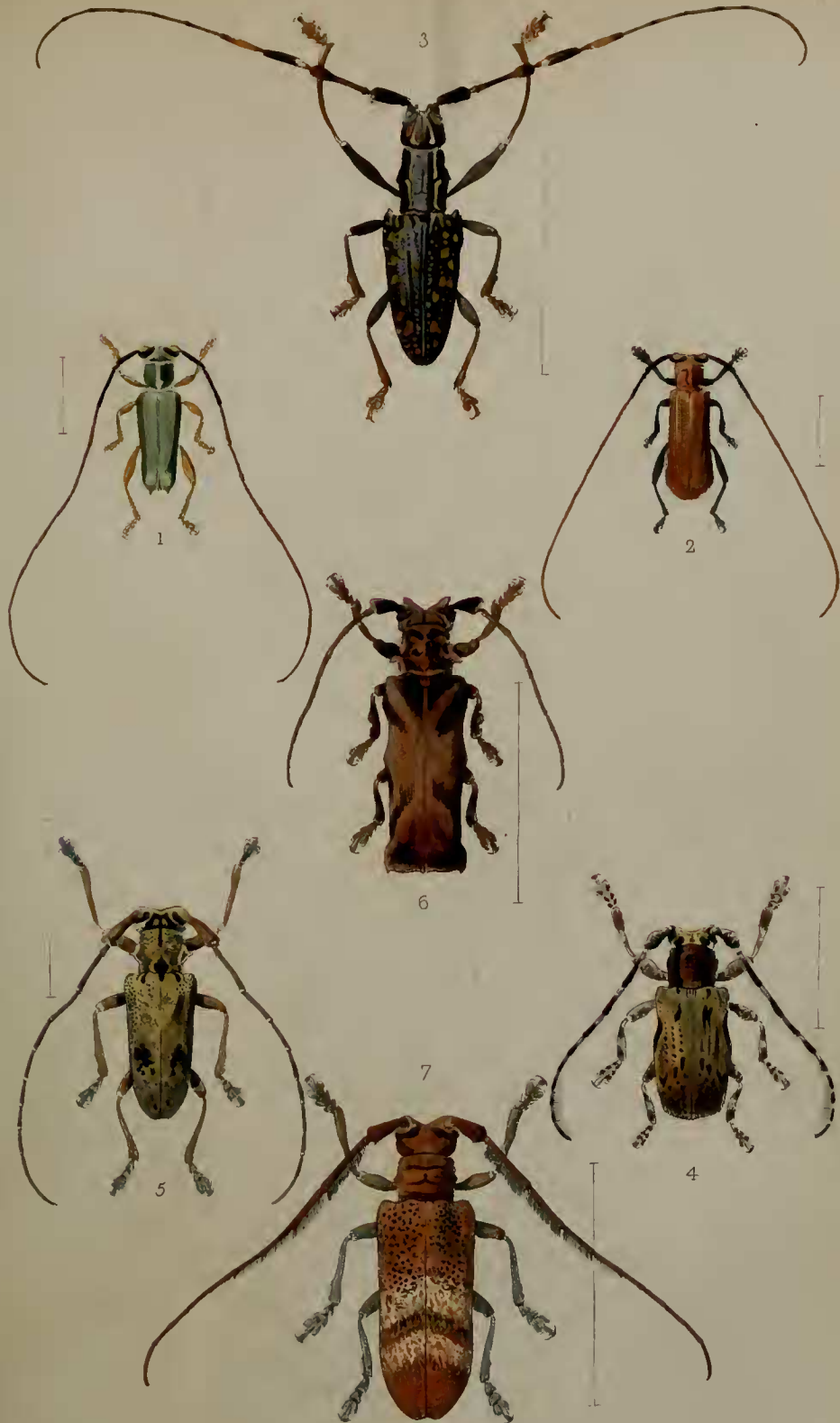
A few years ago all, with the exception of about fourteen, would have been new to science; even now not less than 98 are described for the first time, leaving 26 for further observation, the greater part of which are also probably new. Of these, 19 are types of entirely new genera, out of the total of 110. But to these, three more must be added, previously found by Mr. Wallace, but not yet published—*Ame-sisa*, *Ephies*, and *Cyriopalus*. Two genera are European (*Mesosa* and *Ægosoma*), with species extending to North China; six (*Praonetha*, *Olenecamptus*, *Astathes*, *Philus*, *Dere*, and *Pyrestes*) belong to North China and Northern India, but are not found in Europe (the first is also Australian); four (*Coptops*\*, *Cerosterna*, *Glenea*, and *Megopsis*) have representatives in Africa; *Xystrocera* and *Sybra* are African and Australian; while *Atimura* is the only genus confined to and belonging to both the Australian and Malayan regions. Not less than eight of the exclusively Malayan genera are found in New

\* *Coptops abdominalis*, White, from North Australia, is a species of *Ægomomus*, apparently identical, for the specimen is much worn, with *Æ. insularis*, an insect very generally distributed over the Malayan archipelago.



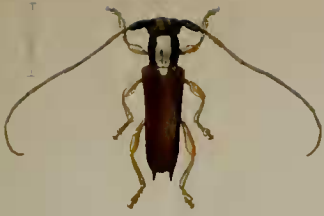
E. W. F. ...





E W Robinson, Del et Sc





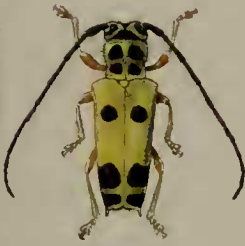
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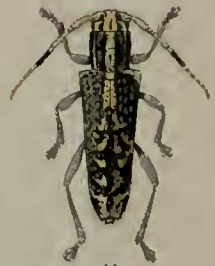
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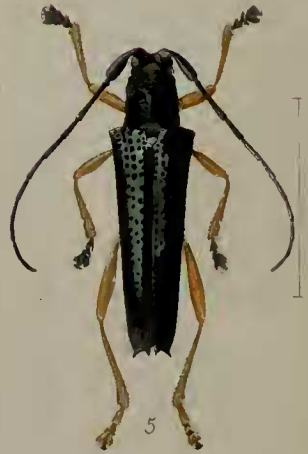
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10



8

F. W. Robinson Del. et Sc.



Guinea, and this without counting many others, such as *Cereopsius*, *Astathes*, *Glenea*, *Ceresium*, &c., which, although almost purely Malayan, dip into the faunas of other regions, but not into the Australian. The eight genera are *Ostedes*, *Eoporis*, *Anancylus*, *Cacia*\*, *Clyzomedus*, *Serixia*, *Xyaste*, and *Merionæda*. Of the genera common to almost all parts of the world there are five—*Monochamus*, *Clytus*, *Stromatium*, *Purpuricenys*, and *Cerambyx*. Thus seventy-two genera are exclusively Malayan. But comparing this with the Australian list we find that out of 154 genera, 124 are exclusively Australian†. It is perhaps scarcely necessary to observe that these statements will doubtless, with the progress of discovery, have to be modified. New Zealand is, I think, like Madagascar, to be regarded as a "satellite" region; and therefore I have omitted taking it into consideration in connexion with Australia.

In studying the geographical distribution of the Longicornia, it must not be forgotten that the areas, into which the earth's surface may be divided in relation to its organic productions, will not hold good for all classes, or even in some cases for all orders. Certain it is that, so far as the Coleoptera are concerned, the Malayau region, with its centre in Borneo, finds its south-eastern limit in New Guinea, —Australia constituting a very distinct and remarkable region of its own, and, so far as we know, not even shading off, as might have been expected, into a transition province on one side or the other of Torres Straits. To the north the Philippines, the southernmost part of China, and Burmah would be its northern boundaries; the two latter probably should only be considered transition countries, since their commoner species are largely mixed with European forms. The same may be said of India, which, even so far south as the Neilgherries, has but a comparatively small proportion to remind us of a tropical beetle-fauna. Even in Ceylon, European genera are dominant‡. Regarding, therefore, these also as transition provinces from Malayan to European types, we find the only countries on the mainland of Asia belonging to the Malayan beetle-region are Pegu, Siam, Annam, and the peninsula of Malacca.

As to the classification adopted, we consider the Longicornia a suborder embracing the three families *Lamiidæ*, *Cerambycidæ*, and *Prionidæ*, each of these comprising numerous subfamilies; from the subfamilies we pass at once to the genera. With many naturalists I believe the idea still remains that every genus must have certain definite structural peculiarities, and they appear to expect that broadly dividing lines shall run between them. Any confession that no absolute or primary characters exist, or that they are only secon-

\* *Cacia latifascia*, White, from North China, is a very doubtful member of this genus.

† A synonymic list of the Longicorns of Australia will shortly be published by the Linnean Society.

‡ In Sir J. E. Tennent's work on 'Ceylon,' 358 genera of Coleoptera are enumerated; of these 184, or rather more than one-half, are European. With regard to Lepidoptera, to the diurnal at least, India belongs to the Malayan region; while even in the valleys of the Himalayas the Homoptera are of the most decidedly tropical forms.



dary, is taken by them as a fatal proof of the weakness of the position. As neither genus nor species has any absolute existence, and these terms can only be used to express "categories of thought," it cannot be expected that they should be defined with absolute certainty; and as there must necessarily be varying degrees of precision, some of these definitions might be so slight as to leave it doubtful if any distinction at all could be maintained. It is true that, owing to the more or less exceptional isolation of many genera, a very clear and decisive description may be given of them; but then it can never be said how soon the discovery of another form or species may upset the characters we have drawn from our limited number of examples, or whether the new genus or species may not be the other sex of some other species. These are questions which, when they occur, can only be solved by the possession of data suited to each. In the meantime our best efforts can only be tentative. Moreover there are many natural assemblages of species, whether we choose to call them genera or not, for which no *technical* characters can be found, their connexion depending partly on peculiarities which it is scarcely possible to convey an adequate idea of in words, partly on such gradual modifications of characters that no satisfactory line can be drawn between them, but which are, notwithstanding, not less real or striking. Those who only select a few prominent forms for description may demur to this; but anyone who has gone conscientiously through a large collection will acknowledge how difficult it is, in many instances, to say if genera really exist even as a collective term for any *limitable* number of species, and how unsatisfactory is any attempt to combine species into genera, or individuals into species, or to distinguish hybrids\* from what we conventionally call "true species." It will therefore be readily understood that many genera can only be vaguely defined, either from the absence of salient characters, or from their gradual modifications; and some of the most natural groups among the Coleoptera might be cited as examples of these classes. To argue that genera ought to be ignored when not strictly defined, would, in entomology, be to make classification impossible; to say that recognized genera should be enlarged from time to time to admit aberrant forms would be merely to create repertoires of incongruous species.

These remarks, which may be considered almost out of place when discussing a collection so distinctive in all its aspects as the one before us, are rather directed to a class of critics who, looking on from afar, are troubled lest they should be overwhelmed by the excessive multiplication of genera. My object has been to show that genera may be not the less natural because founded on secondary characters, and that they *must* be so formed if we would avoid a greater evil than any multiplication of them would be, namely, putting species into genera where no one would think of looking for them. It is quite true that genera have been excessively multiplied

\* No doubt many of our so-called species are hybrids; but a majority of these obscurer species do not appear to possess the intermediate characters we should expect to find if their existence were due to hybridity.

by many authors, and that such genera have been based on characters so artificial as to divide species otherwise closely connected. It is not to be denied that this is an evil.

The following is a list of the species under their respective genera, subfamilies, and families. The genera and species not named are represented by dotted lines :—

## Family LAMIIDÆ.

## Subfamily ACANTHOCININÆ.

- Eoporis*, Pasc.  
 — *elegans*, Pasc.  
*Ostedes*, Pasc.  
 — . . . . ., sp. n.  
 — . . . . ., sp. n.

## Subfamily EXOCENTRINÆ.

- Cuphisia*, g. n.  
 — *callosa*, sp. n.

## Subfamily NIPHONINÆ.

- Ælara*, J. Thoms.  
 — *arrogans*, Pasc.  
 — *concisa*, J. Thoms.  
*Daxata*, Pasc.  
 — *ustulata*, sp. n.

## Subfamily MESOSINÆ.

- Anancylus*, J. Thoms.  
 — *griseatus*, Pasc.  
*Ereis*, Pasc.  
 — *anthriboides*, Pasc.  
*Mesosa*, Serv.  
 — *allapsa*, sp. n.  
*Cacia*, Newm.  
 — *inculta*, Pasc.  
 — *melanopsis*, sp. n.  
 — *pistor*, sp. n.  
 — *herbacea*, sp. n.  
 — *obsessa*, sp. n.  
*Clyzomedus*, Pasc.  
 — *nanus*, Pasc.  
 — *annularis*, sp. n.  
*Coptops*, Serv.  
 — *vomicosa*, Pasc.  
 — *polyspila*, Pasc.  
 — *lecideosa*, Pasc.  
*Saimia*, Pasc.  
 — *albidorsalis*, Pasc.  
 — *bituberosa*, sp. n.

- Agelasta*, Newm.  
 — *lambii*, sp. n.  
 — *polynesus*, White.  
 — *sobrina*, Pasc.  
 — *balteata*, sp. n.  
 — *substrigosa*, sp. n.  
*Æsopida*, J. Thoms.  
 — *malasiaca*, J. Thoms.  
*Golsinda*, J. Thoms.  
 — *corallina*, J. Thoms.  
*Palimna*, Pasc.  
 — *tessellata*, Pasc.  
 — *mouhotii*, sp. n.  
*Sodus*, Pasc.  
 — *ursulus*, sp. n.

## Subfamily APOMECYNINÆ.

- Cenodocus*, J. Thoms.  
 — *adustus*, Pasc.  
 — *granulosus*, sp. n.  
*Ixais*, g. n.  
 — *episomoides*, sp. n.  
*Cyadium*, g. n.  
 — *cribrosum*, sp. n.  
*Sesiosa*, Pasc.  
 — *subfasciata*, Pasc.  
*Praonetha*, Blanch.  
 — *obducta*, Pasc.  
 — *illicita*, Pasc.  
 — *consularis*, sp. n.  
 — *villosa*, sp. n.  
 — . . . . .  
 — . . . . .  
 — . . . . .  
*Ropica*, Pasc.  
 — *vinacea*, Pasc.  
 — . . . . .  
*Sybra*, Pasc.  
 — *umbratica*, Pasc.  
*Atimura*, Pasc.  
 — *bacillina*, Pasc.  
 . . . . ., g. n.  
 — . . . . ., sp. n.

*Xylorhiza*, Lap.— *venosa*, Lap.*Thylactus*, g. n.— *angularis*, sp. n.

## Subfamily DORCADIONINÆ.

*Obages*, g. n.— *palparis*, sp. n.

## Subfamily HYPSILOMINÆ.

*Cereopsius*, Pasc.— *whitei*, J. Thoms.*Combe*, J. Thoms.— *brianus*, White.*Amesisa*, Pasc.— *consularis*, Pasc.*Pharsalia*, J. Thoms.— *incerta*, Pasc.*Cycos*, g. n.— *subgenmatus*, J. Thoms.*Peribasis*, J. Thoms.— *aspersa*, Pasc.— *pubicollis*, Pasc.*Omocyrius*, g. n.— *fulvisparsus*, sp. n.*Achthophora*, Newm.— *dactylon*, Pasc.*Trachystola*, Pasc.— *granulosa*, Pasc.

## Subfamily LAMINÆ.

*Batocera*, Lap.— *victoriana*, J. Thoms.— *thomsoni*, Javet.*Apriona*, Chevrol.— *germari*, Hope.*Thestus*, g. n.— *oncideroides*, sp. n.*Cerosterna*, Blanch.— *approximator*, J. Thoms.*Metopides*, g. n.— *occipitalis*, sp. n.*Epepeotes*, g. n.— *luscus*, Fab.*Blephephæus*, g. n.— *succinator*, Chevrol.*Epicedia*, J. Thoms.— *plagiata*, J. Thoms.

— ? . . . . .

— ? . . . . .

*Monochamus*, Serv.— *fistulator*, Germ.— *musivus*, sp. n.— *sobrius*, Pasc.

— ? . . . . .

*Imantocera*, J. Thoms.— *plumosa*, Ol.*Gnoma*, Fab.— *dispersa*, sp. n.*Mecotagus*, g. n.— *tigrinus*, Ol.*Olenecamptus*, Chevrol.— *bilobus*, Fab.— *optatus*, sp. n.— *quietus*, sp. n.

## Subfamily ONOCEPHALINÆ.

*Atossa*, J. Thoms.— *atomaria*, sp. n.

## Subfamily HIPPOPSINÆ.

*Nyctimene*, J. Thoms.— *agriloides*, J. Thoms.*Tetraglenes*, Newm.— *insignis*, Newm.

## Subfamily SAPERDINÆ.

*Entelopes*, Guér.— *glauca*, Guér.— *similis*, sp. n.— *ioptera*, Pasc.*Serixia*, Pasc.— *prolata*, Pasc.

— . . . . .

— *basalis*, sp. n.— *longicornis*, Pasc.— *prasinata*, sp. n.

— . . . . ., sp. n.

*Xyaste*, g. n.— *nigripes*, Pasc.

## Subfamily ASTATHEINÆ.

*Astathes*, Newm.— *splendida*, Fab.— *terminata*, Pasc.— *nigricornis*, J. Thoms.

— . . . . .

## Subfamily PHYTÆCIINÆ.

*Glenea*, Newm.

- Glenea elegans*, Ol.  
 — *porphyrio*, sp. n.  
 — *blandina*, Pasc.  
 — .....  
 — *rufina*, Pasc.  
 — *neanthes*, sp. n.  
 — *extensa*, Pasc.  
 — *oudetera*, J. Thoms.  
 — *anticepunctata*, J. Thoms.  
 — *vesta (pulchella)*, Pasc.  
 — ..... , sp. n.  
 — *algebraica*, J. Thoms.  
 — *jubæa*, sp. n.  
 — *cunila*, sp. n.  
 — *alysson*, sp. n.  
 — *æme*, sp. n.  
 — *illuminata*, J. Thoms.  
 — *manto*, sp. n.  
 — *anthyllis*, sp. n.

- .....  
*Tanylecta*, g. n.  
 — *lambii*, sp. n.  
*Zosne*, g. n.  
 — *cincticornis*, sp. n.  
*Oberea*, Muls.  
 — *curialis*, sp. n.  
 — *clara*, sp. n.  
 — *tenuata*, sp. n.  
*Ectinogramma*, J. Thoms.  
 — *collare*, sp. n.  
*Nedytisis*, g. n.  
 — *obrioides*, sp. n.

## Family CERAMBYCIDÆ.

## Subfamily LEPTURINÆ.

- Capnolymma*, Pasc.  
 — *stygium*, Pasc.  
 — *capreola*, sp. n.  
*Asilaris*, g. n.  
 — *zonatus*, sp. n.  
*Ephies*, g. n.  
 — *cruentus*, sp. n.  
*Leptura*, Lin.  
 — ..... , sp. n.  
*Philus*, W. W. Saund.  
 — *rufescens*, sp. n.

## Subfamily STENODERINÆ.

- Dejanira*, J. Thoms.

- Dejanira 4-punctata*, J. Thoms.  
 — *biapiculata*, sp. n.  
*Diosyris*, g. n.  
 — *miranda*, sp. n.

## Subfamily DISTENIINÆ.

- Noëmia*, Pasc.  
 — *flavicornis*, Pasc.  
 — *chalybeata*, sp. n.

## Subfamily NECYDALINÆ.

- Merionæda*, Pasc.  
 — *acuta*, sp. n.

## Subfamily OBRINÆ.

- Deuteromma*, Pasc.  
 — *testaceum*, Pasc.  
*Ciopera*, g. n.  
 — *decolorata*, sp. n.

## Subfamily RHINOTRAGINÆ.

- Epianthe*, g. n.  
 — *viridis*, sp. n.  
*Mydasta*, g. n.  
 — *discoidea*, sp. n.  
*Sestyra*, g. n.  
 — *cephalotes*, sp. n.  
*Mimistena*, g. n.  
 — *femorata*, sp. n.  
*Plutonesthes*, J. Thoms.  
 — *crocata*, sp. n.

## Subfamily ERYTHRINÆ.

- Erythrus*, White.  
 — *ignitus*, sp. n.  
 — *lacertosus*, sp. n.  
 — *apiculatus*, sp. n.  
 — *atricollis*, sp. n.  
*Pyrestes*, Pasc.  
 — *politus*, sp. n.  
 — *scapularis*, sp. n.  
 — *virgatus*, sp. n.  
 — *nigricollis*, sp. n.

## Subfamily CALLICHRONINÆ.

- Chloridolum*, J. Thoms.  
 — *thomsoni*, Pasc.  
 — *cinnyris*, sp. n.  
*Leontium*, J. Thoms.  
 — .....

*Pachyteria*, Serv.

- *equestris*, Newm.
- *lambii*, sp. n.
- *virescens*, sp. n.
- *spinicollis*, sp. n.
- *insignita*, sp. n.
- *strumosa*, sp. n.

## Subfamily CLYTINÆ.

*Xylotrechus*, Chev.

- *australis*, Lap.

— . . . . .

— . . . . .

*Clytanthus*, J. Thoms.

- *annularis*, Fab.

— . . . . .

— . . . . .

*Demonax*, J. Thoms.

- *macilentata*, Chev.

— . . . . .

. . . . ., g. n.

— . . . . ., sp. n.

*Dere*, White.

- *marginata*, sp. n.

*Bicon*, g. n.

- *sanguineus*, sp. n.

*Sigeum*, g. n.

- *humerales*, Pasc.

*Euryarthrum*, Blanch.

- *nodicolle*, sp. n.
- *lambii*, sp. n.
- *carinatum*, sp. n.
- *interruptum*, sp. n.
- *egenum*, sp. n.
- *atripenne*, sp. n.

*Asmedia*, g. n.

- *mimetes*, sp. n.

## Subfamily CERAMBYCINÆ.

*Cerambyx*, Lin.

- *pruinosis*, sp. n.

*Neocerambyx*, J. Thoms.

- *lambii*, sp. n.
- ? *intricatus*, sp. n.
- . . . . ., sp. n.

*Hoplocerambyx*, J. Thoms.

- *relictus*, sp. n.

*Dialeges*, Pasc.

- *pauper*, Pasc.

*Imbrius*, g. n.

- *ephebus*, sp. n.
- *lineatus*, sp. n.
- *strigosus*, sp. n.
- . . . . ., sp. n.

*Rhytidodera*, White.

- *simulans*, White.
- *crinata*, sp. n.

*Cyriopalus*, g. n.

- *wallacei*, sp. n.

*Ceresium*, Newm.

- *raripilum*, Newm.
- *vestigiale*, sp. n.
- *zeylanicum*, White.
- *simplex*, Gyll.
- *versutum*, sp. n.

## Subfamily PURPURICENINÆ.

*Purpuricenus*, Serv.

- *sanguinolentus*, Ol.

*Euryphagus*, J. Thoms.

- *maxillosus*, Ol.

*Euryclea*, J. Thoms.

- *cardinalis*, J. Thoms.

## Subfamily CERASPHORINÆ.

*Stromatium*, Serv.

- *asperulum*, White.

*Noserius*, Pasc.

- *tibialis*, Pasc.

*Gnatholea*, J. Thoms.

- *eburifera*, J. Thoms.

*Xystrocera*, Serv.

- *globosa*, Ol.
- *alcyonea*, sp. n.
- . . . . ., g. n.

— . . . . ., sp. n.

## Family PRIONIDÆ.

## Subfamily MACROTOMINÆ.

*Remphan*, Waterh.

- *hopei*, Waterh.

## Subfamily ÆGOSOMINÆ.

*Ægosoma*, Serv.

- *marginale*, Fab.

*Megopis*, Serv.

- *procerus*, sp. n.

## LAMIIDÆ.

## ACANTHOCININÆ.

## EOPORIS.

*Eoporis*, Pascoe, Long. Malay. p. 15.

EOPORIS ELEGANS, Pascoe, *l. c.* p. 16, pl. 1. f. 6.

Two specimens of this widely distributed species, which is found so far south as New Guinea, occur in the collection.

## OSTEDES.

*Ostedes*, Pascoe, Trans. Ent. Soc. ser. 2. v. p. 43.

OSTEDES ———.

Two species of this, or a nearly allied genus, are in the collection, but are not sufficiently perfect to admit of description.

## EXOCENTRINÆ.

## CUPHISIA.

Caput magnum; oculi parvi, profunde emarginati.

Antennæ setosæ, scapo tenuiter cylindrico articulo tertio brevior.

Prothorax transversus, lateraliter inermis.

Head large, broad and convex in front; antennary tubers short, remote; lip small, rounded; eyes small, lateral, deeply divided; palpi short, pointed. Antennæ slender, setose, rather longer than the body; the scape attenuate, cylindrical, shorter than the third joint; the rest gradually but rapidly diminishing. Prothorax short, transverse, not broader than the head, the sides unarmed and slightly rounded. Elytra rather broad, with parallel sides, only rounded at the apex; the shoulders prominent; the disk with a slight callosity on each side near the scutellum. Legs of moderate length; anterior and intermediate coxæ globose and exerted, with the acetabula of the former broadly triangular externally; femora rather incrassated; anterior tibiæ slightly curved, the rest straight; tarsi equal, the three basal joints, taken together, triangular. Pro- and mesosterna simple. Body setose.

Twenty-two genera of this subfamily were found by Mr. Wallace; but there is only one exponent of it in this collection, representing a form which cannot be referred to any of them, although coming near *Egesina*. From that genus, however, it differs in its slender antennæ and elongate and cylindrical scape, which, notwithstanding, is shorter than the third joint; *Emeopedus* is in no wise setose; *Ebæides* and *Dyemus* differ in their remarkably thickened and nodulose antennæ; *Euispia* and *Nesomomus* have also differently formed antennæ; and, lastly, *Oloessa* has (*inter alia*) divided eyes. All the other eastern genera have the prothorax spined or toothed at the sides.

## CUPHISIA CALLOSA. (Pl. XXVI. fig. 1.)

*C. pallide fusca, sparse griseo pubescens; elytris fortiter punctatis, basi fulvis, maculis paucis fulva pilosis ornatis.*

Pale brown, subnitid, with a sparse greyish pubescence; head and prothorax reddish brown, impunctate, the pubescence thicker, with a yellowish tinge; scutellum nearly triangular, pointed posteriorly; elytra coarsely substriate-punctate, the base fulvous, and having a well-marked callus on each near the suture and a little behind the scutellum, posteriorly four patches of fulvous hairs, one behind the middle, equidistant from the suture and external margin, another and the largest preapical, and two outer on the same lateral lines as the preceding; body beneath, legs, and antennæ more or less fulvous brown, subnitid, and all, as well as the whole upper surface, clothed with scattered erect setose hairs, principally white, but intermixed with a few black. Length  $2\frac{1}{2}$  lines.

## NIPHONINÆ.

## ÆLARA.

*Ælara*, J. Thomson, Syst. Ceramb. p. 55.

## ÆLARA ARROGANS.

*Niphona arrogans*, Pascoe, Journ. of Entom. i. p. 338.

*Ælara arrogans*, Pascoe, Long. Malay. p. 82, pl. 4. f. 5.

M. Thomson has two other genera (*Camptocnemu* and *Ocheutes*) which I am unable to distinguish satisfactorily from this. The comparative length of the antennæ, upon which they appear to be chiefly based, varies according to the species and to the sex: thus the male of *Ælara arrogans*, which is an *Ocheutes*, has the antennæ quite as long as *Æ. excisa*, which I take to be congeneric with *Æ. ferdinandi*, the type of the genus. Neither of the three genera would admit *Niphona cylindracea*, White; and one or two others would be nearly as difficult to locate. At the same time they are all tolerably homogeneous in appearance. The species under review has been taken by Mr. Wallace in Sarawak, where it does not appear to be uncommon.

## ÆLARA CONCISA, Thomson.

I have received a specimen from M. J. Thomson under this name from Java. I am not aware if he has published it. I have seen it, or a species very similar, from the Himalaya, in Mr. W. Wilson Saunders's collection.

## DAXATA.

*Daxata*, Pascoe, Long. Malay. p. 88.

## DAXATA USTULATA. (Pl. XXVII. fig. 4.)

*D. grisescens, maculis punctiformibus nigris ornata; elytris singulis basi lineato-cristatis.*

Covered with a short greyish pile, scarcely concealing the shining brownish or yellowish-brown derm beneath; head grey in front, a black patch behind the eye, which is continuous with a line of the same colour on each side of the prothorax, the latter slightly depressed in the centre, with a short longitudinal elevated line, the sides transversely wrinkled; scutellum subquadrate, but a little rounded posteriorly; elytra nearly impunctate, except at the base, rather sparsely dotted with small black punctiform spots, but two or three of larger size forming a transverse interrupted bar behind the middle, at the base a few shining granules and two elevated lines, the innermost simulating a crest; behind the shoulder the elytron is slightly incurved and marked with a dark-brown longitudinal patch; body beneath and legs reddish brown, with a sparse ochreous-grey or greyish pile; the tibiæ varied with dark brown; antennæ brown, the joints, from the third inclusive, ashy at the base, the scape varied with ochreous. Length 8 lines.

*Daxata* is particularly distinguished by its thick pyriform scape and the tooth-like process on the inner edge of the antennary tuber. In this species the eye is larger in proportion, and the remarkably elevated and conical protuberance of the elytron in *Daxata camelus* is replaced by a short narrow crest. The second abdominal segment of the specimen before me is furnished on each side with the curious semicircular hairy patch common to many of the members of this subfamily, and which, I believe, is confined to the males. *D. camelus* is from Sarawak.

## MESOSINÆ.

## ANANCYLUS.

*Anancylus*, J. Thomson, Syst. Ceramb. p. 61.

## ANANCYLUS GRISEATUS.

*Mesosa griseata*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 243.

All the individuals of this species I have hitherto seen have been from Sarawak.

## EREIS.

*Eris*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 110 (nec Koch).

*Ereis*, Pascoe, Long. Malay. p. 105.

EREIS ANTHRIBOIDES, Pascoe, Trans. l. c. pl. 22. f. 7.

This also has hitherto only occurred at Sarawak. I have described two other species from Cambodia.

## MESOSA.

*Mesosa*, Serville, Ann. Soc. Entom. de France, t. 4. p. 43.

## MESOSA ALLAPSA.

*M. rufo-grisea*, fusco variegata; antennis rufescentibus, fusco maculatis et annulatis.



Covered above with a short dense reddish-grey pubescence varied or marbled with brown; head minutely punctured, the mesial line extending to the lip; prothorax transverse, rounded at the sides, rather finely punctured; scutellum rounded behind; elytra broader behind the middle, the punctures larger than those on the prothorax, and very irregular, the brown mottling the whole of the elytra in a very indefinite manner, but forming posteriorly an oblique zigzag line, anterior to which, but behind the middle, is a large brown well-marked spot; body beneath dark chestnut, the sides of the abdomen densely clothed with a rich-reddish-brown pile; legs covered with a delicate rosy pubescence, banded with dark brown, the two basal joints of the tarsi entirely rosy, the third and fourth varied with brown; antennæ longer than the body, also with a short rosy pubescence, the four basal joints spotted, and at their tips, as well as the tips of the remainder, ringed with brown. Length 7 lines.

Not to be distinguished generically, as it appears to me, from the *Mesosa curculionoides* of Europe. It is a very distinct species from the *M. perplexa* of China.

#### CACIA.

*Cacia*, Newman, Entom. p. 290 (1842).

*Corethrophora*, Blanchard, Voy. au Pôle Sud, t. 4. p. 301 (1843).

CACIA INCULTA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 102.

Mr. Wallace took this species in Singapore and Sarawak.

CACIA MELANOPSIS. (Pl. XXVI. fig. 4.)

*C. fusco-grisea, nigro et albo variegata; capite antice glabro, nigro; prothorace transversim corrugato; tarsis cinereis, atro marginatis.*

Dark brown, the pubescence brownish grey mingled with spots and patches of dark brown and white; head glabrous in front (from abrasion?), black, finely punctured, a patch of whitish pubescence under the eye; prothorax transverse, scarcely broader than the head, finely corrugated, the pubescence very slight and mostly brownish grey; scutellum small, rounded posteriorly; elytra with a slightly elevated granular line on each side at the base, the punctures very small and partly concealed by the pubescence, behind the middle a series of white spots forming an indefinite band, nearer the apex a similar band but narrower, the rest greyish, with dark spots; body beneath and legs with a slight greyish pile; the knees and ends of the tibiæ black; tarsi ashy, bordered with black; antennæ (♀) as long as the body, black, the third and fourth joints (except at the tips and their tufts) ashy, scape nearly glabrous, finely punctured. Length 8 lines.

A fine and very distinct species.

CACIA PISTOR.

*C. albescens, fusco maculata; capite prothoraceque albescentibus, hoc haud corrugato; tarsis cinereis, nigro marginatis.*

In size and outline like the last ; but the general colour is white without any brownish grey, the head pubescent in front, and the prothorax not corrugated ; the antennæ and legs similar, except that the black on the knees is less marked. There is only one specimen of each. In both, the third and fourth antennary joints are produced at the apex, but the process is concealed by the tuft of hairs with which the apices of these joints are furnished.

CACIA HERBACEA. (Pl. XXVI. fig. 3.)

*C. capite fulvescente; elytris griseo-viridibus, basi et ultra medium dilutioribus; tarsis infuscatis.*

Head with a pale ochreous-grey pubescence, finely punctured in front ; lip pale brown ; prothorax short, greenish grey with four oblong blotches, the two central paler ; scutellum transverse ; elytra setulose at the sides, yellowish green, the base and behind the middle paler, the latter with darker blotches forming an incomplete band ; body beneath and legs covered with a fine greyish-yellow pile, the ends of the tibiæ and tarsi chocolate-brown ; antennæ about as long as the body (♀), ochreous, the fourth joint and its tuft brown except at the base, the third finely spined at the apex\*. Length  $4\frac{1}{2}$  lines.

CACIA OBSESSA.

*C. cinerea; prothorace fusco bivittato; elytris fusco irroratis vel plagiatis; tarsis infuscatis.*

Pubescence pale ashy varied with stripes or spots of blackish ; head ashy, a dark band between the eyes ; eyes very small ; prothorax short, impunctate, with two blackish stripes, each continuous with a patch behind the eye ; scutellum semicircular ; elytra rather short, sparingly punctured, especially towards the apex, indeterminate sprinkled with blackish ; body beneath and legs ashy, the tarsi darker ; antennæ blackish, bases of the second, third, fourth, and fifth joints entirely ashy, elongated tuft on the fourth black. Length 4 lines.

*Cacia* is a somewhat heterogeneous genus, though, on the whole, one readily recognized. In some of the species the two sexes have the antennæ nearly equal in length ; in the females of others the seven terminal joints are together scarcely a quarter the length of the remainder, while in the male they are half as long again as the basal portion. Tufts of hairs are found on the third or fourth joint, or on both, or they disappear altogether ; these are sometimes supported by spines or short prolongations of the apices of the joints, or the spines occur without tufts. The colouring is very variable, even occasionally in the same species.

CLYZOMEDUS.

*Clyzomedus*, Pascoe, Long. Malay. p. 115.

\* In *Cacia inculta* this character is present or absent in the same species.

CLYZOMEDUS NANUS.

*Coptops nanus*, Pascoe, Trans. Ent. Soc. ser. 2. v. p. 39.

*Clyzomedus nanus*, Pascoe, Long. Malay. p. 116, pl. 8. f. 4.

This species was found in New Guinea by Mr. Wallace, but in none of the intervening islands.

CLYZOMEDUS ANNULARIS.

*C. pallide brunneus, tenuissime griseo pubescens; antennis griseis, brunneo annulatis.*

Pale reddish brown, with an exceedingly delicate greyish pubescence, which is, however, coarser on the head and face; prothorax very short, impunctate; scutellum scutiform; elytra rather short, finely punctured, the punctures larger at the base, the pubescence somewhat irregular and forming, principally posteriorly, one or two indefinite flexuous lines; body beneath, legs, and antennæ with a thin greyish pubescence, the latter with tips of the joints dark reddish brown. Length  $3\frac{1}{2}$  lines.

*Clyzomedus* has been separated from *Coptops* on account of its prosternum produced posteriorly, forming an angular transverse ridge between the coxæ, not rounded or without such angle. The species are also smaller and far less robust.

COPTOPS.

*Lachnia*, deuxième division *Coptops*, Serville, Ann. Soc. Ent. de France, t. 4. p. 64.

COPTOPS VOMICOSA.

*Abryna vomica*, Pascoe, Journ. of Entom. i. p. 341.

This species, described in the work above quoted, was found by the late M. Mouhot in Cambodia, where it appears to be common.

COPTOPS POLYSPILA, Pascoe, Long. Malay. p. 118.

Also found by Mr. Wallace at Pulo Penang.

COPTOPS LECIDEOSA, Pascoe, Long. Malay. p. 120.

Mr. Wallace's specimens are from Sarawak and Sumatra.

SAIMIA.

*Samia*, Pascoe, Long. Malay. p. 121.

SAIMIA ALBIDORSALIS.

*Samia albidorsalis*, Pascoe, *l. c.* p. 122, pl. 8. f. 6.

Found also by Mr. Wallace at Singapore and Sarawak. Mr. Lamb's specimen has five well-marked tuberosities on the disk\*.

\* I have slightly altered the orthography, the original name having been pre-occupied for a genus of Lepidoptera.

## SAIMIA BITUBEROSA.

*Fusca, grisescente pubescens; prothorace medio valde bituberoso.*

Brownish, with a thin greyish pubescence, forming on the elytra little longitudinal silky ridges; head rather broad and thinly pubescent in front; prothorax about equal in length and breadth, two approximate strongly marked tubers a little before the middle, the rest of the disk tolerably regular, on each side anteriorly a short thick tooth; scutellum transversely quadrate; elytra rather short, thinly punctured, a broad callus on each side at the base; body beneath and legs chestnut-brown, shining, the pubescence thin and spotty; antennæ more than twice as long as the body, chestnut-brown, the basal joints with greyish pubescent spots, the middle and terminal joints with the base and the tip of each greyish. Length 9 lines.

## AGELASTA.

*Agelasta*, Newman, The Entom. p. 288.

AGELASTA LAMBII. (Pl. XXVI. fig. 7.)

*A. fusca, pube alba brevissima et densissima induta; capite prothoraceque albo vittatis; elytris albis, ultra medium fascia angusta vittisque fuscis ornatis.*

Covered with a very short but very dense white pubescence, varied with lines or stripes of dark chocolate-brown, which are very nearly glabrous; head with one central and two lateral yellowish-white stripes, the latter interrupted above the eye, the cheeks white; prothorax yellowish white, with two central brown stripes connected posteriorly, and three lateral stripes, the two innermost united anteriorly and all continuous with the stripes on the head; scutellum transversely scutiform; elytra minutely punctured, of a clear chalky white to behind the middle, where they are crossed by a narrow irregular brown band, which throws out towards the apex two (or three) stripes on each side; body beneath black, shining, the sides pubescent, white; legs pure white, the tarsi dark brown, except the lobes of the third and middle of the fourth joints; antennæ longer than the body in the male and *twelve*-jointed, in the female shorter than the body and *eleven*-jointed, dark brown, the second and bases of the third to the sixth joints white. Length 7-8 lines.

Closely allied to *A. wallacei*, but differing in the absence of the brown band at the base of the elytra, and the presence of a supplementary joint in the antennæ of the male.

AGELASTA POLYNESUS, White, Catal. Long. Brit. Mus. (1855) pl. 10. f. 9 (sine descript.); Proc. Zool. Soc. 1856, p. 410.

Apparently a common species at Singapore and Sarawak.

AGELASTA SOBRINA, Pascoe, Long. Malay. p. 127.

In the Wallacean collection there are specimens from Singapore,

Sarawak, and Banca. It has been confounded with *Agelasta amica*, White.

*AGELASTA BALTEATA.* (Pl. XXVI. fig. 9.)

*A. supra pube rufo-brunnea induta, maculis plurimis et fascia elytrorum rufo-fuscis.*

Above with a short dense pale reddish-brown pubescence, mingled with a few white hairs, with several spots and a band on the elytra dark reddish brown; spots on the head somewhat obscure, on the prothorax about nine, the odd one nearly at the base; scutellum broadly triangular; elytra with a well-marked band between the middle and the base, and eight or nine spots on each posteriorly; body beneath pubescent, pale ashy; legs brownish, the tips of the tibiæ and the tarsi dark brown; antennæ brown, the base as far as the middle of the third joint and bases of the fourth and fifth ashy. Length 5 lines.

Approaches in some respects *A. newmani*, which, however, is of an ashy colour, with two bands on the elytra; in both, the scape and third and fourth joints are of equal length.

*AGELASTA SUBSTRIGOSA.* (Pl. XXVI. fig. 8.)

*A. nigra, pube dispersa cinerea induta; capite, prothorace, et basi elytrorum granulis numerosis nigris nitidis instructis.*

Black, with small patches (on the elytra, posteriorly, lines) of pale ashy pile; head and prothorax with numerous small black shining granules, between which are little patches of ashy hairs, the latter narrowed behind, a little contracted anteriorly, the sides without any projections; scutellum transverse, nearly glabrous; elytra subcylindrical, the base finely granulate, the middle with a few foveolate punctures and three or four white spots on each side, towards the apex indefinite longitudinal lines of pale ashy; body beneath and legs black, subnitid, with a mottled ashy pubescence, tarsi ashy, the basal and apex of the claw-joint black; antennæ slender, about half as long again as the body in the male, black, with the base speckled with ashy, the bases of the fourth and fifth and eighth and ninth joints ashy. Length 5 lines.

An interesting species, resembling in colour *A. irrorata*, but more cylindrical than any other member of the genus, and furnished with little graniferous points rising in an exceedingly definite manner from the derm. In this species the third joint of the antennæ has a double curve, and is considerably longer than any other. The technical characters of *Agelasta* are extremely variable, yet, notwithstanding, it is a very natural genus and very readily recognized.

*ÆSOPIDA.*

*Æsopida*, J. Thomson, Syst. Céramb. p. 62.

*ÆSOPIDA MALASIACA*, J. Thomson, *l. c.* p. 62.

Apparently not uncommon in Malacca.

## GOLSINDA.

*Golsinda*, J. Thomson, Essai Class. Céramb. p. 343.

GOLSINDA CORALLINA, J. Thomson, *l. c.* p. 344.

The single example in Mr. Lamb's collection differs a little in the colour of its antennæ and legs from the Borneo species. In the former a pale ashy replaces the bright orange of the latter, and *all* the joints of the antennæ, except the last, are ringed; beyond this I am unable to distinguish it. M. Mouhot also took it in Laos.

## PALIMNA.

*Palimna*, Pascoe, Journ. of Entom. i. p. 346 (1862).

*Cylanca*, J. Thomson, Syst. Ceramb. p. 58 (1864).

## PALIMNA TESSELLATA.

*Golsinda tessellata*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 49; Long. Malay. p. 135, pl. 6. f. 2.

Numerous individuals of this species were found by Mr. Wallace in Sarawak.

## PALIMNA MOUHOTII.

*P. nigra, albo maculata, densissime et breviter pubescens; elytris apice rotundatis; articulo ultimo tarsorum toto nigro.*

Covered with a very dense and short black pubescence, marked with large definite, occasionally almost confluent, white spots; head white, band between the eyes and behind them black; prothorax a little transverse, the lateral angle fringed with a row of small black granules, the disk irregular, with a large black patch, varied with two or three spots of white; scutellum scutiform, black, the centre white; elytra with two erect spines at the base of each, the shoulders also slightly spinous or tuberculate, an oblique angular line on each side, the apex rounded; legs and antennæ ringed with black and white, the first two joints of the tarsi white bordered with black, the last two entirely black. Length 10 lines (♂)—13 (♀).

This description has been drawn up from Laos specimens collected by the late M. Mouhot. The species bears a very decided resemblance to *P. tessellata*, but the colours are much purer and more clearly limited, the prothorax shorter, more coarsely toothed, and the last tarsal joint is entirely black. There are other differences, which may, however, not be so permanent.

## SODUS.

*Sodus*, Pascoe, Long. Malay. p. 137.

SODUS URSULUS. (Pl. XXVI. fig. 2.)

*S. fulvo-brunneus, setulosus; capite scutelloque griseis; prothorace basi latiore; antennis brunneis, griseo setulosis.*

Tawny brown, thickly pubescent, everywhere, except the under surface, clothed with short erect setulose hairs; head with sparse greyish hairs, behind the eye a yellowish spot, which corresponds with another on the prothorax, the latter turgid in the centre and expanded at the base; scutellum nearly triangular; elytra remotely and irregularly punctured, obscurely varied with dark brown, particularly two flexuous marks which enclose near the shoulder a pale yellowish spot; body beneath dark chestnut-brown, subnitid, minutely pubescent; legs and antennæ tawny brown, obscurely varied with greyish. Length  $4\frac{1}{2}$  lines.

A somewhat broader species than *Sodus verticalis*, and otherwise very distinct. *Sodus* is a somewhat isolated genus, differing from the other genera of its subfamily in the rounded apex of the scape, not dilated nor cicatricose, and in the presence of setulose hairs clothing every part of the insect, except the breast and abdomen.

#### APOMECCYNINÆ.

##### CENODOCUS.

*Cenodocus*, J. Thomson, Syst. Ceramb. p. 47.

CENODOCUS ADUSTUS, Pascoe, Long. Malay. p. 142, pl. 10. f. 3.

Mr. Wallace's specimen of this species is from Sumatra. M. Thomson's type (*C. antennatus*) is from Java.

CENODOCUS GRANULOSUS. (Pl. XXVI. fig. 12.)

*C. ferrugineo-griseus*; *elytris singulis medio impressione obliqua instructis*; *tarsis concoloribus*.

Derm black, closely covered with a coarse rusty-grey pile; head rugose in front, the pile sparsely distributed; prothorax oblong, with numerous large foveolate punctures; scutellum semilunar; elytra short, strongly punctured, with here and there black glossy granules between them, from near the suture at about the middle of each elytron a large shallow impression proceeds outwards and downwards, this is nearly free from punctures or granules, and is of a lighter colour than the rest; body beneath and legs with a coarse greyish pile; antennæ brown, the fringe, apex of the fourth, which is otherwise white, and the remainder of the joints black. Length 6 lines.

This is a well-marked species belonging to a well-marked genus. The antennæ are unusually short, even for this subfamily, and the joints of very unequal length, the last seven, for instance, being together shorter than the third; this joint is feathered as it were on two sides by densely compacted hairs. In this species the feathering does not extend to the base of the joint. The scape and also the second joint have also slighter plumes beneath, so far as the above species are concerned, but in M. Thomson's species no mention is made of the plume on the scape.

## IXAIS.

Caput *antice subtransversum, linea mediana ad orem attingente.*  
 Antennæ *perbreves, articulis tertio et quarto subæqualibus, infra fimbriatis.*

Elytra *basi angusta, postice latiora, in medio elevato-convera.*

Head rather transverse in front, the impressed median line extending from the vertex to the mouth; antennary tubers almost obsolete. Eyes deeply divided, the lower lobe somewhat approximating to the base of the mandibles. Antennæ very short, entirely pubescent, scape ovate, the third joint very little longer than the fourth, both closely fimbriated beneath, the last seven joints exceedingly short. Prothorax subquadrate, its sides nearly straight. Elytra highly convex in the middle, narrower and depressed at the base, broadest posteriorly. Legs short, robust, nearly equal; anterior coxæ exerted, their acetabula with a vertical angle. Pro- and mesosterna slightly raised, their opposing faces rounded.

This genus is a modification of the *Cenodocus* form, differing principally in the shape of the elytra, the presence of a strongly impressed median line on the head, and the relative proportion of the third antennary joint. The only species which it contains at present is remarkable for its general resemblance to *Episomus pauperatus*, Fab. (*Curculio*), a native of Sumatra, and probably extending to the opposite coast of Malacca, as it occurs also in Java. There are other genera of Longicorns which never fail to recall forms belonging to widely different groups.

## IXAIS EPISOMOIDES. (Pl. XXVI. fig. 10.)

I. *supra fusco-grisea, infra albida; elytris seriatim punctatis, punctis oblongis, profunde impressis.*

Derm brownish testaceous, covered above with a thin greyish pile; head slightly punctured in front, two brownish stripes on the vertex, continuous with a broad central stripe of the same colour on the prothorax, the latter with crowded foveolate punctures; scutellum transverse; elytra seriate punctate, the punctures rather irregular near the suture, oblong and very deeply impressed, with a few pale-testaceous granular elevations, principally at the base, the sides anteriorly and a few small spots white; body beneath and legs covered with a whitish pubescence; antennæ about half as long as the body, closely pubescent, white, except the apex of the fourth and all the succeeding joints. Length 6 lines.

## CYARDIUM.

Caput *subtransversum, fronte sulcato.*

Antennæ *breves, robustæ, vix fimbriatæ, scapo obconico.*

Prothorax *capite paulo latior, dente antico instructus.*

Elytra *elongata, cylindrica.*

Head transverse in front, the forehead deeply sulcate; antennary tubers robust; eyes deeply divided. Antennæ short, stout, pubes-



cent, scarcely fimbriated; scape obconic, third joint much longer than the fourth, the rest very short. Prothorax a little broader than the head, subcylindrical, toothed anteriorly. Elytra elongate, cylindrical, callous at the base. Legs short, equal; anterior tibiæ not toothed internally. Prosternum elevated. Mesosternum toothed anteriorly.

The presence of a prothoracic tooth, as well as the style of sculpture, places this genus in the neighbourhood of *Synelasma*, from which, however, it abundantly differs in the characters of the head, antennæ, and in its elongate cylindrical form.

CYARDIUM CRIBROSUM. (Pl. XXVI. fig. 5.)

*C. pallide ferrugineum, sparse griseo pubescens; elytris post medium fascia albida ornatis; antennis articulis tertio et quarto, apice excepto, albis.*

Pale rusty brown, rather sparingly clothed with a greyish pubescence; head deeply impressed on the vertex between the upper lobes of the eyes, the front coarsely punctured, each puncture with a stiff whitish hair at the base; prothorax with deep crowded irregular impressions having apparently a deciduous greyish pubescence, the raised intermediate portions tuberculiform or granular; scutellum very transverse; elytra with a slight callus near the base, and numerous large foveolate punctures, and little patches of ochreous pubescence between them, behind the middle a broad whitish band; body beneath pale buff, spotted with yellowish brown; legs buff, varied with brownish; antennæ dark brown, the scape reddish brown, third and fourth joints white except at their tips. Length 8 lines.

SESIOSA.

*Sesiosa*, Pascoe, Long. Malay. p. 154.

SESIOSA SUBFASCIATA, Pascoe, *l. c.* p. 154, pl. 8. f. 2.

The Wallacean specimen is from Singapore. The genus is allied to *Apomecyna*.

PRAONETHA.

*Prioneta* (ab errore), Blanchard, Voy. au Pôle Sud, iv. p. 292.

PRAONETHA OBDUCTA, Pascoe, Long. Malay. p. 165.

The puncturation is a little coarser than on the typical specimens from Ceram and Bouru, on which I have based my description.

PRAONETHA ILLICITA, Pascoe, *l. c.* p. 169.

It is possible that this is only a subspecies or variety of a widely distributed species, and it will then be found to extend from Penang to Java on the one hand, and to Aru on the other. Other localities are Goram, Batchian, and Mysol.

PRAONETHA CONSULARIS.

*P. fusca, pube densa flavida vestita; vertice maculis duabus,*

*prothorace plagis duabus basalibus, scutelloque medio purpureo-fuscis; tarsiis fuscis.*

Dark brown, covered with a coarse yellowish-grey pile; head white between the eyes, the vertex with two purplish-brown spots; prothorax transverse, a large purplish-brown spot on each side extending to the base; scutellum triangular, with a dark-brown central spot; elytra subtrigonal, strongly crested at the base, three well-marked raised lines on each, across the middle, and curving round from the shoulders a broad band paler and less pubescent than the base and apex; body beneath pilose, yellowish grey, the abdomen ashy; legs closely covered with a yellowish-grey pubescence, the tarsi dark brown, with a few scattered hairs; antennæ yellowish brown. Length 6 lines.

This description is from a specimen in my own collection, taken by Captain Smythe of H. M. 34th; Mr. Lamb's example is smaller and much injured. It is a very distinct species, and will stand for the present after *Praonetha scopulifera*, Pasc.

#### PRAONETHA VILLOSA.

*P. fusca, brunneo-griseo pubescens; prothorace bituberculato; scutello triangulari; elytris obscure fusco variis, linea curvata alba ante cristam posticam sita, crista antica nigro pilosa, apicibus rotundatis.*

Dark brown, with a pale brownish-grey pile, and numerous fine erect hairs; head with a few punctures in front, antennary tubers strongly marked; prothorax subtransverse, the disk slightly bituberculate, with numerous small punctures; scutellum triangular; elytra slightly subtrigonal, rather coarsely punctured, compressed, the basal crests formed of black erect hairs, a short curved white transverse line before the posterior crests, rest of the elytra obscurely varied with brown; body beneath and legs rufous, with a thin grey pile; antennæ brown, slightly annulate with grey. Length 4 lines.

This species will stand in my fifth section of the genus, after *P. fractilinea*, characterized by the "elytra abruptly declivous posteriorly, the angle generally furnished with a short tuft (of hair)—the exterior raised lines nearly obsolete." There are two or three other species in the collection, which appear to be distinct from any of the fifty-three species described in the 'Longicornia Malayana.'

#### ROPICA.

*Ropica*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 247.

ROPICA VINACEA, Pascoe, Long. Malay. p. 194.

Found also at Ternate and Sarawak by Mr. Wallace, whose collection contained twenty-three species.

#### SYBRA.

*Sybra*, Pascoe, Long. Malay. p. 198.

SYBRA UMBRATICA, Pascoe, *l. c.* p. 203.

Occurs also in Sarawak, Mysol, and Ternate. Fifty-two species of this genus are described in the work above quoted.

#### ATIMURA.

*Atimura*, Pascoe, Trans. Ent. Soc. ser. 3. i. p. 548.

ATIMURA BACILLINA, Pascoe, Long. Malay. p. 158.

Mr. Wallace finds this species in Sarawak and Sumatra, and another species in the same localities as well as in Singapore. It is one of the few Longicorn genera common and confined to Australia and the Malayan archipelago.

#### XYLORHIZA.

*Xylorhiza*, Laporte de Castelnau, Hist. Nat. des Ins. ii. p. 476.

XYLORHIZA VENOSA, Laporte, *l. c.* p. 476.

A handsome insect, sometimes nearly two inches long, common to both sides of the Bay of Bengal. It is lazy in its habits, remaining for a long time in one spot, and, unlike the Longicorns generally, bores into the young and living shoots of trees, probably to deposit its eggs.

#### THYLACTUS.

*Scapus obconicus.*

*Palpi brevisculi, glabri.*

*Prothorax utrinque spina valida armatus.*

Head transverse in front; antennary tubers very stout and prominent, approximate at the base. Eyes narrow, broadly emarginate. Antennæ shorter than the body, pubescent, not fimbriated, the scape obconic; third joint longest, the rest gradually shorter (the last joints are wanting). Palpi rather short, not hairy or only slightly pubescent. Prothorax narrow, unequal, armed on each side with a stout spine. Elytra elongate, cylindrical, irregular, a little depressed, expanded at the apex into a broad angular process. Legs short; femora fusiform; tibiæ rather shorter than the tarsi. Pro- and mesosterna depressed.

A remarkable insect, allied to *Xylorhiza* and *Cymatura*, is the type of this genus. From both it will be readily distinguished by its strongly toothed prothorax, as well as the different form of the scape. I should have been inclined to consider these, and other species still referred to *Xylorhiza*, highly individualized members of one group, which, although differing in several technical characters, have a very obvious relationship. This view, however, would not be likely to be adopted.

THYLACTUS ANGULARIS. (Pl. XXVII. fig. 6.)

*T. pube sericea densissima fulvo-brunnea indutus; elytris lateraliter fusco uniplagiatis.*

Covered above with a very dense short silky pubescence of a light

reddish or fulvous-brown colour, beneath coarser and less compact; head slightly punctured in front, the vertex and between the eyes deeply grooved; prothorax with an elevated longitudinal line, the base of the spine occupying the middle third on each side; scutellum nearly semicircular; elytra about five times as long as the prothorax, and much broader at the base, minutely and sparingly punctured, the base and a large longitudinal patch on each side behind the middle, where the elytron is hollowed or impressed, dark brown, the apices broadly truncate and expanding beyond the side into a large rectangular convex plate; legs and antennæ concolorous. Length 13 lines.

#### DORCADIONINÆ.

##### OBAGES.

*Tubera antennifera erecta, approximata.*

*Palpi maxillares elongati, art. ultimo dilatato, truncato.*

*Prothorax muticus, ovatus, ad elytra arcte applicatus.*

*Tarsi art. penultimo dilatato.*

Head rather narrow, quadrate in front; the antennary tubers stout, nearly erect, approximate or nearly contiguous at the base. Eyes lateral, broadly emarginate, pointed below. Antennæ setaceous, rather longer than the body; scape subelongate, cylindrical; third joint longest, the rest gradually shorter. Maxillary palpi very long, the terminal joint, as also in the labial palpi, considerably larger than the preceding ones, and truncate. Prothorax oblong, subcylindrical, a little broader than the head, the disk regular, the sides unarmed. Elytra ovate, very convex, the convexity culminating at the middle, not wider than the prothorax at the base, humeral angles entirely absent. Legs rather slender, especially the tibiæ of the posterior pair; femora slightly thickened; tarsi short, the penultimate joint dilated. Anterior acetabula narrowly angulated. Pro- and mesosterna declivous.

The unique specimen before me is the only representative of the subfamily in the collection. Mr. Wallace during all his researches only found two species, but neither of these has the slightest affinity to it; nor can I mention any other to which it can be said to be allied. The Australian genus *Microtragus* agrees in its eyes and approximate antennary tubers, but differs in other characters, and has a totally different habit.

OBAGES PALPARIS. (Pl. XXVI. fig. 11.)

*O. piceus, pube sparsa grisea subtiliter indutus.*

Pitchy brown, with a short sparse greyish pile; head more pubescent, rather coarsely punctured; prothorax covered with coarse crowded punctures; scutellum very transverse; elytra deeply striatopunctate, the interstitial lines alone pubescent, the third line from the suture with a small white spot posteriorly, apices obliquely truncate, the outer angle produced; body beneath, legs, and antennæ with a tolerably copious greyish pubescence. Length 4 lines.

## HYPSELOMINÆ.

## CEREOPSIUS.

*Cereopsius*, Pascoe, Journ. of Entom. i. p. 344.

CEREOPSIUS WHITEI, J. Thomson, Syst. Ceramb. p. 556.

A very distinct species, having two large white spots on each elytron.

## COMBE.

*Combe*, J. Thomson, Syst. Ceramb. p. 83.

## COMBE BRIANUS.

*Monohammus brianus*, White, Proc. Zool. Soc. 1858, p. 409.

*Combe fulgurata*, J. Thomson, *op. cit.* p. 84.

This handsome insect appears to be very scarce. Mr. Lamb has found only a single example, a female; this is much larger than a male in my own collection. The specimen in the British Museum from which Mr. White described the species is without a head.

## AMESISA.

*Amesisa*, Pascoe, Long. Malay. p.\*

AMESISA CONSULARIS, Pascoe, *l. c.* p. , pl. 11. f. 2.

Mr. Wallace's specimen is from Singapore.

## PHARSALIA.

*Pharsalia*, J. Thomson, Syst. Ceramb. p. 85.

PHARSALIA INCERTA, Pascoe, Long. Malay. p. .

The single specimen in Mr. Lamb's collection is referred very doubtfully to this species.

## CYCOS.

Antennæ *in maribus longissimæ, normales.*

Scapus *cylindricus, basi subito constrictus.*

Pedes *in maribus elongati, antici longiores.*

Mesosternum *dentatum.*

Head rather small, quadrate in front, the antennary tubers very robust, erect or very slightly divergent. Eyes of moderate size, broadly emarginate. Antennæ very long in the male, scarcely longer than the body in the female, not fimbriated beneath; scape moderately long, cylindrical, suddenly constricted at the base, the third joint longer than the scape, the remainder gradually abbreviated, except the last in the male, which is more than twice as long as the preceding joint. Prothorax scarcely broader than the head, sub-

\* When this was written I anticipated that this genus and two or three species mentioned further on, collected by Mr. Wallace and which are identical with those in Mr. Lamb's collection, would have been published in the above work; but, although the plates to accompany the forthcoming part are ready, the text has been unfortunately delayed.

cylindrical, with a median tooth at the side, the base subbinate. Elytra broadest at the base, the shoulders prominent, apex rounded. Legs in the males elongate, the anterior longest, their tarsi dilated and fringed; in the female the legs comparatively short, but all of nearly equal length, the tarsi neither dilated nor fringed. Prosternum simple. Metosternum toothed.

The closely approximate and nearly erect antennary tubers separate the insect on which this genus is founded from *Monochamus*, as well as from the *Lamiinæ*—its position appearing to me to be between *Pharsalia* and *Triammatus*, the long legs of the male, *inter alia*, distinguishing it from the former, and the normal antennæ from the latter. The scape is remarkably constricted at the base above the articulating portion, the outer side of it, indeed, is so produced as to form a very acute angle.

#### CYCOS SUBGEMMATUS.

*Monochamus subgemmatus*, J. Thomson, Arch. Entom. i. p. 294 (1857).

*Monohammus georgius*, White, Proc. Zool. Soc. 1858, p. 407.

A handsome species originally discovered in Sylhet, and apparently not uncommon in the more eastern Himalayan range.

#### PERIBASIS.

*Peribasis*, J. Thomson, Syst. Ceramb. p. 86.

#### PERIBASIS ASPERSA.

*Monohammus aspersus*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 48. Apparently a common species at Penang and Singapore.

#### PERIBASIS PUBICOLLIS, Pascoe, Long. Malay. p. .

Taken also by Mr. Wallace at Singapore and Sarawak. *Monohammus larvatus*, White (Proc. Zool. Soc. 1858, p. 406) is also a *Peribasis*.

#### OMOCYRIUS.

Caput *exsertum*, *infra oculos sensim latiore*.

Antennæ *art. 4, 5, in utroque sexu, omnino incrassatis*.

Elytra *ad humeros producto-lobata*.

Pedes *antici, in maribus, perlongi*.

Head exserted, narrowed above and gradually widening below the eyes; antennary tubers very stout and approximate, but not contiguous. Eyes small, broadly emarginate. Antennæ longer than the body in the male, shorter than the body in the female, the scape obconic, the third joint longer than the scape, clubbed at the apex, the fourth and fifth thickened throughout in both sexes, in the female, however, gradually smaller towards the base, the sixth and remaining joints shorter than the fifth, and nearly equal in length, except the last in the male, which is longer, subulate, and curved. Prothorax oblong, rather narrower anteriorly, toothed at the sides,

bisinate at the base. Elytra slightly depressed, the sides narrowing posteriorly, the shoulders lobed above. Legs elongate, especially the anterior pair in the males; protibiæ curved; tarsi equal in length, the anterior dilated in the males. Prosternum slightly elevated. Mesosternum produced.

This handsome genus is allied on the one hand to *Otarionomus* in respect of its lobed shoulders, a character which it shares also with *Achthophora*, and on the other to *Triammatus*, with which it otherwise agrees, except in a modification of the remarkable antennæ, especially in the female, and in the divergent, although still approximate, antennary tubers, which are not cornuted or produced as in *Triammatus*. The protibiæ, too, are curved throughout, and the preapical tooth is nearly obsolete.

OMOCYRIUS FULVISPARSUS. (Pl. XXVII. fig. 3.)

*O. rufo-fuscus*; capite prothoraceque fulvo bilineatis; elytris fulvo maculatis; tarsis nitidis, luteis.

Reddish brown, slightly nitid, nearly glabrous, but varied with lines and spots of fulvous pubescence; head brownish opaque in front, with a raised median line, two narrow stripes on the vertex, another longitudinal one before the eye, and a third extending beneath it horizontally; mandibles dark brown; palpi luteous; prothorax finely corrugated, the corrugations becoming gradually granular at the sides, the disk with two narrow fulvous stripes, below on each side a broader, nearly white, stripe, which passes also along the sterna; scutellum triangular, obtuse; elytra coarsely and irregularly punctured, with three slightly raised lines on each, the shoulders above produced into a prominent ear-shaped lobe, the disk with numerous small and a few large well-defined spots of fulvous; body beneath reddish brown, nitid, each abdominal segment, at the side, with a pale fulvous spot; legs dark brown, with a fine ashy pubescence, the tibiæ becoming more and more luteous towards the extremities, the tarsi bright luteous, shining; antennæ more or less dark reddish brown, the fourth and succeeding joints pale flesh-coloured at the base. Length 12 lines.

ACHTHOPHORA.

*Achthophora*, Newman, The Entom. p. 292.

*Stegenus*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 104, pl. 22. f. 6.

ACHTHOPHORA DACTYLON.

*Stegenus dactylon*, Pascoe, *l. c.*

The differences between *Stegenus* and *Achthophora* are, I think on a re-examination, too slight to justify their being treated as distinct genera. Mr. Wallace, who first discovered this species at Sarawak, found only a few specimens; at Penang, however, it seems to be abundant.

TRACHYSTOLA.

*Trachystola*, Pascoe, Journ. of Entom. i. p. 350.

TRACHYSTOLA GRANULOSA, Pascoe, *op. cit.* p. 351.

*Trachystola* is placed at the end of this subfamily only provisionally; its general form, sculpture, and colour point to the *Dorcadininae*, and, but for the presence of humeral angles, in that group it would undoubtedly take its place. M. J. Thomson puts it between *Aderpas* and *Anamera* in his "groupe *Mesositæ*," a location, I think, very far from natural. *T. granulosa* is apparently a common insect at Sarawak. A second species is described by M. J. Thomson, from Java.

#### LAMIINÆ.

##### BATOCERA.

*Batocera*, Laporte de Castelnau, Hist. Nat. des Insectes, t. 11. p. 470 (1840).

BATOCERA VICTORIANA, Thomson, Rev. et Mag. de Zool. 1856, p. 529; Arch. Ent. t. 1. p. 23. "Frontispiece."

Found also by Mr. Wallace in Borneo. The spots on the elytra are of a fine vermilion during life.

BATOCERA THOMSONI, Javet in Thoms. Arch. Ent. t. 1. p. 412, pl. 20. f. 2.

This is also a Bornese species. Mr. Wallace found not less than eighteen species of this magnificent genus; some of them measure, from tarsus to antennæ, nearly a foot in length.

#### APRIONA.

*Apriona*, Chevrolat, Rev. et Mag. de Zool. 1852, p. 414.

##### APRIONA GERMARI.

*Lamia germarii*, Hope, Zool. Miscell. p. 28.

The original specimens of this species were from Sylhet, but it appears to be generally distributed in continental India.

#### THESTUS.

Antennæ *subtus fimbriatæ*.

Prothorax *lateribus haud spinosus*.

Tibiæ *anticæ compressæ*.

Mesosternum *productum*.

Head transverse in front, not dilated below the eyes; antennary tubercles very robust, approximate at the base; eyes rather large, broadly emarginate. Antennæ longer than the body, densely fringed beneath, except the terminal joints; the scape obconic, rather short, strongly cicatricose at the apex; the third joint the longest, the following to the sixth or seventh gradually shorter, the remainder about equal. Prothorax not broader than the head, cylindrical, short, slightly toothed at the sides. Elytra broad at the base, the sides nearly parallel, shoulders produced. Legs nearly equal; tibiæ compressed. Mesosternum toothed anteriorly.

The closely fringed antennæ, compressed tibiæ, and general out-



line, only a little less convex, approximates this genus to *Sarothro-cera*, from which it would be distinguished by the form of the head, nearly unarmed prothorax, and toothed mesosternum. The example here described betrays a certain resemblance to some of the larger species of *Oncideres*.

THESTUS ONCIDEROIDES. (Pl. XXVII. fig. 7.)

*T. fuscus, pube ferruginea albo irrorata tectus; antennis nigro fimbriatis; elytris pallide sub-bifasciatis.*

Dark brown, covered with a short close yellowish-ferruginous pubescence, minutely speckled with whitish on the elytra; head uniformly ferruginous, lip short, not fringed; prothorax very short, its anterior and posterior portions slightly grooved, a few punctures behind the middle on each side; scutellum subscutiform; elytra finely punctured, more or less sprinkled with minute white spots, which are collected at about the middle to form a broad but rather indefinite band, behind this a similar but narrower one; the base with numerous small black granules, apex rounded; body beneath, legs, and antennæ ferruginous, the latter with its fringe brownish black. Length 14 lines.

CEROSTERNA.

*Cerosterna*, Blanchard, Hist. Nat. des Insectes, t. ii. p. 158 (ab. err. *Celosterna*).

CEROSTERNA APPROXIMATOR, Thomson, Syst. Ceramb. p. 552.

From the short description given by M. Thomson I am somewhat doubtful of this species. If in the reference to *C. clathrator*, and this in its turn to *C. reticulator*, it is to be assumed that the same style of antennæ characterizes the three, then the specimen in Mr. Lamb's collection, which has black simple antennæ, will probably be different.

METOPIDES.

Caput *antice latissimum.*

Antennæ *distantes, haud fimbriatæ, scapo subcylindrico, cicatricoso.*

Prothorax *angustus, transversus, lateraliter armatus.*

Mesosternum *dentatum.*

Head somewhat triangular in front, very broad along the line of the antennary tubers, which are stout and somewhat raised across the forehead. Eyes narrow, broadly emarginate. Antennæ longer than the body, distant at their insertion, not fimbriated; the scape subcylindrical, a little irregular at the apex, and strongly cicatricose; third joint as long as the scape, the rest gradually shorter, except the last, which is a little longer than the preceding. Prothorax short and narrow, irregular or rugose, the sides strongly toothed, the base bisinuate, not broader than the apex. Elytra a little depressed, broadest at the base, rounded at the apex. Legs somewhat slender; the femora not thickened; tibiæ straight; tarsi equal. Mesosternum toothed.

In its widely separated antennæ this genus resembles *Diastocera*;

perhaps in habit and colour it is most suggestive of some species of *Phrynetæ* (e. g. *P. cæca*); but its cicatricose antennæ will not permit it to be placed near that genus. For the present I should be inclined to put it after the African genera *Imalmus* and *Hagesata*.

**METOPIDES OCCIPITALIS.** (Pl. XXVII. fig. 5.)

*M. fuscus, pube densissima cervina tectus, vertice nigro signata.*

Dark brown, covered with a very close fawn-coloured pubescence; head rugosely punctured in front, no median line, the vertex velvet-black, bordered at the sides and spotted in the middle with ochraceous; prothorax deeply punctured, the intervals irregularly convex, sulcated behind, a black line at the apex and a black spot at the base; scutellum subscutiform, black in the middle; elytra finely and irregularly punctured, with a few small granules at the base, two black spots on each side the scutellum, and an irregular mass of spots behind the middle mixed with a few white specks; body beneath, legs, scape, and second joint of the antennæ densely pubescent, somewhat darker than the elytra, &c., with larger snowy-white setulose hairs scattered over them, rest of the antennæ with a thin greyish pubescence. Length 11 lines.

**EPEPEOTES.**

*Antennæ graciles, art. tertio scapo duplo vel triplo longiore.*

*Pedes antici elongati; protibiæ curvatæ.*

*Mesosternum elevatum, productum.*

Head exserted, subtransverse in front; antennary tubers robust, approximate at the base; eyes large. Antennæ very long in the males, the scape not produced at the apex, the third joint two or three times as long as the scape, the following shorter and more or less equal, the last sometimes the longest of all. Prothorax transverse, the propectus produced. Fore legs elongate, the tibiæ curved, not toothed, their tarsi with the basal joint spined externally in the males. Mesosternum elevated, produced or keeled in front.

Separated from *Monochamus* for the reception of those species which differ chiefly in a strongly produced mesosternum, the other characters being mostly those of that genus as it is here restricted. The type is *Lamia lusca*, Fab.

**EPEPEOTES LUSCUS.**

*Lamia lusca*, Fabricius, Ent. Syst. t. i. pt. 11. p. 283.

Besides Siam, Malacca, and Borneo, this well-known species extends through Sumatra and Java to Timor.

**BLEPEPHÆUS.**

*Antennæ subincrassatæ, art. tertio quam scapus vix longiore: art. ult. præc. fere æquali.*

*Propectus abbreviatum.*

*Pedes antici cæteris haud longiores.*

*Mesosternum elevatum, dentatum.*

Head not exerted, subquadrate in front; the forehead deeply sulcate; antennary tubers very robust. Antennæ rather stout, longer than the body in both sexes, pubescent, not fringed; the scape narrowly obconic; the third joint scarcely longer than the scape; the remainder gradually shorter, except the last, which is a little longer than the preceding. Prothorax transverse, strongly spined at the sides; the propectus short. Legs nearly equal in size. Prosternum rounded. Mesosternum elevated, toothed.

The relative proportion of the antennal joints, the equal size of the legs, and the toothed mesosternum would have distinguished this genus from *Monochamus*, to which the type has been referred, without the characters of the shortened head and prothorax, which, as we venture to think, accord better with the more normal *Lamiinæ*.

#### BLEPEPHÆUS SUCCINCTOR.

*Monohammus succinator*, Chevrolat, Rev. et Mag. de Zool. 1852, p. 417.

*Monohammus sublineatus*, White, Proc. Zool. Soc. 1858, p. 410.

*Monohammus obfuscatus*, White, l. c. p. 411.

Rather variable as to colour. This species appears to be abundant at Penang; it has also been found in India (Dacca) and in China (Hong Kong).

#### EPICEDIA.

*Epicedia*, J. Thomson, Syst. Ceramb. p. 78.

#### EPICEDIA PLAGIATA.

*Leprodera plagiata*, J. Thomson, Arch. Entom. i. p. 178.

This is the *Leprodera trimaculata*, Chev., according to M. J. Thomson—an unpublished name, I believe. The genus *Leprodera* of Dejean's catalogue was first published by M. J. Thomson with *L. elongata* as the type and *L. pleuricausta* as one of its members. The latter, which is the *Lamia carcelii* of Guérin, is separated in the 'Systema' to form the genus *Epicedia*, chiefly distinguished by the shorter antennæ in both sexes, and the shorter anterior legs. *Archidice*, Thoms., and *Euoplia*, Hope, are also nearly allied genera. I have several undescribed species which cannot be satisfactorily referred to any of these, but which are all more or less nearly related by habit and coloration, yet at the same time with characters sufficiently distinctive to probably necessitate the institution of more genera for their reception. Two of these species are in Mr. Lamb's collection, both of them have simple mesosterna; and one has the apex of the scape entire, a very important character generally. I prefer leaving these alone at present, or until they can be all more thoroughly examined.

#### MONOCHAMUS.

*Monochamus*, Serville, Ann. de la Soc. Ent. de France, t. 4. p. 91.

## MONOCHAMUS FISTULATOR.

*Lamia fistulator*, Germar, Ins. Nov. Sp. p. 478.

Very generally distributed in India, and extending also to Australia (Brisbane), where, however, it seems to be very uncommon.

## MONOCHAMUS MUSIVUS.

*M. fuscus*, *pube dense brunnescente indutus*, *elytris sparse albo irroratis*; *vertice capitis impunctato*; *scutello pallide griseo*, *apice rotundato*; *elytris singulis apice rotundatis*.

Dark brown, with a pubescence varying from pale brownish ochre to rather dark chestnut-brown, speckled on the elytra with very pale grey; head pale greyish in front, sparsely spotted with brown, each spot inclosing a puncture, the vertex fulvous, entirely impunctate; prothorax transverse, sparingly punctured on the basal half only, or nearly so; scutellum very pale greyish, subscutiform, with the apex rounded; elytra gradually decreasing from the base, rounded at each apex, rather finely punctured; body beneath ochreous or ochreous grey; legs and antennæ varying from ochreous grey to ashy. Length 7-13 lines.

It is with some hesitation that I have come to the conclusion that the several specimens now before me belong to one species. In fact this is one of those genera in which it is almost impossible in many cases to separate the species satisfactorily when it is possible to examine a good series of individuals. *M. musivus* has also been found by Mr. Wallace at Singapore and Sarawak, and in Celebes.

MONOCHAMUS SOBRIUS, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 246 (var. ?)

It would be rash to treat this as a distinct species; yet Mr. Lamb's single example scarcely accords with my type, which is from North China, and which is not to be distinguished from another found by Mr. Wallace at Sarawak. It is larger, the pubescence thinner and more ashy, the punctures more decided (but this may in part be owing to its finer pubescence), and the scutellum is uniformly paler and more conspicuous.

## IMANTOCERA.

*Imantocera*, J. Thomson, Arch. Entom. i. p. 188; Essai, &c., p. 102.

## IMANTOCERA PLUMOSA.

*Cerambyx plumosus*, Olivier, Entom. iv. no. 67. p. 98, pl. 20. f. 152.

*Imantocera* and the following genera of this subfamily are very aberrant members of the *Lamiinæ*, and are but slightly connected among themselves. Although three species of this genus are described, it is somewhat doubtful if they be not all referable to one, or at most forming only geographical subspecies. M. J. Thomson's *I. plumosa* is said to be *I. penicillata*, Hope\*. The species or sub-

\* See Journ. of Entom. i. p. 192.

species extend from Assam to Flores. Mr. Wallace's specimen from the latter is an additional variety or subspecies.

### GNOMA.

*Gnoma*, Fabricius, Syst. Eleuth. ii. p. 315.

#### GNOMA DISPERSA.

*G. fuscescens*, *pube brevi grisea tecta*; *elytris pallide ochraceo irroratis*, *prothorace duplo longioribus*.

Brownish, inclining to dark chestnut, with a thin short greyish pile, the elytra sprinkled with more or less confluent pale-ochreous spots; head sparingly punctured in front, varied with flavous above the eyes and mouth; prothorax about half as long as the elytra in the male, strongly corrugated; scutellum semicircular, entirely pubescent; elytra rather narrow, the sides nearly parallel, except at the posterior third, rather closely punctured; body beneath, legs, and antennæ with a sparse greyish pile, the tarsi nearly equal in size and outline. Length 10 lines.

This description is made from a male in my own collection. Mr. Lamb has only a single specimen, also a male, differing from the above in having the elytra more spotted, a little longer prothorax, and very decidedly longer legs, with the fore tarsi considerably longer and broader than the others. It may probably be found to be sufficiently well marked to deserve a specific, or *quasi*-specific, name; but in a genus so difficult as *Gnoma* it is almost impossible to say if such differences are permanent. I have never seen anything answering to Fabricius's description of *G. longicollis*: "nigra, ferrugineo irrorata." Olivier's figure (to which he refers) is, to me, an unknown species, and evidently a female.

### MECOTAGUS.

Prothorax *subcylindricus*, *latera haud, vel parum antice, incurvata*.  
Femora *linearia*.

Tarsi *articulo basali duobus sequentibus simul sumptis æquali*.

Head subtransverse in front; antennary tubers very stout, divergent, but approximate at the base. Eyes distant from the mouth. Antennæ very long in the male, the scape obconic, the third joint as long as or longer than the fourth and fifth together, the rest subequal in the male, except that the last is considerably longer than the preceding joint; in the female the joints slightly decreasing from the sixth or seventh. Prothorax elongate, especially in the male, subcylindrical, narrower anteriorly in the male, but scarcely or only very slightly incurved. Elytra oblong, subdepressed, truncate at the apex. Legs long, slender; femora linear; tibiæ gradually longer from the posterior to the anterior; tarsi elongate, the basal joint in the male as long as the two following together. Prosternum simple. Mesosternum with a projecting tooth.

This genus is founded on the *Cerambyx tigrinus*, Olivier, a con-

gener of which has been referred by Mr. White\* to *Pelargoderus* of Serville, quite another genus altogether. A single specimen, a female, is in Mr. Lamb's collection, which agrees with Olivier's figure and description, also taken from a unique example, whose locality was at that time unknown. The genus differs from *Gnoma* in the form of the prothorax, linear femora not thickened in the middle, and the elongate basal joint of the tarsi.

#### MECOTAGUS TIGRINUS.

*Cerambyx tigrinus*, Olivier, Entom. iv. no. 67. p. 401, pl. 19. f. 142.

*M. guerinii*, White, apparently the commoner species, differs from this, *inter alia*, in having fewer and isolated spots, not crowded and more or less confluent, as in the one before us.

#### OLENECAMPTUS.

*Olenecamptus*, Chevrolat, Mag. de Zool. 1835, p. 134.

#### OLENECAMPTUS BILOBUS.

*Saperda biloba*, Fabricius, Syst. Eleuth. ii. p. 324.

*Olenecamptus serratus*, Chev. Mag. de Zool. 1835, p. 134.

*Anthades indianus*, J. Thomson, Arch. Entom. i. p. 192.

A common species, found all over India, and as far south as Timor. It is also *said* to have been found in Australia. *O. serratus*, Chev., is a remarkable variety with the inner edge of the fore tibiæ minutely serrated. The basal elytral spots are sometimes tipped with the richest carmine.

#### OLENECAMPTUS OPTATUS.

*O. fusco-brunneus*, *pube grisea brevi tectus*; *scutello concolore*; *capite, prothorace elytrisque maculis rotundatis niveis ornatis*.

Dark reddish brown, covered with a short greyish pile, two or three spots on the cheek, one behind the eye, four on the prothorax, and four on each elytron, *i. e.* seven on each side from the eye to the apex of the elytra, snowy white; head broader than the prothorax, remotely punctured in front, the vertex impunctate; prothorax about half as long again as broad, transversely corrugated; scutellum semicircular, greyish brown; elytra rather closely punctured, the sides gradually narrowing posteriorly, the apices slightly dehiscent, each ending in a short mucro; body beneath and legs with a thin greyish-white pile; antennæ scabrous, slightly pubescent. Length 6-10 lines.

I have not seen this species from India; otherwise it appears to be scarcely less widely distributed than the preceding. The description is taken from one of Mr. Wallace's specimens from Singapore. *Schæniocera sex-notata* of Dejean's catalogue is probably this insect.

\* Ann. & Mag. Nat. Hist. ser. 3. ii. p. 274.

## OLENECAMPTUS QUIETUS.

*O. luteus, supra pube flavescente dense tectus, infra niger, nitidus, interrupte albido pubescens; antennis fuscis.*

Luteous, with a closely set yellowish pile above, beneath glossy black, the propectus, sides of the postpectus, and abdomen with a whitish pile; head nearly impunctate; prothorax scarcely longer than broad, not corrugated; scutellum semicircular; elytra with the sides nearly parallel at the basal half, then slightly diverging until towards the apex, where they are rounded off; the apex itself of each slightly truncate, but scarcely mucronate; legs glossy brown, the tibiæ and tarsi of the fore and intermediate legs luteous; antennæ brown, not scabrous. Length 5 lines.

Of this new and very distinct species there is only a single example in the collection.

## ONOCEPHALINÆ.

## ATOSSA.

*Atossa*, J. Thomson, Syst. Ceramb. p. 100.

ATOSSA ATOMARIA. (Pl. XXVI. fig. 6.)

*A. fuscescens, nitida, pube sparsa tecta; capite prothoraceque flavo vittatis; elytris seriatim albido maculatis; lateribus infra et fronte capitæ albidis.*

Pale brown, with a thin pubescence; head pale greyish in front, forehead, behind the eye, and vertex brown, the latter impunctate, with two yellowish longitudinal lines corresponding with two on the prothorax, a similar line also on each side, disk of the prothorax very slightly punctured; scutellum transversely scutiform; elytra finely punctured, speckled with numerous clear greyish pubescent points arranged to a certain extent in longitudinal lines; body beneath dark chestnut-brown, shining, with a sparse silvery pubescence, which is dense along the sides of the breast; legs and antennæ with a pale greyish pile, the latter about two-thirds the length of the body. Length 6 lines.

*A. strenua*, M. J. Thomson's type, is from Java. The present species has the elytra finely but very distinctly speckled with greyish, and the front uniformly greyish, except the space in a line with the antennary tubers.

## HIPPOPSINÆ.

## NYCTIMENE.

*Nyctimene*, J. Thomson, Arch. Ent. i. p. 314.

NYCTIMENE AGRILOIDES, J. Thomson, *l. c.*

Not uncommon apparently in the Malayan region. M. J. Thomson has placed this genus in a "groupe" to itself, as it differs from the rest of its subfamily in not having its antennæ approximate at the base. I do not think, however, that it would be natural to sepa-

rate it from such genera as *Pothyne* and its allies, as, it seems to me, it is one of those aberrant forms in which a technical character must give way to an obvious affinity.

## TETRAGLENES.

*Tetraglenes*, Newman, The Entom. p. 300.

TETRAGLENES INSIGNIS, Newman, *l. c.*

A remarkable and interesting form, having four very distinct eyes placed at a distance from the antennæ, and therefore not simply divided for the more easy play of those organs as in *Astathes*, *Tetraopes*, and many others. *Eucomatocera*, an allied genus from the same region, has the eyes slightly connected; but otherwise they have the same position and appearance. In *Euthuorus* and *Spalacopsis*, American forms, the upper eyes disappear. *Dorcasta*, another near ally, has the eyes of the normal character; but somewhat intermediate is that most singular genus *Aprosopus*. The specific name of this insect was given unfortunately on the antithetical principle; it is small and dull-coloured, and its peculiarities are only distinguishable under the lens.

## SAPERDINÆ.

## ENTELOPES.

*Entelopes*, Guérin, Iconog. du Règne An. p. 245.

ENTELOPES GLAUCA, Guérin, *l. c.*; Pascoe, Trans. Ent. Soc. ser. 2. iv. pl. 16. f. 2.

Found also in Borneo, Singapore, and Java.

## ENTELOPES SIMILIS.

*E. rubro-fulva*, *subnitida*, *infra nigra*; *scutello fere semicirculari*, *apice haud lobato*.

Reddish fulvous, slightly nitid, especially on the head and prothorax; head and prothorax nearly glabrous, almost obsoletely punctured, the latter much shorter than the former; scutellum nearly semicircular, not elevated or bilobed posteriorly as in *E. wallacei*; elytra much punctured, with numerous small glossy granules at the base (one over each puncture); body beneath, intermediate and posterior femora, except at their apices, and their coxæ black, their trochanters yellow; antennæ with the terminal joints blackish. Length  $4\frac{1}{2}$  (♂)– $5\frac{3}{4}$  (♀) lines.

Extremely like *Entelopes wallacei*, but with a differently formed scutellum, the upper surface more or less glossy (more so in the male), larger and more numerous granules on the elytra, and the intermediate femora, as well as the posterior, black.

ENTELOPES IOPTERA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 108, pl. 23. f. 8.

Taken also by Mr. Wallace at Sarawak and Singapore. A more



detailed account of this genus is given by M. J. Thomson in his 'Essai, &c.,' p. 345.

## SERIXIA.

*Serixia*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 45.

*Iolea* (*Iole*), Pascoe, *op. cit.* iv. p. 254.

## SERIXIA PROLATA.

*Iole prolata*, Pascoe, *l. c.*

Not uncommon at Sarawak. A somewhat thick-set uniformly coloured luteous species with the apices of the elytra rounded.

## SERIXIA VARIANS.

*S. lutea, pube nitida argenteo-velutina tecta; antennis totis infuscatis.*

Luteous, covered with a shining silvery velvet pile, varying when viewed with and against the light; head and prothorax very slightly punctured, the latter much narrower than the head, and gradually narrowed behind from nearly the anterior border; scutellum small, rounded behind; elytra seriate-punctate, the punctures small, the sutural angle at the apex slightly produced; body beneath darker yellow, and less pubescent; antennæ two or three times as long as the body. Length 4 lines.

Distinguished from *S. prolata* by its glossy velvet-like pubescence, prothorax tapering behind, the small punctures on the elytra, antennæ entirely brownish black, &c.

## SERIXIA BASALIS.

*S. lutea, elytris dimidio basali griseo-nigris, utrinque macula alba prope scutellum sita.*

Pale luteous; head and prothorax darker, with an exceedingly delicate pile and impunctate; the head considerably wider than the prothorax, the latter gradually narrowed to the base; scutellum truncate behind; elytra seriate-punctate, the rows and the punctures widely apart, pubescence very fine, much denser than on the prothorax, and varying with the light, sutural angle of the apex forming a short mucro; body beneath entirely luteous; antennæ brownish black, the base of the fourth joint luteous. Length 3-4 lines.

A very distinct species, which may take its place immediately after my *S. cephalotes*.

## SERIXIA LONGICORNIS.

*Iole longicornis*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 255.

Taken also by Mr. Wallace in Singapore, Batchian, Ceram, and Waigiou. It is a narrow palc-luteous species, with the apices of the elytra rounded. A variety in the collection is less pubescent, with the basal antennal joint testaceous.

## SERIXIA PRASINATA. (Pl. XXVII. fig. 1.)

*S. plumbeo-viridescens, pube velutina albicante tecta; labro, corpore infra pedibusque luteis; antennis nigris.*

Pale leaden green, the greener hue predominating on the elytra, and covered with a satiny whitish pile, varying with the light; head very distinctly punctured in front, the vertex and prothorax nearly impunctate, the latter slightly narrower than the head, and the sides a little narrowed towards the base; scutellum rounded behind; elytra lightly seriate-punctate, the sides gradually narrower posteriorly, the apices obliquely truncate, each angle produced into a very slight micro; body beneath and legs, lip, and palpi luteous; antennæ black. Length 4-5 lines.

One of Mr. Lamb's specimens is almost entirely of a leaden colour above, and of a much darker luteous beneath, but does not otherwise differ. The species is very distinct. In the 'Journal of Entomology' (vol. i. p. 354) I have proposed to unite *Iolea*\* to *Serixia*: the slight difference in habit, and the more depressed form of the latter, which, in conjunction with its fimbriated antennæ, induced me to consider the three or four species of the supposed group to belong to two veritable but nearly allied genera were subsequently bridged over by newly discovered forms. M. J. Thomson, however, in his 'Systema,' regards them not only as distinct, but refers *Iolea* to his "groupe" Saperditæ veræ, and *Serixia* to his "groupe" Amphionychitæ.

## XYASTE.

*Articulus tertius antennarum incrassatus, sæpissime hirsutus.*

*Scapus tenuiter cylindricus.*

*Tarsi antici dilatati, articulis tribus basalibus æqualibus.*

As this genus has only one described species, and there are several others in Mr. Wallace's collection, I shall reserve further remarks for the 'Longicornia Malayana,' only observing that it is distinguished (*inter alia*) from *Serixia* by its thickened third antennal joint, which, in the majority of the species, is also closely covered with short hairs, so as to give it the appearance of being thicker than the scape.

## XYASTE NIGRIPES. (Pl. XXVII. fig. 2.)

*Iole nigripes*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 255.

An insect of a uniform dull testaceous colour, with the third joint less thickened than in any of the other species, and therefore not the most typical of the genus.

## ASTATHEINÆ.

## ASTATHES.

*Astathes*, Newman, The Entom. p. 299 (1842).

*Tetraophthalmus*, Blanchard, Hist. Nat. des Ins. ii. p. 161 (1845).

\* *Iole* was first proposed; but finding very soon after that a genus of birds was already so designated, I altered it to *Iolca*.

## ASTATHES SPLENDIDA.

*Cerambyx splendidus*, Fabricius, Ent. Syst. t. i. pt. 2. p. 263.

This is also an Indian species.

ASTATHES TERMINATA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 109.

Varies in the extent and depth of the yellow at the apex of the elytra; the abdomen is also frequently more yellowish than brown. In some examples a sort of areola may be noticed round the punctures on the posterior part of the elytra, a peculiarity which is very remarkable in *A. perplexa*, Newm.

ASTATHES NIGRICORNIS, J. Thomson, Syst. Ceramb. p. 560.

An entirely fulvous species, with black antennæ. A marked callosity on each side of the prothorax will distinguish it from an undescribed species from Morty with a similar coloration. A fourth species, with the antennæ imperfect, is in the collection. It has a yellow head, with a dusky patch behind each eye; otherwise it approaches very closely to an undescribed species from Singapore. The distribution of the two colours, blue and yellow, and the intensity of the black, are too variable in this genus to carry much weight in the determination of the species. The *Astatheinae* are remarkable for the peculiar modification of the metasternum: this is prolonged anteriorly between the intermediate coxæ, so as to completely overlap that part of the mesosternum lying between them.

## PHYTÆCIINÆ.

## GLENEA.

*Glenea*, Newman, The Entom. p. 301.

*Sphenura*, Laporte de Castelnau, Hist. Nat. des Ins. ii. p. 489, 1840 (nec Lichtenstein, 1823).

## GLENEA ELEGANS.

*Saperda elegans*, Olivier, Coléop. iv. no. 68. p. 15, pl. 4. f. 40 (1795).

*Stenocorus pictus*, Fabricius, Syst. Eleuth. ii. p. 306 (1801).

Of this extensive and very difficult genus I have about twelve species or *quasi*-species, which may be probably referable to Olivier's *Saperda elegans*. They are all of the richest metallic blue, with snowy-white spots and stripes, varying in length from 8 lines to  $1\frac{1}{4}$  inch. The spots and stripes are without doubt very uncertain characters, and the minor differences, for there are no others, are very unsatisfactory on paper. Nevertheless it may be perhaps necessary to name some of the extreme forms. Mr. Lamb's specimens have yellow legs; but this scarcely seems of specific importance. *Glenea delia*, J. Thoms., from the character "humeris fere nullis," is doubtless distinct. Another *Glenea* in the collection has the elytra rapidly narrowing from the shoulders, and rather suddenly rounded near the apex, which is much narrower and at the same time more

deeply emarginate than in the more typical forms of *G. elegans*. Viewed as one polychromatous species, it extends from India to New Guinea, but is apparently nowhere more common than in Malacca.

GLENEA PORPHYRIO. (Pl. XXVIII. fig. 5.)

*G. nigro-purpurea, nitida; prothorace crebre punctato, in medio bituberculato; elytris grosse punctatis, lateribus cyaneo micantibus; pedibus flavis; tarsis infuscatis.*

Blackish purple, shining, the pubescence nearly obsolete; head narrow between the eyes, which are nearly contiguous above; prothorax oblong, gradually widening towards the base, the sides straight, the disk bituberculate, closely and coarsely punctured; scutellum narrowly triangular; elytra coarsely punctured, elongate, gradually tapering from the base, the shoulders acutely prominent, the sides with a bluish tinge, apices slightly obliquely truncate with the outer angle produced; body beneath chalybeate blue, with a whitish pile on the sterna; legs yellow, the tarsi brownish, the posterior only partially so; antennæ purplish black. Length 12 lines.

A very distinct species, with an unusually narrow head and approximate antennary tubers, at variance with the characters of the genus. The elytra have faint indications of a bluish pubescent spot on the centre of each, and also at the apex.

GLENEA BLANDINA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 259.

Mr. Lamb's specimens rather depart from the typical form in having the sutural region pale greyish brown. In other respects, however, they agree. The species is distinguished by the first three joints of the antennæ, underneath, being of a beautiful cobalt-blue. Another species, confined to a single example, has a similar coloration; but the spots are white, not blue, the elytra more obliquely truncate at the apex, the form narrower, and the eighth and ninth joints of the antennæ pure white. It is without doubt distinct.

GLENEA RUFINA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 259.

One of the four species in the present collection that is found also in Burmah. It is a pale but clear reddish chestnut-colour, with greyish or greenish-grey elytra.

GLENEA NEANTHES. (Pl. XXVIII. fig. 4.)

*G. rufo-lutea; elytris castaneis, nitidis, niveo maculatis, regione suturali et lateribus rufo-luteis, immaculatis; antennis nigris.*

Reddish luteous, partially pubescent; head slightly punctured; prothorax equal in length and breadth, rounded at the sides anteriorly, vertically compressed behind, the disk with few punctures and two small round black spots; scutellum scutiform; elytra broad at the base, gradually narrowing posteriorly, a broad brown nearly glabrous stripe from the shoulder to the apex, limited externally by the carina, but shading off towards the suture, and having five snowy-white pubescent spots; body beneath pale ferruginous, with an

ochreous pile; legs luteous, tarsi darker; antennæ black. Length 7-10 lines.

A very distinct and handsome species.

GLENEA EXTENSA, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 258.

Found also by Mr. Wallace at Singapore and Sarawak.

GLENEA OUDETERA.

*Stibara oudetera*, J. Thomson, Arch. Ent. i. p. 143.

Also from Sarawak.

GLENEA ANTICEPUNCTATA.

*Stibara anticepunctata*, J. Thomson, Arch. Ent. i. p. 142.

M. J. Thomson's type is from Java. It appears to be a common species at Singapore.

GLENEA VESTA. (Pl. XXVIII. fig. 3.)

*Glenea pulchella*, Pascoe, Trans. Ent. Soc. ser. 2. iv. p. 260.

I have altered the specific name *pulchella*, it having been previously used by Hope. It appears to be rather a common species in Singapore and at Sarawak, and is found also in Mysol and Ceram.

GLENEA ALGEBRAICA.

*Stibara algebraica*, J. Thomson, Arch. Ent. i. p. 144.

Also from Java and Borneo.

GLENEA JUBEA.

*G. rufo-brunnea, fulvo vittata, sparse pubescens; prothorace angusto; elytris trivittatis, vitta intermedia obliqua, abbreviata; antennis concoloribus.*

Reddish brown, with fulvous stripes, sparingly pubescent; head nearly glabrous between the eyes, and coarsely punctured; prothorax closely punctured, oblong, narrow, vertically compressed posteriorly, the disk with three fulvous stripes, and two paler stripes on each side; scutellum semicircular, fulvous; elytra tapering posteriorly, moderately punctured, the apex with its outer angle strongly mucronate, each elytra with three stripes, one sutural, one near the carina, and an intermediate short oblique one at the base; body beneath with a close pale-ochreous pile, divided by three glabrous stripes; legs dark testaceous; antennæ entirely dark brown. Length 5 lines.

Mr. Lamb has a specimen very near this species in most respects, but with a much broader head and shorter scape. The outer stripe on the elytra is also wanting. It is probably distinct.

GLENEA CUNILA.

*G. capite, prothorace, scutello et regione suturali pube velutina grisca tectis, cateris elytrorum fuscis, glabris; antennis pedibusque fuscis, his femorum basi rufescentibus.*

Head, prothorax, scutellum, and broad stripe along the sutural region covered with a dense greyish velvety pile, rest of the elytra brown and glabrous; head and prothorax remotely punctured, the latter gradually narrowed posteriorly, the disk with a slight longitudinal ridge; elytra narrow, gradually tapering to the apex, the glabrous brown portion only punctured, the apices obliquely emarginate with a long mucro at the external angle; body beneath greyish pubescent; antennæ blackish brown; legs brown, base of the femora reddish; posterior tarsi greyish. Length 5 lines.

Allied to *G. mathematica*, but with the head and prothorax entirely unicolorous. The description is taken from one in Mr. Wallace's collection. In Mr. Lamb's example there is also a narrow greyish stripe on the brown portion of the elytron, &c.

GLENEA ALYSSON. (Pl. XXVIII. fig. 8.)

*G. capite prothoraceque fuscis, hoc et vertice in medio vitta ochracea; elytris brunneis, extus infuscatis, apice singulorum macula nivea ornatis; antennis nigris, articulis quatuor ultimis albis.*

Head dark brown, a white line bordering the eye in front, the vertex with an ochraceous spot continuous with a broad stripe of the same colour on the prothorax; cheeks, stripe on the side of the prothorax, and all the under parts pale ashy; scutellum ochraceous; elytra pale brown, the outer side darker, a snowy-white spot on each at the base of the strongly marked exterior mucro; legs testaceous, the lower half of the posterior tibiæ and their tarsi white; antennæ black, the last four joints white. Length 5-6 lines.

The colouring of the antennæ and the absence of stripes on the elytra will readily distinguish this species. The description is from one of Mr. Wallace's specimens taken at Singapore.

GLENEA CEME. (Pl. XXVIII. fig. 2.)

*G. capite prothoraceque niveis, illo vertice nigro, hoc vittis duabus nigris; elytris testaceo-brunneis, pube sparsa albida tectis; antennis pedibusque testaceis, illis articulis duobus basalibus nigris, articulo ultimo albo.*

Head and prothorax snowy white, the former with the vertex and behind the eyes black, the latter with a broad black stripe on each side; scutellum large, subscutiform, white; elytra rather short, gradually tapering posteriorly, the outer angle of the apex strongly mucronate, covered with a uniform thin whitish pile; body beneath reddish ferruginous, subglabrous, the sides with a dense snowy-white pile; legs testaceous; antennæ testaceous, the two basal joints black, the last white. Length 4 lines.

There is but one example of this species, but it is very distinct from any other known to me.

GLENEA ILLUMINATA.

*Stibara illuminata*, J. Thomson, Arch. Entom. i. p. 144.

My specimen from Singapore has testaceous antennæ, except the two basal joints. Mr. Lamb's specimen has black antennæ, except the underside of the third joint, which is of a cobalt blue. M. J. Thomson does not mention the antennæ at all.

GLENEA MANTO. (Pl. XXVIII. fig. 7.)

*G. nigra*; prothorace dimidio basali, elytrisque plaga media magna communi et macula apicali pube crassa albida (vel ochracea), indutis.

Black, with a short black pubescence, mixed with a few setulous hairs; the posterior half, or rather more, of the prothorax, a large median patch common to both elytra, and a spot at the apex of each densely covered with a very coarse whitish or ochraceous pubescence; head with two white stripes in front; prothorax slightly rounded at the sides, scarcely contracted behind; scutellum rounded, black; elytra tapering posteriorly, the pubescence nearly hiding the punctures in fresh specimens, the external mucro at the apex of moderate length; body beneath and legs testaceous, sparsely pubescent; antennæ brownish. Length 5-6 lines.

Similar in the disposition of its colours to *Glenea funerula*, Thoms.\*; but the pubescence (*inter alia*) of that species, so far as the white portion of it is concerned, is exceedingly short and dense, so as to look like a sort of incrustation. The white colour, however, varies; in my Sarawak specimens it is of a pure ochreous tint, in Mr. Lamb's specimen it is snowy white.

GLENEA ANTHYLLIS. (Pl. XXVIII. fig. 6.)

*G. corpore pube densissima sulphurea, nigro maculata induto; elytris ante medium maculis duabus, apicem versus fasciis duabus latis (aliquando ad suturam interruptis) nigris.*

Everywhere covered, except the legs and antennæ, with a dense bright sulphur-yellow pubescence spotted with black; head with the vertex and stripe between the eyes black; prothorax with four spots, or the two anterior united and forming a band; elytra rather short, the apex nearly directly truncate, the outer angle suddenly produced into a mucro, a large round spot anteriorly on each, posteriorly two bands, one nearly apical, either united or one or the other more or less interrupted at the suture; body beneath entirely yellow; legs pale testaceous; antennæ black. Length 6 lines.

Near *G. sulphurella*, Wh., which has, however, many-spotted elytra without apical bands. Found also in Sumatra and Borneo. Another *Glenea* in the collection is closely allied to *G. fricator*, Dalm., but with a yellowish head, not black. The whole of the genus *Glenea* will require more ample materials than any we now possess before we can be sure of the veritable species. What is generally considered to be conclusive evidence is not wanting to show that a form so entirely different as *G. grisea* is but the male

\* *Stibara funerula*, Arch. Ent. i. p. 141. At least if I am right in my determination of it.

of *G. fulvo-maculata*; and this again is probably only a variety of *G. arouensis*. It is a misfortune that these and many other equally important questions can only be solved by naturalists on the spot; but in the meantime we must make the best of what is before us.

#### TANYLECTA.

*Antennæ basi approximatae.*

*Pedes graciles; femora linearia; tibiæ intermediæ emarginatae.*

*Ungues simplices in utroque sexu.*

Head nearly quadrate in front, the antennary tubers obsolete. Eyes large, the upper lobe narrow. Antennæ shorter than the body, approximate at the base, the scape subcylindrical, slightly shorter than the third joint, which is the longest, the rest gradually shorter, all nearly cylindrical, the last a little thickened. Palpi slender. Prothorax oblong, scarcely broader than the head, regular above, the sides towards the base vertically impressed. Elytra elongate cuneate, broadest at the base, the shoulders prominent, the sides abruptly declivous, the angle forming a carina, the apex of each acuminate externally. Legs slender, unequal, femora linear, intermediate tibiæ emarginate; tarsi with the basal joint elongate; claws simple in both sexes. Anterior acetabula slightly angulated. Pro- and mesosterna rounded.

The approximate antennæ and simple claws might seem to separate this genus from the *Phytæcinæ*; but, on the other hand, its location at any distance from *Glenea* would be most unnatural. The female is much stouter than the male, but there is no other difference. The upper surface has deeply impressed punctures, much coarser on the elytra, on which a second carina is found at the side, commencing a little distance from the shoulder, but both terminating at the apex.

#### TANYLECTA LAMBII. (Pl. XXVIII. fig. 9.)

*T. nigra, nitida, lineis maculisque albo pubescentibus ornata; antennis albis, nigro annulatis.*

Black, nearly glabrous, shining, with lines and spots composed of short white hairs; head with two central white lines and a line behind each eye, which are continued on the prothorax, the central, however, almost or quite contiguous, and the lateral having a supplemental line below it; scutellum scutiform, white; elytra covered with small round white spots, the suture bordered with white; body beneath black, with a broad white stripe from the cheeks to the end of the abdomen, the sternal and abdominal portions of the stripe with glabrous black patches; legs and centre of the abdomen with a delicate greyish pile; antennæ not so long as the body, white, the joints from the fourth to the tenth, the eleventh entirely, black. Length 10 lines.

#### ZOSNE.

*Antennæ basi distantes; articuli ultimi sex abbreviati.*

*Pedes mediocres; tibiæ intermediæ integræ.*

*Ungues basi obtuse dentati.*



Head rather transverse in front; antennary tubers short, distant. Eyes moderate, deeply divided. Antennæ shorter than the body, sublinear, the scape subcylindrical, as long or a little longer than the third joint, the fourth and fifth equal and shorter, the last six very short, all nearly cylindrical, except the last, which is ovate and pointed. Prothorax quadrate, regular, not broader than the head. Elytra cuneate, much broader than the prothorax at the base, the sides abruptly declivous, the angle scarcely forming a carina, the apex subtruncate. Legs moderate, slender; the intermediate tibiæ entire; tarsi with the basal joint short; claws obtusely toothed at the base. Anterior acetabula slightly angulated. Pro- and mesosterna rounded.

The peculiar shortening of the terminal joints of the antennæ (as in many *Apomecyninæ*) will readily distinguish this genus, which in style of coloration bears a striking resemblance to the last (*Tanylecta*). The two specimens before me appear to be females; almost as a matter of course, therefore, the toothed claws will characterize both sexes, not the male sex only, as it appears to do generally in *Glenea*.

ZOSNE CINCTICORNIS. (Pl. XXVIII. fig. 11.)

*Z. nigra, subnitida, lineis maculisque albo pubescentibus ornata; antennis albis, medio et apice nigris.*

Black, nearly glabrous, subnitid, with lines and spots of short white hairs; head with two central white lines on the vertex, another behind the eye, the front and cheeks white; lines on the head continued on the prothorax, the central, however, contiguous, the intervals sparsely pubescent and rather finely punctured; scutellum white, densely pubescent; elytra coarsely punctured, with numerous irregular white spots; body beneath with a white silvery pile, the sterna striped with black, two blackish spots on the side of each abdominal segment; legs and antennæ with a close greyish-white pubescence, the latter a little longer than half the length of the body, and having the upper half of the fourth and the whole of the fifth and eleventh joints black. Length 8 lines.

OBEREA.

*Oberea*, Mulsant, Hist. Nat. des Coléopt. de Fr., Longicornes, p. 194 (1839).

*Isosceles*, Newman, The Entom. p. 318 (1840).

OBEREA CURIALIS.

*O. nigra; capite, prothorace, pedibus anticis et femoribus intermediis rubris; abdomine segmentis duobus basalibus argenteis.*

Black; head, prothorax, anterior legs, and intermediate femora deep orange-red; metasternum and abdomen black, the latter with its two basal segments silvery white; head and prothorax finely punctured, the prothorax transverse, neither wider nor longer than the head; scutellum narrow, truncate, red, silvery in certain lights;

elytra much broader than the prothorax at the base, longer by 7 to 2 than the head and prothorax together, coarsely punctured, the intermediate carina strongly marked, the apices obliquely truncate, not mucronate at the angles; antennæ shorter than the body, the third joint much longer than the fourth, the basal joint red, the remainder black. Length 9 lines.

Description from a Sumatran specimen.

#### OBBEREA CLARA.

*O. fulvo-testacea; elytris pube albescente velutina indutis, lateribus infuscatis; antennis nigris.*

Fulvous testaceous, inclining to pale luteous on the head and prothorax, the elytra covered with a whitish velvety pubescence; head and prothorax finely punctured, the latter rather narrower and longer than the head; scutellum scutiform; elytra seriate-punctate, the external margin and apex brownish; body beneath and legs pale luteous, the posterior tarsi sometimes brownish; antennæ black, shorter than the body, the third joint the longest. Length 7-9 lines.

I have specimens from Mr. Wallace, taken at Singapore.

#### OBBEREA TENUATA.

*O. angustata, subfuliginosa; capite prothoraceque rufis; elytris pube albescente velutina indutis.*

Narrow and nearly linear throughout, pale fuliginous, with the head and prothorax rufous, the elytra dull reddish brown as to the derm; but, viewed through the velvety whitish pubescence, they appear of a dark-greyish or smoky colour; head rather finely punctured, broader than the prothorax, the latter much longer than broad, with a yellowish pubescence and minute scattered punctures; scutellum oblong, dark brown; elytra seriate-punctate, darker at the apex; body beneath, except the antepectus, and legs blackish, with a greyish-white pubescence; antennæ black, the third joint shorter than the fourth. Length 6 lines.

Described from a specimen taken in Sarawak. It seems to me that Mr. Newman's genus *Isosceles* has not the slightest claim to be preserved. Why he separated it from *Oberea*\* does not appear. M. James Thomson, who has adopted it, relies chiefly on the antennæ "corpore multum longiores;" but Mr. Newman expressly says of his genus that they are "corpore plerumque breviores." *Oberea* is a very extensive group, but with species often varying according to the individual, and therefore very difficult to determine satisfactorily. The three species described above are, however, unusually well marked.

\* In my 'Longicornia Malayana' I have proposed to separate *Oberea* and its allies from the subfamily *Phytæciinæ*; I fear, however, that the characters on which I relied are more than usually questions of degree, too numerous and graduated to lead to anything satisfactory in adopting them.

## ECTINOGRAMMA.

*Ectinogramma*, J. Thomson, Syst. Ceramb. p. 96.

ECTINOGRAMMA COLLARE. (Pl. XXVIII. fig. 10.)

*E. nigrum, subnitidum; prothorace pedibusque anticis, tarsis exceptis, rufo-castaneis.*

Very long, narrow, and nearly linear, black, subnitid, the prothorax and fore legs, except the tarsi, reddish chestnut; head deeply cleft between the antennæ, clothed with long pale-greyish hairs in front; prothorax finely punctured, scarcely wider than the head, the sides nearly parallel; scutellum narrow, rounded behind; elytra about five times as long as the prothorax, and but slightly broader, the shoulders rounded, rather irregularly punctured, the apex of each obliquely truncate; body beneath and legs, except the anterior pair, glossy black; antennæ setaceous, 12-jointed, rather longer than the body, the basal joint elongate, cylindrical, its apex entire, the third joint considerably shorter, but longer than the fourth, the rest very gradually shortened, the twelfth the shortest.

A most interesting genus, which M. J. Thomson has referred to the *Hippopsinæ* on account of its contiguous antennary tubers—a character, it is true, quite at variance with the *Obereinæ*, but which, it appears to me, should yield to the insect's more obvious affinities with that subfamily. His specimen was imperfect as to the antennæ; I have therefore subjoined a description of them. It will be seen that they have the remarkable character of being 12-jointed; but whether this is a sexual peculiarity or not cannot now be decided. *Ectinogramma isosceloides*, the type, differs from the above in having the head red: nothing is said about the legs; it may be therefore inferred that they are unicolorous.

## NEDYTISIS.

*Elytra lateraliter haud deflexa.*

*Prothorax capite latior, antice et postice constrictus et sulcatus.*

*Femora postica elongata, cæteris brevibus.*

*Coxæ anticæ contiguæ.*

Head broad in front; antennary tubers small and widely apart. Eyes rather prominent, narrowly emarginate. Antennæ as long as the body, setaceous, fimbriated beneath, the scape slender towards the base; third joint longer than the scape, the remainder gradually shorter. Prothorax narrower than the head, cylindrical, constricted and grooved anteriorly and posteriorly. Elytra short, nearly parallel, not bent down at the sides, except a little at the shoulders, their apices slightly dehiscent and pointed. Legs very unequal, the anterior and intermediate pairs (especially their femora) short, the posterior femur two or three times as long as the anterior; basal joint of the posterior tarsi as long as the next two together. Claws broadly appendiculate. Anterior coxæ prominent, contiguous, their acetabula slightly angulated.

This genus, which has something of an *Obrioid* habit, has the anterior coxæ perfectly contiguous. The narrowly constricted prothorax posteriorly is also characteristic. It is perhaps nearest some of the African forms of *Phytæcia*, not yet clearly understood, e. g. *Obereopsis*, Chev. Col. (? *Nitocris*, Thoms.).

NEDYTISIS OBRIOIDES. (Pl. XXVIII. fig. 1.)

*N. rufo-testacea*; *elytris dimidio apicali fuscescentibus*; *abdomine segmentis tribus apicalibus argenteis*.

Reddish testaceous, the apical half of the elytra brownish; head and prothorax minutely pubescent, impunctate, a finely raised line on the vertex, but becoming impressed between the eyes, and so continued to the mouth; eyes and mandibles black; prothorax narrowest posteriorly; scutellum small, rounded; elytra subseriate-punctate at the base, more irregularly posteriorly, the apex of each dehiscent and terminating in a sharp angle; body beneath reddish testaceous, thinly pubescent, the posterior coxæ, posterior margin of the meta-thorax, and last three abdominal segments covered with a coarse bright silvery pubescence; legs and two basal joints of the antennæ reddish testaceous, rest of the antennæ blackish. Length 5 lines.

[To be continued.]

EXPLANATION OF PLATES XXVI., XXVII., XXVIII.

PLATE XXVI.

- |   |   |
|---|---|
| Fig. 1. <i>Cuphisia callosa</i> , p. 230. | Fig. 7. <i>Agelasta lambii</i> , p. 235.  |
| 2. <i>Sodus ursulus</i> , p. 237.         | 8. ——— <i>substrigosa</i> , p. 236.       |
| 3. <i>Cæcia herbacea</i> , p. 233.        | 9. ——— <i>balteata</i> , p. 236.          |
| 4. ——— <i>melanopsis</i> , p. 232.        | 10. <i>Izais episomoides</i> , p. 239.    |
| 5. <i>Cyadium eribrosus</i> , p. 240.     | 11. <i>Obages palparis</i> , p. 243.      |
| 6. <i>Atossa atomaria</i> , p. 254.       | 12. <i>Cenodocus granulatus</i> , p. 238. |

PLATE XXVII.

- |  |  |
|--|--|
| Fig. 1. <i>Serixia prasinata</i> , p. 257. | Fig. 5. <i>Metopides occipitalis</i> , p. 249. |
| 2. <i>Xyaste nigripes</i> , p. 257.        | 6. <i>Thylactus angularis</i> , p. 242.        |
| 3. <i>Omocyrius fulvisparsus</i> , p. 246. | 7. <i>Thestus oncideroides</i> , p. 248.       |
| 4. <i>Daxata ustulata</i> , p. 230.        |  |

PLATE XXVIII.

- |  |   |
|--|---|
| Fig. 1. <i>Nedytisis obrioides</i> , p. 267. | Fig. 7. <i>Glenea manto</i> , p. 262.     |
| 2. <i>Glenea œme</i> , p. 261.               | 8. ——— <i>alysson</i> , p. 261.           |
| 3. ——— <i>vesta</i> , p. 260.                | 9. <i>Tanylecta lambii</i> , p. 263.      |
| 4. ——— <i>neanthes</i> , p. 259.             | 10. <i>Ectinogramma collare</i> , p. 266. |
| 5. ——— <i>porphyrio</i> , p. 259.            | 11. <i>Zosne cineticornis</i> , p. 264.   |
| 6. ——— <i>anthyllis</i> , p. 262.            |   |

7. A Monograph of the Diurnal Lepidoptera belonging to the Genus *Euplœa*, with Descriptions of many New Species; founded principally on the Specimens in the Collection of the British Museum. By ARTHUR G. BUTLER, F.Z.S., Assistant, Zoological Department, British Museum.

(Plates XXIX., XXX.)

The last synopsis of this genus was made in 1847 by Mr. E. Doubleday, in his 'Genera of Diurnal Lepidoptera.' The number of species at that time amounted to thirty-seven; in the present monograph it will be seen that the species are more than doubled. A great proportion of them have hitherto been undescribed\*.

I have endeavoured in the present paper to arrange the species as nearly as possible in a regular gradual series, so as to bring together the more closely allied forms. I have also made an effort to separate the numerous species into divisions and subdivisions, in order to facilitate their determination; these sections are, however, to some extent necessarily arbitrary, owing to the variations to which some of the species are subject, and to the difficulties arising from the knowledge of only one sex.

#### Genus EUPLŒA, Fabricius.

*Euplœa*, Fabricius (Illiger's Mag. 1807), Horsfield, Boisduval, Doubleday, Moore.

*Terpsichrois*, *Crastia*, *Salpinx*, *Didonis*, Hübner, Verz. bek. Schmett. (1816).

*Danaus*, p., Latreille.

*Danais*, p., Godart.

*Danaida*, p., Guérin.

#### Division I.

*Ala supra fuscæ, plerumque elongatæ et cærulescentes; apice acuto, raro obtuso, plerumque maculis submarginalibus albis cæruleisve serie duplici positis: subtus maculis discalibus cæruleis aut albis, et plerumque submarginalibus albis.*

#### Subdivision 1.

*Ala plerumque magnæ et cærulescentes: anticæ subtus maculis, posticæ punctis discalibus, punctoque uno in cellaposito.*

#### 1. EUPLŒA PROTHOË.

*Danais prothoë*, Godart, Enc. Méth. ix. p. 177. n. 1 (1816).

*Papilio midamus*, Cramer, Pap. Exot. iii. pl. 266. f. A, B (1780).

*Terpsichrois alca*, Hübner, Verz. bek. Schmett. p. 16 (1816).

\* Several species, which I had overlooked whilst writing the present paper, will be found in the Appendix.



A. G. Butler lith

M. & N. Hanhart. imp

NEW SPECIES OF EUPLŌEA





G Butler lith

M & N Hanhart imp

NEW SPECIES OF EUPLŒA





*Euplœa pavetta*, Zinken-Sommer, in Nova Acta Acad. Nat. Curios. xv. p. 189 (1831).

*Hab.* North Ceram ; Amboyna.

B.M.



*Euplœa semicirculus.*

## 2. EUPLŒA SEMICIRCULUS.

♂. *Alæ marginibus externis costisque subdirectis, supra cupreo-fuscæ, purpurascantes; anticæ serie macularum violacearum submarginalium apud costam bifurcata maculaque una indistincta in cella apud finem posita; posticæ maculis duabus subapicalibus violaceis; margine antico late albo; vena subcostali fascia lata ochrea pene cellum replente inclusa; margine anali quasi inuncto; corpus fuscum, antice nigrescens et ochreo punctatum; antennæ nigræ.*

*Alæ anticæ subtus cupreo-fuscæ, extus fuscescentes, costa fusca, margine interno ochreo-albo, margine postico serie punctorum cæruleorum submarginalium, punctisque duobus marginalibus sub nervulo tertio mediano positis; serie interna macularum quatuor magnitudine crescentium, post cellam posita, duabus infimis albis maximis, unaque in cella violacea albo pupillata; alæ posticæ cupreo-fuscæ, extus fuscescentes, margine postico serie punctorum cæruleorum submarginalium apud apicem magnitudine crescentium, punctisque duobus marginalibus sub nervulo tertio mediano positis, serie interna macularum cærulearum arcuata post cellam posita maculuque una apud cellæ finem, basi punctis nonnullis minoribus albis; corpus thorace nigro, ochreo punctato; abdomine fusco pallido; antennæ nigræ.*

*Exp. alur. unc. 4* $\frac{1}{8}$ .

*Hab.* — ?

B.M.

Allied to the preceding species, but proportionally much shorter

in the wings, the costa and outer margin of the front wings much more direct, and the apex more pointed; darker and more completely shot with purple; the spots smaller, less numerous, and violet. Below, the front wings with only one complete submarginal row of spots.

### 3. EUPLŒA PHŒBUS, sp. n.

*Euplœa prothoë*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 12 (1847); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 130. n. 259 (1857).

*Alæ anticæ elongatæ, supra aureo-fuscæ, costa fusca; area interiore fuscescente; margine postico seriebus tribus macularum albarum submarginalium, maculæque una apud cellæ finem; serie externa maculis oblongis parvis, serie media maculis apud costam magnitudine crescentibus et linea arcuata currentibus, serie interna angulata, maculis oblongis, apud costam magnitudine crescentibus: alæ posticæ purpurascens, area costali ochreo-alba, mediaque cella ochrea, areis externa et interna rufo-fuscis; margine postico femine seriebus tribus macularum albarum rufescentium submarginalium continuis, maris autem seriebus tribus interruptis nec angulum analem attingentibus; margine anuli maris quasi inuncto.*

*Alæ anticæ subtus basi fuscescentes, medio certo situ purpurascens; margine interno pallido, macula permagna subanali alba; margine postico seriebus macularum ut supra, duabus maculis autem externis minoribus serieque interna post cellæ finem aliquando obsoleta maculisque majoribus: posticæ cupreo-fuscæ; margine postico maris fuscescente, serie punctorum alborum marginali, tribusque subapicalibus; serie punctorum quinque violaceorum arcuata post cellæ finem; femine seriebus punctorum duabus, serie interna macularum septem violacearum arcuata, unaque apud cellæ finem: corpus thorace nigro, ochreo punctato; abdomine cinereo; antennæ nigræ.*

*Exp. alar. unc. ♂ 4½, ♀ 4⅞.*

*Hab.* Penang; Java.

B.M.

This species is quite distinct from *E. prothoë* of Godart, being much smaller, of a more golden colour, and quite differently spotted.

### 4. EUPLŒA ELISA, sp. n.

*Alæ anticæ supra aureo-fuscæ margine interno fuscescente, seriebus macularum albarum tribus, serie interna brevi maculis tribus inter nervulos medianos positis, serie externa apicem non attingente, serie media maris valde interrupta, femine autem continua apud costam arcuata; macula una apud cellæ finem: posticæ maris cupreo-fuscæ area costali ochreo-alba medioque cellæ ochreo; punctis tribus discalibus post cellam positis; margine postico fusco; margine anali quasi inuncto: posticæ femine aureo-fuscæ, margine costali pallido, margine postico seriebus punctorum alborum duabus submarginalibus, apud angulum analem indistinctis, serieque macularum trium post cellam posita: corpus fuscum, antice fuscescens alboque punctatum; antennæ nigræ.*

*Alæ anticæ subtus velut supra, maculis autem majoribus serieque submarginali externa maris continua: alæ posticæ maris pallidiores; margine postico serie media punctorum quinque marginalium serieque punctorum violaccorum angulata post cellæ finem; basi punctis nonnullis minimis albis: alæ posticæ femine velut supra, serie autem interna punctorum sex post cellæ finem posita unoque apud cellæ finem: corpus thorace nigro, albo pupillato; abdomine fusco; antennæ nigræ.*

*Exp. alar. unc.* ♂  $4\frac{3}{8}$ , ♀  $4\frac{1}{8}$ .

*Hab.* Ceylon.

B.M.

##### 5. EUPLŒA OCHSENHEIMERI.

*Euplœa ochsenheimeri*, Lucas, Rev. et Mag. de Zool. 1853, p. 315; F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 132. n. 264 (1857).

*Hab.* East India (Lucas); Java.

B.M.

Var. (a.) *Alis posticis supra pæne immaculatis.*

*Hab.* Borneo.

B.M.

Var. (b.) *Alis posticis supra seriebus duabus macularum albarum submarginalium continuis.*

*Hab.* Madjico Sima, Borneo; Penang; Siam.

B.M.

This last appears to be the normal form of the species, and the true *E. ochsenheimeri* the variety.

##### 6. EUPLŒA CAMARALZEMAN, sp. n. (Pl. XXIX. fig. 1.)

♂. *Alæ supra nigro-fuscæ: anticæ area basali viridi-cærulescente, puncto uno indistincto albo sub cellæ extimo, posticæ margine costali pallidiore, anticarum medio viridi-cærulescente; maculis duodecim marginalibus ochreo-albis, serieque submarginali anali: corpus nigro-fuscum, antice albo punctatum, antennis nigris.*

*Alæ subtus olivacæ, anticæ area basali medio fuscescente, et viridi-cærulescente; area interna pallidiore; maculis duabus discalibus, puncto uno ad cellæ extimum tribusque minimis analibus, albis: posticæ maculis submarginalibus velut supra, punctis quinque discalibus unoque ad cellæ extimum ochreo-albis: corpus thorace nigro, albo punctato; abdomine fusco, maculis mediis cæruleis.*

*Exp. alar. unc.*  $4\frac{1}{8}$ .

*Hab.* Siam.

B.M.

##### 7. EUPLŒA CHLOË.

*Euplœa chloë*, Guérin, in Delessert, Souvenirs d'un Voyage dans l'Inde, App. 72 (1843).

*Hab.* Pulo Penang; Sumatra.

B.M.

##### 8. EUPLŒA SUPERBA.

*Papilio superba*, Herbst, Pap. t. 119, 120 (1783-95).

*Euplœa superba*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 14 (1847); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 131. n. 260 (1857).

♀. *Papilio midamus*, Fabricius, Ent. Syst. iii. i. 39. n. 116 (1793).  
(Vide Banksian Collection.)

*Limnas mutabilis midamis*, Hübner, Samml. exot. Schmett. Bd. i. pl. 24. f. 3, 4 (1806).

*Danais alopia*, Godart, Enc. Méth. ix. p. 177 (1819).

*Hab.* China; North India; Cape of Good Hope?\*. B.M.

Fabricius (Ent. Syst. iii. i. 39. n. 116 (1793)) refers to (Cramer, pl. 266. f. A, B, D, & E) three distinct species as representatives of his *midamus*; but in the Banksian Collection I find *E. superba*, ♀, as *midamus*.

9. EUPLŒA SPLENDENS, sp. n. (*E. superba*, var.?)

♂. *Alæ anticæ supra nigro-fuscæ omnino viridi-cæruleo mutabiles; margine postico seriebus macularum albarum duabus, externa apicem non attingente, interna antice arcuata de costa currente nec marginem analem attingente; serie brevi angulata macularum septem violacearum oblongarum post cellam posita et de costa super cellam angulis duobus currente; macula una apud cellæ finem; striga pallida sub nervulo mediano primo posita: alæ posticæ pallidiores, paulo cærulescentes, area costali pallida; macula permagna ochrea in vena subcostali posita, margine postico seriebus duabus macularum valde indistinctarum: corpus fuscum, albo antice punctatum.*

*Alæ anticæ subtus cupreo-fuscæ, margine interno pallido seriebus macularum submarginalium velut supra, serie autem interna maculis minoribus; macula post costæ medium, una apud cellæ finem, una sub cellæ fine, unaque magna oblonga inter nervulos medianos, albis: posticæ cupreo-fuscæ seriebus duabus macularum submarginalium albarum, interna serie utrinque de punctis minimis, serie angulata macularum violaceo-albarum post cellæ finem maculaque una in cella; basi punctis albis: corpus fuscum, thorace albo punctatum.*

*Exp. alar. unc. 3 $\frac{2}{3}$ .*

*Hab.* Nepaul.

B.M.

Allied to *E. superba*, Herbst, but more brilliantly shot with variable blue green; the outer margin of front wings more arched; the costa of hind wings not so angular; the discoidal spots of the front wings much larger and oblong, and the submarginal spots smaller; the submarginal spots of hind wings nearly obsolete. Below, the discoidal spots are much more distinct and larger, the submarginal spots of the front wings more numerous, and the inner submarginal series of the hind wings very small, especially towards the apex and anal angle.

10. EUPLŒA CALLITHOË.

*Euplœa callithoë*, Boisduval, Faune de l'Océanie, p. 93 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 13 (1847).

*Hab.* New Guinea.

\* We have a female specimen registered as from this locality but it may very likely be an error.

Var. a.? ♂, ♀.

*Hab.* Northern India.

B.M.

Var. b.? ♂. *Alæ posticæ seriebus duabus macularum albarum continuis.*

*Hab.* Sylhet.

B.M.

#### 11. EUPLŒA KLUGII.

*Euplœa klugii*, F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 130. n. 258 (1857).

*Hab.* Bootan.

B.M.

#### 12. EUPLŒA KINBERGI.

*Euplœa kinbergi*, Wallengren, Wien. Entom. Monats. iv. (1860).

*Hab.* China.

B.M.

#### Subdivision 2.

*Alæ plerumque minores; supra raro cærulescentes vel apice acuto; maculis submarginalibus instabilibus, interruptis, aliquando obsoletis.*

#### 13. EUPLŒA MODESTA, sp. n.

♂. *Alæ supra fuscæ rufescentes, anticæ area basali cærulescente; posticæ area costali pallidiorè macula permagna subcostali fusca, margine postico seriebus macularum submarginalium ochreo-albarum duabus, serie interna maculis elongatis, nec apicem attingente; corpus rufo-fuscum, capite albo punctato, antennis nigris. Alæ subtus pallidiores; anticæ area interna antice ochrea, margine late cinereo; macula una discali punctisque duobus, uno costali, maculaque ad cellæ extimum cæruleo-albis; posticæ maculis submarginalibus velut supra, punctis septem discalibus serie arcuata, maculaque ad cellæ extimum violaceo-albis; basi albo punctata; corpus thorace cinereo, albo punctato, antennis nigris; abdomine fusco, maculis elongatis mediis ochreis.*

*Exp. alar. unc.  $3\frac{3}{16}$ .*

*Hab.* Siam.

B.M.

#### 14. EUPLŒA JANUS, sp. n.

*Salpinx eleusina*, Hübner, Samml. exot. Schmett. Bd. ii. pl. 9. f. 1, 2 (1806).

*Alæ supra cupreo-fuscæ, anticæ maris area basali paulo fuscescente, serie subapicali punctorum alborum, puncto uno post costæ medium, unoque sub cellæ fine; posticæ serie marginali punctorum alborum serieque interna macularum trium subapicalium; anticæ femine serie marginali punctorum parvorum, serie subapicali pene ad angulum analem continuata; posticæ seriebus macularum submarginalium duabus; corpus cupreo-fuscum, antice fuscescens et albo punctatum.*

*Alæ subtus pallidiores, anticæ margine interno pallido; tribus quinque maculis discalibus albis unaque in cella; aliter velut supra:*

*alæ posticæ punctis quinque sexve discalibus serie arcuata unoque in cella, aliter velut supra.*

*Alar. exp. unc.* ♂  $2\frac{5}{8}$ , ♀  $2\frac{1}{8}$ .

*Hab.* Java\*. Allied to the next species.

15. EUPLŒA HUEBNERI.

*Euplœa hübneri*, F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 129. n. 255 (1857).

*Hab.* Java (*Horsf. Coll.*).

Var. intermediate. *Alæ anticæ supra maculis subapicalibus interruptis, puncto discali obsoleto: posticæ serie punctorum marginalium continuata, serieque trium subapicalium.*

*Hab.* Java.

B.M.

16. EUPLŒA AMYNONE.

*Euplœa amymone*, Godart, Enc. Méth. ix. p. 179. n. 10 (1819); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 20 (1847).

*Hab.* Amboyna; Cochin China.

B.M.

16a. EUPLŒA HAWORTHII.

*Euplœa haworthii*, Lucas, Rev. et Mag. de Zool. 1853, p. 317.

*Hab.* Java.

17. EUPLŒA TISIPHONE, sp. n.

*Alæ supra nigro-fuscæ, area apicali pallidiore, serie angulata punctorum alborum quinque minimorum submarginalium: posticæ nigro-fuscæ, area apicali pallida olivaceo-fusca; margine costali late alba; macula triangulari ochrea in cella sub vena subcostali posita: corpus nigro-fuscum, albo antice punctatum, antennis nigris.*

*Alæ subtus olivaceo-fuscæ, anticæ macula permagna anali cinereu, fascia elongata ochrea ad venæ submedianæ basin posita; margine inferiore ochreo-albo; puncto uno costali albo, duobusque discalibus inter nervulos medianos; margine postico seriebus punctorum alborum duabus, serie interna punctis quinque: posticæ olivaceo-fuscæ, serie punctorum violaceorum marginali punctisque quatuor minutis apud apicem submarginalibus; basi albo punctata: corpus nigrum, antennis nigris, thorace albo punctato, abdomine cinereo fasciato.*

*Alar. exp. unc.*  $3\frac{3}{16}$ .

*Hab.* Philippine Islands.

B.M.

Possibly this species may be closely allied to *E. midamus*; but at present we only possess the male sex. Above very similar to *E. amymone* (God.), but with the purple gloss scarcely distinguishable.

Subdivision 3.

*Alæ anticæ supra vix cærulescentes, maculis submarginalibus obsoletis indistinctivæ; posticæ maculis submarginalibus continuis, serie interna elongatis.*

\* I think it possible that if we had a large series of this insect it might prove to be only a variety of the next species.

## 18. EUPLŒA MÉNÉTRIESII.

*Euplœa ménétriesii*, Felder, Wien. Ent. Monats. iv. p. 398 (1860).

*Hab.* Malayan peninsula.

## 19. EUPLŒA ALCATHOË.

*Danaïa alcathoë*, Godart, Enc. Méth. ix. p. 178 (1819).

*Euplœa alcathoë*, Boisduval, Faune de l'Océanie, p. 99 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 16 (1847); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 131. n. 261 (1857).

*Hab.* Northern India.

B.M.

## 20. EUPLŒA FELDERI, sp. n.

♀. *Alæ supra fuscæ, anticæ area basali cærulescente, maculis duabus discalibus, una ad cellæ extimum, una costali, quinque subapicalibus serie arcuata, raroque tribus submarginalibus punctisque nonnullis marginalibus albis: posticæ immaculatæ seriebusve duabus macularum indistinctarum apud apicem albarum: corpus nigro-fuscum, antice albo punctatum.*

*Alæ subtus pallidiores, anticæ area interna pallida, aliter velut supra, maculis autem submarginalibus minoribus: posticæ punctis sex discalibus serie angulata, uno ad cellæ extimum maculisque submarginalibus velut supra positis albis; basi albo punctata: corpus cinereum, albo maculatum.*

*Exp. alar. unc. 3½.*

*Hab.* Sumatra.

B.M.

## 21. EUPLŒA ALECTO, sp. n.

*Alæ supra cupreo-fuscæ, medio paulo fuscescente, anticæ puncto uno costali, uno sub cellæ extimo, duobus subapicalibus indistinctis quatuorque marginalibus apud angulum analem albis: posticæ seriebus duabus macularum oblongarum submarginalium albarum, serie externa maculis minoribus: corpus fuscum; caput albo punctatum, antennis nigris.*

*Alæ subtus pallidiores, anticæ macula una in cella, maculis duabus magnis et quinque parvis discalibus serie arcuata apud apicem albis, punctisque septem marginalibus nec apicem attingentibus: alæ posticæ maculis septem violaceo-albis serie arcuata circa cellam positas maculisque duabus in cella; maculis submarginalibus velut supra: corpus fuscum, abdomine albo punctato.*

*Exp. alar. unc. 3½.*

*Hab.* Ceram.

B.M.

## 22. EUPLŒA GODARTII.

*Euplœa godartii*, Lucas, Rev. et Mag. de Zool. 1853, p. 319.

*Alæ supra fuscæ, margine postico pallescente: anticæ apice late roseo-violaceo, punctis albis velut in E. alcathoë: posticæ velut in E. core.*

*Alæ subtus velut in E. core, maculis discalibus autem majoribus.*

*Alar exp. unc. ♂ 3¾, ♀ 3½.*

*Hab.* Java (Lucas); Philippines; Siam.

B.M.



## 23. EUPLŒA CORE.

*Papilio core*, Cramer, Pap. Exot. iii. t. 266. f. E, F (1780).

*Euplœa core*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 31 (1847); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 131. n. 262 (1857).

*Crastia core*, Hübner, Verz. bek. Schmett. p. 16 (1816).

*Papilio corus*, Fabricius, Ent. Syst. iii. 1. p. 41 (1793).

*Danais coreta*, Godt. Enc. Méth. ix. p. 182 (1819).

Var. *Danais cora*, Godt. Enc. Méth. ix. p. 178. n. 7 (1819).

*Hab.* Ceylon.

B.M.

Var. *maculis submarginalibus parvis*.

*Hab.* Java (*Horsf. Coll.*).

## Subdivision 4.

*Alæ supra plerumque maculis submarginalibus instabilibus, raro obsoletis; anticæ maculis subapicalibus semper distinctis, plerumque oblongis.*

24. EUPLŒA VERMICULATA, sp. n. (*E. core*, var.?)

*Lemnas mutabilis cora*, Hübner, Samml. exot. Schmett. Bd. i. pl. 25. f. 1, 2 (1806).

*Alæ anticæ supra fuscæ, margine postico pallidiores, maculis novem submarginalibus, apicalibus permagnis maculisque marginalibus multis minoribus albis: posticæ pallidiores, basi fuscæ, seriebus macularum albarum submarginalium duabus, serie interna maculis elongatis magnis: corpus fuscum; caput nigrum, albo punctatum, antennæ nigris.*

*Alæ subtus pallidiores, anticæ macula una costuli, duabus discalibus, una apud cellæ finem, albis; maculis submarginalibus velut supra, majoribus autem: alæ posticæ maculis submarginalibus, apud apicem et angulum analem confusis; aliter velut supra; punctis quinque discalibus serie angulata post cellam positis unoque apud cellæ finem.*

*Exp. alar. unc.*  $3\frac{1}{4}$ .

*Hab.* Northern India.

B.M.

This species appears to be allied to *E. core* of Cramer, of which it may possibly be the northern form; it differs from it chiefly in having the submarginal spots exceedingly large and distinct, especially near the apex.

## 25. EUPLŒA MEGÆRA, sp. n.

*Alæ anticæ supra saturate brunneæ, margine postico pallido, maculis quinque subapicalibus albis serie obliqua positis; maris fascia discali nitente, feminæ macula una discali apud marginem posticum; puncto uno costali, uno discali post cellam unoque in cella albis; serie punctorum marginalium partim indistorum, nec apicem attingente: posticæ maris pallidiores, maculis tribus subapicalibus*

*albis; feminae margine postico late pullido, seriebus macularum submarginalium duabus continuis: corpus fuscum; caput nigrum, albo punctatum, antennis nigris.*

*Alæ subtus pallidiores, anticæ maris maculis septem subapicalibus punctisque tribus marginalibus albis, macula unu discali sub nervulo mediano primo, quasi inuncta, punctis insuper duobus discalibus cæruleis unoque in cella: posticæ punctis sex discalibus serie arcuata, unoque in cella, maculis sex submarginalibus, punctisque quinque marginalibus albis: anticæ feminae margine interiore ochreo, maculis submarginalibus velut supra, punctis undecim marginalibus distinctis duobusque sub costa post medium, maculis tribus discalibus serie obliqua, una apud cellæ finem fasciæque apud marginem interiorem roseo-albis: posticæ punctis sex discalibus serie arcuata unoque in cella roseo-albis, seriebus macularum duabus submarginalium albarum.*

*Exp. alar. unc. ♂ 3, ♀ 3½.*

*Hab.* Aru Islands.

B.M.

## 26. EUPLÆA ÆGYPTUS, sp. n.

*Alæ elongatæ, supra fuscæ, anticæ striga discali nitente brevi, maculis quinque subapicalibus albis unaque subcostali rosea indistincta, strigis duabus minimis costalibus: posticæ seriebus punctorum duabus submarginalibus alborum aliquando indistinctorum, margine costali albo: corpus fuscum, antice nigrescens alboque punctato; antennis nigris.*

♂. *Alæ subtus olivaceo-fuscæ, anticæ margine interiore albo, strigis costalibus maculisque subapicalibus albis velut supra; serie punctorum marginalium valde interrupta punctoque uno submarginali apud angulum analem, macula una discali, una in cella, fasciæque discali quasi inuncta: posticæ seriebus punctorum duabus submarginalibus alborum, serie interna brevi; serie discali punctorum violaceorum arcuatu punctoque uno in cella: corpus thorace nigro, albo punctato; antennis nigris; abdomine fusco, albo fasciato.*

*Exp. alar. unc. 4 $\frac{1}{16}$ .*

*Hab.* Borneo; Sumatra.

B.M.

## 27. EUPLÆA CRAMERI.

*Euplæa crameri*, Lucas, Rev. et Mag. de Zool. 1853, p. 319; F. Moore, Cat. Lep. Mus. East India Comp. p. 129, n. 256 (1857).

*Hab.* Manilla (Lucas); Borneo.

B.M.

## 28. EUPLÆA BREMERI.

*Euplæa bremeri*, Felder, Wien. Ent. Monatsschr. iv. p. 398 (1860).

*Hab.* Malayan peninsula; India.

B.M.

## 29. EUPLÆA MOOREI, sp. n.

♀. *Alæ supra olivaceo-fuscæ, anticæ cærulescentes, maculis velut in E. bremeri, Felder: posticæ seriebus punctorum alborum duabus, interna subapicali, externa marginuli continua: corpus fuscum, antice nigrum alboque punctatum.*

*Alæ subtus paulo pallidiores, anticæ maculis velut in E. bremeri: posticæ maculis marginalibus velut supra albis, maculis septem discalibus serie arcuata unaque ad cellæ extimum violaceo-albis; basi albo punctata: corpus nigrum, albo maculatum.*

*Exp. alar. unc.*  $3\frac{1}{8}$ .

*Hab.* Sumatra.

B.M.

Closely allied to *C. bremeri*, Felder, but much smaller; the costa of the front wings more direct, the subapical spots smaller and more distinct, the inner submarginal row of spots in the hind wings not continuous.

### 30. EUPLŒA SWAINSONII.

*Danais swainsonii*, Godart, Enc. Méth. ix. p. 815. n. 17-18, Suppl. (1823); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 33 (1847).

*Hab.* Philippine Islands.

B.M.

### 31. EUPLŒA CRASSA, sp. n.

*Alæ supra cupreo-olivaceæ, basi paulo fuscescentes et cærulescentes, anticæ apice valde acuto, seriebus macularum submarginalium albarum duabus, serie interna ad apicem permagnarum violaceo-albarum; punctis tribus discalibus post cellæ extimum unoque costali violaceo-albis: posticæ costa alba, seriebus macularum albarum duabus, interna apud apicem paulo majoribus: corpus fuscum, abdomine cærulescente; caput ochreo punctatum.*

*Alæ subtus pallidiores, anticæ seriebus macularum duabus, interna apicali, externa marginali continua, macula una interna magna, una costali duabusque plerumque post cellæ extimum roseo-albis: posticæ seriebus macularum duabus submarginalibus; basi albo punctata: corpus thorace fusco, albo punctato; abdomine cinereo, maculis albis mediis.*

*Exp. alar. unc.* ♂  $3\frac{9}{16}$ , ♀  $3\frac{1}{2}$ .

*Hab.* Siam.

B.M.

### 32. EUPLŒA NOX, sp. n.

♀. *Alæ supra nigro-fuscæ, margine postico pallido, anticæ maculis quinque subapicalibus albis serie arcuata positis: posticæ maculis septem submarginalibus albis punctisque decem indistinctis marginalibus ochreis: corpus fuscum; caput albo punctatum, antennis nigris.*

*Alæ subtus pallidiores, anticæ margine interiore albo, maculis subapicalibus velut supra, puncto uno submarginali punctisque duobus marginalibus albis; puncto uno post costæ medium ochreo, uno in cella unoque discali, cæruleis: posticæ maculis octo submarginalibus, punctis decem marginalibus, duobus discalibus, uno apud cellæ finem basique nonnullis albis: corpus fuscum, thorace ochreo-punctato, antennis nigris; abdomine pallidior, maculis tribus mediis quadratis albis.*

*Exp. alar. unc.*  $3\frac{1}{2}$ .

*Hab.* Aru Islands.

B.M.

## Division II.

*Alæ latae, breves, supra nigro-fuscæ, maculis submarginalibus albis distinctis, subapicalibus anticarum oblongis: subtus maculis discalibus posticarum interruptis, raro obsoletis.*

## 33. EUPLŒA GAMELIA.

*Salpinx gamelia*, Hübner, Samml. exot. Schmett. Bd. ii. pl. 10. f. 1, 2 (1806-27).

*Euplœa gamelia*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 29 (1847).

*Euplœa faber*, Zinken-Sommer in Nova Acta Acad. Curios. xv. t. 16. f. 18, 19 (1831).

*Hab.* Java.

B.M.

## Division III.

*Alæ supra fuscæ, raro cærulescentes; anticæ plerumque immaculatæ, raro punctis discalibus: alæ subtus maculis discalibus distinctis.*

## Subdivision 1.

*Alæ elongatæ, supra cærulescentes, anticæ apice leviter subangulato, plerumque puncto uno costali punctisque nonnullis minimis discalibus cæruleo-albis; posticæ aliquando maculis submarginalibus albis, serie interna elongatis: subtus pallidiores, maculis discalibus violaceo-albis.*

## 34. EUPLŒA MARGARITA, sp. n.

*Alæ supra olivaceo-fuscæ, anticæ fuscescentes, cæruleo viridique variabiles, puncto uno costali albo, maris maculis duabus discalibus cæruleis, puncto uno subapicali, uno anali unoque submarginali ochreis; feminæ puncto uno discali albo: posticæ maris margine costali ochreo-albo, macula permagna subcostali ochrea; margine postico seriebus macularum ochreo-albarum duabus submarginalibus; feminæ seriebus macularum duabus, maculis ad angulum analem confusis, serie interna elongatis: corpus fuscum, antice nigrescens alboque punctatum.*

*Alæ subtus pallidiores, anticæ punctis nonnullis sparsis submarginalibus albis, unoque costali, maculis duabus discalibus, inferiore elongata magna lunulaque in cella iridescentibus, margine interiore pallido; feminæ striga elongata discoidali ochrea apud marginem posita: posticæ maris punctis quinque, feminæ sex discalibus duobusque in cella albis iridescentibus, maculis submarginalibus velut supra, basi albo punctata: corpus nigro-fuscum, albo punctatum; antennis nigris.*

*Exp. alar. unc.* ♂  $3\frac{5}{8}$ , ♀  $4\frac{1}{6}$ .

*Hab.* East Indies.

B.M.

Allied to *Euplœa deione*, Westwood.

## 35. EUPLŒA DEIONE.

*Euplœa deione*, Westwood, Cab. Orient. Entom. p. 76, pl. 37. f. 3 (1847); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. Suppl.

p. 531 (1852?); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 132.  
n. 263 (1857).

*Hab.* Assam (*Westw.*); Darjeeling; Sylhet.

B.M.

36. EUPLŒA PICINA, sp. n. (Pl. XXX. fig. 1.)

♂. *Alæ antica supra nigro-fuscæ, certo situ purpurascens, strigis duabus apud marginem internam: posticæ fuscæ, margine costali albo, margine postico pallido: corpus nigro-fuscum; caput albo punctatum, antennis nigris.*

*Alæ subtus pallidiores, antica margine interna albo, strigis brunneis velut supra; serie macularum quatuor discalium viridi-albarum obliqua angulata post cellam posita, ad costam magnitudine decrescentium, maculæque una apud cellæ finem: posticæ maculis quinque discalibus cæruleis serie arcuata post cellam positæ unaque in cella: corpus nigro-fuscum, abdomine albo punctato.*

*Exp. alar. unc.*  $3\frac{7}{8}$ .

Allied to the preceding species.

*Hab.* Sumatra.

B.M.?

37. EUPLŒA WALLACEI, Felder, sp.

*Euplœa wallacei*, Felder, Wien. Entom. Monatschr. iv. (1860).

*Hab.* Gilolo.

♀, B.M.

Subdivision 2.

*Alæ breviores, supra rarissime punctis nonnullis submarginalibus; plerumque area apicali pallescente: subtus maculis discalibus distinctis cæruleis pallidis, raro maculis submarginalibus similibus.*

38. EUPLŒA MELANCHOLICA, sp. n.

♂. *Alæ supra nigro-fuscæ, posticæ margine unali paulo pallidiore, margine costali cinerascens; margine postico seriebus macularum fulvarum duabus, ad apicem obsoletis: corpus fuscum, antice nigrescens fulvoque punctatum, antennis nigris.*

*Alæ subtus pallidiores, antica striis duabus internis maculisque quatuor quinqueve discalibus serie obliqua et magnitudine antica decrescentibus, punctis tribus costalibus tribusque minimis apud marginem internam albis: posticæ seriebus macularum submarginalium ochreo-albarum duabus, maculis septem discalibus serie angulata unaque ad cellæ extremum roseo-albis, basi ochreo punctata: corpus nigro-fuscum, thorace ochreo punctato, antennis nigris, abdomine medio ochreo punctato.*

*Exp. alar. unc.*  $3\frac{3}{5}$ – $3\frac{13}{16}$ .

*Hab.* Bouru; Amboina (*B.M. and Salvin Coll.*).

39. EUPLŒA ANTHRACINA, sp. n. (Fig. 1, p. 281.)

*Alæ supra saturate fuscæ, margine postico pallidiore, antica maculis submarginalibus serie una valde indistinctis, maris striga elongata nitente apud marginem internam: posticæ feminae punctis tribus albis indistinctis subapicalibus: corpus fuscum; caput nigrum, albo punctatum; antennis nigris.*

*Alæ subtus pallidiores, anticæ serie punctorum viridi-alborum submarginalium apud apicem arcuata: anticæ maris macula magna, punctis quatuor discalibus serie directa, uno in cella unoque costali viridi-albis: anticæ feminae punctis nonnullis marginalibus minimis indistinctis, striga, macula punctisque quatuor discalibus, macula una in cella punctoque uno costali viridi-albis: posticæ maculis octo novemve submarginalibus, octo discalibus serie angulata, una in cella, feminaeque serie marginali, viridi-albis; basi punctis nonnullis ochreis: corpus fuscum, albo punctatum; antennis nigris.*

*Exp. alar. unc.* ♂  $3\frac{3}{16}$ — $3\frac{3}{8}$ , ♀  $3\frac{5}{16}$ .

*Hab.* Amboina (♂ B.M., ♀ Salvin Coll.).

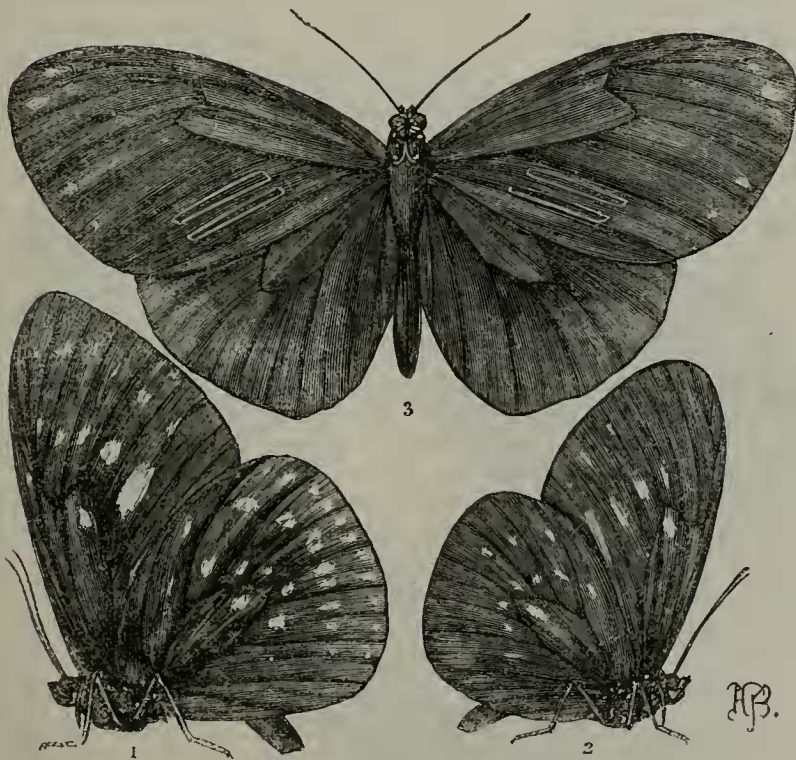


Fig. 1. *Euplæa anthracina*, p. 280.

2. — *morosa*, p. 282.

3. — *mæsta*, p. 284.

39 a. EUPLÆA ANTHRACINA, var.? (! *E. climena*, ♂.)

*Alæ anticæ subtus maculis solum tribus discalibus: posticæ serie macularum submarginalium marginem analem non attingente.*

*Exp. alar. unc.*  $3\frac{1}{2}$ .

*Hab.* Ceram (Coll. Salvin).

B.M.

## 40. EUPLŒA CLIMENA.

*Papilio climena*, Cramer, Pap. Exot. iv. t. 389. f. E, F (1782).

*Crastiu climena*, Hübner, Verz. bek. Schmett. p. 16 (1816).

*Euplœa climena*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 18 (1847).

*Danaïs algea*, Godart, Enc. Méth. ix. p. 178. n. 8 (1819).

*Hab.* Amboina; Ceram.

B.M.

## 41. EUPLŒA MELINA. (Fig. 1, p. 283.)

*Danaïs melina*, Godart, Enc. Méth. ix. p. 179. n. 9 (1819).

*Euplœa melina*, Boisduval, Faune de l'Océanie, p. 89 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 17 (1847).

*Hab.* New Guinea (*Doubl.*); Aru Islands; Ceram.

B.M.

## 42. EUPLŒA MOROSA, sp. n. (Fig. 2, p. 281.)

*Alæ supra fuscæ margine postico paulo pallidiore: anticæ maris apice, acuto, margine interiore brevi; margine postico convexo; maculis duabus apud marginem interiorem nitentibus, una parva alteraque insuper ovali magna: corpus fuscum; caput albo punctatum, antennis nigris.*

*Alæ subtus rufescenti-fuscæ; anticæ margine interiore pallido, striga elongata interna, macula punctisque duobus discalibus serie obliqua, maculaque ad cellæ extimum, cæruleo-albis: posticæ punctis septem discalibus serie arcuata post cellam positis, tribus subapicalibus maculaque ad cellæ extimum cæruleo-albis: corpus thorace nigro, albo punctato; antennis nigris; abdomine fusco-pallido.*

*Exp. alar. unc. 3.*

*Hab.* Gilolo (*B.M. and Salvin Coll.*).

## 43. EUPLŒA DUPONCHELII.

*Euplœa duponchelii*, Boisduval, Faune de l'Océanie, p. 97. n. 6 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 7 (1847).

*Hab.* Bouru.

## 44. EUPLŒA AGLIDICE.

*Euplœa aglidice*, Boisduval, Faune de l'Océanie, p. 96. n. 5 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 6 (1847).

*Hab.* Rawack.

## 45. EUPLŒA LAPEYROUSEI.

*Euplœa lapeyrousei*, Boisduval, Faune de l'Océanie, p. 97 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 27 (1847).

*Hab.* Bourn (*Bdv.*); Aneiteum.

B.M.

## 46. EUPLŒA SEPULCHRALIS, sp. n. (Fig. 2, p. 283.)

*Euplœa melina*, F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 128. n. 25-1.

♂. *Alæ supra olivaceo-fuscæ margine postico pallidiore, anticæ raro puncto uno discali albo; margine anali posticarum albicante: corpus fuscum, caput albo punctatum, antennis nigris.*

*Alæ subtus pallidiores, anticæ maculis tribus discalibus serie obliqua, una in cella, punctis duobus subapicalibus duobusque mediis submarginalibus cæruleo-albis: posticæ seriebus punctorum alborum subapicalium duabus, serie interna punctis majoribus, maculis sex discalibus serie arcuata, unaque ad cellæ extimum, albis: corpus thorace cinereo, albo punctato; abdomine ochreo.*

♀. *Apice anticarum acuto; posticæ supra pallidiores, maculis subapicalibus: anticæ subtus strigis duabus elongatis internis, puncto uno costali, tribus subapicalibus minimis albis: posticæ puncto uno subcostali; serie macularum marginalium pene ad angulum analem continuata.*

*Exp. alar. unc.  $2\frac{3}{4}$ .*

*Hab. Java (Horsf. Coll. & B.M.).*

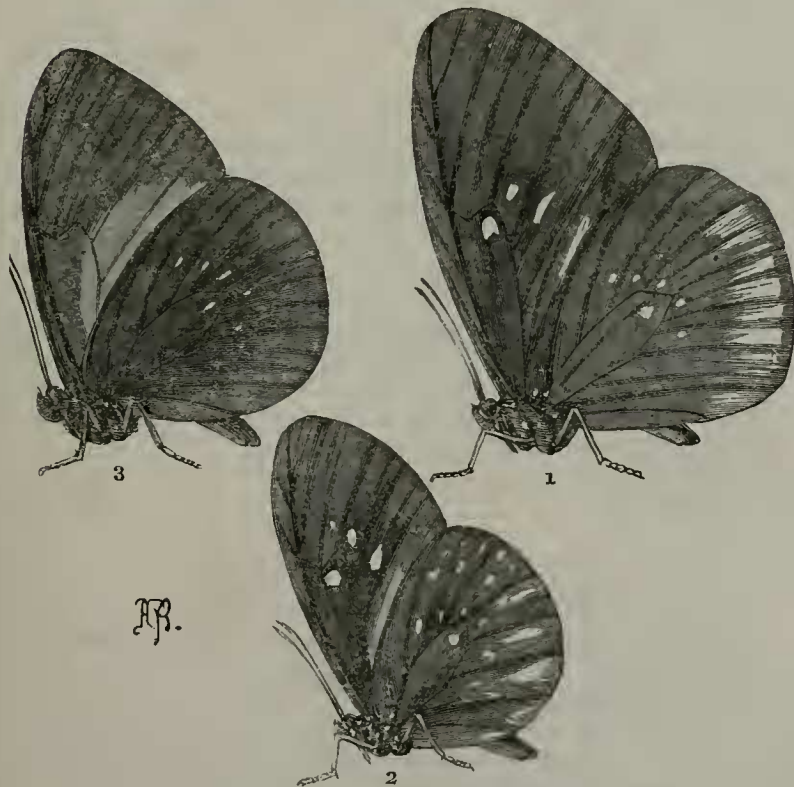


Fig. 1. *Euplea melina*, ♂, p. 282.  
 2. — *sepulchralis*, ♂, p. 282.  
 3. — *confusa*, ♀, p. 285.

*Note.*—The true *E. melina* of Godart is similar in size to *E. climena* of Cramer, from which it chiefly differs in having no subapical spots



on the underside of the hind wings. The *E. melina* of Horsfield's collection, however, is a much smaller insect, and has subapical spots on the hind wings as in *E. climena*.

47. EUPLŒA PALLA, sp. n.

*Alæ supra nigro-fuscæ, certo situ cærulescentes; anticæ maculis septem submarginalibus albis ad apicem majoribus, striis duabus internis nitentibus: posticæ area anali rufescente; margine costali rufescente; margine interno cinereo; maculis decem submarginalibus ochreo-albis, punctis minimis marginalibus brunneis: corpus nigro-fuscum, antice albo punctatum; antennis nigris.*

*Alæ subtus pallidiores, rufescentes, maculis submarginalibus velut supra, anticæ autem uno minimo costali: anticæ punctis duobus discalibus novemque marginalibus minimis albis: posticæ punctis undecim marginalibus minimis, basi punctis duobus albis minimis: corpus thorace nigro-fusco, punctis nonnullis albis, antennis nigris; abdomine olivaceo-fusco, punctis mediis albis.*

*Exp. alar. unc. 3 $\frac{1}{8}$ .*

*Hab.* Aru Islands.

B.M

48. EUPLŒA TRISTIS, sp. n.

*Alæ supra nigro-fuscæ purpurascantes, anticæ maculis quinque marginalibus albis: posticæ costa pallida, margine postico rufescente, margine apicali maculis sex irregularibus albis submarginato: corpus nigro-fuscum, collo albo punctato, antennis nigris.*

*Alæ subtus olivaceo-fuscæ, anticæ area basali fusciscente, certo situ purpurascantes, punctis quinque discalibus maculaque in cella subviolaceis; maculis duabus apicalibus, duabus mediis submarginolibus punctisque nonnullis marginalibus sparsis albis: posticæ punctis sex discalibus unoque in cella subviolaceis; punctis nonnullis minimis valde indistinctis submarginalibus sparsis: corpus nigrum, abdomine cæruleo punctato.*

*Exp. alar. unc. 2 $\frac{1}{8}$ .*

*Hab.* Aneiteum.

B.M.

49. EUPLŒA MŒSTA, sp. n. (Fig. 3, p. 281.)

♂. *Alæ supra nigro-fuscæ certo situ purpurascantes, posticæ extus pallescentes: anticæ maculis duabus subapicalibus punctisque duobus oblongis submarginalibus cæruleis: corpus nigro-fuscum; capite collo albo punctato, antennis nigris.*

*Alæ anticæ subtus area basali nigro-fusca; costa areaque postica rufescentibus; margine interno albo-cinereo; maculis duabus discalibus unaque ad cellæ extimum; striis duabus internis sericeis: posticæ fusco-rufescentes, marginibus paulo pallescentibus, punctis quatuor discalibus cæruleis serie arcuata post cellam positis unoque ad cellæ extimum: corpus nigro-fuscum, abdomine medio cinereo punctato.*

*Exp. alar. unc. 3 $\frac{3}{8}$ .*

*Hab.* Dory; Sumatra (*alæ supra immaculatæ*).

B.M.

♂. Var. *Anticæ supra immaculatæ; posticæ margine postico fusco marginato: anticæ subtus punctis tribus minimis discalibus post cellam positis: posticæ margine costali obscuriore.*

*Exp. alar. unc.  $3\frac{3}{4}$ .*

*Hab.* Amboina.

B.M.

50. EUPLŒA ÆTHIOPS, sp. n.

♂. *Alæ anticæ supra nigro-fuscæ, margine postico rufescente: posticæ medio nigrescentes; area costali cinereo-fusca; area anali et margine apicali olivaceo-fuscis: corpus nigro-fuscum, antice albo punctatum, antennis nigris.*

*Alæ subtus olivaceo-fuscæ, anticæ medio fuscescente, margine interiore striga magna interna alba, puncto uno subcostali unoque discali sub cellæ extimo strigaeque interna exigua elongata albis: posticæ punctis nonnullis minimis subapicalibus albis, punctis quinque discalibus serie arcuata post cellam unoque ad cellæ extimum violaceis.*

*Exp. alar. unc.  $3\frac{1}{4}$ .*

*Hab.* Waigiou.

B.M.

Division IV.

*Alæ fuscæ, breves, anticæ maris et raro femine macula una discali, sub nervulo mediano primo posita: alæ subtus plerumque maculis submarginalibus distinctis; anticæ maculis discalibus plerumque distinctis.*

Subdivision 1.

*Alæ anticæ supra striga media lata pallida roseo-ferruginea: alæ subtus sine maculis submarginalibus; punctis discalibus indistinctis obsolete.*

51. EUPLŒA USIPETES.

*Euplæa usipetes*, Hewitson, Exot. Butterf. ii. pl. 12. f. 4 (♂) (1857-61).

*Hab.* Aru Islands.

B.M.

52. EUPLŒA CONFUSA, sp. n. (Fig. 3, p. 283.)

♀. *Alæ anticæ supra ochreo-fuscæ, striga discali interna elongata confusa roseo-pallida, costa basi fuscescente: posticæ obscuriores, margine costali pallido, fascia triangulari nigro-fusca de margine abdominali ad cellæ extimum currente: corpus fuscum, antice nigrescens alboque punctatum; antennis nigris.*

*Alæ subtus velut in E. usipete (Hewitson), posticæ autem margine anali pallidiore: corpus thorace nigro, abdomine cinereo-fusco.*

*Alar. exp. unc.  $3\frac{1}{8}$ .*

*Hab.* Waigiou (Coll. Salvin and B.M.).

This insect may be only a local form of *E. usipetes*; I have only seen female specimens.

## Subdivision 2.

*Ala anticæ margine postico pallido; anticæ et aliquando posticæ subtus maculis discalibus distinctis; anticæ maculis subapicalibus distinctis.*

## 53. EUPLÆA EURYPON.

*Euplæa eurypon*, Hewitson, Exot. Butterf. ii. pl. 12. f. 3 (♀) (1857-61).

*Hab.* North Ceram; Ké Island.

B.M.

## Subdivision 3.

*Ala supra sine maculis submarginalibus: posticæ subtus maculis discalibus obsoletis.*

54. EUPLÆA HISME. (Fig. 1 *infra*.)

*Euplæa hisme*, Boisduval, Faune de l'Océanie, p. 95 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 4 (1847).

*Hab.* Aru Islands.

B.M.

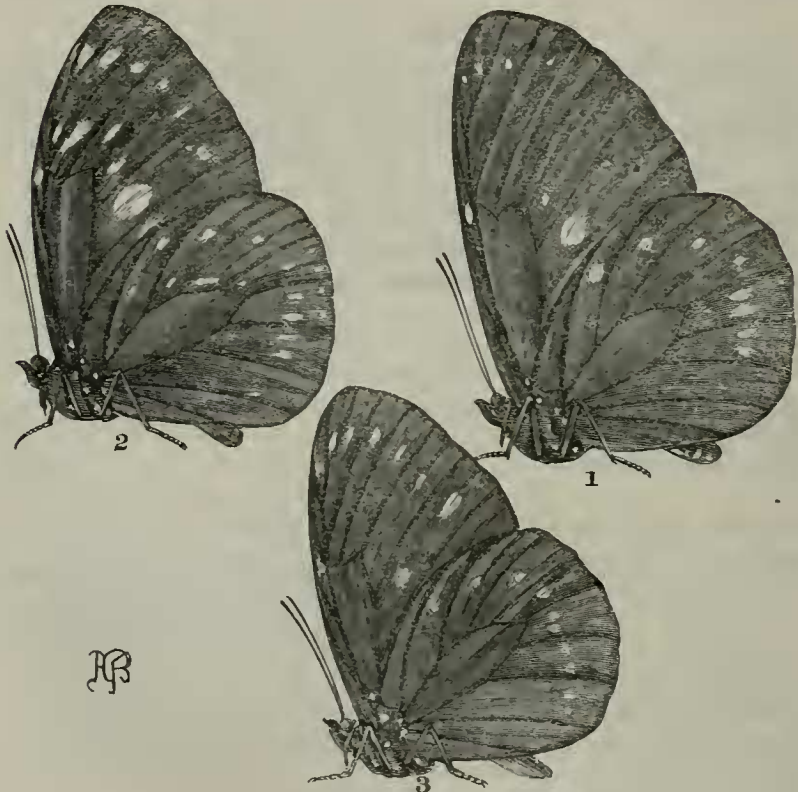


Fig. 1. *Euplæa hisme*, ♀, p. 286.

2. — *eunice*, ♀, p. 287.

3. — *iphianassa*, ♀, p. 287.

## Subdivision 4.

*Alæ supra maculis submarginalibus violaceis albisve serie una; posticæ subtus sine maculis discalibus.*

## 55. EUPLŒA HERBSTII.

*Euplœa herbstii*, Boisduval, Faune de l'Océanie, p. 95. n. 3 (1832); Westw., Doubleday & Hewitson, Gen. Diurn. Lepid. p. 87. n. 8 (1847).

*Hab.* New Guinea.

## 56. EUPLŒA EUNICE. (Fig. 2, p. 286.)

*Danaïs eunice*, Godart, Enc. Méth. ix. p. 177 & p. 815. n. 2 (1819).

*Euplœa eunice*, Boisduval, Faune de l'Océanie, p. 94 (1832); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 1 (1847); F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 129. n. 257 (1857).  
? *Danaida eunice*, Guérin, Icon. du Règne Animal, p. 474, pl. 77. f. 4 (1829-44).

*Limnas mutabilis nemertes*, Hübner, Samml. exot. Schmett. (1806-27).

*Salpinx nemertes*, Hübner, Verz. bek. Schmett. p. 17 (1816).

*Hab.* Ceram; Amboina; Java (*Westwood, Moore*); Pinang (*Moore*).  
B.M.

## 57. EUPLŒA IPHIANASSA, sp. n. (Fig. 3, p. 286.)

*Alæ supra fuscæ, marginibus pallescentibus; anticæ maris macula subapicali alba a venis interrupta, maculis tribus parvis submarginalibus, una costali unaque ovali magna discali, albis: posticæ area costali cinerea, macula permagna subtriangulari ochreo-feruginea: corpus fuscum, albo antice punctatum.*

*Alæ anticæ subtus fuscæ, ad marginem posticum pallidiores, maculis sex submarginalibus, una costali unaque discali magna globosa albis; margine interno ochreo: posticæ fuscæ, margine postico paulo pallidior, maculis septem submarginalibus serie angulata positis nec angulum analem attingentibus, cæruleo-albis; basi albo punctata: corpus cinereo-fuscum, antennis nigris.*

*Exp. alar. unc.*  $3\frac{2}{8}$ .

*Alæ anticæ femine subtus maculis septem submarginalibus punctoque uno costali albis: posticæ margine costali albo; maculis quatuor subapicalibus albis aliisque submarginalibus valde indistinctis: anticæ subtus margine interno ochreo-albo, macula una discali alba, aliter velut supra: posticæ maculis decem submarginalibus albis serie angulata positis; basi albo punctata; aliter velut supra.*

*Exp. alar. unc.*  $3\frac{1}{16}$ .

*Hab.* Aneiteum.

B.M.

*Note.*—Allied to the preceding species, of which it may be only a local form; it differs from it chiefly in having only one discal spot on the front wings below, and none on the hind wings, also in the

female having no discal spot above; the latter may be a variable character, but it appears to be constantly the case with the females of *E. mazares* (Hübner).

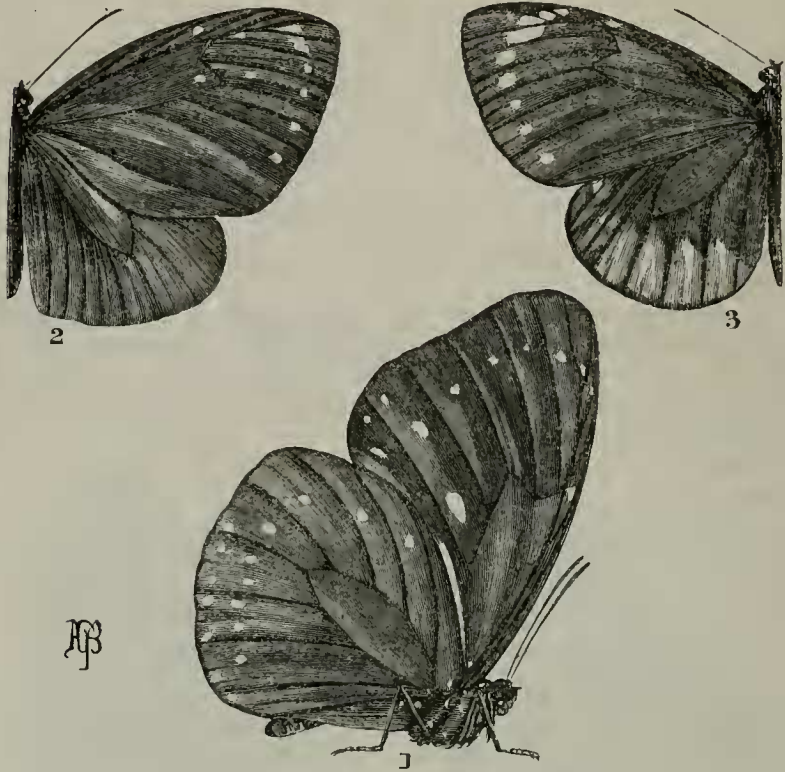


Fig. 1. *Euplœa vestigiata*, ♀, p. 288.  
 2. — *inquinata*, ♂, p. 291.  
 3. — *hyems*, ♀, p. 292.

58. EUPLŒA VESTIGIATA, sp. n. (Fig. 1 *suprà*.)

*Alæ anticæ supra nigro-fuscæ, marginibus paulo rufescentibus; maculis submarginalibus octo novemve, una costali striaque brevi interna discali violaceis: posticæ olivaceo-fuscæ, medio fusciscente, margine costali albido; maculis tribus subapicalibus albis; alæ maris macula permagna subtriangulari ochrea apud costam posita: corpus nigro-fuscum, albo antice punctatum, antennis nigris.*

*Alæ subtus olivacæ, margine interiore ochreo-albo, maris punctis sex submarginalibus, novem marginalibus maculaque una permagna ovali discali albis; macula una ovali discali interna cinerea; macula una parva costali duabusque discalibus post cellam positis violaceo-albis: anticæ feminæ maculis novem submarginalibus, punctis quatuor subanalibus, duabus subapicalibus minimis unaque discali magna ovali albis; macula una costali violaceo-alba: posticæ maculis decem submarginalibus et novem decemve analibus marginalibus albis, punctis duobus elongatis discalibus inter*

*venas subcostales violaceo-albis: corpus thorace nigro, albo maculato, antennis nigris, abdomine cinereo-fusco.*

*Eup. alar. unc.* ♂  $3\frac{9}{16}$ , ♀  $3\frac{3}{8}$ .

*Hab.* Java.

B.M.

*Note.*—This species is also allied to *E. eunice*, Godart, and is probably the insect intended in the ‘Genera’ and in the ‘Catalogue of the East India Company.’ Our present specimens of *E. eunice* are named from insects that had been determined by Dr. Boisduval, and agree with the original description of the species.

#### 59. EUPLŒA ELEUSINE.

*Papilio eleusine*, Cramer, Pap. Exot. iii. t. 266. f. D (1780).

*Euplœa eleusine*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 9 (1847).

*Danais eleusine*, Godart, Enc. Méth. ix. p. 177 (1819).

*Salpinx eleusina*, Hübner, Samml. exot. Schmett. Bd. ii. pl. 9. f. 3, 4 (♀) (1806).

*Terpsichrois eleusina*, Hübner, Verz. bek. Schmett. p. 16 (1816).

*Euplœa eleusine*, F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 127. n. 252 (1857).

*Euplœa mazares*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 10 (1847).

*Hab.* Java (*Horsf. Coll.*).

Var. ? *Danais darchia*, M’Leay, King’s Survey of Australia, ii. App. p. 462 (1827); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 87. n. 2 (*Eup. darchia*) (1847).

*Hab.* Australia.

Hübner (Samml. exot. Schmett. Bd. ii. pl. 9) figures two species under the name of *Salpinx eleusina*; he considers them to be the sexes of the species; they, however, belong to two distinct groups.

#### Division V.

*Alæ supra fusco-cærulescentes: anticæ sine macula interna discali obsoleta; maculis submarginalibus, ad apicem majoribus: posticæ raro maculis submarginalibus. Alæ subtus maculis submarginalibus; anticæ aliquando macula discali; posticæ rarissime maculis discalibus.*

#### Subdivision 1.

*Alæ posticæ supra punctis nonnullis subapicalibus albis.*

#### 60. EUPLŒA MAZARES.

*Euplœa mazares*, F. Moore, Cat. Lep. Mus. East Ind. Comp. p. 127. n. 253 (1857) (but not of Doubleday).

*Hab.* Java (*Horsf. Coll.*).

Var. *Alis majoribus, obscurioribus, femine sine puncto costali.*

*Hab.* Java; New Guinea.

B.M.

*Note.*—Hübner’s figures of *Salpinx eleusina* are certainly taken from a variety of Cramer’s insect, the discal spots above being only

partially obscured, the subapical spots not running so obliquely to the costa, and the subapical spots of the hind wings becoming very large at the apex. In the 'Genera,' however, they are quoted as *E. mazares*.

61. EUPLŒA PUMILA, sp. n.

*Alæ anticæ brunneo-rufescentes et certo situ paulo purpurascentes; margine postico dilutiore, femineæ roseo-albicante; anticæ maculis septem submarginalibus violaceo-albis: posticæ maris area costali cinerea, macula permagna ochrea apud costam posita; maculis duabus subapicalibus albis: posticæ femineæ margine costali ochreo-albo, maculis tribus subapicalibus albis: corpus fuscum, albo antice punctatum.*

*Alæ subtus brunneo-rufescentes, anticæ maris margine interno macula permagna ochrea; punctis quatuor subapicalibus albis: posticæ maculis quatuor subapicalibus punctisque decem minimis inconspicuis marginalibus albis; basi albo punctata: anticæ femineæ margine interno pallidiore, margine postico punctis plurimis submarginalibus albis serie duplici positis; posticæ maculis quatuor subapicalibus punctisque decem conspicuis marginalibus albis.*

*Exp. alar. unc. ♂ 2 $\frac{3}{8}$ , ♀ 2 $\frac{5}{8}$ .*

*Hab.* New Guinea.

B.M.

62. EUPLŒA POLLITA.

*Euplœa pollita*, Erichson in Nov. Acad. Nat. Curios. xvi. pt. 2, pl. 40. f. 6. p. 282 (1833); Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 21 (1847).

*Hab.* Philippine Islands.

B.M.

*Note.*—This species may be a local form of *E. tulliolus*, Fabricius.

63. EUPLŒA SYLVESTER.

*Papilio sylvester*, Fabricius, Ent. Syst. iii. 1. p. 41. n. 124 (1793).

*Euplœa sylvester*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 25 (1847).

*Danaïs sylvestris*, Godart, Enc. Méth. ix. p. 182. n. 20 (1819).

*Hab.* Australia?

I think it doubtful whether this species is rightly placed; the description of it is so poor that it is impossible to recognize the insect by it.

Subdivision 2.

*Alæ posticæ supra punctis subapicalibus obsoletis.*

64. EUPLŒA TULLIOLUS.

*Papilio tulliolus*, Fabricius, Ent. Syst. iii. 1. p. 41. n. 123 (1793).

*Euplœa tulliolus*, Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 88. n. 26 (1847).

*Danaïs tulliola*, Godart, Enc. Méth. p. 181. n. 19 (1819); M'Leay, King's Survey of Australia, p. 461. n. 148 (1827).

*Hab.* Australia; Aneiteum.

B.M.