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CATALOGUE  
OF THE  
SPECIMENS  
OF  
DERMAPTERA SALTATORIA  
AND  
SUPPLEMENT TO THE BLATTARIÆ  
IN  
THE COLLECTION  
OF THE  
BRITISH MUSEUM.

pt. 1.

BY

FRANCIS WALKER, F.L.S., &c.

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## P R E F A C E.

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THE object of the present Catalogue is to give a complete List of all the genera and species of Dermaptera Saltatoria known to exist in the collections of European and American Entomologists. The letters *a, b, c, &c.*, after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained; and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

J. E. GRAY.

BRITISH MUSEUM,

*May 1st, 1869.*



CATALOGUE  
OF  
GRYLLIDÆ.

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Order DERMAPTERA.

Sect. 2. SALTATORIA.

Saltatoria, *Latr. Serv. Hist. Orth.* 293.

- a.* Fore wings horizontal in repose. - - - - GRYLLIDÆ.
- aa.* Fore wings deflexed in repose.
- b.* Antennæ long, setaceous. Tarsi 4-jointed. - - - - ACRIDIDÆ.
- bb.* Antennæ filiform, generally rather short. Tarsi 3-jointed. LOCUSTIDÆ.

Fam. 1. GRYLLIDÆ.

Gryllides, *Latr. Gen. Cr. et Ins.* 1807. — Gryllina, *Macleay.* — Achetidæ, *Leach, Steph.* — Gryllodea, *Burm. Handb. Ent.* ii. 725. — Achetina, *Newm. Ent. Mag.* ii. 1835. — Gryllides et Hypsallomeni, *Serv. Hist. Orth.* 319, 358.

- a.* Fore legs fossorial.
- b.* Hind tarsi of the usual form.
- c.* Tarsi 3-jointed.

Genus 1. GRYLLOTALPA.

Grylotalpa, *Ray, Leach, Latr., Steph., Serv., Burm., Fisch.* — Gryllus, *Linn. Syst. Nat.* i. 2, 693. — Acheta, *Fabr. Ent. Syst.* ii. 28.

- a.* Fore tibiæ with four teeth.
- b.* Fore wings not extending beyond the fourth segment of the abdomen.
- c.* Fore border of the hind femora sinuated. - - - - vulgaris.
- cc.* Fore border of the fore femora not sinuated.
- d.* Hind wings extremely small, shorter than the fore wings. hirsuta.
- dd.* Hind wings narrow, shorter than the abdomen. borealis; cophita.
- ddd.* Hind wings as long as the abdomen. - - - - minuta.
- dddd.* Hind wings longer than the abdomen.
- e.* Body dull above.
- f.* Fore femora not sinuated.
- g.* Prothorax moderately broad.

<i>h.</i>	Size moderate.	-	-	-	-	-	-	-	<i>africana.</i>
<i>hh.</i>	Size large.	-	-	-	-	-	-	-	<i>grandis.</i>
<i>gg.</i>	Prothorax narrow.	-	-	-	-	-	-	-	<i>coarctata.</i>
<i>ff.</i>	Fore femora sinuated.								
<i>g.</i>	Sides of the fore wings not varied with gray.								
<i>h.</i>	Prothorax narrow.	-	-	-	-	-	-	-	<i>hexadaetyla.</i>
<i>hh.</i>	Pr thorax moderately broad.	-	-	-	-	-	-	-	<i>longipennis, Scudder.</i>
<i>gg.</i>	Sides of the fore wings varied with gray.	-	-	-	-	-	-	-	<i>chiliensis.</i>
<i>ce.</i>	Body shining above.	-	-	-	-	-	-	-	<i>nitidula.</i>
<i>bb.</i>	Fore wings extending to the sixth segment of the abdomen.								
<i>c.</i>	Body not blackish.	-	-	-	-	-	-	-	<i>longipennis, Haan.</i>
<i>cc.</i>	Body blackish.	-	-	-	-	-	-	-	<i>ornata.</i>
<i>aa.</i>	Fore tibiae with two teeth.								
<i>b.</i>	Claws of the hind tarsi longer than the third joint.								
<i>c.</i>	Claws unequal.	-	-	-	-	-	-	-	<i>oxydaetyla.</i>
<i>cc.</i>	Claws equal.	-	-	-	-	-	-	-	<i>mexicana.</i>
<i>bb.</i>	Claws of the hind tarsi shorter than the third joint.								
<i>c.</i>	Hind wings longer than the body.	-	-	-	-	-	-	-	<i>didactyla.</i>
<i>cc.</i>	Hind wings shorter than the body.	-	-	-	-	-	-	-	<i>parvipennis.</i>

## 1. GRYLLOALPA VULGARIS.

— *Geoffr. Ins. Par.* i. 387, pl. 8, f. 1. *Frisch. Ins.* ii. pl. 5. *Scha.*  
*Mus.* iv. pl. 89, f. 3, 4. — *Gryllus Gryllotalpa, Linn. Syst. Nat.* i. 2,  
693. *Oliv. Enc. Meth.* vi. 633, pl. 128, f. 3—14. — *Roos. Ins. Bel.* ii. ;  
*Gyl.* 89, pl. 14, 15. *Doy. Ins.* iii. 336, 2. *Berk. Syn.* i. 111. *Don.*  
*Brit. Ins.* v. pl. 147. *Stew. Elw.* ii. 93. *Turt. Syst. Nat.* ii. 544.  
*Shaw, Gen. Zool.* vi. 140. *Bingley, Anim. Biog.* iii. 159. *Wood,*  
*Ill.* i. 91, pl. 33. *Ratz. Forst. Ins.* iii. 269. — *Acheta Gryllotalpa,*  
*Fabr. Ent. Syst.* ii. 28. *Stoll, Saut. et Grill.* pl. 2, f. 6—7. *Panz.*  
*Fann. Ins. Germ.* 88, pl. 5. *Kirby and Spence, Intr. Ent.* i. pl. 2, f. 3.  
— *Gryllotalpa vulgaris, Latr. Hist. Nat. Cr. Ins.* xii. 122, pl. 94, f.  
4; *Gen.* iii. 95. *Steph. Ill. Brit. Ent. Mans.* vi. *Zett. Orth. Succ.*  
51. *Doy. Atlas, Regn. An. Cur.* pl. 81, f. 1. *Charp. Hor. Ent.* 83.  
*Blauch. Hist. Nat. Ins.* iii. 34. *Serv. Hist. Orth.* 306. *Burm. Handb.*  
*Ent.* ii. 738. *Fisch. Orth. Eur.* 157, pl. 9, f. 1.

*a—h.* England. From Mr. Stephens' collection.

*i.* England. Presented by A. A. White, Esq.

*j, k.* England.

*l.* Montpellier. Presented by F. Walker, Esq.

*m—o.* France.

*p.* Tangier. From Mr. Fraser's collection.

*q, r.* Tunis. From Mr. Fraser's collection.

*s.* Egypt. Presented by Sir G. Wilkinson.

*t, u.* Bagdad. Presented by W. R. Loftus, Esq.

*v.* Syria. From Mr. Lowie's collection.

*w.* ———

## 2. GRYLLOALPA BOREALIS.

*Gryllotalpa americana, Say, MSS., Harris, Ct. Ins. Mass.* 56. — *borealis,*  
*Burm. Handb. Ent.* ii. 740. *Scudder, Journ. Boston Soc. Nat. Hist.*

vii. 426. — brevipennis, *Serv. Hist. Orth.* 303. *Harris, Rep.* 3<sup>d</sup> ed. 149, f. 68.

a. N. America. Presented by Sir R. I. Murchison.

### 3. GRYLLOTALPA LONGIPENNIS.

——— *Catesby, Nat. Hist. N. Car.* i. pl. 8. — *Gryllotalpa longipennis*, *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 426 (nomen bis lectum).

Massachusetts. Maryland.

a. N. America. Presented by Sir R. I. Murchison.

### 4. GRYLLOTALPA MEXICANA.

*Mexicana*, *Burm. Handb. Ent.* ii. 740.

Alvarado, Mexico.

### 5. GRYLLOTALPA HEXADACTYLA.

hexadactyla, *Perty, Del. Anim. Art.* 119, pl. 23, f. 9. *Serv. Hist. Orth.* 307. *Blanch. Hist. Nat.* iii. 34. *Burm. Handb. Ent.* ii. 740.

a. Orizaba. From M. Sallé's collection.

b. Columbia. From Mr. Turner's collection.

c. Santarem. From Mr. Bates' collection.

d—f. Tejuca. Presented by the Rev. H. Clark.

g, h. Brazil. Presented by Sir C. Stewart.

i, j. Brazil. Presented by Prof. Busk.

k. Brazil. From Mr. Mornay's collection.

### 6. GRYLLOTALPA OXYDACTYLA.

oxydactyla, *Perty, Del. Anim. Art.* 118, pl. 23, f. 7. *Serv. Hist. Orth.* 308. *Burm. Handb. Ent.* ii. 740.

a. Brazil. From Mr. Mornay's collection.

b. Demerara. From Mr. Bower's collection.

c—e. Para. From Mr. Wallace's collection.

f. Para. Presented by G. Graham, Esq.

g. Para. Presented by J. P. G. Smith, Esq.

h, i. Archidona. From Mr. Stevens' collection.

### 7. GRYLLOTALPA BIDACTYLA.

*Gryllus Gryllotalpa*, var., *Oliv. Enc. Meth.* vi. 633. — *Gryllotalpa didactyla*, *Latr. Hist. Cr. et Ins.* xii. 122. *N. Dict. Hist. Nat.* vi. 446. *Griff. Anim. Kingd.* xv. pl. 113, f. 3. *Serv. Hist. Orth.* 309. *Burm. Handb. Ent.* ii. 740. — *Gryllotalpa tetradaactyla*, *Perty, Del. An. Art.* 118, pl. 13, f. 8. *Blanch. Hist. Nat.* iii. 34, pl. 9, f. 2.

a—c. Jamaica. From Mr. Bracy Clark's collection.

d, e. W. Indies. Presented by Dr. Pereira.

f, g. Para. Presented by Gordon Graham, Esq.

h, i. Brazil. Presented by Sir C. Stewart.

j. Brazil. Presented by J. P. G. Smith, Esq.

k—m. ———? Presented by J. G. Children, Esq.

n. ———? From Mr. Mather's collection.

## 8. GRYLLOTALPA PARVIPENNIS.

parvipennis, *Serv. Hist. Orth.* 309. — variegata, *Burm. Handb. Ent.* ii. 740.

Columbia.

## 9. GRYLLOTALPA CULTRIGERA.

cultriger, *Uhler, Proc. Ent. Soc. Phil.* ii. 543.

El Paso.

## 10. GRYLLOTALPA CHILIENSIS.

Chiliensis, *Sauss. Rev. et Mag. Zool.* 1861, 130.

Chili.

## 11. GRYLLOTALPA COPHTA.

——— *Sav. Descr. Egypte*, pl. 3, f. 3. — *Gryllus* (*Grylotalpa*) *cophitus*,  
*Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 237.

Egypt.

## 12. GRYLLOTALPA AFRICANA.

africana, *Pal. Beauv. Ins.* 229, pl. 2, f. 6. *Serv. Hist. Orth.* 307. *Schaum,*  
*Peters' Reise Mozamb.* 116. — orientalis, *Burm. Handb. Ent.* ii. 739.

a, b. Sierra Leone. Presented by the Rev. F. Morgan.

c. Congo. From Mr. Cranch's collection.

d. Angola. Presented by J. J. Monteiro, Esq.

e. Fantee.

f, g. S. Africa. From Mr. Argent's collection.

h. S. Africa. Presented by R. Trimen, Esq.

i. S. Africa. Presented by Earl Russell.

j. Natal. Presented by the Rev. H. Methuen.

k—n. Natal. From M. Guenzins' collection.

o. Natal. From Mr. Argent's collection.

p. Zoolu. From Mr. Macgillivray's collection.

q. E. Africa. Presented by Earl Russell.

r. Mauritius. From Dr. Beke's collection.

s. Ceylon. From the Rev. J. Wenham's collection.

t, u. Ceylon. Presented by Prof. Hooker.

v. Ceylon. From Dr. Thwaites' collection.

w. Ceylon. Presented by Dr. Templeton.

x. Corea. Presented by Capt. Sir E. Belcher.

y. Malabar. Presented by the Entomological Club.

z. N. Bengal. From Lieut. Campbell's collection.

aa. Hindostan. From Archdeacon Clerk's collection.

bb. N. Hindostan. From Mr. Walker's collection.

cc—cc. Hong Kong. Presented by J. C. Bowring, Esq.

ff, gg. Hong Kong. Presented by Major Champion.

hh—jj. China. Presented by G. T. Lays, Esq.

kk. Chousan, N. China. Presented by J. C. Bowring, Esq.

ll, mm. Interior of China. Presented by Lieut.-Col. H. A. Saterl.

nn. Japan. From Mr. Stevens' collection.

oo. Birmah. From Mrs. Waring's collection.

- pp*—*rr*. Philippine Isles. From Mr. Cuming's collection.  
*ss*. Australia. Presented by the Entomological Club.  
*tt*. Australia. From Mr. Stutchbury's collection.  
*uu*. Australia. From Mr. Dring's collection.  
*vv*. Australia. From Mr. Argent's collection.  
*ww*. Australia.  
*xx*. S. Australia. Presented by R. Bakewell, Esq.  
*yy*, *zz*. Adelaide. From Mr. Stevens' collection.  
*aaa*. Moreton Bay. Presented by — Gibbons, Esq.  
*bbb*. Tasmania. Presented by R. Butler, Esq.  
*ccc*—*eee*. Tasmania. From Mr. A. J. Smith's collection.  
*fff*. Tasmania. From Mr. Cutler's collection.  
*ggg*. N. Zealand. From Mr. Churton's collection.  
*hhh*. N. Zealand. From Major Parry's collection.  
*iii*. ———? Presented by J. G. Children, Esq.  
*jjj*. ———? From Mr. Shuckard's collection.  
*kkk*, *lll*. ———? From Mr. Walker's collection.  
*mmm*—*rrr*. ———?

## 13. GRYLLOTALPA MINUTA.

*minuta*, *Burm. Handb. Ent.* ii. 740.

Cape.

## 14. GRYLLOTALPA LONGIPENNIS.

*Gryllus* (*Grylotalpa*) *longipennis*, *Huan, Verh. Nat. Gesch. Ned. Ind. Bez.* 237.

Borneo.

## 15. GRYLLOTALPA GRANDIS.

*G. africanæ simillima, multo major.*

There is no distinct character, except its much larger size, to distinguish this from *G. africana*. The latter has some slight variations in colour and markings, and future observations will decide whether *G. grandis* is only a variety of it, or whether one or two more species may be separated from it. Length of the body 17—19 lines.

- a*. Tenasserim. Presented by J. C. D. V. Packman, Esq.  
*b*, *c*. Java. From Mr. Walker's collection.  
*d*. Java. From Mr. Argent's collection.  
*e*. Philippine Isles. From Mr. Cuming's collection.

## 16. GRYLLOTALPA ORNATA.

*Mas. Nigro-fusca, gracilis, tomentosa, subtus fulva; caput lineis duabus transversis lineolaque intermedia longitudinali testaceis; pedes fulvi, femoribus posticis supra piceis; alæ anticæ abdominis apicem non attingentes, postice et apicem versus cinereæ nigro-fusco venosæ, areola strigaque basali albidis illa maculam nigram includente; alæ posticæ cinereæ, nigro-fusco venosæ, abdomen longe superantes.*

*Male*. Blackish brown, slender, tomentose, tawny beneath. Head in front with two transverse testaceous lines, which are connected by a short

longitudinal testaceous line. Antennæ piceous. Abdominal setæ beset with long slender hairs. Legs tawny; fore tibiæ armed with four stout black teeth; hind femora piceous, except the under side. Fore wings blackish brown, with a whitish streak proceeding from the base, extending to three-fourths of the length of the abdomen; hind part and apical part cinereous, with blackish brown veins; areolet at the base of the costa whitish, including near its base a large black spot. Hind wings cinereous, with blackish brown veins, extending much beyond the abdomen. Length of the body 10 lines.

a. Hindostan. Presented by J. C. Bowring, Esq.

#### 17. GRYLLOPALPA HIRSUTA.

*hirsuta*, *Burm. Handb. Ent.* ii. 739.—*Gryllus* (*Gryllopalpa*) *hirsutus*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 237.

Java. Padang. Banjermassing.

#### 18. GRYLLOPALPA NITIDULA.

*nitidula*, *Serr. Hist. Orth.* 307.

a. Australia. From Mr. Damel's collection.

b. Sydney. From Mr. Lambert's collection.

c. Moreton Bay. Presented by — Gibbons, Esq.

d, e. Swan River. Presented by Sir J. Richardson.

f. Swan River. From Mr. Turner's collection.

#### 19. GRYLLOPALPA COARCIATA.

Mas. *Saturate ferrugineo-fusca, tomentosa, G. africana angustior; alæ anticae abdominis dimidio breviores; alæ posticae abdomen paullo superantes.*

*Male.* Dark ferruginous-brown, tomentose, narrower than *G. africana*. Abdominal setæ pubescent and furnished with long slender hairs. Legs setose; fore tibiæ armed with four stout black teeth. Fore wings like the body in colour, less than half the length of the abdomen. Hind wings extending a little beyond the abdomen. Length of the body 15 lines.

a. N. Australia. Presented by J. R. Eusey, Esq.

cc. Tarsi 2-jointed.

#### Genus 2. CYLINDRODES.

*Cylindrodes*, *G. R. Gray, Griff. Anim. Kingd.* pl. 131. *Brullé, Hist. Nat. Ins.* ix. *Serr. Hist. Orth.* 310.

#### 1. CYLINDRODES CAMPBELLI.

*Campbelli*, *G. R. Gray, Griff. Anim. Kingd.* pl. 131, f. 15. *Serr. Hist. Orth.* 310. *Blanch. Hist. Nat.* iii. 31.—*Gryllopalpa* (*Cylindrodes*) *Campbelli*, *Burm. Handb. Ent.* ii. 738.

Melville Isle, Australia



- a. Adelaide. From Mr. Argent's collection.  
 b. Swan River. Presented by Sir J. Richardson.  
 c. Swan River. From Dr. Bacon's collection.

- bb. Hind tarsi flat, digitate.  
 c. Four anterior tarsi 3-jointed.

### Genus 3. TRIDACTYLUS.

*Tridactylus*, *Oliv. Latr. Gen. Cr. et Ins.* 1807. *Blanch. Hist. Nat.* iii. 34. *Serv. Hist. Orth.* 311.—*Acheta*, *Coqueb.*—*Heteropus*, *Pal. de Beauv. Ins.* 230.—*Xya*, *Illiger, MSS. Latr. Gen.* iv. 1809. *Burm. Handb. Ent.* ii. 741. *Fisch. Orth. Eur.* 152.

#### 1. TRIDACTYLUS VARIEGATUS.

*Tridactylus variegatus*, *Latr. Hist. Nat. Ins.* xii. 119; *Gen.* iv. 385. *Nouv. Dict. Hist. Nat.* édit. 2. *Gen. Cr. et Ins.* iii. 97. *Descr. Egypte, Orth.* pl. 3, f. 1. *Blanch. Hist. Nat.* iii. 34. *Serv. Hist. Orth.* 315. *Brullé, Hist. Nat. Ins.* ix. 197, pl. 18, f. 6. *Foudras. Observ. Trid. Pau.* 1829. *Léon. Duf. Ann. Sci. Nat. Zool.* ix. 321.—*Xya variegata*, *Charp. Hor. Ent.* ii. 741. *Sar. Descr. Egypte*, pl. 3, f. 1. *Burm. Handb. Ent.* ii. 742. *Fisch. de Waldh. Orth. Ross.* 117, pl. 3, f. 3. *Ramb. Faune, Ent. And.* ii. 27. *Fisch. Orth. Eur.* 154, pl. 9, f. 2. *Doy, Atlas, Regn. An. Cur.* pl. 81, f. 2. *Kittary, Bull. Soc. Imp. Mosc.* xxii. 450, pl. 7, f. 10, 11; 14—16.

Algeria.

- a. S. Europe. Presented by Dr. Leach.  
 b, c. S. Germany. Presented by Dr. Burmeister.  
 d. S. Europe. From Prof. Westwood's collection.  
 e—g. Italy. Presented by A. H. Haliday, Esq.

#### 2. TRIDACTYLUS APICALIS.

*Tridactylus apicalis*, *Say, Journ. Acad. Nat. Sci. Phil.* iv. 310, f. 1; *Ent. N. Amer. ed. Le Conte*, ii. 239. *Scudder, Journ. Boston Soc. Nat. Hist.* vii. 425.—*Xya apicalis*, *Burm. Handb. Ent.* ii. 741.

Alabama. Kentucky.

#### 3. TRIDACTYLUS TERMINALIS.

*Tridactylus terminalis*, *Uhler, MSS. Scudder, Journ. Boston Soc. Nat. Hist.* vii. 425.

Illinois. Massachusetts. Maryland.

#### 4. TRIDACTYLUS MINUTUS.

*Tridactylus minutus*, *Scudder, Journ. Boston Soc. Nat. Hist.* vii. 425.

Illinois.

#### 5. TRIDACTYLUS AFRICANUS.

*Heteropus africanus*, *Pal. Beauv. Ins.* 230; *Orth.* pl. 2, f. 7.—*Tridactylus paradoxus*, *Latr. Hist. Cr. et Ins.* xii. 120; *Gen.* iii. 97. *Dumeril*,

*Cons. Gen.* pl. 25, f. 8. *Serv. Hist. Orth.* 314. — *Acheta digitata*, *Coqueb. Ill. Icon.* iii. 91, pl. 21, f. 9. — *Tridactylus fasciatus*, *Perch. Génér. Icon.* pl. 54, f. 5. *Griff. Anim. Kingd.* xv. 196, pl. 113, 5. *Sav. Descr. de l'Égypte, Orth.* pl. 3, f. 2. — *Acheta fossor*, *Fabr. Ent. Syst. Suppl.* 191. — *Xya fossor*, *Burm. Handb. Ent.* ii. 742.

*a, b.* Natal. From M. Guéinzus' collection.

#### 6. TRIDACTYLUS MAJOR.

*major*, *Scudder, Cent. Orth. Dec. Gryll.*

Bengal.

#### 7. TRIDACTYLUS JAPONICUS.

*Gryllus (Xya) japonicus*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 238.

Japan.

#### 8. TRIDACTYLUS OBSCURUS.

*Xya obscura*, *Motsch. Bull. Soc. Nat. Mosc.* xxxix. 182. — *japonicus*?

Japan.

*cc.* Four anterior tarsi 2-jointed.

#### Genus 4. RHIPPIPTERYX.

*Rhipipteryx*, *Newman, Ent. Mag.* 204. *Serv. Hist. Orth.* 316. — *Xya (Rhipipteryx)*, *Burm. Handb. Ent.* ii. 742.

#### 1. RHIPPIPTERYX MARGINATUS.

*marginatus*, *Newm. Ent. Mag.* 204, pl. 7. *Serv. Hist. Orth.* 317. — *Xya (Rhipipteryx) marginata*, *Burm. Handb. Ent.* ii. 742.

*a-f.* Venezuela. From Mr. Dyson's collection.

*g.* Oaxaca. From M. Sallé's collection.

#### 2. RHIPPIPTERYX BRULLEI.

*marginatus*, *Brullé, Hist. Nat. Ins.* iii. 35. — *Brullei*, *Serv. Hist. Orth.* 318. — *Xya (Rhipipteryx) notata*, *Burm. Handb. Ent.* ii. 742.

Brazil.

#### 3. RHIPPIPTERYX LIMBATUS.

*Xya (Rhipipteryx) notata*, *Burm. Handb. Ent.* ii. 742.

Brazil.

#### 4. RHIPPIPTERYX ATER.

*ater*, *Serv. Hist. Orth.* 318.

*aa.* Fore legs not fossorial.

*b.* Head concealed.

#### Genus 5. MYMECOPHILA.

*Myrmecophila*, *Latr. Fam. Nat.* 413. *Serv. Hist. Orth.* 318. *Fisch. Orth. Eur.* 158. — *Spharium*, *Charp. Hor. Ent.* 78. *Burm. Handb. Ent.* ii. 729. *Brullé.* — *Gryllus*, *Savi.* — *Blatta*, *Panz.*

## 1. MYRMECOPHILA ACERVORUM.

*Myrmecophila acervorum*, *Latr. Fam. Nat.* 413. *Cuv. Regne Anim.* ed. 5, iii. 183, pl. 82, f. 2. *Guér. Icon.* pl. 54. *Griff. Anim. Kingd.* xv. pl. 113, f. 6. *Serv. Hist. Orth.* 319. *Fisch. de Waldh. Orth. Ross. Suppl.* 356, pl. 33, f. 4. *Fisch. Orth. Eur.* 160, pl. 9, f. 3.—*Sphærium acervorum*, *Charp. Hor. Ent.* 78. *Burm. Handb. Ent.* ii. 730. *Blanch. Hist. Nat.* iii. 33, pl. 9, f. 1.—*Gryllus myrmecophilus*, *Savi, Giornale di Lett. Sci. e Arti*, xvi. 11.—*Blatta acervorum*, *Panz. Faun. Ins. Germ.* 68, pl. 24.

a. Tuscany. Presented by Dr. Leach.

## 2. MYRMECOPHILA HIRTICAUDA.

*hirticauda*, *Motsch. MSS. Fisch. de Waldh. Orth. Ross.* 357, pl. 33, f. 5.—*acervorum*, var. ?

Tauria.

## 3. MYRMECOPHILA BIFASCIATA.

*bifasciata*, *Motsch. MSS. Fisch. de Waldh. Orth. Ross.* 357, pl. 33, f. 6. *acervorum*, var. ?

Tshougoueff, near Kharkoff.

## 4. MYRMECOPHILA OCHRACEA.

*ochracea*, *Fisch. Orth. Eur.* 161.

Sicily.

## 5. MYRMECOPHILA MAURETANICA.

*Sphærium mauretanicum*, *Lucas, Expl. Sci. Alg.* 23, pl. 1, f. 6.

Algeria.

- bb. Head prominent.
- c. Face rounded.
- d. Hind tibiæ with spines.
- e. Four anterior legs short or moderately long.
- f. Third joint of the palpi not directly truncated.
- g. Fore wings not very long.
- h. Prothorax not very narrow.
- i. Hind legs stout, of moderate length.
- f. Hind tibiæ with stout approximate spines.
- k. Tarsi four-jointed.

## Genus 6. ACHETA.

*Gryllus*, *Drury, Oliv.*—*Acheta*, *Fabr. Ent. Syst.* ii. 29. *Burm. Handb. Ent.* ii. 719.—*Schizodactylus*, *Brullé, Hist. Nat. Ins.* ix. 162. *Serv. Hist. Orth.* 320.

## 1. ACHETA MONSTROSA.

*Gryllus monstrosus*, *Drury, Ins.* ii. 81, pl. 43, f. 1. *Oliv. Enc. Meth.* vi. 633. *Latr. Gen.* 111.—*Acheta monstrosa*, *Fabr. Ent. Syst.* ii. 29. *Stoll, Saut. et Grill.* pl. 1, f. 1—3. *Burm. Handb. Ent.* ii. 720.—

*Schizodaetylus monstrosus*, *Blanch. Hist. Nat.* iii. 31, pl. 8, f. 2. *Serr. Hist. Orth.* 322.

- a. Hindostan. From Mr. Stevens' collection.  
 b. Bengal. Presented by W. Masters, Esq.  
 c—e. ——— ?

kk. Tarsi three-jointed.

l. First joint of the hind tarsi setulose.

### Genus 7. BRACHYTRYPES.

*Brachytrypes*, *Serr. Hist. Orth.* 323. — *Brachytrypes*, *Erichson, Agassiz, Nomencl. Fisch. Orth. Eur.* 186.

In the following descriptions the number of the lateral spines of the hind tibiae has no reference to the apical spines.

#### 1. BRACHYTRYPES MEGACEPHALUS.

———, *Dej. Ins.* iii. 341, 9, pl. 43, f. 9. — *Gryllus megacephalus*, *Lefebvre, Ann. Soc. Linn. Paris*, vi. 10, pl. 5, f. 4. — *Gryllus macrocephalus*, *Blanch. Hist. Nat.* iii. 32. — *Brachytrypes megacephalus*, *Serr. Hist. Orth.* 326. — *Brachytrypes megacephalus*, *Fisch. Orth. Eur.* 186, pl. 9, f. 10.

- a. Sicily. From the Zoological Society's collection.

#### 2. BRACHYTRYPES ACHATINUS.

*Gryllus achatinus*, *Stoll, Saut. et Grill.* pl. 2, c, f. 8. — *Burm. Handb. Ent.* ii. 735. — *Gryllus membranaceus*, *Stoll, Saut. et Grill.* pl. 2, c, f. 9. — *Dej. Ins.* iii. pl. 43, f. 9. — *Acheta membranacea*, *Drury, Ins.* ii. 81, pl. 43, f. 2. — *Acheta vastatrix*, *Afzel, Ach. Guineena*, 15. — *Brachytrypes ustulatus*, *Serr. Hist. Orth.* 326. — *Gryllus vastator*, *Burm. Handb. Ent.* ii. 735. — *Gryllus (Brachytrypes) achatinus*, *Huan, Verh. Nat. Gesch. Ned. Ind. B z. Ins.* 229.

Java. Padang.

- a. Sierra Leone. Presented by the Rev. D. F. Morgan.  
 b. W. Africa. Presented by A. Swanzy, Esq.  
 c, d. Angola. Presented by J. J. Monteiro, Esq.  
 e. Congo. Presented by Sir J. Richardson.  
 f. Natal. From Mr. Stevens' collection.  
 g—i. Natal. From M. Guenzins' collection.  
 j—m. Africa. Presented by Earl Russell.  
 n—p. Silhet. From the Rev. Mr. Stainforth's collection.  
 q, r. Hindostan. From Mr. Foxcroft's collection.  
 s, t. China? From Gen. Hardwicke's collection.  
 u. Australia.

#### 3. BRACHYTRYPES TERRITICUS.

*Mus. Fulvus, subtus testaceus, B. achatino minor et gracilior; alæ anticae piceæ, basi fulvæ, abdomen longe superantes; alæ posticæ multo longiores.*

*Male.* Tawny, shining, testaceous beneath. Head large, prominent. Eyes with piceous disks. Palpi testaceous; third joint clavate, truncated at the tip. Antennæ piceous, longer than the body. Cerci much shorter than the abdomen. Hind tibiæ with four spines on each side. Fore wings piceous, tawny at the base, extending much beyond the abdomen; transverse sectors numerous. Hind wings extending much beyond the fore wings. Length of the body 13 lines.

The smaller size, narrower body and less robust structure distinguish it from *B. achatinus*.

a—c. Madras. Presented by the Rev. A. Taylor.

#### 4. BRACHYTRYPES FERREUS.

*Fœm.* *Piceus, subtus fulvus, B. terrifico minor et gracilior; prothoracis latera fulva; abdomen testaceum, vittis duabus ventralibus piceis; femora postica extus strigata; alæ quatuor longitudine æquales, abdomen paullo superantes.*

*Female.* Piceous, smooth, shining, tawny beneath. Head prominent, globose above. Eyes with black disks. Third joint of the palpi clavate, truncated. Antennæ piceous. Prothorax tawny on each side. Abdomen testaceous, with two piceous ventral stripes. Cerci about half the length of the abdomen. Oviduct about half the length of the cerci. Hind femora darker on the outer side, where there are paler oblique parallel streaks; hind tibiæ with three short spines on each side. Wings of equal length, extending a little beyond the abdomen. Fore wings acute; costal space colourless, with pale veins. Length of the body 13 lines.

It is smaller and more slender than *B. terrificus*, and the spines of the hind tibiæ are much shorter.

a. Madras. Presented by — Jordan, Esq.

#### 5. BRACHYTRYPES BISIGNATUS.

*Mas.* *Piceus, subtus fulvus; caput antice fulvum; palpi testacei; prothorax rufescente bimaculatus; abdomen testaceum; femora postica substrigata; alæ antice fulvæ, abdomen superantes; alæ posticæ multo longiores. B. ferreo affinis; oculi majores; tibiæ posticæ spinis apicalibus longioribus.*

*Male.* Piceous, shining, tawny beneath. Head rather prominent; fore part tawny; sockets of the antennæ, an intermediate dot and fore border testaceous. Palpi testaceous; third joint clavate. Antennæ piceous, longer than the body. Prothorax with a transverse reddish spot on each side of the disk. Abdomen testaceous. Cerci much shorter than the abdomen. Hind femora slightly streaked. Fore wings testaceous-cinereous, extending beyond the abdomen; a brown patch on the hind part of the base; veins along the lateral keel blackish; subcostal space pellucid. Hind wings pellucid, extending much beyond the hind wings; costa and subcostal streak testaceous; veins white. Length of the body 14 lines.

It has much resemblance to *B. ferreus*; the eyes are larger, the markings of the prothorax are different, and the apical spines of the hind tibiæ are longer.

a. Hindostan. From Archdeacon Clerk's collection.

## 5. BRACHYTYPES TRUCULENTUS.

Mas. *Ferrugineus, subtus fulvus; caput antice fulvum; prothoracis latera fulva; femora postica substrigata; ala antice abdomen paullo superantes; ala postice abdomen longissime superantes.*

*Male.* Ferruginous, shining. Head prominent, tawny in front. Palpi tawny; third joint clavate, truncated. Prothorax on each side and pectus tawny. Cerci testaceous, shorter than the abdomen. Hind femora with slight streaks; hind tibiæ with three spines on each side. Fore wings extending a little beyond the abdomen. Hind wings pellucid, extending very much beyond the abdomen; costa and a subcostal streak testaceous; veins white. Length of the body 15 lines.

The hind tibiæ are longer and the hind tarsi much longer than those of *B. ferreus*.

a. Hindostan. From Mr. Stevens' collection.

## 6. BRACHYTYPES ROBUSTUS.

Fœm. *Piceus, subtus fulvus, B. ferreo crassior; caput antice fulvum; prothoracis latera fulva; femora postica pallido strigata; ala antice abdomine breviores; ala postica cinerea, adhuc breviores.*

*Female.* Piceous, stout, shining, tawny beneath. Head prominent, tawny in front. Eyes darkly livid. Third joint of the palpi clavate, truncated. Antenna as long as the body. Prothorax tawny on each side. Oviduct about one-fourth of the length of the abdomen. Hind femora with oblique paler streaks; hind tibiæ with four spines on each side. Fore wings shorter than the abdomen. Hind wings cinerous, shorter than the fore wings; veins piceous. Length of the body 15 lines.

The body is much more stout than that of *B. ferreus*, and it is distinguished from all the other preceding species by its short hind wings.

a. Philippine Isles. From Mr. Cuming's collection.

## 7. BRACHYTYPES FULVUS.

Mas. *Fulvus; caput testaceo unimaculatum; palpi apice picei; femora postica oblique striata; ala antica pallide cinerea, testaceo venosa, abdomen paullo superantes; ala postice abdomen longe superantes. B. bisignato affinis; caput longius; tarsi postici graciliores.*

*Male.* Tawny, shining. Head with a testaceous spot between the eyes behind the antennæ. Eyes livid. Third joint of the palpi piceous, slightly securiform. Antennæ piceous. Hind femora with oblique striæ; hind tibiæ with four spines on each side. Fore wings pale cinerous, extending a little beyond the abdomen; veins testaceous. Hind wings pellucid, extending much beyond the fore wings; costa testaceous; veins white. Length of the body 12 lines.

It has most resemblance to *B. bisignatus*; the head is more elongated, and the hind tarsi are much more slender.

a. ———

## 8. BRACHYTRYPES PEDESTRIS.

*Fœm.* *Piceus, apterus, tomentosus; caput nitens, antice ferrugineum; palpi, prothoracis latera pectusque fulva; cerci abdomini aequilongi; oviductus abdominis dimidio vix longior; pedes fulvi, crassi.*

*Female.* Piceous, tomentose. Head shining, ferruginous in front. Palpi tawny. Prothorax tawny along each side. Pectus tawny. Cerci as long as the abdomen. Oviduct hardly more than half the length of the abdomen. Legs tawny, thick: hind tibiæ with five stout spines on each side. Wings none. Length of the body 11 lines.

Much more slender than any of the preceding species.

*a.* Port Essington. Presented by the late Earl of Derby.

*ll.* First joint of the hind tarsi smooth.

*m.* Head not ridged.

*n.* Head not conical in front.

*o.* Oviduct very narrow.

## Genus 8. GRYLLUS.

*Gryllus, Linn. Syst. Nat. 1748. Latr. Gen. Serv. Hist. Orth. 327. Burm. Handb. Ent. ii. 730. Blanch. Hist. Nat. iii. Fisch. Orth. Eur. 170. — Acheta, Fabr. Syst. Ent. 1775. Leach, Ed. Enc. ix. 119. Zell., Charp., Steph.*

## Europe.

- a.* Fore wings and hind wings none or very small.  
*b.* Body wholly pale, very small. - - - - - squamiger.  
*bb.* Body spotted with brown, of moderate size.  
*c.* Cerci moderately long. - - - - - apterus.  
*cc.* Cerci very long. - - - - - longicauda.  
*aa.* Fore wings as long as the abdomen or shorter. Hind wings shorter than the fore wings or obsolete.  
*b.* Body pale.  
*c.* Head pale. - - - - - pipiens.  
*cc.* Head brown, with pale spots. - - - - - burdigalensis.  
*bb.* Body brown.  
*c.* Head not black. - - - - - arvensis.  
*cc.* Head black. - - - - - geminus.  
*bbb.* Body black.  
*c.* Head marked with white. - - - - - frontalis.  
*cc.* Head without marks.  
*d.* Fore wings shorter than the abdomen.  
*e.* Body tomentose. - - - - - melas.  
*ee.* Body smooth. - - - - - campestris.  
*dd.* Fore wings almost as long as the abdomen. - - - - - tristis.  
*aaa.* Wings developed. Hind wings longer than the abdomen and than the fore wings.  
*b.* Body grayish red. - - - - - hispanicus.  
*bb.* Body testaceous. - - - - - domesticus.  
*bbb.* Body black. - - - - - capensis.

## 1. GRYLUS SQUAMIGER.

squamiger, *Fisch. Orth. Eur.* 173, pl. 9, f. 8.

Istria.

## 2. GRYLUS APTERUS.

*Acheta aptera*, *H.-Sch. Paus. Faun. Ins. Germ. Cont.* 156, pl. 19.—*Gryllus apterus*, *H.-Sch. Nomencl. Ent.* ii. 24. *Fisch. Orth. Eur.* 173.—*Acheta dalmatina*, *var. ? Deshay, Nova Acta, An. Natr. Cur.* xvi. 959.

S. Europe.

## 3. GRYLUS LONGICAUDA.

longicauda, *Ramb. Faune Ent. And.* ii. 31, pl. 2, f. 9.

Andalusia. Algeria.

## 4. GRYLUS PIPICIENS.

pipiciens, *L. Duf. Ann. Sci. Phys. Brux.* vi. 315. *Serv. Hist. Orth.* 344. *Fisch. Orth. Eur.* 175.

Spain.

## 5. GRYLUS BURDIGALENSIS.

*Gryllus burdigalensis*, *Latr. Hist. Nat. Ins.* xii. 121. *Serv. Hist. Orth.* 341. *Fisch. Orth. Eur.* 175.—*Acheta burdigalensis*, *Charp. Hor. Ent.* 82. *H.-Sch. Paus. Faun. Ins. Germ. Cont.* 157, pl. 13.—*Gryllus burdigalensis*, *Burm. Handb. Ent.* ii. 734.

S. Europe.

## 6. GRYLUS ARVENSIS.

*Acheta arvensis*, *Ramb. Faune And.* 30, pl. 2, f. 7, 8.—*Gryllus arvensis*, *Fisch. Orth. Eur.* 176.

Spain.

## 7. GRYLUS GEMINUS.

geminus, *Serv. Hist. Orth.* 313.—*burdigalensis*, *var. ?*

Sardinia.

## 8. GRYLUS FRONTALIS.

frontalis, *Fieb. Ent. Mongr.* 127, pl. 10, f. 11. *Fisch. Orth. Eur.* 176, pl. 9, f. 7.

Bohemia. Austria.

## 9. GRYLUS MELAS.

*Acheta melas*, *Charp. Hor. Ent.* 81; *Germ. Zeitsch.* iii. 321.—*Gryllus melas*, *Serv. Hist. Orth.* 338. *Burm. Handb. Ent.* ii. 734. *Fisch. de Waldh. Orth. Ross.* 132. *Fisch. Orth. Eur.* 177. *Lucas, Exp. Sci. Alg.* iii. 22, pl. 1, f. 7.—*Acheta agricola*, *Ramb. Faune And.* 32, pl. 2, f. 6.

S. Europe. Algeria.



## 10. GRYLLUS CAMPESTRIS.

*Gryllus* (*Acheta*) *campestris*, *Linn. Syst. Nat.* i. 2, 695; *Mus. Lud. Utr.* 124. *Roes. Ins. Bel.* ii. *Gryll.* 81, pl. 13. *Berk. Syn.* i. 112. *Stew. Elem.* ii. 94. *Turt. Syst. Nat.* ii. 545. *Oliv. Enc. Meth.* vi. 636, pl. 129. *Stoll, Saut. et Grill.* pl. 1, f. 4, 5. *Sow. Brit. Misc.* i. pl. 64. *Don. Brit. Ins.* xii. pl. 432. *Bingley, Anim. Biog.* iii. 161. *Frisch. Deutsch. Ins.* i. pl. 1. *Fisch. de Waldh. Orth. Ross.* 127, pl. 24, f. 4, 5. *Latr. Hist. Nat. Cr. et Ins.* xii. 124; *Gen.* iii. 98. *Blanch. Hist. Nat.* iii. 32. *Serv. Orth. Eur.* 336. *Burm. Handb. Ent.* ii. 734. *Fisch. Orth. Eur.* 178. *Doy, Atlas, Regn. An. Cuv.* pl. 81, f. 3. — *Acheta campestris*, *Fabr. Ent. Syst.* ii. 31. *Leach, Ed. Enc.* ix. 119. *Panz. Faune Ins. Germ.* 88, pl. 8, 9. *Steph. Ill. Brit. Ent. Mand.* vi. *Charp. Hor. Ent.* 87. *Ramb. Faune Ent. And.* ii. 30.

Algeria.

*a—d.* England. From Mr. Stephens' collection.

*e—g.* England.

*h, i.* France.

*j.* ———?

## 11. GRYLLUS TRISTIS.

*Gryllus tristis*, *Serv. Hist. Orth.* 338. *Fisch. Orth. Eur.* 178.

Sardinia. Sicily.

## 12. GRYLLUS HISPANICUS.

*Acheta hispanica*, *Ramb. Faune And.* 33, pl. 2, f. 3. — *Gryllus hispanicus*, *Fisch. Orth. Eur.* 180.

Spain. Madeira.

## 13. GRYLLUS DOMESTICUS.

*Gryllus domesticus*, *Linn. Faun. Suec.* 868; *Syst. Nat.* i. 2, 694. *De Geer, Ins.* 331, pl. 24, f. 1, 2. *Roes. Ins. Bel.* ii. 73, pl. 12. *Berk. Syn.* i. 111. *Stew. Elem.* i. 93. *Turt. Syst. Nat.* ii. 541. *Don. Brit. Ins.* xi. pl. 409. *Bingley, Anim. Biog.* iii. 161. *Stoll, Saut. et Gryll.* iii. f. 12, 13. *De Borck, Rätving Ins.* 49, pl. 1, f. 8, 9. *Oliv. Enc. Meth.* vi. 634, pl. 129, f. 1—8. *Latr. Hist. Cr. et Ins.* xii. 123. *Brullé, Hist. Nat. Ins.* ix. 177, pl. 18, f. 3. *Serv. Hist. Orth.* 340. *Blanch. Hist. Nat. Ins.* iii. 33. *Burm. Handb. Ent.* ii. 733. *Fisch. de Waldh. Orth. Ross.* 129, pl. 24, f. 8, 9. *Fisch. Orth. Eur.* 180, pl. 9, f. 9. — *Acheta domestica*, *Fabr. Ent. Syst.* ii. 29. *Phil. Orth. Berol.* 15. *Zett. Orth. Suec.* 55. *Charp. Hor. Ent.* 80. *Panz. Faun. Ins. Germ.* 88, pl. 6, 7.

*a—m.* England. From Mr. Stephens' collection.

*n—p.* England.

*q.* Odessa. Presented by Dr. Dowler.

*r—v.* Bussorah. Presented by J. Doubleday, Esq.

*w.* Gaboon. Presented by F. Moore, Esq.

## 11. GRYLUS CAPENSIS.

*Acheta capensis*, *Fabr. Ent. Syst.* ii. 31. *Romb. Faune Aut.* ii. 28, pl. 2, f. 4, 5. *Cyrrillo, Spec. Ent. Neap.* pl. 5, f. 6. — *Acheta bimaculata*, *Mzcl. Ach. Guineens.* 18. *Herbst, Fäpfl. Arch.* viii. 192, pl. 53, f. 1. — *Gryllus bimaculatus*, *De Geer, Ins.* iii. 338, pl. 43, f. 1. — *Acheta rubricollis*, *Stoll, Saut. et Grill.* pl. 3, f. 15. — *Gryllus capensis*, *Say, Deser. Egypte, Orth.* pl. 3, f. 4. *Oliv. Enc. Meth.* vi. 635. *Serr. Hist. Orth.* 337. *Burm. Handlb. Ent.* ii. 734. *Fisch. Orth. Eur.* 182. *Blanch. Hist. Nat. Ins.* iii. 33.

Madeira.

- a, b.* Italy. From Dr. Leach's collection.  
*c, d.* Spain. Presented by B. Freund, Esq.  
*f, g.* Grenada. Presented by the Rev. H. Clark.  
*h.* Syria. From Dr. Leach's collection.  
*i, j.* Tunis. From Mr. Fraser's collection.  
*k.* St. Helena. Presented by Major Parry.  
*l.* Sierra Leone. Presented by the Entomological Club.  
*m.* Gambia. From Mr. Rendall's collection.  
*n, o.* Congo. Presented by Sir J. Richardson.  
*p.* W. Africa. From Mr. Turner's collection.  
*q, r.* S. Africa. Presented by Sir A. Smith.  
*s.* S. Africa. Presented by R. M'Andrew, Esq.  
*t.* S. Africa. From Mr. Pearson's collection.  
*u, w.* Natal. From M. Guenzins' collection.  
*x.* E. Africa. Presented by Earl Russell.  
*y.* Cape. From Dr. Krauss' collection.  
*z.* Abyssinia. Presented by J. C. Bowring, Esq.  
*aa.* Mauritius. From Dr. Beke's collection.  
*bb, cc.* China. Presented by J. C. Bowring, Esq.  
*dd.* Philippine Isles. From Mr. Cuming's collection.  
*ee.* Borneo.  
*ff.* Adelaide. From Mr. Stevens' collection.  
*gg.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.  
*hh—jj.* Rio Janeiro. Presented by the Rev. H. Clark.  
*kk, ll.* ——— ?

*Var. ? Male.* Head with a red patch on each side in front; fore border red in the middle. Eyes livid. Palpi piceous. Cerci piceous, a little shorter than the abdomen. Fore femora red at the base. Hind legs red; femora with a black abbreviated stripe and with blackish oblique streaks; tibiae with five blackish spines on the inner side and with four on the outer side. Fore wings lurid, extending to the tip of the abdomen; costal space pale cinereous.

*mm.* S. Africa. Presented by Sir A. Smith.

*Var. ? Female.* Fore border of the head and palpi reddish piceous. Cerci piceous, shorter than the abdomen. Oviduct piceous, rather longer than the abdomen. Legs dark reddish. Fore wings lurid, extending very little beyond the tip of the abdomen; a piceous stripe near the interior border, dilated near the base towards the costa.

*nn.* Borneo. Presented by the Admiralty.

## 1. MYRMECOPHILA ACERVORUM.

*Myrmecophila acervorum*, *Latr. Fam. Nat.* 413. *Cuv. Regne Anim.* ed. 5, iii. 183, pl. 82, f. 2. *Guér. Icon.* pl. 54. *Griff. Anim. Kingd.* xv. pl. 113, f. 6. *Serv. Hist. Orth.* 319. *Fisch. de Waldh. Orth. Ross. Suppl.* 356, pl. 33, f. 4. *Fisch. Orth. Eur.* 160, pl. 9, f. 3.—*Sphærium acervorum*, *Charp. Hor. Ent.* 78. *Burm. Handb. Ent.* ii. 730. *Blanch. Hist. Nat.* iii. 33, pl. 9, f. 1.—*Gryllus myrmecophilus*, *Savi, Giornale di Lett. Sci. e Arti*, xvi. 11.—*Blatta acervorum*, *Panz. Faun. Ins. Germ.* 68, pl. 24.

α. Tuscany. Presented by Dr. Leach.

## 2. MYRMECOPHILA HIRTICAUDA.

*hirticauda*, *Motsch. MSS. Fisch. de Waldh. Orth. Ross.* 357, pl. 33, f. 5.—*acervorum*, *var. ?*

Tauria.

## 3. MYRMECOPHILA BIFASCIATA.

*bifasciata*, *Motsch. MSS. Fisch. de Waldh. Orth. Ross.* 357, pl. 33, f. 6.—*acervorum*, *var. ?*

Tshougoueff, near Kharkoff.

## 4. MYRMECOPHILA OCHRACEA.

*ochracea*, *Fisch. Orth. Eur.* 161.

Sicily.

## 5. MYRMECOPHILA MAURETANICA.

*Sphærium mauretanicum*, *Lucas, Expl. Sci. Alg.* 23, pl. 1, f. 6.

Algeria.

*bb.* Head prominent.

*c.* Face rounded.

*d.* Hind tibiæ with spines.

*e.* Four anterior legs short or moderately long.

*f.* Third joint of the palpi not directly truncated.

*g.* Fore wings not very long.

*h.* Prothorax not very narrow.

*i.* Hind legs stout, of moderate length.

*f.* Hind tibiæ with stout approximate spines.

*k.* Tarsi four-jointed.

## Genus 6. ACHETA.

*Gryllus*, *Drury, Oliv.*—*Acheta*, *Fabr. Ent. Syst.* ii. 29. *Burm. Handb. Ent.* ii. 719.—*Schizodactylus*, *Brullé, Hist. Nat. Ins.* ix. 162. *Serv. Hist. Orth.* 320.

## 1. ACHETA MONSTROSA.

*Gryllus monstrosus*, *Drury, Ius.* ii. 81, pl. 43, f. 1. *Oliv. Enc. Meth.* vi. 633. *Latr. Gen.* 111.—*Acheta monstrosa*, *Fabr. Ent. Syst.* ii. 29. *Stoll, Saut. et Grill.* pl. 1, f. 1—3. *Burm. Handb. Ent.* ii. 720.—

*Schizodaetylus monstrosus*, *Blanch. Hist. Nat.* iii. 31, pl. 8, f. 2. *Serr. Hist. Orth.* 322.

- a. Hindostan. From Mr. Stevens' collection.  
 b. Bengal. Presented by W. Masters, Esq.  
 c—e. ——— ?

kk. Tarsi three-jointed.  
 l. First joint of the hind tarsi setulose.

### Genus 7. BRACHYTRYPES.

*Brachytrypes*, *Serr. Hist. Orth.* 323. — *Brachytrypes*, *Erichson, Agassiz, Nomencl. Fisch. Orth. Eur.* 186.

In the following descriptions the number of the lateral spines of the hind tibiæ has no reference to the apical spines.

#### 1. BRACHYTRYPES MEGACEPHALUS.

—————, *Deg. Ins.* iii. 341, 9, pl. 43, f. 9. — *Gryllus megacephalus*, *Lefebvre, Ann. Soc. Linn. Paris*, vi. 10, pl. 5, f. 4. — *Gryllus macrocephalus*, *Blanch. Hist. Nat.* iii. 32. — *Brachytrypes megacephalus*, *Serr. Hist. Orth.* 326. — *Brachytrypes megacephalus*, *Fisch. Orth. Eur.* 186, pl. 9, f. 10.

- a. Sicily. From the Zoological Society's collection.

#### 2. BRACHYTRYPES ACHATINUS.

*Gryllus achatinus*, *Stoll, Saut. et Grill.* pl. 2, c, f. 8. — *Burm. Handb. Ent.* ii. 735. — *Gryllus membranaceus*, *Stoll, Saut. et Grill.* pl. 2, c, f. 9. *Deg. Ins.* iii. pl. 43, f. 9. — *Acheta membranacea*, *Drury, Ins.* ii. 81, pl. 13, f. 2. — *Acheta vastatrix*, *Afzel, Ach. Guineæ*, 15. — *Brachytrypes ustulatus*, *Serr. Hist. Orth.* 326. — *Gryllus vastator*, *Burm. Handb. Ent.* ii. 735. — *Gryllus (Brachytrypes) achatinus*, *Haan, Verh. Nat. Gesch. Ned. Ind. B. z. Ins.* 229.

Java. Padang.

- a. Sierra Leone. Presented by the Rev. D. F. Morgan.  
 b. W. Africa. Presented by A. Swanzy, Esq.  
 c, d. Angola. Presented by J. J. Monteiro, Esq.  
 e. Congo. Presented by Sir J. Richardson.  
 f. Natal. From Mr. Stevens' collection.  
 g—i. Natal. From M. Gueinzus' collection.  
 j—m. Africa. Presented by Earl Russell.  
 n—p. Silhet. From the Rev. Mr. Stainforth's collection.  
 q, r. Hindostan. From Mr. Foxeoli's collection.  
 s, t. China? From Gen. Hardwicke's collection.  
 u. Australia.

#### 3. BRACHYTRYPES TERRIFICUS.

*Mas. Fulvus, subtus testaceus, B. achatino minor et gracilior; ale antica picæ, basi fulvæ, abdomen longe superantes; ale posticæ multo longiores.*

*Male.* Tawny, shining, testaceous beneath. Head large, prominent. Eyes with piceous disks. Palpi testaceous; third joint clavate, truncated at the tip. Antennæ piceous, longer than the body. Cerci much shorter than the abdomen. Hind tibiæ with four spines on each side. Fore wings piceous, tawny at the base, extending much beyond the abdomen; transverse sectors numerous. Hind wings extending much beyond the fore wings. Length of the body 13 lines.

The smaller size, narrower body and less robust structure distinguish it from *B. achatinus*.

a—c. Madras. Presented by the Rev. A. Taylor.

#### 4. BRACHYTRYPES FERREUS.

*Fœm.* *Piceus, subtus fulvus*, *B. terrifico minor et gracilior*; *prothoracis latera fulva*; *abdomen testaceum, vittis duabus ventralibus piceis*; *femora postica extus strigata*; *alæ quatuor longitudine aequales, abdomen paullo superantes*.

*Female.* Piceous, smooth, shining, tawny beneath. Head prominent, globose above. Eyes with black disks. Third joint of the palpi clavate, truncated. Antennæ piceous. Prothorax tawny on each side. Abdomen testaceous, with two piceous ventral stripes. Cerci about half the length of the abdomen. Oviduct about half the length of the cerci. Hind femora darker on the outer side, where there are paler oblique parallel streaks; hind tibiæ with three short spines on each side. Wings of equal length, extending a little beyond the abdomen. Fore wings acute; costal space colourless, with pale veins. Length of the body 13 lines.

It is smaller and more slender than *B. terrificus*, and the spines of the hind tibiæ are much shorter.

a. Madras. Presented by — Jordan, Esq.

#### 5. BRACHYTRYPES BISONATUS.

*Mas.* *Piceus, subtus fulvus*; *caput antice fulvum*; *palpi testacei*; *prothorax rufescente bimaculatus*; *abdomen testaceum*; *femora postica substrigata*; *alæ antice fulvæ, abdomen superantes*; *alæ postice multo longiores*. *B. ferreo affinis*; *oculi majores*; *tibiæ posticæ spinis apicalibus longioribus*.

*Male.* Piceous, shining, tawny beneath. Head rather prominent; fore part tawny; sockets of the antennæ, an intermediate dot and fore border testaceous. Palpi testaceous: third joint clavate. Antennæ piceous, longer than the body. Prothorax with a transverse reddish spot on each side of the disk. Abdomen testaceous. Cerci much shorter than the abdomen. Hind femora slightly streaked. Fore wings testaceous-cinereous, extending beyond the abdomen; a brown patch on the hind part of the base; veins along the lateral keel blackish; subcostal space pellucid. Hind wings pellucid, extending much beyond the hind wings; costa and subcostal streak testaceous; veins white. Length of the body 14 lines.

It has much resemblance to *B. ferreus*; the eyes are larger, the markings of the prothorax are different, and the apical spines of the hind tibiæ are longer.

a. Hindostan. From Archdeacon Clerk's collection.

## 5. BRACHYTRYPES TRUCULENTUS.

Mas. *Ferrugineus, subtus fulvus; caput antice fulvum; prothoracis latera fulva; femora postica substrigata; alæ anticæ abdomen paullo superantes; alæ posticæ abdomen longissime superantes.*

*Male.* Ferruginous, shining. Head prominent, tawny in front. Palpi tawny; third joint clavate, truncated. Prothorax on each side and peetus tawny. Cerci testaceous, shorter than the abdomen. Hind femora with slight streaks; hind tibiæ with three spines on each side. Fore wings extending a little beyond the abdomen. Hind wings pellucid, extending very much beyond the abdomen; costa and a subcostal streak testaceous; veins white. Length of the body 15 lines.

The hind tibiæ are longer and the hind tarsi much longer than those of *B. ferreus*.

a. Hindostan. From Mr. Stevens' collection.

## 6. BRACHYTRYPES ROBUSTUS.

Fœm. *Piceus, subtus fulvus, B. ferreo crassior; caput antice fulvum; prothoracis latera fulva; femora postica pallido striata; alæ anticæ abdomine breviores; alæ posticæ cinereæ, adhuc breviores.*

*Female.* Piceous, stout, shining, tawny beneath. Head prominent, tawny in front. Eyes darkly livid. Third joint of the palpi clavate, truncated. Antennæ as long as the body. Prothorax tawny on each side, Oviduct about one-fourth of the length of the abdomen. Hind femora with oblique paler streaks; hind tibiæ with four spines on each side. Fore wings shorter than the abdomen. Hind wings cinereous, shorter than the fore wings; veins piceous. Length of the body 15 lines.

The body is much more stout than that of *B. ferreus*, and it is distinguished from all the other preceding species by its short hind wings.

a. Philippine Isles. From Mr. Cuming's collection.

## 7. BRACHYTRYPES FULVUS.

Mas. *Fulvus; caput testaceo unimaculatum; palpi apice picci; femora postica oblique striata; alæ anticæ pallide cinereæ, testaceo venosæ, abdomen paullo superantes; alæ posticæ abdomen longe superantes, B. bisignato affinis; caput longius; tarsi postici graciliores.*

*Male.* Tawny, shining. Head with a testaceous spot between the eyes behind the antennæ. Eyes livid. Third joint of the palpi piceous, slightly securiform. Antennæ piceous. Hind femora with oblique striæ; hind tibiæ with four spines on each side. Fore wings pale cinereous, extending a little beyond the abdomen; veins testaceous. Hind wings pellucid, extending much beyond the fore wings; costa testaceous; veins white. Length of the body 12 lines.

It has most resemblance to *B. bisignatus*; the head is more elongated, and the hind tarsi are much more slender.

a. ———?

## 8. BRACHYTRYPES PEDESTRIS.

*Fœm.* *Piceus, apterus, tomentosus; caput nitens, antice ferrugineum; palpi, prothoracis latera pectusque fulva; cerci abdomini aequilongi; oviductus abdominis dimidio vix longior; pedes fulvi, crassi.*

*Female.* Piceous, tomentose. Head shining, ferruginous in front. Palpi tawny. Prothorax tawny along each side. Pectus tawny. Cerci as long as the abdomen. Oviduct hardly more than half the length of the abdomen. Legs tawny, thick; hind tibiæ with five stout spines on each side. Wings none. Length of the body 11 lines.

Much more slender than any of the preceding species.

*a.* Port Essington. Presented by the late Earl of Derby.

*ll.* First joint of the hind tarsi smooth.

*m.* Head not ridged.

*n.* Head not conical in front.

*o.* Oviduct very narrow.

## Genus 8. GRYLLUS.

*Gryllus, Linn. Syst. Nat. 1748. Latr. Gen. Serv. Hist. Orth. 327. Burm. Handb. Ent. ii. 730. Blanch. Hist. Nat. iii. Fisch. Orth. Eur. 170. — Acheta, Fabr. Syst. Ent. 1775. Leach, Ed. Enc. ix. 119. Zett., Charp., Steph.*

## Europe.

- a.* Fore wings and hind wings none or very small.  
*b.* Body wholly pale, very small. - - - - - squamiger.  
*bb.* Body spotted with brown, of moderate size.  
*c.* Cerci moderately long. - - - - - apterus.  
*cc.* Cerci very long. - - - - - longicauda.  
*aa.* Fore wings as long as the abdomen or shorter. Hind wings shorter than the fore wings or obsolete.  
*b.* Body pale.  
*c.* Head pale. - - - - - pipiens.  
*cc.* Head brown, with pale spots. - - - - - burdigalensis.  
*bb.* Body brown.  
*c.* Head not black. - - - - - arvensis.  
*cc.* Head black. - - - - - gemiuus.  
*bbb.* Body black.  
*c.* Head marked with white. - - - - - frontalis.  
*cc.* Head without marks.  
*d.* Fore wings shorter than the abdomen.  
*e.* Body tomentose. - - - - - melas.  
*ee.* Body smooth. - - - - - campestris.  
*dd.* Fore wings almost as long as the abdomen. - - - - - tristis.  
*aaa.* Wings developed. Hind wings longer than the abdomen and than the fore wings.  
*b.* Body grayish red. - - - - - hispanicus.  
*bb.* Body testaceous. - - - - - domesticus.  
*bbb.* Body black. - - - - - capensis.

## 1. GRYLLOUS SQUAMIGER.

squamiger, *Fisch. Orth. Eur.* 173, pl. 9, f. 8.

Istria.

## 2. GRYLLOUS APTERUS.

Acheta aptera, *H.-Sch. Panz. Faun. Ins. Germ. Cont.* 156, pl. 19.—Gryllus apterus, *H.-Sch. Nomencl. Ent.* ii. 24. *Fisch. Orth. Eur.* 173.—Acheta dalmatina, var. ? *Deskey, Nova Acta, An. Natr. Cur.* xvi. 959.

S. Europe.

## 3. GRYLLOUS LONGICAUDA.

longicauda, *Ramb. Faune Ent. And.* ii. 34, pl. 2, f. 9.

Andalusia. Algeria.

## 4. GRYLLOUS PAPIENS.

papiens, *L. Duf. Ann. Sci. Phys. Brux.* vi. 315. *Serv. Hist. Orth.* 344. *Fisch. Orth. Eur.* 175.

Spain.

## 5. GRYLLOUS BURDIGALENSIS.

Gryllus burdigalensis, *Latr. Hist. Nat. Ins.* xii. 124. *Serv. Hist. Orth.* 344. *Fisch. Orth. Eur.* 175.—Acheta burdigalensis, *Charp. Hor. Ent.* 82. *H.-Sch. Panz. Faun. Ins. Germ. Cont.* 157, pl. 13.—Gryllus burdigalensis, *Burm. Handb. Ent.* ii. 734.

S. Europe.

## 6. GRYLLOUS ARVENSIS.

Acheta arvensis, *Ramb. Faune And.* 30, pl. 2, f. 7, 8. — Gryllus arvensis, *Fisch. Orth. Eur.* 176.

Spain.

## 7. GRYLLOUS GEMINUS.

geminus, *Serv. Hist. Orth.* 343.—burdigalensis, var. ?

Sardinia.

## 8. GRYLLOUS FRONTALIS.

frontalis, *Fieb. Ent. Mongr.* 127, pl. 10, f. 11. *Fisch. Orth. Eur.* 176, pl. 9, f. 7.

Bohemia. Austria.

## 9. GRYLLOUS MELAS.

Acheta melas, *Charp. Hor. Ent.* 81; *Germ. Zeitsch.* iii. 321. — Gryllus melas, *Serv. Hist. Orth.* 338. *Burm. Handb. Ent.* ii. 734. *Fisch. de Waldh. Orth. Ross.* 132. *Fisch. Orth. Eur.* 177. *Lucas, Exp. Sci. Aly.* iii. 22, pl. 1, f. 7.—Acheta agricola, *Ramb. Faune And.* 32, pl. 2, f. 6.

S. Europe. Algeria.



## 10. GRYLLUS CAMPESTRIS.

*Gryllus* (*Acheta*) *campestris*, *Linn. Syst. Nat.* i. 2, 695; *Mus. Lud. Utr.* 124. *Roes. Ins. Bel.* ii. *Gryll.* 81, pl. 13. *Berk. Syn.* i. 112. *Stew. Elem.* ii. 94. *Turt. Syst. Nat.* ii. 545. *Oliv. Enc. Meth.* vi. 636, pl. 129. *Stoll, Saut. et Grill.* pl. 1, f. 4, 5. *Sow. Brit. Misc.* i. pl. 64. *Don. Brit. Ins.* xii. pl. 432. *Bingley, Anim. Biog.* iii. 161. *Fisch. Deutsch. Ins.* i. pl. 1. *Fisch. de Waldh. Orth. Ross.* 127, pl. 24, f. 4, 5. *Latr. Hist. Nat. Cr. et Ins.* xii. 124; *Gen.* iii. 98. *Blanch. Hist. Nat.* iii. 32. *Serv. Orth. Eur.* 336. *Burm. Handb. Ent.* ii. 734. *Fisch. Orth. Eur.* 178. *Doy, Atlas, Regn. An. Cuv.* pl. 81, f. 3. — *Acheta campestris*, *Fabr. Ent. Syst.* ii. 31. *Leach, Ed. Enc.* ix. 119. *Panz. Faune Ins. Germ.* 88, pl. 8, 9. *Steph. Ill. Brit. Ent. Mand.* vi. *Charp. Hor. Ent.* 87. *Ramb. Faune Ent. And.* ii. 30.

Algeria.

a—d. England. From Mr. Stephens' collection.

e—g. England.

h, i. France.

j. ———?

## 11. GRYLLUS TRISTIS.

*Gryllus tristis*, *Serv. Hist. Orth.* 338. *Fisch. Orth. Eur.* 178.

Sardinia. Sicily.

## 12. GRYLLUS HISPANICUS.

*Acheta hispanica*, *Ramb. Faune And.* 33, pl. 2, f. 3. — *Gryllus hispanicus*, *Fisch. Orth. Eur.* 180.

Spain. Madeira.

## 13. GRYLLUS DOMESTICUS.

*Gryllus domesticus*, *Linn. Faun. Suec.* 868; *Syst. Nat.* i. 2, 694. *De Geer, Ins.* 331, pl. 24, f. 1, 2. *Roes. Ins. Bel.* ii. 73, pl. 12. *Berk. Syn.* i. 111. *Stew. Elem.* i. 93. *Turt. Syst. Nat.* ii. 544. *Don. Brit. Ins.* xi. pl. 409. *Bingley, Anim. Biog.* iii. 161. *Stoll, Saut. et Gryll.* iii. f. 12, 13. *De Borck, Rätving Ins.* 49, pl. 1, f. 8, 9. *Oliv. Enc. Meth.* vi. 634, pl. 129, f. 1—8. *Latr. Hist. Cr. et Ins.* xii. 123. *Brullé, Hist. Nat. Ins.* ix. 177, pl. 18, f. 3. *Serv. Hist. Orth.* 340. *Blanch. Hist. Nat. Ins.* iii. 33. *Burm. Handb. Ent.* ii. 733. *Fisch. de Waldh. Orth. Ross.* 129, pl. 24, f. 8, 9. *Fisch. Orth. Eur.* 180, pl. 9, f. 9. — *Acheta domestica*, *Fabr. Ent. Syst.* ii. 29. *Phil. Orth. Berol.* 15. *Zett. Orth. Suec.* 55. *Charp. Hor. Ent.* 80. *Panz. Faun. Ins. Germ.* 88, pl. 6, 7.

a—m. England. From Mr. Stephens' collection.

n—p. England.

q. Odessa. Presented by Dr. Dowler.

r—v. Bussorah. Presented by J. Doubleday, Esq.

w. Gaboon. Presented by F. Moore, Esq.

## 14. GRYLLOUS CAPENSIS.

*Acheta capensis*, *Fabr. Ent. Syst.* ii. 31. *Ramb. Faune And.* ii. 28, pl. 2, f. 4, 5. *Cyrillo, Spec. Ent. Neap.* pl. 5, f. 6. — *Acheta bimaculata*, *Afzel. Ach. Guineens.* 18. *Herbst, Füpfl. Arch.* viii. 192, pl. 53, f. 1. — *Gryllus bimaculatus*, *De Geer, Ins.* iii. 338, pl. 43, f. 1. — *Acheta rubricollis*, *Stoll, Saut. et Grill.* pl. 3, f. 15. — *Gryllus capensis*, *Say, Deser. Egypte, Orth.* pl. 3, f. 4. *Oliv. Enc. Meth.* vi. 635. *Serr. Hist. Orth.* 337. *Burm. Handb. Ent.* ii. 734. *Fisch. Orth. Eur.* 182. *Blauch, Hist. Nat. Ins.* iii. 33.

## Madeira.

- a, b.* Italy. From Dr. Leach's collection.  
*c, d.* Spain. Presented by B. Friend, Esq.  
*f, g.* Grenada. Presented by the Rev. H. Clark.  
*h.* Syria. From Dr. Leach's collection.  
*i, j.* Tunis. From Mr. Fraser's collection.  
*k.* St. Helena. Presented by Major Parry.  
*l.* Sierra Leone. Presented by the Entomological Club.  
*m.* Gambia. From Mr. Rendall's collection.  
*n, o.* Congo. Presented by Sir J. Richardson.  
*p.* W. Africa. From Mr. Turner's collection.  
*q, r.* S. Africa. Presented by Sir A. Smith.  
*s.* S. Africa. Presented by R. M'Andrew, Esq.  
*t.* S. Africa. From Mr. Pearson's collection.  
*u, v.* Natal. From M. Gueinzins' collection.  
*x.* E. Africa. Presented by Earl Russell.  
*y.* Cape. From Dr. Krauss' collection.  
*z.* Abyssinia. Presented by J. C. Bowring, Esq.  
*aa.* Mauritius. From Dr. Beke's collection.  
*bb, cc.* China. Presented by J. C. Bowring, Esq.  
*dd.* Philippine Isles. From Mr. Cuming's collection.  
*ee.* Borneo.  
*ff.* Adelaide. From Mr. Stevens' collection.  
*gg.* St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.  
*hh—jj.* Rio Janeiro. Presented by the Rev. H. Clark.  
*kk, ll.* ——— ?

*Var. 2* *Male.* Head with a red patch on each side in front; fore border red in the middle. Eyes livid. Palpi piceous. Cerci piceous, a little shorter than the abdomen. Fore femora red at the base. Hind legs red; femora with a black abbreviated stripe and with blackish oblique streaks; tibiae with five blackish spines on the inner side and with four on the outer side. Fore wings lurid, extending to the tip of the abdomen; costal space pale cinereous.

*mm.* S. Africa. Presented by Sir A. Smith.

*Var. 2* *Female.* Fore border of the head and palpi reddish piceous. Cerci piceous, shorter than the abdomen. Oviduct piceous, rather longer than the abdomen. Legs dark reddish. Fore wings lurid, extending very little beyond the tip of the abdomen; a piceous stripe near the interior border, dilated near the base towards the costa.

*nn.* Borneo. Presented by the Admiralty.

Var. Mas. *Caput maculis duabus obscure lividis ; femora postica substriata ; alæ anticæ luridæ, abdomine paullo longiores ; alæ posticæ nullæ.*

*Male.* Head with a darkly livid spot on each side in front. Hind femora with slightly marked oblique striæ on the outer side. Fore wings lurid, a little longer than the abdomen. Hind wings not developed.

oo. Cahar. Presented by J. C. Bowring, Esq.

### N. America.

a.	Hind wings extending beyond the abdomen.	-	-	-	-	-	-	-	luctuosus.
aa.	Hind wings not extending beyond the abdomen.								
b.	Oviduct long.								
c.	Body stout.	-	-	-	-	-	-	-	abbreviatus.
cc.	Body slender.	-	-	-	-	-	-	-	angustus.
bb.	Oviduct of moderate length.	-	-	-	-	-	-	-	neglectus.
bbb.	Oviduct short.								
c.	Wings long.	-	-	-	-	-	-	-	niger.
cc.	Wings short.	-	-	-	-	-	-	-	Pensylvanicus.

### 15. GRYLLUS LUCTUOSUS.

luctuosus, *Serv. Hist. Orth.* 335. *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 427.

a. N. America. Presented by W. Kirby, Esq.

b. Canada. Presented by W. S. M. D'Urban, Esq.

c. Canada. Presented by Dr. Barnston.

### 16. GRYLLUS ABBREVIATUS.

abbreviatus, *Serv. Hist. Orth. Eur.* 336. *Scudder, Journ. Bot. Nat. Hist.* vii. 427.—*Acheta tripunctata, Harr. Cat. Ins. Mass.* 56.—*Acheta abbreviata, Harr. Rep.* 3rd ed. 152, f. 69.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

b. N. America. Presented by F. Walker, Esq.

### 17. GRYLLUS ANGUSTUS.

angustus, *Scudder, Journ. Bot. Soc. Nat. Hist.* vii. 427.

Massachusetts. Cape Cod.

### 18. GRYLLUS NEGLECTUS.

neglectus, *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 428.

Massachusetts. Cape Cod.

### 19. GRYLLUS NIGER.

*Acheta nigra, Harris, Rep.* 3rd ed. 152. — *Gryllus niger, Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 428.

Massachusetts.

20. *Gryllus pennsylvanicus*.

*Pennsylvanicus*, *Burm. Handb. Ent.* ii. 734.

- a.* N. America. Presented by E. Doubleday, Esq.  
*b—c.* Indiana. Presented by F. Walker, Esq.  
*f.* N. America. Presented by W. Kirby, Esq.  
*g.* California. From M. Hartweg's collection.

The specimen from California is in an early stage of growth, and cannot be certainly assigned to this species.

21. *Gryllus personatus*.

*personatus*, *Uhler, Proc. Ent. Soc. Phil.* ii. 547.

Kansas.

## Mexico.

22. *Gryllus septentrionalis*.

*Fem.* *Niger, tomentosus; caput nitens, linea transversa angulata lateribus faviisque fulvis; prothoracis latera fulva; cerci picci, abdomine duplo breviores; oviductus abdomine paullo longior; pedes fulvi, femoribus posticis pallido strigatis; alæ anticae luridae, abdominis apicem attingentes, basi carinaeque pallidioribus; alæ posticae abdomen longe superantes.* Mas.—*Alæ posticae abdomen non superantes.*

*Female.* Black, tomentose. Head shining, tomentose along the hind border, tawny about the eyes: a slender transverse angular tawny line between the ocelli: sides and fore part irregularly tawny. Palpi blackish at their tips. Antennae piceous, shorter than the body. Prothorax tawny along each side. Cerci piceous, nearly half the length of the abdomen. Oviduct tawny towards the tip, a little longer than the abdomen. Legs tawny; hind femora with paler oblique parallel streaks on the outer side; hind tibiae with six spines on the outer side and with four spines on the inner side. Fore wings lurid, extending to the tip of the abdomen, paler at the base and along the mediastinal vein or along the lateral keel; branches of the mediastinal vein whitish. Hind wings extending much beyond the abdomen. *Male.*—Hind wings not longer than the abdomen. Length of the body 10 lines.

The colour of the palpi and of the legs distinguishes it from *G. capensis*.

*a, b.* Oajaca. From M. Sallé's collection.

*c, d.* St. Domingo. From Mr. Tweedie's collection.

*e.* St. Domingo. From Mr. Hearse's collection.

*f.* W. Coast of America. Presented by Capt. Kellett and Lieut. Wood.

23. *Gryllus luridus*.

*Fem.* *Niger, tomentosus; caput nitens, antice rufum; palpi rufescente picci; antennae piceae, corpore paullo longiores; prothorax strigis duabus posticis rufis; oviductus abdomine multo longior; alæ anticae piceae, abdomine breviores, apud costam diaphane testaceo pallido venosa; alæ posticae abdomen longe superantes.*

*Female.* Black, tomentose. Head shining, red on each side in front and about the mouth. Palpi reddish piceous. Antennæ piceous, a little longer than the body. Prothorax with a red longitudinal streak on each side proceeding from the hind border. Cerci and oviduct piceous, the former much shorter than the abdomen, the latter much longer than the abdomen. Femora red beneath; hind tibiæ with seven spines on the outer side and with six on the inner side. Fore wings piceous, somewhat shorter than the abdomen; a streak along the mediastinal vein and subcostal space pellucid, the latter with pale testaceous veins. Hind wings extending much beyond the body. Length of the body  $10\frac{1}{2}$  lines.

The fore wings, which are not pale at the base, distinguish it from *G. abbreviatus* and from *G. Oujacanus*.

Vera Cruz. In Mr. Saunders' collection.

### W. Indies.

- a.* Legs blackish. - - - - - - - - - - determinatus.  
*aa.* Legs tawny.  
*b.* Hind wings of the female much longer than the abdomen.  
*c.* Head and prothorax somewhat broad.  
*d.* Prothorax blackish. - - - - - - - - - - parilis.  
*dd.* Prothorax tawny. - - - - - - - - - - similis.  
*cc.* Head and prothorax rather narrow. - - - - - - - - - - angustulus.  
*bb.* Hind wings obsolete. - - - - - - - - - - contingens.

### 24. GRYLLUS DETERMINATUS.

*Mas et fœm.* *Niger, tomentosus; caput nitens, linea transversa angulata lateribus facique fulvis; palpi nigricantes; cerci sordide fulvi, abdomine breviores; oviductus abdomine multo longior; pedes picei, femoribus posticis cinereo strigatis subtus rufescentibus; alæ anticae luridæ, abdominis apicem paullo superantes, vitta subcostali fulva venulis subcostalibus testaceis; alæ posticæ abdomen longe superantes.*

*Male and female.* Black, tomentose. Head shining, tomentose along the hind border; a transverse tawny angular line between the ocelli; sides in front and fore border tawny. Eyes piceous. Palpi blackish. Antennæ piceous. Cerci dusky tawny, much more than half the length of the abdomen. Oviduct tawny towards the tip, much longer than the abdomen. Legs piceous; hind femora reddish beneath, with oblique parallel cinereous streaks on the outer side; hind tibiæ with six or seven spines on the outer side and with four or five on the inner side. Fore wings lurid, extending a little beyond the tip of the abdomen; mediastinal vein and its branches testaceous or tawny. Hind wings pellucid, extending much beyond the abdomen; veins white; costa and subcostal stripe pale brown. Length of the body 9—11 lines.

The oviduct and the hind wings of this species are a little longer than those of *G. Oujacanus*. It much resembles *G. abbreviatus*, but the fore wings have not the reddish tinge which distinguishes the latter species.

- a, b. Jamaica. From Mr. Gosse's collection.  
 c. St. Domingo. From Mr. Hearsé's collection.  
 d. Isle St. Vincent. From the Rev. L. Guilding's collection.

## 25. GRYLUS PARILIS.

*Mas.* *Piceus, nitens; caput lituris quatuor facieque testaceis; palpi pallide testacci; prothoracis latera pectusque testacea; cerci fulvi, abdomine multo breviores; pedes fulvi, femoribus posticis pallido strigatis; ala antica luridæ, abdominis apicem attingentes, venis subcostalibus pallide testaceis; ala postica abdomen longe superantes.*

*Male.* Piceous, shining. Head with two testaceous spots between the eyes and the hind border, and with two testaceous patches between the eyes and the sides; fore part testaceous. Eyes and palpi pale testaceous. Antenna longer than the body. Prothorax irregularly testaceous on each side. Pectus testaceous. Cerci tawny, much shorter than the abdomen. Legs tawny; hind femora with the usual paler streaks; hind tibiæ with five spines on the outer side and with four spines on the inner side. Fore wings lurid, extending to the tip of the abdomen; subcostal veins pale testaceous. Hind wings extending much beyond the abdomen. Length of the body 9 lines.

- a. St. Vincent. From the Rev. L. Guilding's collection.  
 b. Brazil. Presented by J. P. G. Smith, Esq.

## 26. GRYLUS SIMILARIS.

*Fœm.* *Testaceus, tomentosus; caput nitens, vittis quatuor indeterminatis lineisque duabus anterioribus transversis ferrugineis; palpi pallide flari, apice picei; prothorax piceo biplagiatus; venter niger, rufo vittatus; cerci abdomine vix breviores; oviductus abdomine longior; femora postica vix strigata; ala antica picea, abdominis apicem attingentes, apicis versus pallidiores, basi carinaque testaceis, spatio subcostali diaphano venis pallide testaceis; ala postica abdomen longissime superantes.*

*Female.* Testaceous, tomentose. Head shining, with four intermediate ferruginous stripes and with two anterior transverse ferruginous lines. Eyes black. Palpi pale yellow, with piceous tips. Prothorax with two large piceous patches, which occupy nearly all the disk. Abdomen beneath black and with a red stripe, testaceous at the tip. Cerci nearly as long as long as the abdomen. Oviduct somewhat longer than the abdomen. Hind femora with slightly indicated oblique streaks; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings piceous, extending to the tip of the abdomen, paler towards the tips, testaceous at the base and with a testaceous stripe along the mediastinal vein; subcostal space pellucid, with pale testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 10 lines.

Rather larger than *G. parilis*, and distinguished from the female of that species by the fore wings, which are pale at the base.

- a, b. St. Domingo. From Mr. Tweedie's collection

27. *Gryllus angustulus*.

Mas et fœm. *Ferrugineus, nitens, sat angustus; caput litura frontali nigra, facie testacea; palpi pallide testacei; prothorax lateribus aut angulis anticis testaceis; pedes testacei, femoribus posticis substri-gatis; alæ anticæ abdominis apicem attingentes aut paullo super-antes, nonnunquam piceæ, basi pallide testaceæ, spatio subcostali pal-lide cinereo. Mas.—Alæ posticæ nullæ. Fœm.—Venter fulvo vit-tatus; alæ posticæ abdomen longe superantes.*

*Male and female.* Ferruginous, shining, rather narrow. Head pro-minent, with a black mark between the eyes; fore part testaceous. Eyes piceous or black. Palpi pale testaceous; third joint subclavate, hollow beneath at the tip. Antennæ piceous, longer than the body, pale testaceous at the base. Prothorax with a testaceous spot adjoining each fore angle, or with the sides wholly testaceous. Pectus and legs testaceous; hind femora with the oblique streaks indistinctly marked; hind tibiæ with five spines on each side. Fore wings sometimes piceous, almost as long as the abdomen or a little longer, pale testaceous at the base; subcostal space pale cinereous. *Male.*—Hind wings obsolete. *Female.*—Abdomen with a tawny ventral stripe. Hind wings extending much beyond the abdomen. Length of the body 8 lines.

It has most resemblance to *G. parilis*, but the size is smaller and the prothorax is narrower.

a—d. Isle St. Vincent. From the Rev. L. Guilding's collection.  
e. Jamaica. From Mr. Gosse's collection.

28. *Gryllus contingens*.

Fœm. *Niger, tomentosus; caput nitens, lineæ transversa angulata facie-que fulvis; palpi fulvi, apice nigricantes; prothoracis anguli antici et cerci fulvi; oviductus abdomine paullo brevior; pedes fulvi; alæ anticæ piceæ, abdominis apicem fere attingentes, vena mediastinali ramisque testaceis; alæ posticæ breviores.*

*Female.* Black, tomentose. Head shining, tomentose along the hind border; a transverse tawny angular line between the ocelli; orbits of the eyes and fore part tawny. Palpi tawny, with blackish tips. Antennæ piceous, shorter than the border. Prothorax tawny about the fore angles. Cerci tawny. Oviduct tawny towards the tip, a little shorter than the abdomen. Legs tawny; hind tibiæ with six spines on the outer side and with four spines on the inner side. Fore wings piceous, extending nearly to the tip of the abdomen; mediastinal vein and its branches testaceous. Hind wings not apparent. Length of the body 12 lines.

It has not the two longitudinal pale streaks on the prothorax which distinguish *G. septentrionalis*.

a. St. Vincent. From the Rev. J. Guilding's collection.  
b. Jamaica. From Mr. Gosse's collection.

## W. Coast of America.

## 29. GRVILLUS SIGNATIPES.

Mas. *Nigro-piceus, nitens; caput fascia facieque fulvis; palpi pallide picei; prothorax margine antico liturisque posticis longitudinalibus testaceis; segmentorum abdominalium margines postici testaceo notati; venter testaceo vittatus; pedes ferrugini, breviusculi, sat robusti, femoribus posticis testaceis crassis piceo interrupte strigatis et ferrugineo nebulosis; alæ brevissimæ.*

*Male.* Blackish piceous, shining. Fore part of the head and a band in front of the antennæ tawny. Eyes piceous, their orbits partly tawny. Palpi pale piceous. Prothorax irregularly testaceous along the fore border and with short longitudinal testaceous streaks on the hind border. Abdomen with irregular testaceous marks along the hind border of each segment; under side with a testaceous stripe. Legs ferruginous, rather short and stout; hind femora testaceous, very stout, their outer side with piceous oblique streaks which are interrupted by a pale longitudinal line, their inner side mottled with ferruginous; hind tibiæ with seven spines on the outer side and with six on the inner side. Wings rudimentary; fore wings longer than the hind wings. Length of the body 8 lines.

The markings of the prothorax sufficiently distinguish it from all the preceding species.

*a.* W. Coast of America. Presented by Capt. Kellett and Lieut. Wood.

## S. America.

<i>a.</i> Prothorax spotted.							
<i>b.</i> Prothorax yellow.	-	-	-	-	-	-	verticalis.
<i>bb.</i> Prothorax black.							
<i>c.</i> Fore wings blackish.	-	-	-	-	-	-	comptus.
<i>cc.</i> Fore wings pale.	-	-	-	-	-	-	fulvipennis.
<i>aa.</i> Prothorax not spotted.							
<i>b.</i> Head and prothorax pale.	-	-	-	-	-	-	assimilis.
<i>bb.</i> Head and prothorax brown.	-	-	-	-	-	-	Guadalupensis.
<i>bbb.</i> Head and prothorax black.							
<i>c.</i> Head tawny about the eyes.	-	-	-	-	-	-	mundus.
<i>cc.</i> Head black about the eyes.							
<i>d.</i> Fore wings not testaceous at the base.	-	-	-	-	-	-	signatus.
<i>dd.</i> Fore wings testaceous at the base.	-	-	-	-	-	-	vicarius.

## 30. GRVILLUS VERTICALIS.

verticalis, *Serr. Hist. Orth.* 343.

Cayenne.

## 31. GRVILLUS ASSIMILIS.

*Acheta assimilis, Fabr. Ent. Syst.* ii. 29.—*Gyllus assimilis, Burm. Handb. Ent.* ii. 733.

Middle and S. America.



## 32. GRYLLUS GUADALUPENSIS.

*Acheta Guadalupensis*, *Fabr. Ent. Syst.* ii. 32.

This species has been included with *Gryllus*, as the genus is now limited, but probably belongs to another group.

Guadaloupe.

## 33. GRYLLUS FULVIPENNIS.

*fulvipennis*, *Blanch. Gay, Hist. Chile Zool.* vi. 32, *Atlas*, pl. 1, f. 8.

Valparaiso. Coquimbo.

## 34. GRYLLUS COMPTUS.

*Mas. Niger, nitens; caput lateribus margineque antico fulvis; palpi pallide testacei; antennæ piceæ, corpore breviores; thorax plagis quatuor sordide fulvis, maculis duabus anticis lateralibus testaceis; cerci picei, abdominis breviores; pedes pallide testacei; alæ anticæ nigricantes, abdominis apicem fere attingentes, venis subcostalibus pallide testaceis; alæ posticæ breviores.*

*Male.* Black, shining. Head tawny in front and along each side, and partly so about the eyes. Palpi pale testaceous. Antennæ piceous, shorter than the body. Thorax with two dusky tawny patches on each side; a testaceous spot along the fore part of each side. Cerci piceous, much shorter than the abdomen. Legs pale testaceous; five spines on each side of the right hind tibia and six spines on each side of the left one. Fore wings blackish, extending nearly to the tip of the abdomen; veins in the deflexed part pale testaceous. Hind wings shorter than the fore wings. Length of the body 9 lines.

It has most resemblance to *G. angustulus*, but is somewhat broader and has stouter legs.

*a.* *Constancia.* Presented by the Rev. H. Clark.

## 35. GRYLLUS MUNDUS.

*Fœm. Niger, tomentosus; caput nitens, antice fulvum; antennæ corpore longiores; prothoracis latera tenuiter fulva; cerci fulvi, abdomine paullo breviores; oviductus abdomine paullo longior; pedes pallide fulvi, femoribus posticis obscure strigatis; alæ anticæ luridæ, abdominis apicem attingentes, striga venisque subcostalibus testaceis; alæ posticæ abdomen longe superantes.*

*Female.* Black, tomentose. Head smooth and shining, except the vertex, tawny in front and about the eyes. Antennæ longer than the body. Prothorax narrowly tawny along each side. Cerci tawny, a little shorter than the abdomen. Oviduct a little longer than the abdomen. Pectus and legs pale tawny; hind femora with oblique darker streaks on the outer side; hind tibiæ with five spines on each side. Fore wings lurid, extending to the tip of the abdomen; a streak along the mediastinal vein, and the veinlets in front testaceous. Hind wings extending much beyond the abdomen. Length of the body 10 lines.

It may be a small variety of *G. septentrionalis*.

*a.* Brazil. Presented by J. P. G. Smith, Esq.

### 36. GRULLUS SIGNATUS.

*Fem.* *Niger, tomentosus; caput nitens, margine antico fulvo; palpi picei; prothorax margine antico et postico tenuissime fulvis; oviductus abdomine paullo longior; pedes piceï, femoribus posticis subtus fulvis; alæ anticae piceæ, abdominis apicem attingentes, vitta fulva, apud costam diaphane albido venosa; alæ posticæ abdomen longe superantes. Mas.—Minor; caput testaceo unimaculatum; alæ abdomine breviores.*

*Female.* Black, tomentose. Head shining, tomentose along the hind border, tawny about the mouth. Eyes and palpi piceous. Ocelli luteous. Prothorax very narrowly tawny in front and along the hind border. Pectus and oviduct piceous, the latter a little longer than the abdomen. Legs piceous; hind femora tawny beneath and with slightly indicated tawny streaks on the outer side; hind tibiae with five spines on the outer side and with four on the inner side. Fore wings piceous, extending to the tip of the abdomen, with a tawny stripe along the mediastinal vein; costal space pellucid, with whitish veins. Hind wings extending much beyond the abdomen. Length of the body 10 lines. *Male.*—Much smaller. Head with a testaceous spot between the eyes. Fore wings about three-fourths of the length of the abdomen. Hind wings not longer than the fore wings. Length of the body 9½ lines.

The two hinder dots on the head distinguish this species from those previously recorded.

*a, b.* Venezuela. From Mr. Dyson's collection.

### 37. GRULLUS VICARIUS.

*Mas.* *Niger, nitens; capitis latera antica rufa; palpi sordide rufescentes; pectus ferrugineum; cerci ferruginei; pedes ferruginei, femoribus posticis vix strigatis; alæ anticae piceæ, basi pallide testaceæ, apud costam testaceo venosa, abdomen paullo superantes; alæ posticæ abdomen longe superantes.*

*Male.* Black, shining. Head red on each side in front; mandibles red, with black teeth. Eyes hind. Palpi dull reddish. Pectus and legs ferruginous. Cerci piceous. Hind femora with the oblique streaks hardly perceptible; hind tibiae with six spines on the outer side and with five on the inner side. Fore wings piceous, pale testaceous at the base, extending a little beyond the abdomen; subcostal space with testaceous veins. Hind wings extending much beyond the abdomen. Length of the body 10½ lines.

The colour of the fore wings distinguishes this species from *G. signatus*.

*Para.* In Mr. Saunders collection.

## Madeira.

## 38. GRYLLUS MARGINALIS.

Mas. *Niger, nitens; ocelli albi; antennæ corpore breviores; prothorax lineis duabus lateralibus posticis margineque postico interrupte utrinque luteis; cerci abdomine breviores; femora postica ex parte lutea; alæ anticæ abdominis dimidio longiores; alæ posticæ breviores.*  
 Var.  $\beta$ .—*Pedes postici tibiis tarsisque saturate rufis.* Var.  $\gamma$ .?—*Caput luteo bistrigatum; prothorax luteo marginatus; abdomen luteo conspersum; pedes fulvi.*

*Male.* Black, shining, very finely punctured. Antennæ shorter than the body. Prothorax with a luteous line along the hind part of each side; hind border interruptedly luteous on each side. Cerci more than half the length of the abdomen. Hind femora towards the base mottled with luteous on the outer side, wholly luteous on the inner side; hind tibiæ armed with five spines along each side. Fore wings more than half the length of the abdomen. Hind wings more than half the length of the fore wings.  
 Var.  $\beta$ .—Hind tibiæ and hind tarsi dark red. Var.  $\gamma$ .? *Larva.*—Head with a luteous streak on each side between the eye and the hind border. Prothorax irregularly bordered with luteous. Abdomen speckled with luteous. Legs tawny. Length of the body 8 lines.

In the synopsis of the European *Grylli* this species agrees with *G. campestris*, from which the luteous lines on the prothorax and other characters distinguish it.

a, b. Madeira. From Mr. Macgillivray's collection.

c. Madeira. Presented by Mrs. Hope.

## North Africa.

## 39. GRYLLUS CERISYI.

*Gryllus Cerisyi, Serv. Hist. Orth.* 342—*burdigalensis, var.?*

Egypt.

## 40. GRYLLUS PYGMÆUS.

Fœm. *Testaceus, tomentosus; caput nitens, vertice fusciscente testaceo-quadrilineato, fascia nigra; fascia maculisque duabus anterioribus fuscis; prothorax fusco quadrimaculatus et bistrigatus; oviductus corpore brevior; alæ anticæ abdominis apicem attingentes, apud costam diaphanæ testaceo pallido venosæ, striga subcostali fusciscente; alæ posticæ abdomen longissime superantes.*

*Female.* Testaceous, tomentose. Head shining; vertex brownish, with four testaceous longitudinal lines; a black band between the eyes; a brown band between the sockets of the antennæ, and a brown spot on each side in front. Eyes testaceous, with brownish disks. Prothorax with four brown spots in the disk and on each side with a brown streak which is abbreviated in front. Oviduct piecous towards the tip, rather shorter than the body. Hind tibiæ with five spines on each side. Fore wings extending to the tip of the abdomen, with a brownish streak along the lateral

keel; subcostal space pellucid, with pale testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 6 lines.

a. Egypt. Presented by J. Burton, Esq.

### West, South, and East Africa.

- a. Prothorax tomentose.  
 b. Prothorax brownish gray, speckled with black. - - conspersus.  
 bb. Prothorax black or pale.  
 c. Spines of the hind tibiæ very long and stout. - - fortipes.  
 cc. Spines of the hind tibiæ moderately long and stout.  
 d. Legs tawny.  
 e. Fore wings not pale at the base. - - - - guttatus.  
 ee. Fore wings pale at the base and along the mediastinal vein.  
 f. Head not striped. - - - - plagiiceps.  
 ff. Head striped.  
 g. Prothorax of equal breadth. - - - - lineaticeps.  
 gg. Prothorax slightly narrower in front. - - - - notabilis.  
 dd. Legs blackish.  
 e. Oviduct not longer than the body - - - - ignobilis.  
 ee. Oviduct longer than the body - - - - macurus.  
 aa. Thorax smooth.  
 b. Legs black. - - - - atratus.  
 bb. Legs piceous.  
 c. Antennæ of one colour. - - - - posticus.  
 cc. Antennæ with a pale band. - - - - compactus.  
 bbb. Legs tawny.  
 c. Head tawny. - - - - consocius.  
 cc. Head black.  
 d. Head banded. - - - - parallelus.  
 dd. Head not banded. - - - - lucens.

#### 41. GRYLUS CONSPERSUS.

conspersus, Schaum, *Peters, Reise Mozamb.* 117.

Mozambique.

#### 42. GRYLUS FORTIPES.

Fœm. *Niger, nitens; caput lateribus margineque antico obscure rufis; palpi picei; prothorax maculis duabus, vittis duabus exterioribus lateribusque obscure rufis; oviductus piceus, abdomine perpaullo brevior; pedes crassi, femoribus obscure rufis supra piceis, femoribus posticis substrigatis, spinis longis crassis; alæ anticae piceae, abdomine breviores, vitta fulva, venis subcostalibus testaceis; alæ posticae paullo longiores.*

*Female.* Black, shining. Head dark red along the hind border and in front. Eyes and ocelli luid. Palpi piceous. Prothorax with two spots, with two exterior stripes and with the sides of a dark red hue. Oviduct piceous, very little shorter than the abdomen. Legs very stout; femora dark red, piceous above; hind femora with the usual paler streaks slightly indicated; hind tibiae with very long and stout spines, seven on the outer

side, six on the inner side. Fore wings piceous, about three-fourths of the length of the abdomen, with a tawny stripe along the mediastinal vein; subcostal veins testaceous. Hind wings extending a little beyond the fore wings. Length of the body 11 lines.

The stout hind legs and the length of the spines on the tibiæ distinguish it from all the other African species, and the head is longer and more prominent than that of *G. capensis*.

a. Natal. From M. Gueinzus' collection.

#### 43. GRYLLUS GUTTATUS.

Fœm. *Niger, tomentosus; caput nitens, strigis duabus longitudinalibus margineque antico testaceis; palpi testacei; antennæ picæ, corpore longiores, basi testaceæ; prothoracis latera late testacea; venter testaceo vittatus; cerci testacei, abdomine longiores; oviductus testaceus, paullo longior; pedes testacei; alæ anticæ fulvæ, abdominis apicem attingentes, striga guttisque subcostalibus nigris, spatio subcostali diaphano venis pallide testaceis; alæ posticæ abdomen superantes.*

*Female.* Black, with tawny tomentum. Head shining, tomentose along the hind border, and with two longitudinal streaks of the same on the vertex; space about the eyes, clypeus in front, fore part and palpi testaceous. Antennæ piceous, longer than the body; first joint testaceous. Prothorax broadly testaceous along each side. Abdomen with a black shining dorsal ridge; under side with a testaceous stripe. Cerci testaceous, longer than the abdomen. Oviduct testaceous, a little longer than the cerci. Legs testaceous; hind tibiæ with six spines on the outer side and with five spines on the inner side. Fore wings tawny, extending to the tip of the abdomen; a black streak between the mediastinal vein and the scapular vein; three black dots on the fore side of the mediastinal vein in the right wing, and two of the same in the left wing; space between the mediastinal vein and the costa pellucid, with pale testaceous veins. Hind wings pellucid, extending beyond the abdomen; veins white. Length of the body 8 lines.

It has much resemblance to *G. contingens*, from which it differs in the markings of the prothorax and of the fore part of the head.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 44. GRYLLUS PLAGICEPS.

Mas. *Niger, nitens; caput lateribus, fascia tenui, plaga subquadrata margine antico palpisque pallide luteis; antennæ picæ; prothorax strigis duabus posticis nigro conspersis lateribusque pallide luteis; abdomen plagis tribus ventralibus guttisque lateralibus pallide luteis, segmentis cinereo marginatis; cerci ferruginei, abdomine multo breviores; oviductus piceus, abdomine longior; pedes ferruginei, femaribus posticis picco strigatis; alæ anticæ picæ, plaga basali strigaeque pallide luteis, venis subcostalibus pallide flavis; alæ posticæ brevissimæ aut nullæ.*

*Male.* Black, shining. Head pale luteous on each side between the eye and the border; a narrow pale luteous band between the eyes near the

hind border of a subquadrate patch of the same hue; this patch is notched on each side; fore part and palpi pale luteous. Antennæ picceous. Prothorax with two irregular pale luteous black-speckled streaks extending from the hind border to the disk, and with pale luteous sides. Abdomen with pale luteous dots along each side and with three pale luteous ventral patches; hind borders of the segments cinereous. Cerci ferruginous, much shorter than the abdomen. Oviduct picceous, longer than the abdomen. Legs ferruginous; hind femora with oblique paler streaks; hind tibiæ with five spines on each side. Fore wings picceous, much shorter than the abdomen, with a pale luteous patch on each inner angle at the base, and with a pale luteous streak along the mediastinal vein, and not extending to the tip; subcostal veins pale yellow. Hind wings rudimentary or none. Length of the body 9 lines.

This, like the preceding species, differs from all the American *Grylli* in the colour of the prothorax.

- a. Congo. Presented by Sir J. Richardson  
b. Cape Coast.

#### 45. GRYLLUS LINEATICUS.

Mas. *Niger, tomentosus; caput vittalis sex lituraque luteis, margine antico palpisque fulvis; antennæ basi fulvæ; prothorax litaris duabus contortis, vittis duabus lateralibus lateribusque anticis luteis; venter fulvo vittatus; pedes fulvi, picco varii, femoribus posticis oblique strigatis supra piccis; alæ anticae piccæ, abdominis apicem fere attingentes, basi pallide lutea, venis subcostalibus costaque basi albidoflavis; alæ posticæ brevissima aut nulla.*

*Male.* Black, dull. Head shining, with six luteous stripes on the vertex, the two on each side united in front; an irregular luteous mark between the middle stripes; ocelli luteous; fore part and palpi tawny. Eyes picceous. Antennæ tawny at the base. Prothorax with two convolute luteous marks on the disk, and with two lateral pale luteous stripes which are less complete in front; sides luteous in front. Pectus tawny. Abdomen with a tawny ventral stripe. Legs tawny; anterior femora and tibiæ varied with picceous above; hind femora picceous above, their outer sides with pale oblique streaks; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings picceous, extending nearly to the tip of the abdomen, pale luteous at the base; veins in front of the mediastinal vein and costa at the base whitish yellow. Hind wings not apparent. Length of the body 9 lines.

- a. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 46. GRYLLUS NOTABILIS.

Mas. *Fulvus, tomentosus; caput testaceum, nitens, nigro scæstriatum; prothorax vittis duabus nigris subundulatis, strigis duabus transversis pallidis lineolatis arcuatis; femora postica fusco pallido strigata; pedes anteriores fusco fasciati; alæ anticae abdominis apicem fere attingentes; alæ posticæ nullæ.*

*Male.* Tawny, tomentose. Head testaceous, shining, with six longitudinal black streaks; the middle pair much longer than the others, united

in front; the inner pair attenuated in front; the outer pair very short; some minute black marks in front. Eyes black. Antennæ piceous, testaceous towards the base. Prothorax with a broad black slightly undulating stripe on each side; disk with a transverse lanceolate curved pale streak on each side. Hind femora with oblique pale brown streaks; hind tibiæ with five spines on the outer side and with four on the inner side; anterior femora with brown spots; anterior tibiæ with brown bands. Fore wings extending nearly to the tip of the abdomen. Hind wings not apparent. Length of the body 7 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

#### 47. GRYLLUS IGNOBILIS.

Fœm. *Piceus, tomentosus; caput nitens, fulvo biplagiatum; antennæ corpore multo longiores; cerci abdomine paullo longiores; oviductus corpore vix brevior; femora postica fulva strigata; alæ anticæ abdomine breviores, basi strigæque testaceis, apud costam cinereæ venis testaceis; alæ posticæ brevissimæ aut nullæ.* Mas.—*Caput fulvo bilineatum; alæ anticæ abdomine vix breviores, gutta basali costaque basi albidis.*

*Female.* Piceous, tomentose. Head shining; sockets of the antennæ and a patch in front of each eye tawny. Mandibles reddish, black at the base and with black teeth. Eyes ferruginous. Antennæ much longer than the body. Cerci a little longer than the abdomen. Oviduct nearly as long as the body, forked at the tip. Hind femora with tawny oblique streaks; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings shorter than the abdomen, testaceous at the base, and with a testaceous streak along the mediastinal vein; costal space cinereous, with testaceous veins. Hind wings not developed. *Male.*—Head with two longitudinal tawny lines on the vertex. Fore wings nearly as long as the abdomen; a whitish dot at the base of the mediastinal vein; costal space whitish at the base. Length of the body 9 lines.

a—d. Natal. From M. Gueinzus' collection.

#### 48. GRYLLUS MACRURUS.

Fœm. *Piceus, tomentosus; caput nitens, facie sordide testacea; palpi piceæ; antennæ corpore multo longiores; venter testaceo vittatus; cerci sordide fulvi, abdomine longiores; oviductus corpore paullo longior; pedes postici longi, femoribus cinereo substrigatis; alæ anticæ fuscescentes, abdominis apicem attingentes, picco univittatæ; alæ posticæ abdomen longissime superantes.*

*Female.* Piceous, tomentose. Head shining, tomentose along the hind border, dingy testaceous in front. Palpi piceous. Antennæ black, much longer than the body. Abdomen beneath with a dingy testaceous stripe. Cerci dingy tawny, longer than the abdomen. Oviduct a little longer than the body. Hind legs elongate; femora obliquely and indistinctly streaked with cinereous; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings brownish, as long as the abdomen, with a piceous stripe along the lateral keel. Hind wings

pellucid, extending very much beyond the abdomen; costal streak and subcostal streak brown; veins white. Length of the body 10 lines.

a. Fantec.

#### 49. GRYLUS ATRATUS.

Mas. et fœm. *Ater, robustus, nitens; caput margine antico ferrugineo; antennæ corpori æquilongæ; cerci ferrugini, abdomine breviores; oviductus abdomine paullo longior, apice furcatus; femora posticæ substriata; alæ anticæ abdominis apicem attingentes, maris latissime tympano cinereo hyalino; alæ posticæ abdomen longe superantes.*

*Male and female.* Black, stout, smooth, shining. Head ferruginous about the mouth. Eyes piceous. Ocelli luteous. Antennæ as long as the body. Prothorax with a slight transverse furrow and a slight transverse impression. Abdomen piceous above. Cerci ferruginous, shorter than the abdomen. Oviduct of the female a little longer than the abdomen. Legs stout; hind femora indistinctly striated; hind tibiæ with four stout spines on each side. Fore wings extending to the tip of the abdomen, very broad and with a cinereous hyaline tympanum in the male. Hind wings pellucid, extending much beyond the tip of the abdomen; veins white; costa and the subcostal streak black. Length of the body 8—10½ lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

b. Sierra Leone. From Mr. Foxcroft's collection.

c. Congo. Presented by Sir. J. Richardson.

d. Fantec.

e. Abyssinia. Presented by J. C. Bowring, Esq.

#### 50. GRYLUS POSTICUS.

Fœm. *Ferruginus, subopacus; caput nitens, antice luteum piceo sexnotatum, plaga frontali nigricante; palpi testacei; oviductus corpore vir brevior; pedes rufi, femoribus posticis substrigatis; alæ anticæ abdominis apicem attingentes, striga testacea piceo marginata, spatio subcostali cinereo venis testaceis; alæ posticæ abdomen sat superantes.*  
 Var.  $\beta$ .—*Piceus; caput nigrum, antice et postice ferrugineum.*  
 Var.  $\gamma$ .—*Piceus; caput antice lividum.*

*Female.* Ferruginous, slightly shining. Head shining, luteous towards the fore border; a blackish patch on the front including the luteous ocelli and part of an anterior luteous dot; fore part with six small piceous marks, four transverse and two longitudinal. Eyes darkly livid. Palpi testaceous. Oviduct nearly as long as the body. Legs red; hind femora with slightly marked oblique darker streaks; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings extending to the tip of the abdomen; a testaceous streak along the mediastinal vein, bordered with piceous in front; subcostal space cinereous, with testaceous veins. Hind wings extending somewhat beyond the abdomen. *Var.  $\beta$ .*—Piceous. Head black, ferruginous along the hind border and in front. *Var.  $\gamma$ .*—Piceous. Head in front, eyes and ocelli livid. Cerci shorter than the abdomen. Oviduct as long as the body. Fore wings extending rather beyond the abdomen: a blackish subcostal streak. Hind wings extending a little beyond the fore wings. Length of the body 8—13 lines.



*G. macrurus* and *G. guttatus*, like it, have long hind tibiæ, but in these two species the spines are much stouter. *G. macrurus* agrees with it also in the prothorax, which is slightly narrower in front, and in the head, which is rather smaller than that of the more typical species.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

b—d. Natal. From M. Gueinzins' collection.

e. E. Africa. Presented by Earl Russell.

#### 51. GRYLUS COMPACTUS.

Mas. *Niger, nitens*; *caput antico fulvum*; *palpi piceo*; *abdomen basi subtus et pectus fulva*; *cerci abdomine multo breviores*; *pedes nigricantes, femoribus subtus fulvo variis, femoribus posticis strigatis*; *alæ anticæ piceæ, abdomen perpaullo superantes*; *alæ posticæ brevissimæ aut nullæ*.

*Male*. Black, shining. Fore part of the head and sockets of the antennæ tawny. Eyes, palpi and antennæ piceous. Abdomen beneath towards the base and pectus tawny. Cerci much shorter than the abdomen. Legs blackish; femora partly tawny beneath; hind femora with oblique tawny streaks; hind tibiæ with five tawny spines on each side. Fore wings piceous, extending very little beyond the abdomen; apical part thickly reticulated. Hind wings not developed. Length of the body  $7\frac{1}{2}$  lines.

The smaller spines on the hind tibiæ of this species and their reddish colour distinguish it from *G. atratus*.

a. Natal. From M. Gueinzins' collection.

#### 52. GRYLUS CONSOCIUS.

Mas. *Testaceus, nitens*; *caput nigro fasciatum*; *palpi picei*; *prothorax transverse impressus*; *femora postica substrigata*; *alæ anticæ cinereæ, abdomen paullo superantes, vitta testacea, spatium subcostali diaphano*; *alæ posticæ brevissimæ aut nullæ*.

*Male*. Testaceous, shining. Head with a black band between the eyes, which are lurid. Palpi piceous. Prothorax with a transverse impression at a little behind the middle. Hind femora with slightly indicated darker streaks. Fore wings cinereous, extending a little beyond the tip of the abdomen; a testaceous stripe along the mediastinal vein; anterior space pellucid. Hind wings not apparent. Length of the body 9 lines.

The specimen described is injured, and the number of the spines of the hind tibiæ cannot be ascertained. The hind tibiæ are much shorter than those of *G. guttatus* and of *G. posticus*.

a. S. Africa. Presented by Sir A. Smith.

#### 53. GRYLUS PARALLELUS.

Mas. *Niger, nitens*; *caput fascia, linea anteriore transversa angulata margineque antico fulvis, striga antica albida, macula anteriore picea*; *palpi fulvi, apice picei*; *prothorax fulvo marginatus et biplagiatus*; *pectus fulvum*; *cerci picei, abdomini æquilongi*; *pedes*

*fulvi, femoribus posticis fulco strigatis; alæ anticæ piceæ, abdominis apicem attingentis, spatio costali diaphano venis pallide testaceis; alæ postica abdomen longe superantes.*

*Male.* Black, shining. Head with a tawny band behind the eyes and with an angular transverse tawny line between the ocelli; a whitish streak on the clypeus; fore part and under side tawny, the former with a very large piceous spot. Eyes piceous. Palpi tawny; third joint piceous towards the tip. Prothorax with a tawny border and with two large tawny patches on the hind side. Pectus tawny. Abdomen piceous beneath. Cerci piceous, as long as the abdomen. Legs tawny; hind femora with oblique piceous streaks; hind tibiæ with five spines on each side. Fore wings piceous, extending to the tip of the abdomen, pellucid and with pale testaceous veins along the costa; left wing with a pellucid stripe along the mediastinal vein. Hind wings extending much beyond the abdomen. Length of the body 9½ lines.

*a.* Natal. From M. Guézin's collection.

#### 54. GRYLUS LUCENS.

*Mas.* *Niger, nitens; caput lateribus, margine antico palpisque testaceis; antennæ piceæ, basi testacæ; thoracis latera testacea; abdomen piceum, ritta ventrali testacea; cerci testacei, abdomine multo breviores; pedes testacei, femoribus apice tibiisque basi fulvis, femoribus posticis supra piceis testaceo strigatis; alæ anticæ fuscæ, abdominis apicem attingentes, spatio subcostali tympanoque diaphanis; alæ postica abdomen longissime superantes.*

*Male.* Black, shining. Head testaceous on each side and in front. Palpi testaceous. Antennæ piceous, testaceous at the base. Thorax testaceous along each side. Pectus testaceous. Abdomen piceous, with a testaceous ventral stripe. Cerci testaceous, much shorter than the abdomen. Legs testaceous; femora at the tips and tibiæ at the base tawny; hind femora piceous above, with testaceous oblique streaks on each side; hind tibiæ with five spines on each side. Fore wings brown, extending to the tip of the abdomen; subcostal space and tympanum pellucid; apical part thickly reticulated. Hind wings pellucid, extending very much beyond the abdomen; veins white. Length of the body 9 lines.

*a.* Sierra Leone. Presented by the Rev. D. F. Morgan.

#### Madagascar.

#### 55. GRYLUS MADAGASCARIENSIS.

*Mas.* *Niger, nitens, robustus; caput anticæ obscure rufum; palpi picei; venter nonnunquam rufo unimaculatus; pedes rufi, crassi, femoribus posticis rix striatis, spinis longis crassis; alæ anticæ pallidissime testacæ, abdominis apicem fere attingentes, disco pallide cinereo; alæ postica brevissima.*

*Male.* Black, shining, stout. Head dark red in front and beneath except the clypeus. Eyes and palpi piceous. Abdomen with a dark red spot on the under side or wholly black. Legs red, very stout; hind femora

with very indistinct oblique striæ on the outer side; hind tibiæ with five or seven spines on the outer side and with four on the inner side; spines very long and stout. Fore wings very pale testaceous, extending nearly to the tip of the abdomen; disk pale cinereous, wings rudimentary. Length of the body  $10\frac{1}{2}$ — $11\frac{1}{2}$  lines.

*a, b.* Madagascar. Presented by F. Walker, Esq.

### W. Asia.

#### 56. GRYLLUS ATER.

*Fœm.* *Ater, nitens; antennæ corpore breviores; cerci abdominis dimidio longiores; oviductus abdomini æquilongus; pedes crassi, femoribus posticis subtus rufis; alæ anticæ abdominis dimidio non longiores; alæ posticæ minimæ aut nullæ.*

*Female.* Deep black, smooth, shining. Antennæ more than half the length of the body. Prothorax with a slight longitudinal furrow and with a few slight impressions on each side. Cerci stout, more than half the length of the abdomen. Oviduct as long as the abdomen; valves forked at the tip. Legs thick; hind femora dark red beneath for more than half the length from the base; hind tibiæ armed on each side with six spines. Fore wings about half the length of the abdomen. Length of the body  $8\frac{1}{2}$  lines.

The shining body of this species distinguishes it from *G. melas*, and the red under side of the femora from *G. atratus*: in the latter character it resembles *G. capensis*, from which it differs in the fore wings, which are wholly black.

*a.* Syria. From Mr. Lowne's collection.

### S. Asia.

<i>a.</i> Head red.	- - - - -	erythrocephalus.
<i>aa.</i> Head not red.		
<i>b.</i> Legs black.		
<i>c.</i> Prothorax tawny about the hind angles.	- - - - -	spureatus.
<i>cc.</i> Prothorax with two tawny lines.	- - - - -	interruptus.
<i>ccc.</i> Prothorax with a ferruginous fore border.	- - - - -	conscitus.
<i>bb.</i> Legs blackish, femora pale except at the tips.	- - - - -	clarus.
<i>bbb.</i> Legs tawny.		
<i>c.</i> Fore wings black.		
<i>d.</i> Head black.	- - - - -	melanocephalus.
<i>dd.</i> Head pale.	- - - - -	orientalis.
<i>cc.</i> Fore wings piceous.	- - - - -	conscitus.
<i>ccc.</i> Fore wings not black or piceous.		
<i>d.</i> Fore wings dusky along the costa.		
<i>e.</i> Hind femora distinctly streaked.		
<i>f.</i> Size large	- - - - -	membranaceus.
<i>ff.</i> Size rather small.	- - - - -	supplicans.
<i>ee.</i> Hind femora not streaked.		
<i>f.</i> Head with a band.	- - - - -	minusculus.
<i>ff.</i> Head not banded.	- - - - -	tenellus.

- dd.* Fore wings pellucid along the costa.  
*e.* Head black.  
*f.* Fore wings as long as the body. - - - - - signifrons.  
*ff.* Fore wings shorter than the body. - - - - - confirmatus.  
*fff.* Fore wings shorter than the abdomen. - - - - - aspersus.  
*ce.* Head pale. - - - - - testaceus.

57. *GRYLLUS MEMBRANACEUS.*

*membranaceus*, *Serv. Hist. Orth.* 334.

- a.* China? Presented by Major Gen. Hardwicke.  
*b.* Philippine Isles. From Mr. Cuming's collection.  
*c.* Borneo. Presented by the Admiralty.

58. *GRYLLUS ERYTHROCEPHALUS.*

*erythrocephalus*, *Serv. Hist. Orth.* 339.

Hindustan.

- a.* Ceylon.

59. *GRYLLUS MELANOCEPHALUS.*

*melanocephalus*, *Serv. Hist. Orth.* 342.

Bengal.

60. *GRYLLUS? ORIENTALIS.*

*Acheta orientalis*, *Fabr. Ent. Syst.* ii. 30—*Gryllus orientalis*, *Burm. Handb. Ent.* ii. 735.

This may be a species of *Brachytrypes*.

Tranquebar.

61. *GRYLLUS CONCISUS.*

*Æm.* *Niger, nitens; caput maculis duabus facique testaceis; palpi et prothoracis anguli antici albido-testacei; venter testaceo late vittatus; cerci et oviductus abdomine longiores; pedes testacei, supra nigricantes, femoribus posticis oblique strigatis; alæ anticae piceæ, abdomine paullo breviores, apud costam diaphane testaceo venosæ; alæ posticae abdomen longissime superantes.*

*Female.* Black, shining. Head testaceous in front and with a testaceous spot on each side at the base of the antenna. Eyes and ocelli testaceous. Palpi whitish testaceous. Prothorax with a whitish testaceous spot on each fore angle. Pectus testaceous. Abdomen with a broad testaceous ventral stripe. Cerci and oviduct longer than the abdomen, the latter tawny with black tips. Legs testaceous, blackish above; hind femora with pale oblique streaks on the outer side: hind tibiae with five spines on the outer side and with four on the inner side. Fore wings piceous, a little shorter than the abdomen: subcostal space pellucid, and with testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body  $7\frac{1}{2}$  lines.

- a.* Burmah. Presented by W. W. Saunders, Esq.

## 62. GRYLLUS SPURCATUS.

**Fæm.** *Niger, subopacus; caput nitens; antennæ corpore longiores; prothorax maculis duabus posticis luteis valde incisís; cerci et oviductus æquilongí, abdomine breviores; femora postica substriata; alæ anticæ piceæ, abdominis apicem attingentes, striga venisque subcostalibus albidis; alæ posticæ brevissimæ aut nullæ.*

*Male and female.* Black, rather dull. Head shining. Eyes piceous. Ocelli luteous. Antennæ longer than the body. Prothorax with a much excavated luteous spot on each hind angle. Cerci and oviduct shorter than the abdomen, about equal in length. Hind femora with indistinct oblique striæ; hind tibiæ with six spines on each side. Fore wings piceous, extending to the tip of the abdomen; a dingy whitish streak along the mediastinal vein; veins in front of this streak whitish. Hind wings none or rudimentary. Length of the body  $7\frac{1}{2}$  lines.

*a.* Macao. Presented by J. C. Bowring, Esq.

*b, c.* Hong Kong. Presented by J. C. Bowring, Esq.

## 63. GRYLLUS INTERRUPTUS.

**Mas.** *Niger, nitens; caput plagis duabus, linea transversa guttaque antica testaceis; prothorax margine antico tenuissimo vittisque duabus interruptis fulvis; cerci abdominis dimidio non breviores; femora postica basi subtus lutea; tarsi postici basi supra fulvi; alæ anticæ piceæ, basi fulvæ, abdominis dimidio non longiores; alæ posticæ duplo breviores.*

*Male.* Black, shining. Head with a testaceous patch on each side in front of the eye, with a transverse intermediate testaceous line and with a testaceous dot in front. Eyes and ocelli livid. Prothorax very narrowly bordered with tawny in front; a tawny interrupted stripe on each side. Cerci about half the length of the abdomen. Hind femora luteous beneath towards the base; hind tibiæ with five spines on the outer side and with four on the inner side; hind tarsi tawny above towards the base. Fore wings piceous, about half the length of the abdomen, tawny at the base. Hind wings about half the length of the fore wings. Length of the body  $10\frac{1}{2}$  lines.

The specimen here described has not acquired its ultimate state. The larger size and the difference in the markings of the prothorax distinguish it from *G. spurcatus*.

*a.* Hong Kong. Presented by J. C. Bowring, Esq.

## 64. GRYLLUS CONSCITUS.

**Mas.** *Ater, nitens; palpi picei; prothorax margine antico tenuissime ferrugineo; pedes picei, tibiis posticis fulvo spinosis; alæ anticæ abdomen paullo superantes, basi vittaque lata pallide testaceis, costa basi albida; alæ posticæ abdomen longissime superantes.*

*Male.* Deep black, shining. Ocelli piceous. Eyes livid. Mandibles red at the base. Palpi piceous. Fore border of the prothorax very narrowly ferruginous. Legs piceous; hind tibiæ with five tawny teeth on

each side. Fore wings extending a little beyond the tip of the abdomen, with a broad pale testaceous stripe which is much dilated at the base and extends along the mediastinal vein; costa whitish at the base. Hind wings extending very much beyond the abdomen. Length of the body 6 lines.

It closely resembles *G. bimaculatus*, but is much smaller.

a. Nepal. Presented by Major Gen. Hardwicke.

#### 65. GRYLUS SUPPLICANS.

Fam. *Fulvus, sat gracilis, subnitens; caput nitens, fascia postica plagaque divisa piceis; antennæ ferrugineæ, basi testacæ; prothorax piceo bifasciatus, margine antico hirsuto; cerci et oviductus æquilongi, abdomine longiores; pedes testacæ, femoribus nigro notatis; alæ æquilongæ, abdominis apicem attingentes; alæ antiçæ venis subcostalibus pallide testacis.*

*Acheta supplicans, Wlk. Ann. Nat. Hist. 3rd Ser. iv. 221.*

*Female.* Tawny, rather slender, slightly shining. Head shining, with a piceous band along the hind border and with an anterior piceous patch which is divided by a tawny transverse line and an anterior tawny streak. Antennæ ferruginous, testaceous at the base. Prothorax hirsute along the fore border; two piceous bands, the first very irregular, the second on the hind border. Cerci and oviduct of equal length, longer than the abdomen. Legs testaceous; femora with some black marks; hind femora with oblique interrupted black streaks; hind tibiæ with four spines on each side. Fore wings extending to the tip of the abdomen; subcostal space with pale testaceous veins. Hind wings as long as the fore wings. Length of the body 6 lines.

This and the three following species are nearly allied and form a group in the genus.

a, b Ceylon. Presented by Dr. Templeton.

#### 66. GRYLUS MINUSCULUS.

Fam. *Niger, nitens, subtus testaceus; caput fascia, linea anteriore transversa margineque antico luteis; palpi pallide testacæ; antennæ corpore longiores; prothorax plagis tribus posticis luteis, vittis duabus marginalibus pallide testacis antice dilatatis; oviductus abdomini æquilongus; femora postica subobsolete strigata; alæ antiçæ abdomine breviores, strigi nigricante, spatio subcostali cinereo; alæ posticæ abdomen longissimæ superantes.*

*Female.* Black, shining, testaceous beneath. Head with an irregular luteous band on the vertex and with a transverse luteous line on the front; fore part luteous. Eyes livid. Ocelli luteous. Palpi pale testaceous. Antennæ longer than the body. Prothorax with three luteous patches on the hind border and with two marginal pale testaceous stripes which are dilated in front. Oviduct as long as the abdomen. Hind femora with the oblique streaks very slightly indicated; hind tibiæ with five spines on the outer side and with four on the inner side. Fore wings extending to three-fourths of the length of the abdomen, with a blackish streak along

the mediastinal vein; anterior space cinereous. Hind wings extending very much beyond the abdomen. Length of the body  $7\frac{1}{2}$  lines.

The markings on the prothorax are very different from those of *G. supplicans*.

a. Amoy, China. From Mr. Stevens' collection.

#### 67. GRYLLUS TENELLUS.

Mas. *Piceus, nitens, subtus fulvus; caput antice fulvum; palpi testacei; antennæ corpore multo longiores, basi testacæ; prothoracis latera testacea; abdomen vitta ventrali fulva; cerci abdomine breviores; pedes fulvi, femoribus posticis strigatis; alæ anticæ abdominis apicem attingentes, spatium subcostali pallide cinereo venis fulvis; alæ posticæ abdomen longissime superantes.*

*Male.* Piceous, shining, tawny beneath. Head tawny in front. Eyes testaceous. Ocelli luteous. Palpi testaceous. Antennæ testaceous at the base, much longer than the body. Prothorax testaceous along each side. Pectus tawny. Abdomen with a tawny ventral spine. Cerci somewhat shorter than the abdomen. Legs tawny; hind femora with oblique darker streaks; spines on each side of the hind tibiæ varying from three to four in number. Fore wings extending to the tip of the abdomen; space between the costa and the mediastinal vein pale cinereous with tawny veins. Hind wings extending very far beyond the abdomen. Length of the body 7 lines.

It much resembles *G. concisus*; the hind femora of that species are much darker and more distinctly streaked, and the fore wings are shorter.

a. Ceylon. Presented by Dr. Templeton.

#### 68. GRYLLUS CONFIRMATUS.

Mas. *Fulvus, subopacus; caput nitens, plaga frontali nigra divisa guttam includente; antennæ piceæ, corpore longiores, basi fulvæ; cerci abdomini æquilongi; femora postica strigata; alæ anticæ abdomine paullo breviores, area subcostali diaphana venis testaceis; alæ posticæ abdomen longissime superantes.*

*Acheta confirmata, Wlk. Ann. Nat. Hist. 3rd Ser. iv. 221.*

*Male.* Tawny, hardly shining. Head shining; a black patch on the front, divided by a transverse tawny line and including an anterior tawny dot. Eyes tawny. Ocelli luteous. Antennæ piceous, tawny at the base, rather longer than the body. Prothorax testaceous along each side. Abdomen blackish, tawny at the base. Cerci as long as the abdomen. Hind femora with oblique darker streaks; hind tibiæ with four spines on each side. Fore wings a little shorter than the abdomen; subcostal space pellucid, with testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 6 lines.

The much paler colour of this species distinguishes it from *G. concisus*.

a. Ceylon. Presented by Dr. Templeton.

69. *GRYLLUS SIGNIFRONS*.

*Fem.* *Niger, tomentosus, subtus fulvus; caput nitens, antice fulvum, rittis duabus pallide flavis, strigis duabus obliquis testaceis; palpi obscure fulvi; antennæ basi fulvæ, corpore puullo longiores; prothorax apud angulos anticos fulvus; cerci abdomine breviores; oviductus abdomine longior; pedes fulvi, femoribus posticis pallido strigatis; alæ antica abdominis apicem attingentes, area subcostali diaphana venis pallide testaceis; alæ posticæ abdomen longissime superantes.*

*Female.* Black, tomentose, tawny beneath. Head shining, tawny in front, a pale yellow stripe along each eye above; an oblique testaceous streak along the socket of each eye. Eyes piceous. Palpi dusky tawny. Antennæ a little longer than the body, tawny at the base. Prothorax tawny about each fore angle. Cerci much shorter than the oviduct, which is rather longer than the abdomen. Legs tawny; hind femora with oblique paler streaks; hind tibiæ rather long, with five spines on the outer side and with four on the inner side. Fore wings extending to the tip of the abdomen; space along the costa pellucid, with pale testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body  $10\frac{1}{2}$  lines.

The broad pale stripe adjoining the inner side of each eye sufficiently distinguishes this species.

a. N. Hindostan. From Dr. Hooker's collection.

70. *GRYLLUS TESTACEUS*.

*Fem.* *Fulvus, nitens, subtus testaceus; caput antice testaceum; palpi pallide testacei; prothorax antice piceo biplagiatus; abdomen piceum basi rittaque lata ventrali testaceis; cerci fulvi, abdomine breviores; oviductus piceus, abdomine longior; femora postica substrigata, tibiæ posticæ sat longæ; alæ anticæ abdominæ breviores, strigæ piceæ, area subcostali diaphana; venis pallide testaceis; alæ posticæ abdomen longe superantes.* *Mas.*—*Alæ anticæ luridæ, abdominis apicem attingentes, basi rittaque piceis.*

*Female.* Tawny, shining, testaceous beneath. Head testaceous in front and about the eyes, whitish about the mouth. Eyes darkly livid. Palpi pale testaceous. Prothorax with a piceous patch on each side of the fore border. Abdomen piceous, testaceous at the base and along the fore borders of the segments; under side with a broad testaceous stripe. Cerci tawny, shorter than the abdomen. Oviduct piceous, longer than the abdomen. Hind femora with indistinct oblique streaks; hind tibiæ long, with six or seven spines on the outer side and with five on the inner side. Fore wings shorter than the abdomen, with a piceous streak extending from the base along the mediastinal vein; subcostal space nearly colourless, with pale testaceous veins. Hind wings colourless, extending much beyond the abdomen. Costa and subcostal streak tawny; veins white. *Male.*—Fore wings livid, extending to the tip of the abdomen, piceous at the base and



with a piceous stripe along the mediastinal vein. Length of the body 12 lines.

a, b. Canton. Presented by E. Larkin, Esq.

c. China.

#### 71. GRYLLUS CLARUS.

Fœm. *Ferrugineus, nitens, sat gracilis; caput margine antico fulvo; palpi sordide testacei, articulo 3o clarato; antennæ corpore plus duplo longiores; cerci abdomine vix breviores; oviductus abdomine longior; pedes nigricantes, femoribus testaceis apice nigricantibus, femoribus tibiisque posticis longis; alæ vix ullæ.*

*Female.* Ferruginous, shining, rather narrow. Head tawny about the fore border. Eyes black, rather prominent. Palpi dingy testaceous; third joint clavate. Antennæ black, tawny towards the base, more than twice the length of the body. Cerci tawny, nearly as long as the abdomen. Oviduct longer than the abdomen. Legs blackish; coxæ and femora testaceous, the latter blackish at the tips, hind legs elongate, their tibiæ with six small and with four large spines on the outer side and with four small and four large spines on the inner side. Wings rudimentary. Length of the body 9 lines.

This species represents a distinct group, but hardly differs sufficiently from the typical *Grylli* to be separated from that genus.

a. Ceylon. Presented by Dr. Templeton.

#### 72. GRYLLUS ASPERSUS.

Fœm. *Testaceus, apterus,\* nitens; caput fasciis duabus (1a testaceo lineata) maculisque duabus anterioribus incisus nigris; palpi pallide testacei; antennæ nigre, basi testaceæ; prothorax picco plagiatus et guttatus; oviductus abdomine paullo brevior; femora postica fusco strigata.*

*Female.* Testaceous, shining. Head with two black bands; first band on the hind border, intersected by six longitudinal testaceous lines; second broader, between the eyes; two large anterior black spots, cleft in front, the first between the sockets of the antennæ. Eyes black. Palpi pale testaceous. Antennæ black, testaceous at the base. Prothorax with several piceous patches and small dots; sides wholly testaceous. Abdomen piceous beneath. Cerci piceous towards the tips, as long as the abdomen. Oviduct a little shorter than the cerci. Legs stout; hind femora obliquely streaked with brown; hind tibiæ with five spines on each side. Fore wings tawny, a little shorter than the abdomen, with a testaceous stripe and a piceous stripe along the keel on each side; subcostal space pellucid. Hind wings very short. Length of the body 7 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

\* Error. See Eng. version.

## Australasia.

<i>a.</i> Legs banded.	-	-	-	-	-	-	-	-	elegans.
<i>aa.</i> Legs not banded.									
<i>b.</i> Colour black above.	-	-	-	-	-	-	-	-	atratus.
<i>bb.</i> Colour blackish brown above.	-	-	-	-	-	-	-	-	mitratus.
<i>bbb.</i> Colour partly pale above.									
<i>c.</i> Fore wings blackish.									
<i>d.</i> Head black above.	-	-	-	-	-	-	-	-	occipitalis.
<i>dd.</i> Head not black above.	-	-	-	-	-	-	-	-	perspicillatus.
<i>ce.</i> Fore wings not blackish.									
<i>d.</i> Wings complete.	-	-	-	-	-	-	-	-	consimilis.
<i>dd.</i> Wings short.									
<i>e.</i> Palpi not whitish.	-	-	-	-	-	-	-	-	brachypterus.
<i>ee.</i> Palpi whitish.	-	-	-	-	-	-	-	-	misor.

## 73. GRYLUS MITRATUS.

mitratus, *Hagenbach, MSS., Burm. Handb. Ent.* ii. 734--perspicillatus, var. ?

Java.

## 74. GRYLUS PERSPICILLATUS.

perspicillatus, *Serr. Hist. Orth.* 338.

Java.

## 75. GRYLUS OCCIPITALIS.

occipitalis, *Serr. Hist. Orth.* 339—perspicillatus, var. ?

Java.

## 76. GRYLUS ELEGANS.

elegans, *Grier. Voy. Ind. Orient.* 495, pl. 4, f. 4. *Serr. Hist. Orth.* 340—leucostichus, *Hagenbach, MSS., Burm. Handb. Ent.* ii. 735.

*a, b.* Java. From Mr. Argent's collection.

*c.* Sumatra. From Sir Stamford Raffles' collection.

## 77. GRYLUS ATRATUS.

Mas. *Ater; caput clypeo ocellisque obscure lividis; cerci nigricantes, basi lividi, abdomine multo breviores; oviductus piceus, abdomini aequalongus; alæ anticae abdomine paullo breviores; alæ posticæ nullæ.*

*Male.* Deep black. Head rather prominent in front; clypeus, eyes and ocelli dark livid. Cerci blackish, livid at the base, much shorter than the abdomen. Oviduct piceous, as long as the abdomen. Hind tibiæ with four spines on each side. Fore wings a little shorter than the abdomen. Hind wings wanting. Length of the body 7 lines.

It is much smaller and somewhat more slender than *G. atratus*.

*a.* Philippine Isles. From Mr. Cuming's collection.

## 78. GRYLLUS CONSIMILIS.

**Fœm.** *Niger, tomentosus; caput nitens, fascia strigisque duabus luteis, facie palpisque fulvis; cœci picei, abdomine vix breviores; oviductus abdomine valde longior; pedes picei, femoribus posticis pallido strigatis; alæ anticæ piceæ, abdomen paullo superantes, apud costam cinereæ, testacco pallido venosæ; alæ posticæ abdomen longe superantes.*

*Female.* Black, tomentose. Head shining except the hind border, tawny in front; an irregular luteous band between the sockets of the antennæ; a pale luteous streak along each eye above. Palpi tawny. Eyes piceous. Cœci piceous, nearly as long as the abdomen. Oviduct piceous, very much longer than the abdomen. Legs piceous; hind femora with oblique pale streaks on the outer side; hind tibiæ with six spines on the outer side and with five on the inner side. Fore wings piceous, extending a little beyond the tip of the abdomen; space along the costa cinereous, with pale testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 9 lines.

It has a great resemblance to *G. membranaceus*, but is much smaller, and may be distinguished also by the luteous band of the head.

a. Philippine Isles. From Mr. Cuming's collection.

## 79. GRYLLUS MISER.

**Fœm.** *Piceus, subnitens, subtus albido-testaceus; caput fascia tenui, striga facieque albido-testaceis; palpi albidii, articulo 3o clavato apice piceo; prothorax postice angustior, vittis duabus albido-testaceis; abdomen lituris variis et segmentorum marginibus posticis sordide testaceis; oviductus fulvus, abdomine paullo longior, apice furcatus; pedes albido-testacei, femoribus posticis piceo strigatis; alæ anticæ abdomine multo breviores, striga pallide testacea, apud costam diaphane testaceo pallido venosæ; alæ posticæ nullæ.*

*Female.* Piceous, slightly shining, whitish testaceous beneath. Head with a narrow whitish testaceous band behind the antennæ and with a whitish testaceous streak between the latter; fore part whitish testaceous. Palpi whitish; third joint clavate, piceous and truncated at the tip. Prothorax narrower hindward, irregularly whitish testaceous along each side, which is piceous. Abdomen with various marks and with the hind borders of the segments dingy testaceous. Oviduct tawny, a little longer than the abdomen; valves forked at the tip. Legs whitish testaceous; hind femora with oblique parallel pale piceous streaks; hind tibiæ partly piceous, with four spines on each side. Fore wings much shorter than the abdomen; a short pale testaceous streak proceeding from the base along the mediastinal vein; subcostal space pellucid, with pale testaceous veins. Length of the body  $7\frac{1}{2}$  lines.

a. Borneo. Presented by the Admiralty.

## 80. GRYLUS BRACHYPTERUS.

brachypterus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 230.  
Java.

## Australia.

<i>a.</i>	Prothorax black.	
<i>b.</i>	Head with not more than one line.	
<i>c.</i>	Size large.	fuliginosus.
<i>cc.</i>	Size small.	
<i>d.</i>	Prothorax with a pale fore border.	diminutus.
<i>dd.</i>	Prothorax with some pale marks near the hind border.	parvulus.
<i>bb.</i>	Head with six lines.	
<i>c.</i>	Head with the two outer lines on each side united in front.	lineiceps.
<i>cc.</i>	Head with the two outer lines on each side not united in front.	comparatus.
<i>aa.</i>	Prothorax not black.	
<i>b.</i>	Wings complete.	
<i>c.</i>	Head not striped.	
<i>d.</i>	Size rather large.	commodus.
<i>dd.</i>	Size small.	diminutus.
<i>cc.</i>	Head striped.	lepidus.
<i>bb.</i>	Wings none or rudimentary.	
<i>c.</i>	Head without marks.	pallens.
<i>cc.</i>	Head banded.	sigillatus.
<i>ccc.</i>	Head striped.	minusculus.

## 81. GRYLUS FULIGINOSUS.

*Acheta fuliginosa?* *Stoll, Saut. et Grill.* pl. 3, f. 10—*Gryllus fuliginosus*, *Serr. Hist. Orth.* 331.

In the long hind tibiae this species agrees with *G. macrurus*, but may be distinguished from it by the shining prothorax.

- a.* Australia. Presented by the Haslar Hospital.  
*a, b.* Adelaide. From Mr. Stevens' collection.  
*c, d.* Australia. Presented by the Entomological Club.  
*e, f.* Australia.  
*g.* Australia. From Mr. Darnley's collection.  
*h, i.* S. Australia. Presented by R. Bakewell, Esq.  
*j, k.* New Zealand. Presented by Col. Bolton.  
*l.* ——— ?

## 82. GRYLUS PALLENS.

*pallens*, *Serr. Hist. Orth.* 311.

Australia.

## 83. GRYLLUS DIMINUENS.

Mas. *Niger, nitens; caput fulvo notatum; palpi picei; antennæ corpore longiores; prothorax margine antico tenuiter fulvo; venter ferrugineus; cerci fulvi, abdomine multo breviores; pedes picei, femoribus posticis subtus testaceis; alæ anticæ cinereæ, abdomine multo breviores, apud costam diaphanæ venis ulbidis; alæ posticæ nullæ.* Var.?—*Prothorax postice fulvo bimaculatus; abdomen segmentorum marginibus ventreeque fulvis; alæ nigrae, minime, margine vittaque fulvis.* Fœm.?—*Oviductus fulvus, abdomine paullo longior; alæ anticæ abdominis dimidio breviores, basi costaque testaceis.*

*Male.* Black, shining. Head with some tawny marks in front. Ocelli yellow. Palpi piceous. Antennæ longer than the body. Prothorax with a narrow tawny fore border. Abdomen ferruginous beneath. Cerci tawny, much shorter than the abdomen. Legs piceous; hind femora testaceous beneath; hind tibiæ with four tawny spines on each side. Fore wings cinereous, full half the length of the abdomen; veins whitish in the subcostal space, which is pellucid. Var.?—Prothorax with a tawny spot on each side of the hind border. Abdomen with the hind borders of the segments tawny; under side tawny, piceous at the tip. Wings black, rudimentary, each with a tawny border and a tawny stripe. *Female?*—Oviduct tawny, a little longer than the abdomen. Fore wings much less than half the length of the abdomen, testaceous at the base and along the costa. Length of the body 7 lines.

It has some resemblance to *G. miser*, but the body and legs are much darker.

- a. Australia. From Mr. Damel's collection.
- b. S. Australia. Presented by R. Bakewell, Esq.
- c. Tasmania. From Mr. A. J. Smith's collection.

## 84. GRYLLUS PARVULUS.

Fœm. *Niger, nitens, subtus luteus; caput vitta, fascia facieque luteis; palpi picei; antennæ corpore longiores; prothorax strigis sex posticis transversis luteis; cerci abdomine breviores; oviductus abdomini aquilongus; pedes sordide testacci, femoribus posticis piceo strigatis; alæ anticæ piceæ, abdomine breviores, linea testacea, apud costam diaphanæ testaceo venosæ; alæ posticæ nullæ.*

*Female.* Black, shining, luteous beneath. Head with the fore part, a slender stripe on the vertex and a narrow band between the eyes luteous. Ocelli luteous. Palpi piceous. Antennæ luteous at the base, longer than the body. Prothorax with three transverse luteous streaks on each side near the hind border. Cerci piceous, shorter than the abdomen. Oviduct as long as the abdomen. Legs dingy testaceous; hind femora with piceous oblique streaks on the outer side; hind tibiæ with five spines on each side. Fore wings piceous, about two-thirds of the length of the abdomen, with a testaceous line along the lateral keel; subcostal space pellucid, with testaceous veins. Hind wings obsolete or rudimentary. Length of the body  $5\frac{1}{2}$  lines.

The markings of the head and of the prothorax distinguish it from *G. miser*.

a. Australia. Presented by the Haslar Hospital.

#### 85. GRILLUS COMPARATUS.

*Mas. Niger, nitens; caput lineis sex fulvis, linea transversa angulata facique testaceis; palpi pallide testacei; antennae corpore multo longiores; prothorax lituris lateribusque ferrugineis; venter testaceo late vittatus; cerci fulvi, abdomini aequilongi; pedes testacei, femoribus posticis piceis testaceo strigatis; alae anticae fuscescentes, abdominis apicem attingentes, vitta picea, apud costam diaphana albo venosa; alae posticae abdomen longissime superantes.*

*Male.* Black, shining. Head with six longitudinal tawny lines on the vertex, testaceous in front, and with a testaceous transverse angular line between the eyes, which are piceous. Ocelli testaceous. Palpi pale testaceous. Antennae piceous, much longer than the body. Prothorax ferruginous along each side and with some indistinct ferruginous marks on each side of the disk. Pectus testaceous. Abdomen piceous, with a broad testaceous ventral stripe. Cerci tawny, as long as the abdomen. Legs testaceous; hind legs piceous; hind femora with testaceous oblique streaks on the outer side, wholly testaceous beneath. Fore wings brownish, extending to the tip of the abdomen, with a piceous stripe along the mediastinal vein; subcostal space pellucid, with white veins. Hind wings pellucid, extending very much beyond the abdomen; costal streak and subcostal streak brown; veins white. Length of the body 7 lines.

a. Australia. Presented by the Entomological Club.

#### 86. GRILLUS LINEICEPS.

*Fæm. Niger, nitens; caput fasciis duabus (2a arcuata), vittis sex lateribusque anticis testaceis; palpi testacei; prothorax vittis duabus interruptis et abbreviatis lateribusque testaceis; abdomen testaceo notatum et subtus vittatum; oviductus testaceus, apice niger, cercis brevior, abdominis dimidio non longior; pedes testacei, nigricante varii, femoribus posticis cæcis ferrugineis pallido strigatis; alae vix ullæ.*

*Female.* Black, shining. Head testaceous on each side in front; six testaceous stripes on the vertex, the two outer pairs united on each side in front; a narrow testaceous band between the eyes and a curved one more in front. Eyes black. Palpi testaceous. Prothorax with testaceous sides and with two testaceous stripes which are interrupted and much abbreviated in front. Abdomen with small testaceous marks along each side; under side with two lateral testaceous spots near the tip and with a testaceous stripe. Oviduct testaceous, with a black tip, about half the length of the abdomen, shorter than the cerci. Legs testaceous, partly blackish above; hind femora ferruginous and with oblique pale streaks on the outer side; hind tibiae short, with four spines on each side. Wings rudimentary. Length of the body 7 lines.

The specimen described may not have attained its full growth, but the markings distinguish it from the other species of *Gryllus*.

a. Australia. From Major Parry's collection.

### 87. GRYLLUS COMMODUS.

*Fœm.* *Piceus, nitens; caput testaceo pallido bimaculatum, antice fulvum; antennæ basi fulvæ, corpore longiores; prothorax maculis duabus discoidalibus fulvis transversis; venter niger, basi fulvus; cerci ferruginei, abdomine longiores; oviductus corpore vix brevior; pedes fulvi, femoribus posticis substrigatis; alæ anticæ luridæ, abdominis apicem attingentes, apud costam diaphanæ testaceo venosæ; alæ posticæ abdomen longissime superantes.*

*Female.* Piceous, smooth, shining. Head tawny on each side and in front; a pale testaceous spot along the inner side of each eye. Palpi tawny. Antennæ piceous, longer than the body, tawny at the base. Prothorax with a transverse tawny spot on each side in the disk. Under side of the abdomen black, tawny in the disk at the base. Cerci ferruginous, longer than the abdomen. Oviduct nearly as long as the body. Legs tawny; hind femora indistinctly streaked on the outer side; hind tibiæ with five spines on the outer side. Fore wings lurid, extending to the tip of the abdomen; subcostal space pellucid, with testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 9 lines.

West Australia. In Mr. Saunders' collection.

### 88. GRYLLUS DIMINUTUS.

*Mas.* *Testaceus, tomentosus; caput piceum, strigis duabus facieque testaceis; antennæ piceæ, basi pallide testaceæ, corpore multo longiores, prothorax maculis quatuor transversis fasciæque tenui bifurcata piceis; femora postica fusco pallido strigata; alæ anticæ abdomen paullo superantes, apud costam diaphanæ testaceo pallido venosæ.*

*Male.* Testaceous, tomentose, paler beneath. Head piceous, shining, testaceous on each side and in front, and with a testaceous streak on each side extending from the hind border to the eye. Eyes black. Antennæ piceous, pale testaceous at the base, much longer than the body. Prothorax with two transverse piceous spots on each side, and with an intermediate slender piceous band which is forked on each side. Hind femora with oblique pale brown streaks on the outer side: hind tibiæ with short spines on each side; five on the outer side, two of these very minute; three on the inner side. Fore wings extending a little beyond the abdomen; subcostal space pellucid, with pale testaceous veins. Length of the body  $4\frac{1}{2}$  lines.

The fore wings of this species extend on each side much beyond the abdomen, and the tympanum is greatly developed.

a. S. Australia. Presented by R. Bakewell, Esq.

## 89. GRILLUS LEPIDUS.

*Fœm.* *Piceus, nitens, subtus albidus; caput strigis duabus, fascia tenui, gutta anteriore strigam emittente, facie palpisque albidis; antennæ corpore paullo longiores; prothorax plagis duabus magnis picco guttatis lateribusque albidis; cerci pallide testacei, abdomine rix breviores; oviductus pallide luteus, abdomine longior; pedes pallide testacei, strigis obscurioribus; alæ anticæ vittâ albida, apud costam diaphanæ albido venosæ; alæ posticæ abdomen longissime superantes.*

*Female.* Piceous, shining, whitish beneath. Head irregularly whitish about the eyes, two short slender whitish streaks proceeding from the hind border; a narrow whitish band between the eyes; an anterior whitish dot which emits a streak in front; fore part and palpi whitish. Antennæ piceous, a little longer than the body. Prothorax with a large whitish piceous-dotted patch on each side of the disk; sides wholly whitish. Cerci pale testaceous, almost as long as the abdomen. Oviduct pale luteous, longer than the abdomen. Legs pale testaceous; hind femora with darker oblique parallel streaks on the outer side; hind tibiæ with six spines on the outer side and with five on the inner side, a tawny stripe beneath. Fore wings with a whitish stripe along the mediastinal vein; subcostal space pellucid, with whitish veins. Hind wings about twice the length of the abdomen. Length of the body 8 lines.

Very distinct from all the other described species in the markings of the head and of the prothorax.

a. S. Australia. From Mr. Stevens' collection.

## 90. GRILLUS SIGILLATUS.

*Fœm.* *Testaceus, tomentosus; caput luteum, nitens, fasciis duabus maculaque magna anteriore strigam luteam includente nigris; antennæ piccæ, basi testacæ, corpore multo longiores; prothorax fasciis duabus (1a interrupta et abbreviata) vittisque duabus nigris; abdomen maculis dorsalibus punctis strigisque obliquis lateralibus nigricantibus; oviductus ferrugineus, corpore brevior; femora postica fusco interrupte strigata; alæ rix ullæ.*

*Female.* Testaceous, tomentose. Head shining, luteous above, with an irregular blackish band on the hind border; a black band between the eyes; a long black spot between the sockets of the antennæ, including the luteous ocelli and an anterior longitudinal luteous streak. Eyes black, reticulated with luteous. Antennæ piceous, testaceous at the base, much longer than the body. Prothorax with two black bands; the first abbreviated, interrupted; the second on the hind border, joining on each side a black stripe which is contracted in the middle. Mesothorax with some blackish spots. Metathorax with a broad blackish band. Abdomen with a row of blackish spots, and on each side with some blackish points and a row of oblique blackish streaks. Oviduct ferruginous, rather shorter than the body. Hind femora with brown oblique interrupted streaks; hind tibiæ with four spines on each side. Wings rudimentary. Length of the body  $5\frac{1}{2}$  lines.



Closely resembles *G. pustulipes*, but differs from it in the markings of the prothorax.

a. Swan River. Presented by Sir J. Richardson.

#### 91. GRYLLUS MINUSCULUS.

Mas. *Testaceus, tomentosus; caput nitens, nigricante quadririgatum et unifasciatum, fascia anteriore fusca; palpi albido-testacei; antennæ piceæ, basi testaceæ, corpore multo longiores; prothorax fusco punctatus et bimaculatus et triguttatus, nigro bistrigatus; abdomen fusco conspersum; cerci abdomine paullo longiores; femora postica fusco pallido subobsolete strigata; alæ vix ullæ.*

*Male.* Testaceous, tomentose. Head shining, with four longitudinal blackish streaks which are attenuated and paler towards the hind border; a blackish band between the eyes, deeply excavated in front; an anterior brown spot. Eyes black. Palpi whitish testaceous. Antennæ piceous, testaceous towards the base, much longer than the body. Prothorax with some brown points, with a transverse brown spot on each side in the disk, with three shorter transverse brown dots nearer the hind border and with a longitudinal black streak on each side. Abdomen speckled with brown. Cerci a little longer than the abdomen. Hind femora with very indistinct oblique pale brown streaks; hind tibiæ with six spines on the outer side and with four on the inner side. Wings rudimentary. Length of the body  $5\frac{1}{2}$  lines.

It has most resemblance to *G. pallidissimus*, but the cerci are longer.

a. Australia. Presented by the Haslar Hospital.

#### Oceania.

#### 92. GRYLLUS INNOTABILIS.

Mas. *Niger; caput lineis sex margineque antico fulvis; palpi fulvi, apice picei; antennæ corpori æquilongæ; prothorax margine postico maculisque duabus fulvis; cerci ferruginei, abdomine paullo breviores; oviductus rufescens, abdomine longior; pedes picei aut fulvi, femoribus posticis strigatis, tarsi posticis saturate rufescentibus; alæ anticæ luridæ, abdomine breviores.* Mas.—*Alæ posticæ abdomen longissime superantes.* Fœm.—*Alæ posticæ abdomine vix breviores.*

*Male and female.* Black. Head with six tawny lines; the two outer on each side extending from the hind border to the eye and there united; fore border tawny. Palpi tawny; third joint piceous towards the tip. Antennæ as long as the body. Prothorax with a tawny spot on each side of the hind border, which is also tawny. Pectus ferruginous. Cerci ferruginous, a little shorter than the abdomen. Oviduct reddish, much longer than the cerci; valves forked. Legs piceous or tawny; hind femora obliquely streaked on the outer side; hind tibiæ with five or six spines along each side; tarsi dark reddish. Fore wings lurid, rather shorter than the abdomen in the male, nearly as long as the abdomen in the female. Hind wings extending very much beyond the abdomen. Length of the body 8—9 lines.

It has most affinity to *G. lepidus*, but differs much from that species in the markings of the head and of the prothorax.

- a. Loo Choo. Presented by Capt. Beechey.  
 b. ———? From Mr. Macgillivray's collection.

#### Country unknown.

- |      |   |   |   |   |   |                |
|------|---|---|---|---|---|----------------|
| a.   | Head white about the mouth.                     | - | - | - | - | leucostomus.   |
| aa.  | Head not white about the mouth                  |   |   |   |   |                |
| b.   | Body black or piceous.                          |   |   |   |   |                |
| c.   | Prothorax not pilose.                           |   |   |   |   |                |
| d.   | Prothorax tomentose.                            |   |   |   |   |                |
| e.   | Fore wings shorter than the abdomen.            | - | - | - | - | carbonarius.   |
| ee.  | Fore wings not shorter than the abdomen.        | - | - | - | - | simplex.       |
| dd.  | Prothorax shining.                              |   |   |   |   |                |
| e.   | Prothorax wholly black.                         | - | - | - | - | nigerrimus.    |
| ee.  | Prothorax bordered with red                     | - | - | - | - | erythrospilus. |
| ccc. | Prothorax with some tawny marks.                | - | - | - | - | collocatus.    |
| cc.  | Prothorax pilose.                               | - | - | - | - | hirsutulus.    |
| bb.  | Body pale.                                      |   |   |   |   |                |
| c.   | Wings complete.                                 | - | - | - | - | pallidissimus. |
| cc.  | Wings none or rudimentary.                      |   |   |   |   |                |
| d.   | Antennæ a little longer than the body.          | - | - | - | - | fasciatus.     |
| dd.  | Antennæ more than twice the length of the body. | - | - | - | - | pustulipes.    |

#### 93. GRYLLUS LEUCOSTOMUS.

leucostomus, *Serv. Hist. Orth.* 342.

#### 94. GRYLLUS CARBONARIUS.

carbonarius, *Serv. Hist. Orth.* 335—fuliginosus, var.?

#### 95. GRYLLUS SIMPLEX.

*Fœm.* *Piccus*, tomentosus; caput nitens, antice testaceum; palpi pallide testacei; prothoracis anguli antici testacei; venter testaceo late vittatus; cerci abdomine breviores; femora testacea, apice picea; alæ anticae abdominis apicem attingentes, vitta brevi fulva, apud costam diaphanæ testaceo venosæ; alæ posticæ abdomen longissime superantes.

*Female.* Piceous, tomentose. Head shining, mostly testaceous in front. Eyes livid. Palpi pale testaceous. Antennæ black. Prothorax with a testaceous dot by each fore angle. Pectus testaceous. Abdomen beneath with a broad testaceous stripe. Oviduct mutilated. Cerci shorter than the abdomen. Coxæ and femora testaceous, the latter piceous towards the tips. Fore wings extending to the tip of the abdomen, with a short tawny stripe along the lateral keel; subcostal space pellucid, with testaceous veins. Hind wings extending very much beyond the abdomen. Length of the body 8 lines.

a. ———?

## 96. GRYLLUS NIGERRIMUS.

Mas. *Niger, nitens; antennæ corpore valde longiores; cerci abdomine multo breviores; femora postica substriata; alæ anticæ abdominis apicem attingentes, apud costam albido venosæ; alæ posticæ nullæ.*

*Male.* Black, shining. Head rather prominent; sockets of the antennæ testaceous. Eyes livid. Ocelli luteous. Antennæ very much longer than the body. Cerci much shorter than the abdomen. Hind femora with slight oblique striæ; hind tibiæ with five spines on each side. Fore wings extending to the tip of the abdomen; subcostal veins whitish. Hind wings not apparent. Length of the body 8 lines.

The pale subcostal veins of the fore wings distinguish it from *G. atratus*.

a. ———? Presented by the Entomological Club.

## 97. GRYLLUS ERYTHROSPILUS.

Mas. *Niger, nitens; caput rufo transverse bistrigatum; palpi rufi; prothorax marginibus antico et postico tenuissime rufis; venter apice pallide rufus; cerci pallide rufi, abdomine longiores; pedes rufi; alæ anticæ cinereæ, abdominis apicem attingentes, striga subcostali fusca; alæ posticæ nullæ.*

*Male.* Black, shining. Head with a transverse red streak on each side near the hind border. Eyes livid. Ocelli luteous. Palpi red. Prothorax narrowly bordered with red in front and behind. Abdomen red beneath at the tip. Cerci pale red, rather longer than the abdomen. Legs red; hind tibiæ with seven spines on the outer side and with four on the inner side. Fore wings cinereous, extending to the tip of the abdomen; a brown streak along the lateral keel; veins testaceous. Hind wings not apparent. Length of the body 8 lines.

a. ———?

## 98. GRYLLUS COLLOCATUS.

Fœm. *Niger, nitens, caput margine antico fulvo; palpi nigro-picei; prothorax margine postico maculisque duabus fulvis; cerci picei, abdomine breviores; oviductus saturate rufus, abdomine longior; pedes picei, femoribus posticis cinereo strigatis; alæ anticæ piceæ, abdominis apicem fere attingentes, apud costam diaphanæ fulvo venosæ; alæ posticæ abdomen longe superantes.*

*Female.* Black, shining. Head about the fore border and ocelli tawny. Eyes livid. Palpi blackish piceous. Prothorax with a tawny spot on each side of the hind border, which is also tawny. Cerci piceous, shorter than the abdomen. Oviduct dark red, longer than the abdomen. Legs piceous; hind femora obliquely streaked with cinereous on the outer side; hind tibiæ with five spines on each side. Fore wings piceous, extending nearly to the tip of the abdomen; subcostal space pellucid, with tawny veins. Hind wings extending much beyond the abdomen. Length of the body  $9\frac{1}{2}$  lines.

Somewhat narrower than *G. fuliginosus*, which it much resembles: the streaks on the head and the pale hind border of the prothorax distinguish it from that species.

a. ——— ?

#### 99. GRYLUS HIRSUICULUS.

Fœm. *Piceus, hirtus; caput fulvum, vertice piceo; palpi picei, articulo 3o clavato; prothorax lateribus strigisque duabus fulvis; venter fulvus; cerci ferrugini, abdomine multo breviores; oviductus abdomine longior; femora postica pallido strigata; alæ anticæ obscure cinereæ, abdominis dimidio paulo longiores, apud costam pallidiores, striga testaceæ; alæ posticæ nullæ.*

*Female.* Piceous. Prothorax and vertex of the head somewhat hirsute, hardly shining. Head tawny, except the vertex. Eyes testaceous. Palpi piceous; third joint clavate, truncated. Prothorax with the sides and two streaks proceeding from the hind border tawny. Pectus and under side of the abdomen tawny. Cerci ferruginous, much shorter than the abdomen. Oviduct longer than the abdomen. Hind femora with the usual paler oblique parallel streaks; hind tibiæ with four tawny spines on each side. Fore wings dark cinereous, a little more than half the length of the abdomen; subcostal space paler; a testaceous streak along the mediastinal vein; transverse sectors very few. Length of the body ♂ lines.

a. ——— ? Presented by the Entomological Club.

#### 100. GRYLUS PALLIDISSIMUS.

Mas. *Testaceus, tomentosus, piceo pallido notatus; caput nitens; antennæ nigre, corpore multo longiores; pedes postici piceo notati, femoribus strigatis; alæ anticæ abdominis apicem attingentes; alæ posticæ abdomen longe superantes.*

*Male.* Testaceous, tomentose. Head and prothorax with many small irregular pale piceous marks. Head shining. Eyes pale reddish. Antennæ black, testaceous at the base, much longer than the body. Cerci shorter than the abdomen. Hind femora and hind tibiæ with various piceous marks; hind femora obliquely and incompletely streaked with piceous on the outer side; hind tibiæ with four spines on each side. Fore wings extending to the tip of the abdomen. Hind wings very much longer than the abdomen; the usual streaks testaceous. Length of the body ♂ lines.

a, b. ——— ?

#### 101. GRYLUS FASCIATUS.

Fœm. *Testaceus, pubescens; caput piceum, nitens, linea transversa, litura arcuata, lateribus facieque testaceis, litura fasciati magna picea; palpi pallide picei; antennæ corpore paulo longiores; prothorax fascia picea abbreviata latissima guttas duas testaceas includente; mesothorax et metathorax piceo fasciati; abdomen piceo bivittatum, segmentorum marginibus posticis piceo punctatis; cerci abdomine longiores; oviductus cercis vix brevis; femora postica fusco strigata et univittata; alæ nullæ.*

*Female.* Testaceous, pubescent. Head piceous, shining, testaceous on each side and in front, with a testaceous line between the hind border and each eye, and a testaceous curved mark between the sockets of the antennæ; a large piceous mark on the face. Eyes dark piceous. Ocelli testaceous. Palpi pale piceous. Antennæ testaceous at the base, a little longer than the body. Prothorax with an abbreviated and very broad piceous band in the disk; this band contains a testaceous dot on each side and is notched on each side of the hind border. Mesothorax and metathorax with a piceous band on each, that of the former interrupted on each side. Abdomen with piceous points on the hind borders of the segments and with two slight piceous stripes. Cerci rather longer than the abdomen. Oviduct nearly as long as the cerci. Hind femora with a brown stripe on the outer side and with oblique brown streaks; hind tibiæ with four spines on each side. Length of the body 6 lines.

a. ———?

#### 102. GRYLLUS PUSTULIPES.

*Fœm.* *Testaceus, gracilis, pubescens; caput fascia lituraque U-formi piceis, macula anteriore ferruginea; palpi albido-testacei; antennæ corpore plus duplo longiores; prothorax fasciis duabus piceis, 1a discoidali abbreviata et interrupta, 2a postica utrinque attenuata; abdomen basi, vittis duabus lateralibus macularibus indeterminatis vittaque intermedia piceis; cerci abdomine paullo longiores; oviductus abdomine sat longior; pedes hirsuti, femoribus fusco notatis, femoribus posticis fusco strigatis; alæ vix ullæ.*

*Female.* Testaceous, slender, pubescent. Head with a piceous band between the eyes, and with a piceous U-shaped mark between the sockets of the antennæ, and with an anterior ferruginous spot. Eyes piceous. Palpi whitish testaceous. Antennæ ferruginous, pale testaceous at the base, much more than twice the length of the body. Prothorax with two piceous bands; the first irregular, interrupted in the middle, abbreviated on each side; the second along the hind border, attenuated at each end. Abdomen piceous at the base and with three piceous stripes, the lateral stripes macular and irregular. Cerci a little longer than the abdomen. Oviduct a little longer than the cerci. Legs hirsute; femora with a few brown marks; hind femora with oblique brown streaks; hind tibiæ with five spines on the outer side and with four on the inner side. Wings rudimentary. Length of the body  $7\frac{1}{2}$  lines.

a. ———?

*Mas.?* *Testaceus, apterus, subnitens; caput fasciis duabus interruptis maculaque anteriore piceis; antennæ piceæ, basi testacæ, corpore plus duplo longiores; prothorax fascia discoidali picea lata interrupta abbreviata; cerci abdomine breviores; femora postica piceo maculata.*

*Male?* Testaceous, slightly shining. Head with an abbreviated and interrupted piceous band on the vertex, with an interrupted piceous band on the front, and with a piceous spot between the sockets of the antennæ. Antennæ piceous, testaceous towards the base, more than twice the length of the body. Prothorax with a broad abbreviated piceous band in the disk.

Mesothorax, metathorax and segments of the abdomen with abbreviated and interrupted piceous bands. Cerci much more than half the length of the abdomen. Hind femora with a few piceous spots; hind tibiæ with three spines on each side. Wings none. Length of the body 6 lines.

*b.* ———?

The figure of the following species resembles a *Gryllus*; in the description it is said to have no elongated oviduct.

GRYLLUS? ATER.

*Gryllus ater*, *Deg. Ins.* iii. 520, pl. 43, f. 3.

Surinam.

*oo.* Oviduct flattened.

Genus 9. PLATYXYPHUS.

*Gryllus* (*Platyxyphus*) *Haan*.

1. PLATYXYPHUS JAVANUS.

*Gryllus platyxyphus*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 230, pl. 20, f. 1.

Java.

*m.* Head conical in front.

Genus 10. MOGOPLISTES.

*Mogoplistes*, *Serv. Hist. Orth.* 357. *Fisch. Orth. Eur.* 162.

1. MOGOPLISTES BRUNNEUS.

*brunneus*, *Serv. Hist. Orth.* 357. *Fieb. Orth. Eur.* 163, pl. 9, f. 4.

Italy. Sicily.

2. MOGOPLISTES OCCIDENTALIS.

*occidentalis*, *Scudder, Aut. Orth. Dec. Gryll.*

Cape St. Lucas, Lower California.

*mm.* Head ridged between the eyes.

*n.* Hind tarsi not serrated.

*o.* Fore wings regularly reticulated.

Genus 11. TAFALISCA.

*Fem.* Corpus angustum, subcylindricum. Caput subcarinatum; facies subproducta. Oculi prominuli. Palporum articulus 3us clavatus. Antennæ gracillimæ, corpore plus duplo longiores. Lamina pectoralis triangularis. Cerci dense pilosi, abdomine longiores. Oviductus cercis non brevior. Pedes robusti; femora subtus sulcata; femora postica crassa; tibiæ posticæ spinis nonnullis parvis quatuorque longis. Alæ anticæ abdomen longe superantes, crebre et indistincte reticulatæ; venæ longitudinales rectæ, bene determinatæ. Alæ posticæ sat longiores.

*Female.* Body narrow, nearly cylindrical. Head as broad as the prothorax, prominent between the sockets of the antennæ; face elongate. Eyes prominent. Third joint of the maxillary palpi clavate, a little longer than the second. Antennæ very slender, much more than twice the length of the body; first joint thick, elongate. Pectus with a triangular plate between the middle coxæ and the hind coxæ. Cerci rather longer than the abdomen, thickly bent, with long slender hairs. Oviduct as long as the cerci. Legs stout, moderately long; femora sulcate beneath; tarsi three-jointed; third joint slender; hind femora incrassated; hind tibiæ with several small spines and with four long stout spines on each side; three of the small spines nearer the base than the first long spine, the others alternate with the long spines. Fore wings extending much beyond the abdomen; longitudinal veins straight, determinate, nearly parallel; intermediate spaces thickly and indistinctly reticulated. Hind wings extending somewhat beyond the fore wings.

#### 1. TAFALISCA LURIDA.

*Fœm. Ferruginea, tomentosa; caput antice nitens; prothorax piceus, annulis duobus triangularibus signatus; cerci picci, basi ferruginei; oviductus fulvus, apice niger; tibiæ nigricantes; femora postica piceo strigata; alæ anticæ pallide luridæ, piceo venosæ, apud costam albido-testaceæ.*

*Female.* Ferruginous, tomentose. Head shining in front. Eyes red. Antennæ piceous. Prothorax piceous, with two triangular transversely elongated spaces formed by impressed lines. Cerci piceous, ferruginous towards the base. Oviduct tawny, black at the tip. Tibiæ blackish. Hind femora with piceous oblique streaks on the outer side. Fore wings pale lurid, whitish testaceous between the keel on each side and the costa; veins piceous. Hind wings pale testaceous along the costa. Length of the body 12 lines.

*a.* St. Domingo. From Mr. Tweedie's collection.

*oo.* Fore wings irregularly reticulated.

*p.* Hind tibiæ not serrated.

#### Genus 12. CARSIDAVA.

*Mas.* Corpus angustum, sublineare. Caput subcarinatum. Oculi prominuli. Palporum articulus 3us lanceolatus. Antennæ longæ, graciles. Prothorax subelongatus. Cerci graciles, abdomine breviores. Pedes breviusculi, sat validi; femora postica crassa; tibiæ posticæ utrinque subserratæ et spinis quatuor robustis armatæ. Alæ anticæ confertim et inordinate reticulatæ, abdomen longe superantes. Alæ posticæ paullo longiores.

*Male.* Body narrow, nearly linear. Head as broad as the prothorax, rather prominent between the sockets of the antennæ. Eyes prominent. Third joint of the maxillary palpi lanceolate, a little longer than the second. Antennæ long, slender, joints very numerous. Prothorax rather longer than broad. Cerci slender, shorter than the abdomen. Legs rather short and stout, thinly and minutely setose; tarsi three-jointed, third joint long, slender; hind femora much incrassated; hind tibiæ very minutely serrated on each side, with four spines on the outer side and with three on

the inner side; spines stout, rather wide apart. Fore wings wholly and irregularly reticulated, extending much beyond the abdomen. Hind wings extending a little beyond the fore wings.

#### I. *CARSIDAVA CINERASCENS.*

*Mas.* *Fulvus, tomentosus; alæ anticæ pallide cineræ, fusco venosæ; alæ posticæ cineræ.*

*Male.* Tawny, tomentose. Eyes piceous. Fore wings pale cinereous; veins brown. Hind wings cinereous. Length of the body 7 lines.

The antennæ of the specimen described are mutilated, and their length in comparison to that of the body cannot be ascertained.

*a. Para.* From Mr. Bates' collection.

*pp.* Hind tibiæ serrated.

#### Genus 13. *NESSA.*

*Fam.* Corpus angustum, subtomentosum, fere cylindricum. Caput subcarinatum, thorace non brevius. Oculi parvis. Palpi mediocres; articulus 3us subsecuriformis. Antennæ graciles, corpus longissime superantes. Prothorax subelongatus, antice paullo angustior, lateribus vix rotundatis. Cerci et oviductus abdomine paullo breviores. Pedes robusti; tibiæ posticæ utrinque serratæ et quadrispinosæ. Alæ anticæ angustæ, acutæ, inordinate reticulatæ, abdomen per paullo superantes. Alæ posticæ longiores.

*Female.* Body narrow, nearly cylindrical. Head and prothorax slightly tomentose. Head as long as the prothorax, slightly keeled between the sockets of the antennæ. Eyes small, not prominent, remote from the hind border. Palpi moderately long; third joint slightly securiform. Antennæ slender, very much longer than the body. Prothorax a little narrower in front, rather longer than broad; sides hardly rounded. Cerci and oviduct a little shorter than the abdomen. Legs stout, moderately long; hind tibiæ serrated and with four stout spines on each side; first joint of the tarsi long, stout, armed with spines; second short; third slender. Fore wings narrow, acute, irregularly reticulated, extending very little beyond the tip of the abdomen; longitudinal veins nearly straight and parallel. Veins along the costa very oblique, the spaces between them reticulated like the rest of the wing. Hind wings somewhat longer than the fore wings.

#### I. *NESSA LINEARIS.*

*Fam.* *Fulva; prothorax picco subnotatus; abdominis dorsum piceum; cerci ferrugini; femora postica picco strigata nigro univittata; alæ anticæ testaceo-cineræ, picco reticulatæ, venis longitudinalibus subrectis.*

*Female.* Tawny. Antennæ ferruginous. Prothorax with some indistinct piceous marks. Abdomen piceous above. Cerci ferruginous. Legs stout, moderately long; hind femora with a black stripe and with oblique piceous streaks on the outer side. Fore wings testaceous-cinereous, veins



piceous. Hind wings pale cinereous, with a testaceous tinge along the costa. Length of the body  $10\frac{1}{2}$  lines.

a. S. America. Presented by Sir R. Schomburgk.

## 2. NESSA FORTIPES.

*Fœm.* Testaceous, tomentosus, gracilis, cylindricus; caput subcarinatum, postice subproductum; prothorax nigro bivittatus; abdomen linea dorsali nigricante duplicata; oviductus abdomine brevior; pedes robusti, femoribus posticis utrinque substrigatis, tibiis posticis quadrispinosis; alæ minimæ.

*Female.* Testaceous, tomentose, slender, cylindrical. Head shining in front, rather prominent between the sockets of the antennæ. Eyes piceous, somewhat remote from the hind border. Mandibles with black tips. Antennæ very slender, much more than half the length of the body. Prothorax with a black stripe on each side, this stripe continued less determinately to the abdominal segments, the latter with an indistinct double dorsal blackish line. Cerci less than half the length of the abdomen. Oviduct with a black tip, rather shorter than the abdomen. Legs stout; anterior legs short; hind femora with indistinct brownish streaks on the outer side; hind tibiæ serrated and with four spines on each side; first, second and third alternate, fourth forming an opposite pair. Wings rudimentary. Length of the body  $9\frac{1}{2}$ — $10\frac{1}{2}$  lines.

a, b. Natal. From M. Guenzius' collection.

*pp.* Hind tarsi serrated.

## Genus 14. LANDREVA.

*Mas.* Corpus nitens, sat robustum, vix convexum. Caput breve, subcarinatum. Oculi prominuli. Palpi breviusculi; articulus 3us securiformis. Antennæ gracillimæ, corpore plus triplo longiores; articulus 1us globosus. Prothorax subsulcatus. Cerci abdomine longiores. Pedes robusti; tibiæ posticæ utrinque serratæ et quadrispinosæ. Alæ abbreviatæ.

*Male.* Body shining, rather stout, hardly convex. Head short, slightly keeled between the sockets of the eyes. Eyes prominent, moderately large. Palpi rather short; third joint securiform. Antennæ very slender, much more than thrice the length of the body; first joint globose. Prothorax rather broader than long, with a slight longitudinal furrow. Cerci longer than the abdomen. Legs robust, moderately long; hind tibiæ with several minute spines, and nearer the tips with four long stout spines on each side; first joint of the hind tarsi long, with small spines on each side. Wings incomplete?

### 1. LANDREVA INSIGNIS.

*Mas.* Piceus; palpi fulvi, antennæ articulo 1o fulvo globoso; cerci rufescentes, alæ anticæ abdominis dimidio breviores; alæ posticæ nullæ.

*Male.* Piceous. Eyes reddish. Palpi tawny. Antennæ with the first joint tawny. Cerci reddish, densely pilose. Legs tawny; tibiæ, tarsi

and tips of hind femora piceous. Fore wings a little less than half the length of the abdomen, tawny at the base; costa whitish for half the length from the base. Hind wings obsolete. Length of the body  $10\frac{1}{2}$  lines.

a. Ceylon. Presented by Dr. Templeton.

jj. Hind tibiae with slender wide apart spurs.

k. Fore wings generally abbreviated.

l. Legs not very hairy.

m. Spines of the hind tibiae not very long.

#### Genus 15. NEMOBIUS.

*Nemobius*, *Serr. Hist. Orth.* 315. *Scudder—Gryllus*, *Oliv., Bosc., Latr., Brullé, Burm. Fisch.*—*Acheta*, *Fabr., Charp., Steph., Curt.*

### Europe.

#### 1. NEMOBIUS SYLVESTRIS.

*Acheta sylvestris*, *Fabr. Ent. Syst.* ii. 33. *Charp. Hor. Ent.* 82. *Coqueb. Ill. Icon.* i. 5, pl. 1, f. 2. *Steph. Ill. Brit. Ent. Mand.* vi. 40. *Curt. Brit. Ent.* viii pl. 293—*Gryllus sylvestris*, *Bosc. Actes. Soc. Hist. Nat.* i. 44, pl. 10, f. 4. *Latr. Hist. Nat.* xii. 124. *Brullé, Hist. Nat. Ins.* ix. 178. *Burm. Handb. Ent.* ii. 734. *Fisch. de Waldh. Orth. Ross.* 131. *Fieb. Ent. Monogr.* 126, pl. 10, f. 10. *Fisch. Orth. Eur.* 183—*Nemobius sylvestris*, *Serr. Hist. Orth.* 348.

a—c. England. From Mr. Stephens' collection.

d—g. England. Presented by J. C. Dale, Esq.

h. England. From Mr. Turner's collection.

i, j. France. From Prof. Westwood's collection.

k—m. France.

#### 2. NEMOBIUS LINEOLATUS.

*Gryllus lineolatus*, *Brullé, Hist. Nat. Ins.* ix. 179. *Fisch. Orth. Eur.* 184—*Nemobius lineolatus*, *Serr. Hist. Orth.* 349—*Gryllus hirticollis?* *L. Duf. Mem. Acad. Roy. Sci.* vii. 327.

S. France.

#### 3. NEMOBIUS HEYDENII.

*Gryllus Heydenii*, *Fisch. Orth. Eur.* 184.

Canton Lucerne, Switzerland.

### N. America.

#### 4. NEMOBIUS FASCIATUS.

*Gryllus fasciatus*, *Deq. Ins.* iii. 522, pl. 43, f. 5—*Acheta hospes*, *Fabr. Syst. Ent.* 281; *Sp. Ins.* i. 355; *Mant. Ins.* i. 232; *Ent. Syst.* ii. 32—*Gryllus hospes*, *Oliv. Enc. Meth.* iv. 636—*Nemobius fasciatus*, *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 430.

Indiana. Massachusetts. S. Carolina.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

b. N. America.

## 5. NEMOBIUS VITTATUS.

*Acheta servilis*, Say, MSS. Harris, *Cat. Ins. Mass.* 56—*Nemobius vittatus*, Harris, *Rep.* 3rd Ed. 152. Scudder, *Journ. Bost. Nat. Hist.* vii. 430.

Massachusetts. Maine. Connecticut.

a. N. America. Presented by W. F. Kirby, Esq.

b—f. Indiana. Presented by F. Walker, Esq.

g—i. Nova Scotia. From Lieut. Redman's collection.

## 6. NEMOBIUS EXIGUUS.

*Acheta exigua*, Say, *Journ. Acad. Nat. Sci. Phil.* iv. 309; *Ent. N. Amer.* Ed. *Le Conte*, i. 238—*Nemobius exiguus*, Scudder, *Journ. Bost. Soc. Nat. Hist.* vii. 429.

Missouri. Minnesota.

a—e. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

## Mexico.

## 7. NEMOBIUS CIRCUMCINCTUS.

*circumcinctus*, Scudder, *Cent. Orth. Dec. Gryll.*

Orizaba.

## 8. NEMOBIUS MEXICANUS.

*Fœm.* *Niger, tomentosus, subhirsutus, subtus testaceus; caput albidum, nitens, nigro bifasciatum et tripunctatum, facie fulva; prothoracis latera interrupte fulva; oviductus ferrugineus, abdomine longior; pedes testacei, nigro interrupte fasciati; alæ anticæ fusæ, abdomine breviores, costâ basi albida; alæ posticæ nullæ.*

*Female.* Black, tomentose. Head and prothorax slightly hirsute. Head whitish, shining, a black band along the hind border, attenuated at each end; a cluster of three black dots on the vertex; a black band on the front, excavated on the hind side, including the whitish sockets of the antennæ; face tawny. Eyes and palpi piceous. Prothorax interruptedly tawny along each side. Pectus and under side of the abdomen testaceous. Cerci piceous. Oviduct ferruginous, longer than the abdomen. Legs testaceous; femora and tibiæ with two irregular interrupted black bands. Fore wings brown, rather shorter than the abdomen; costa whitish at the base. Hind wings obsolete. Length of the body  $4\frac{1}{2}$  lines.

The specimen here described has no hind legs. It is apparently quite distinct from *N. circumcinctus*.

a. Oajaca. From M. Salle's collection.

## America.

## 9. NEMOBIUS? PUSILLUS.

*Gryllus pusillus*, *Klug*, *MSS.* *Burm. Handb. Ent.* ii, 733.  
Brazil.

## 10. NEMOBIUS BASALIS.

*Fem.* *Nigricans, tomentosus; caput nitens, antice fulvum; palpi picei; prothorax marginibus subsetosis, margine postico utriusque fulvo; oriductus abdomine longior; pedes postici femoribus strigatis, tibiis trispinosi; alæ antica abdominis dimidio aequilongæ, basi strigatæ pallide testaceis; alæ posticæ corpore longiores.*

*Female.* Blackish, tomentose. Head shining, tawny about the mouth and about the sockets of the antennæ. Eyes lurid. Palpi piceous; third joint slightly securiform. Antennæ black. Prothorax with a few marginal bristles; hind border tawny on each side. Cerci shorter than the oviduct, which is somewhat longer than the abdomen. Femora mostly testaceous beneath; hind femora with oblique pale streaks on the outer side; hind tibiæ with three spines on each side. Fore wings about half the length of the abdomen, pale testaceous at the base and with a streak of that hue along the mediastinal vein. Hind wings longer than the body. Length of the body 5 lines.

*Para* In Mr. Saunders' collection.

## 11. NEMOBIUS PICINUS.

*Fem.* *Piceus, gracilis, pilosus; caput nigricans, palpis antennisque piceis; cerci abdomine longiores; oriductus abdomine multo brevior; pedes sat graciles, tibiis tarsisque subtus fulvis, tibiis posticis quadrispinosis; alæ antica cinerea, piceo reosæ, abdomine duplo breviores; alæ posticæ abdomen longissime superantes.*

*Female.* Piceous, slender, pilose, shining. Head blackish. Eyes, palpi and antennæ piceous. Prothorax much broader than long. Cerci longer than the abdomen and about twice the length of the oviduct. Legs rather slender; tibiæ and tarsi tawny beneath; hind tibiæ with four slender spines on each side. Fore wings cinereous, not more than half the length of the abdomen; veins piceous. Hind wings very much longer than the abdomen. Length of the body  $4\frac{1}{2}$  lines.

This species is much more slender than *N. bisalis*.

Amazon Region. In Mr. Saunders' collection.

## Hindustan.

## 12. NEMOBIUS INDICUS.

*Fem.* *Piceus, pilosus; antenna corpore longiores; venter testaceus, apice piceus; cerci et oriductus abdomine multo longiores; pedes testacei, sat validi, femoribus apice tibiisque basi piceis, tibiis posticis utriusque trispinosi; alæ antica basi testacea, abdominis dimidio longiores; alæ posticæ ab hinc plus duplo longiores.*

*Female.* Piceous, somewhat pilose. Head shining. Ocelli yellow. Antennæ longer than the body. Prothorax much broader than long. Abdomen testaceous beneath, except at the tip. Cerci and oviduct much longer than the abdomen. Legs testaceous, rather stout; femora piceous towards the tips; tibiæ piceous at the base; hind femora on the outer side with piceous oblique abbreviated streaks; hind tibiæ with three spines on each side. Fore wings testaceous at the base, more than half the length of the abdomen; veins strongly marked; transverse sectors few. Hind wings more than twice the length of the abdomen. Length of the body  $4\frac{1}{2}$  lines.

a. Hindostan. From the Zoological Society's collection.

### Australia.

#### 13. NEMOBIUS BIVITTATUS.

*Mas.* *Niger, hirsutus; antennæ gracillimæ, corpore valde longiores; prothorax luteo bivittatus; cerci picei; pedes sat graciles, femoribus subtilus testaceo vittatis, tibiis testaceo bifasciatis, tarsis basi testaceis; alæ anticæ pallide cinereæ, abdomine breviores; alæ posticæ obsoletæ.*

*Male.* Black, hirsute, shining. Head as broad as the prothorax. Eyes piceous, rather prominent. Antennæ very slender, very much longer than the body. Prothorax with a luteous stripe on each side. Cerci piceous. Legs rather slender; femora striped with testaceous beneath; tibiæ with two testaceous bands; hind tibiæ with three slender spines on each side; tarsi testaceous at the base. Fore wings pale cinereous, about three-fourths of the length of the abdomen, pellucid on each side between the keel and the costa. Hind wings not apparent. Length of the body 3 lines.

The cerci are broken in the specimen described.

a. Swan River. Presented by Sir J. Richardson.

#### 14. NEMOBIUS AUSTRALIS.

*Fœm.* *Fulvus, pubescens, linearis; caput vitta fuscescente, lineis quatuor testaceis piceo punctatis, lineis quatuor exterioribus testaceis abbreviatis; antennæ gracillimæ, corpore plus duplo longiores; prothorax fusco punctatus, nigricante bivittatus, lateribus testaceis; abdomen fuscescens, basi fulvum, ventre testaceo: cerci corpore longiores; oviductus abdomine longior; pedes robusti, setulosi, fusco conspersi; alæ minimæ.*

*Female.* Tawny, dull, pubescent, linear. Head shining in front; vertex with a brownish stripe which is bordered by two testaceous brown-pointed lines; an exterior testaceous brown-pointed line and two more exterior short testaceous lines on each side. Eyes piceous. Antennæ very slender, more than twice the length of the body. Prothorax with some brown points, and on each side with a blackish stripe between the keel and the border which is testaceous. Abdomen brownish, with darker speckles, tawny at the base; ventral segments testaceous. Cerci longer than the body. Oviduct longer than the abdomen, piceous at the tip. Legs stout,

setulose, brown-speckled. Wings rudimentary. Length of the body 5 lines.

The specimen described is without hind legs.

*a.* Australia. Presented by the Haslar Hospital.

#### 15. NEMOBIUS HETEROPUS.

*Fam.* *Niger, apterus, tomentosus, setosus, sat robustus; oculi subprominuli; palpi maxillares albi; oviductus abdomine non brevior; pedes sat validi, femoribus posticis basi subtusque testaceis, tibiis posticis utrinque quadri-spinosis.*

*Female.* Black, tomentose, rather stout. Head and prothorax setose. Head short, as broad as the prothorax. Eyes transversely elongated, rather large, slightly prominent. Maxillary palpi whitish; third joint slightly securiform, much longer than the second. Antennæ slender. Oviduct as long as the abdomen. Legs rather stout; hind femora testaceous at the base and beneath; hind tibiæ with four long slender spines on each side, these spines testaceous towards the base. Wings entirely wanting. Length of the body  $3\frac{1}{2}$  lines.

*a.* Australia. From Mr. Damel's collection.

*mm.* Hind tibiæ with very long spines.

#### Genus 16. ARGIZALA.

*Fam.* Corpus sat robustum, parte setosum, fere lineare. Oculi sat magni, subprominuli. Palpi graciles; articulus 3us clavatus, oblique truncatus. Antennæ gracillimæ, corpore multo longiores. Prothorax transversus, antice vix angustior. Cerci abdomine breviores. Oviductus abdomine longior. Pedes quatuor anteriores breves, sat robusti. Tibiæ posticæ utrinque spinis quatuor longis setulosis. Alæ anticæ abdominis apicem attingentes; venæ longitudinales rectæ, parallelæ, bene determinatæ. Alæ posticæ abdomen longissime superantes.

*Female.* Body rather stout, nearly linear. Head and prothorax thinly setose. Head as broad as the prothorax. Eyes rather large, slightly prominent. Palpi slender; third joint of the maxillary palpi clavate, obliquely truncated. Antennæ very slender, much longer than the body. Prothorax hardly narrower in front, much broader than long. Cerci shorter than the abdomen. Oviduct longer than the abdomen. Legs rather stout; four anterior legs short; hind legs moderately long; hind tibiæ with four long setose spines on each side, the apical spine more than one-third of the length of the tibia; first joint of the hind tarsi longer than the second and third together; unguis very small. Fore wings extending to the tip of the abdomen; longitudinal veins straight, parallel, strongly marked; transverse veins regular, rather numerous. Hind wings very much longer than the abdomen.

## I. ARGIZALA BRASILIENSIS.

Fœm. *Testacea, setis nigris instructo; caput fusco trivittatum; prothorax fusco biplagiatus et biguttatus; alæ anticæ subtestaceo hyalinæ.*

*Female.* Testaceous, shining, paler beneath. Head and prothorax with black bristles. Head with three brown stripes on the vertex. Prothorax with a brown patch and a posterior brown dot on each side of the disk. Abdomen piceous above, except towards the tip. Tip of the oviduct piceous. Fore wings hyaline, slightly testaceous; veins pale testaceous. Hind wings pellucid, with white veins. Length of the body 5 lines.

*a.* Brazil. Presented by J. P. G. Smith, Esq.

*b.* Santarem. From Mr. Bates' collection.

*ll.* Legs very hairy.

## Genus 17. HAPITHUS.

Hapithus, *Uhler, Proc. Ent. Soc. Phil.* ii. 546.

## 1. HAPITHUS AGITATOR.

agitator, *Uhler, Proc. Ent. Soc. Phil.* ii. 546.

Baltimore.

## 2. HAPITHUS QUADRATUS.

quadratus, *Scudder, Cent. Orth. Dec. Gryll.*

Central Texas.

*kk.* Fore wings complete.

*l.* Fore wings membranous.

*m.* Fore wings of the male not very broad.

*n.* Fore wings with transverse veins.

*o.* Prothorax not broader than the head.

*p.* Head not prominent between the eyes.

*q.* Fore wings with the veins beyond the tympanum irregular.

## Genus 18. OROCHARIS.

Orocharis, *Uhler, Proc. Ent. Soc. Phil.* ii. 544.

## 1. OROCHARIS SALTATOR.

saltator, *Uhler, Proc. Ent. Soc. Phil.* ii. 545.

*a—d.* Indiana. Presented by F. Walker, Esq.

## 2. OROCHARIS SIGNATUS.

Mas. *Testaceus, tomentosus; caput prothorax sublatius, fascia postica strigas duas lanceolatas emittente maculaque frontali nigris; palpi articulo 3o capitato oblique truncato; prothorax nigricante marginatus, anticæ angustior; cerci abdomine breviores; femora postica apice picea; alæ anticæ nigro notatæ, abdomen superantes; alæ postica longiores.*

*Male.* Testaceous, tomentose. Head a little narrower than the prothorax; a black band along the hind border emitting two lanceolate black streaks which approach a black spot on the front. Eyes small, round. Third joint of the maxillary palpi capitate, obliquely truncated, shorter than the second. Antennæ piceous, testaceous at the base. Prothorax broader than long, slightly narrower in front, with a very slender blackish border; sides slightly rounded. Cerci shorter than the abdomen. Legs moderately long and stout; hind femora piceous at the tips; hind tibiæ on each side with four spines which are black at the base and at the tips. Fore wings extending somewhat beyond the abdomen, with a transverse black mark towards the hind border near the base, and with some piceous streaks about the tympanum, which is traversed by one angular vein; space beyond the tympanum reticulated; subcostal space broad, with oblique parallel veins which are successively more undulating towards the tip. Hind wings extending a little beyond the fore wings. Length of the body 7 lines.

The larger size and the difference in the marking of the fore wings distinguish this species from *O. saltator*.

*a.* Orizaba. From M. Sallé's collection.

### 3. OROCHARIS SCIULUS.

*Mas.* *Testaceus, tomentosus, O. signato valde affinis; palpi maxillares apice picei, articulo 3o clavato; antennæ nigra, gracillimæ, corpore valde longiores, testaceo multifasciata; prothorax nigro marginatus; femora piceo subfasciata; tibiæ tarsique nigro fasciata; tibiæ posticæ utriusque serratæ et quadrispinosæ; alæ anticæ nigro notatæ.*

*Male.* Testaceous, tomentose, in structure like *signatus*. Head a little narrower than the prothorax. Eyes livid, small. Maxillary palpi piceous towards the tips; third joint clavate, shorter than the second. Antennæ black, very slender, much longer than the body, with many testaceous bands of various breadth; first joint stout, testaceous. Prothorax transverse, a little narrower in front, very slenderly bordered with black; the keel on each side much rounded. Cerci shorter than the abdomen. Legs moderately long and stout; femora with an incomplete piceous band; tibiæ with a black band near the base; tarsi black, with a testaceous band; hind tibiæ on each side serrated and with four slender spines, which are black at the base and at the tips. Fore wings with black marks like those of the preceding species, but more numerous; these marks are nearly all on the veins. Hind wings extending a little beyond the fore wings. Length of the body 6½ lines.

*a.* Honduras. From Mr. Dyson's collection.

### 4. OROCHARIS AFFINIS.

*Mas.* *Testaceus, gracilis, tomentosus; caput subcarinatum, posticæ subelongatum; palporum articulus 3us subsecuriformis; antennæ corpore plus duplo longiores; venter piceus; cerci breves, graciles; pedes validi, breviusculi, tibiis posticis quadrispinosis aut trispinosis; alæ abdomine paullo superantes; alæ anticæ apice reticulatæ, spatio subcostal. lata.*



*Male.* Testaceous, slender, tomentose. Head slightly keeled between the sockets of the antennæ, shining in front. Eyes slightly prominent, at some distance from the hind border of the head. Third joint of the palpi slightly securiform. Antennæ slender, more than twice the length of the body. Prothorax a little longer than its breadth in front, where it is slightly narrower than on the hind border. Abdomen piceous beneath. Cerci testaceous, slender, hardly one-third of the length of the abdomen. Legs stout, rather short; hind tibiæ with four spines on the outer side and with three on the inner side. Fore wings extending a little beyond the tip of the abdomen, reticulated towards the tips; tympanum occupying the rest of the surface, except the space between the mediastinal vein and the costa, which is very broad and has numerous parallel slightly oblique and undulating veins. Hind wings not longer than the fore wings. Length of the body 7 lines.

In this and in the two preceding species the transverse vein is across the middle of the tympanum, not near the base, as it is in *O. saltator*.

*a.* Santarem. From Mr. Bates' collection.

#### 5. OROCHARIS? FUSIFORMIS.

*Fœm.* *Fulvus, fusiformis*; *caput convexum, prothorace paullo angustius*; *palpi testacei, articulo 3o clavato*; *antennæ corpore fere duplo longiores*; *prothoracis carinæ laterales indeterminatæ*; *cerci abdominis dimidio longiores*; *oviductus vix arcuatus, abdomine paullo longior*; *pedes validi, tibiis posticis cæcis quinque spinosis intus septem spinosis*; *alæ anticæ abdominis apicem attingentes, carinæ laterales bene determinatis testaceo lineatis.*

*Female.* Tawny, fusiform. Head convex, a little narrower than the fore border of the prothorax. Eyes rather small, slightly elongated and prominent. Palpi testaceous; third joint clavate, that of the maxillary palpi truncated obliquely. Antennæ very slender, nearly twice the length of the body. Prothorax transverse, not narrower in front; lateral keels hardly apparent; sides slightly rounded. Cerci little more than half the length of the abdomen. Oviduct hardly curved, black at the tip, a little longer than the abdomen. Legs rather stout; hind tibiæ long, with five slender spines on the outer side and with seven on the inner side. Fore wings extending to the tip of the abdomen; longitudinal veins numerous, irregular; transverse sectors also irregular; a testaceous line on each side along most of the length of the lateral keel, which is sharply defined; subcostal space broad, with seven very oblique veins. Hind wings not apparent. Length of the body 7 lines.

It differs much from the typical species of the genus in the convex form and different reticulation of the fore wings.

*a.* Honduras. From Mr. Dyson's collection.

#### 6. OROCHARIS? ANNULATUS.

Eneoptera annulata. *Scudder, Cent. Orth. Dec. Gryll.*

Central America.

## 7. OROCHARTS?? OBSCURUS.

Euceoptera obscura, *Scudder, Cent. Orth. Dec. Gryll.*

Old Calabar.

*qq.* Fore wings with the veins beyond the tympanum regular.

## Genus 19. ITARA.

*Fem.* Corpus fusiforme, tomentosum. Caput parvum, breve, antice rotundatum. Oculi mediocres, subelongati, non prominuli. Palporum articulus 3us clavatus, 2o brevior. Antennæ graciles. Prothorax transversus, antice angustior, lateribus subrotundatis. Cerci abdomine non breviores. Pedes anteriores breviusculi, sat validi. Pedes postici sat longi; tibiæ utrinque trispinosæ. Alæ antice latiusculæ, abdomen superantes, apices versus reticulatæ. Alæ posticæ longiores.

*Female.* Body fusiform, tomentose. Head and prothorax small. Head shining, short, rounded in front, as broad as the fore border of the prothorax. Eyes moderately large, near the hind border, slightly elongated, not prominent. Third joint of the maxillary palpi clavate, shorter than the second. Antennæ slender. Prothorax narrower in front, much broader than long; lateral keels well defined; sides slightly rounded. Cerci fall as long as the abdomen. Anterior legs rather short and stout. Hind wings moderately long; tibiæ with three spurs on each side; tarsi with the usual structure. Fore wings somewhat broad, extending rather beyond the abdomen; transverse sectors beyond the tympanum numerous and regular. Hind wings extending somewhat beyond the fore wings.

The tympanum is smaller than that of the preceding genus, and the transverse vein which intersects it is curved.

## 1. ITARA SERICIA.

*Mas.* *Fulva; caput piceum, antice subtusque fulvum; antenna picea, basi fulva; prothorax vittis duabus subcostalibus latis nigricantibus; femora postica fusco strigata, apices versus fusco unifasciata; alæ antica cinerea, tertio venosa.*

*Male.* Tawny. Head piceous, tawny in front and beneath. Antennæ piceous, tawny at the base. Prothorax with two broad blackish stripes between the keels and the sides. Hind femora with brown oblique streaks on the outer side and with a brown band near the tips. Fore wings cinereous; veins testaceous. Length of the body 8 lines.

*a.* Silhet. From Mr. Stanforth's collection.

*pp.* Head prominent between the eyes.

## Genus 20. MADASUMMA.

*Mas.* Corpus fusiforme, tomentosum. Caput antice subearinatum. Oculi parvi, subproducti, antice angustiores. Ocelli approximati. Palporum articulus 3us subserriformis, 2o longior. Antennæ gracillimæ.

corpore triplo longiores. Prothorax transversus, antice angustior, lateribus subrotundatis. Cerci abdomine breviores. Pedes anteriores breves, robusti. Pedes postici sat longi; tibiis quadrispinosis. Alæ anticæ sat angustæ, apices versus reticulatæ, abdomen superantes. Alæ posticæ longiores.

*Male.* Body fusiform, tomentose. Head as broad as the fore border of the prothorax, prominent between the sockets of the antennæ. Eyes small, slightly elongated, narrowest in front. Ocelli approximate, the middle one in advance of the others. Third joint of the maxillary palpi slightly securiform, longer than the second. Antennæ very slender, about thrice the length of the body. Prothorax broader than long, narrower in front, directly decumbent beyond the ridges; sides slightly rounded. Cerci shorter than the abdomen. Anterior legs short, stout. Hind legs moderately long; tibiæ with four slender spines on each side; tarsi of the usual form. Fore wings rather narrow, extending somewhat beyond the abdomen, irregularly reticulated beyond the tympanum; subcostal space broad, reticulated towards the base, where the oblique veins are most slanting. Hind wings extending rather beyond the fore wings.

The tympanum is smaller than that of the two preceding genera, and the vein across the middle of it is forked.

#### I. MADASUMMA VENTRALIS.

*Mas.* *Fulva, flavo bivittata; ocelli lutei; antennæ ferruginæ; femora postica strigas obliquis obscurioribus; alæ anticæ pallide cinereæ, testaceo venosæ.*

*Male.* Tawny, with two yellow stripes which extend from the hind borders of the eyes along the keels of the prothorax and of the fore wings as far as the tympanum. Eyes piceous. Ocelli luteous. Antennæ ferruginous. Hind femora with oblique darker streaks on the outer side. Fore wings pale cinereous; veins testaceous; subcostal space pellucid. Length of the body  $7\frac{1}{2}$  lines.

a. North Hindostan. From Capt. Reid's collection.

rr. Prothorax much broader than the head.

#### Genus 21. LOBEDA.

*Mas.* Corpus planum, nitens, subovale. Caput parvum. Oculi parvi, subprominuli. Palporum articulus 3us subsecuriformis. Antennæ gracillimæ, corpore triplo longiores. Prothorax antice angustus, postice latus, margine postico convexo. Cerci gracillimi, brevissimi. Pedes graciles; tibiæ posticæ utrinque trispinosæ. Alæ anticæ latiusculæ, abdominis apicem attingentes, perparum reticulatæ, tympano non intersecto, vena mediastinali subarcuata, spatio subcostali angusto venis obliquis nullis. Alæ posticæ nullæ?

*Male.* Body depressed, shining, nearly oval. Head very small, about one-third of the breadth of the hind part of the prothorax, not prominent in front. Eyes small, slightly prominent. Third joint of the maxillary palpi slightly securiform. Antennæ very slender, about thrice the length of the body. Prothorax not broader than long, much narrower in front, its fore border about one-third of the breadth of its hind border, which is

rounded. Cerci very slender, about one-fourth of the length of the abdomen. Legs slender, moderately long; hind tibiæ with three slender spines on each side. Fore wings rather broad, very slightly reticulated, extending to the tip of the abdomen. Tympanum without a transverse vein; ridge on each side slightly rounded; subcostal space narrow, without oblique veins. Hind wings not apparent.

#### 1. LOBEDA OVALIS.

Mas. *Testacea; prothorax margine antico fasciæque arcuata nigris; alæ antica hyalinæ, testaceo venosæ.*

Male. Testaceous. Prothorax with a black fore border, and in the middle with a black band, which is curved forward. Fore wings hyaline; veins testaceous. Length of the body 4 lines.

a, b. Natal. From M. Gueinzins' collection.

nn. Fore wings without transverse veins.

o. Legs not very slender.

#### Genus 22. ENEOPTERA.

Encoptera, *Burm. Handb. Ent.* ii. 736 (ex parte). — Gryllus (Encoptera), *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 231.

*Encoptera* of Burmeister is identical with *Platydaetylus* of Serville, but the former genus, as characterized by Haan, and here adopted, is widely different.

#### 1. ENEOPTERA? GRYLLODES.

*Acheta grylloides*, *Pallas, Spicil. Zool.* ix. pl. 1, f. 10.

Jamaica.

#### 2. ENEOPTERA INSCIARIS.

Fœm. *Nigra, hirsuta; palpi albidii; antennæ gracillimæ, corpore fere duplo longiores; cerci et oriductus abdomine longiores; pedes sat graciles, femoribus testaceis; alæ antica piceæ, abdominis apicem fere attingentes.*

Female. Black, hirsute, shining. Head full as broad as the prothorax. Eyes piceous. Palpi whitish. Antennæ very slender, nearly twice the length of the body. Prothorax much broader than long. Cerci and oriduct rather longer than the abdomen, the latter tawny. Legs rather slender; coxæ and femora testaceous. Fore wings piceous, extending nearly to the tip of the abdomen; veins strongly marked. Hind wings full twice the length of the abdomen. Length of the body 3 lines.

a. Jamaica. From Mr. Gosse's collection.

#### 3. ENEOPTERA LIVIDA.

*livida*, *Burm. Handb. Ent.* ii. 736. — *Gryllus* (Encoptera) *lividus*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 231.

Brazil.

## 4. ENEOPTERA INCOMPTA.

Mas. *Nigricans*; *alæ anticæ testaceæ, abdomen paullo superantes*; *alæ posticæ diaphanæ, apud costam fuscæ testaceo fasciatæ, abdomine duplo longiores.*

*Male.* Blackish. Fore wings testaceous, extending a little beyond the abdomen. Hind wings pellucid, full twice the length of the abdomen, brownish and with pale bands along the costa for half the length from the tips. Length of the body  $2\frac{1}{2}$  lines.

The specimen described is much mutilated.

a. Tapayos. From Mr. Bates' collection.

## 5. ENEOPTERA LANCEOLATA.

Fœm. *Testacea*; *antennæ piceæ, gracillimæ, corpore duplo longiores*; *prothoracis latera setosa*; *oviductus arcuatus, abdomine non brevior*; *pedes graciles, femoribus posticis apice piceis, tibiis posticis piceis utrinque trispinosis*; *alæ anticæ abdomen paullo superantes, venis bene determinatis*; *alæ posticæ valde longiores.*

*Female.* Testaceous, slender. Eyes rather prominent. Antennæ piceous, very slender, testaceous towards the base, not less than twice the length of the body. Prothorax transverse, setose on each side. Oviduct curved upward, as long as the abdomen. Legs slender; hind femora with piceous tips; hind tibiæ piceous, with three slender spines on each side beyond the middle. Fore wings extending a little beyond the abdomen, with straight strongly-marked longitudinal veins. Hind wings extending much beyond the fore wings. Length of the body 3 lines.

a. Brazil. Presented by J. Miers, Esq.

## 6. ENEOPTERA FASCIPES.

Mas. *Testacea*; *caput anticæ nigrum*; *palpi pallide testacei*; *antennæ gracillimæ, corpore longiores*; *prothoracis latera nigra*; *oviductus fulvus, abdomine non brevior*; *pedes nigri, albo fasciati*; *alæ anticæ abdominis apicem fere attingentes*; *alæ posticæ abdomen longissime superantes, apud costam fusce testaceo transverse lineatæ.*

*Male.* Testaceous. Head black and shining in front. Eyes piceous. Palpi pale testaceous; third joint obliquely truncated. Antennæ black, very slender, longer than the body. Prothorax black on each side between the lateral keel and the border. Cerci black. Oviduct tawny, as long as the abdomen. Legs black, moderately long and slender; coxæ and femora white; anterior femora black towards the tips; hind femora with three black bands, the first widely interrupted; tibiæ and tarsi with black bands; hind tibiæ with three spines. Fore wings extending nearly to the tip of the abdomen. Hind wings more than twice the length of the abdomen, brown, with pale transverse lines along the costa. Length of the body  $2\frac{3}{4}$  lines.

This species has bands on the legs like *E. fasciata*, but differs from it in having no spots on the fore wings.

a. North Hindostan. From Capt. Boyes' collection.

## 7. ENEOPTERA HEMELYTRA.

*Gryllus* (Eneoptera) hemelytrus, *Hag. MSS. Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 231, pl. 20, f. 2.

Java.

## 8. ENEOPTERA CONCINNA.

*Gryllus* (Eneoptera) concinnus), *Hag. MSS. Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 231, pl. 20, f. 3.

Java.

## 9. ENEOPTERA FASCIATA.

*Gryllus* (Eneoptera) fasciatus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 232, pl. 20, f. 4.

Java. Celebes.

## 10. ENEOPTERA CINEREA.

*Gryllus* (Eneoptera) cinereus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 232, pl. 20, f. 5.

Java. Celebes. N. Guinea.

## 11. ENEOPTERA PUNCTATA.

*Gryllus* (Eneoptera) punctatus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 232, pl. 20, f. 6.

Celebes.

oo. Legs very slender.

## Genus 23. PHYLLOPALPUS.

*Phyllopalpus*, *Uhler, Proc. Ent. Soc. Phil.* ii. 543.

## 1. PHYLLOPALPUS PULCHELLUS.

*pulchellus*, *Uhler, Proc. Ent. Soc. Phil.* ii. 554.

*a, b.* N. America. Presented by F. Walker, Esq.

*c.* \_\_\_\_\_?

*d.* N. America. Presented by the Entomological Club.

## 2. PHYLLOPALPUS LATIPENNIS.

*Pallide testaceus; alæ anticæ latæ, abdomen superantes; alæ posticæ diaphanæ, abdomen longissime superantes, apud costam nigræ.*

Wholly pale testaceous. Fore wings broad, extending beyond the abdomen. Hind wings black along the costa for half the length from the tips, extending very much beyond the abdomen. Length of the body  $2\frac{1}{2}$  lines.

The mutilated state of the specimen will not admit a more full description. The broader fore wings distinguish it from *P. pulchellus*.

*a.* Jamaica. From Mr. Gosse's collection.

## 3. PHYLLOPALPUS COMPTUS.

*Fœm.* *Piceus, gracilis, subpilosus, subtus fulvus; antennæ nigræ, graciles, nigro late fasciatæ; oviductus ferrugineus, vix arcuatus, abdomine longior; pedes picei, longiusculi, gracillimi, tibiis tarsisque fulvis, tibiis posticis bispinosis; alæ anticæ abdomine paullo breviores; alæ posticæ corpore longiores.*

*Female.* Piceous, slender, tawny beneath. Head shining, tawny about the mouth, vertex and prothorax slightly pilose. Eyes black. Antennæ black, slender, with a broad white band. Oviduct ferruginous, hardly curved, longer than the abdomen. Legs piceous, rather long, very slender; tibiæ and tarsi tawny; hind tibiæ with two short slender spines. Fore wings a little shorter than the abdomen. Hind wings longer than the body. Length of the body  $2\frac{3}{4}$  lines.

*a. Para.* From Mr. Wallace's collection.

## 4. PHYLLOPALPUS ELEGANS.

*Fœm.* *Niger, gracilis, subpilosus; caput albo fasciatum, antice subtusque luteum; antennæ gracillimæ, albo late fasciatæ, corpore plus duplo longiores; prothorax luteo tristrigatis, albido antice marginatus; cerci fulvi, breves; oviductus fulvus, arcuatus, abdomine paullo brevior; pedes fulvi, longi, gracillime nigro vittati; alæ anticæ cervinæ, viridi vittatæ, basi apiceque albo nigroque notatæ; alæ posticæ nullæ.*

*Female.* Black, slender, slightly pilose. Head luteous in front and beneath, with a narrow white band between the eyes. Antennæ very slender, more than twice the length of the body, with a white band at one-fourth of the length. Prothorax with a narrow whitish fore border and with three luteous longitudinal streaks, the middle streak in advance of the other two. Cerci tawny, very slender, less than half the length of the abdomen. Oviduct tawny, curved upward, a little shorter than the abdomen. Legs tawny, long, very slender; femora and the four anterior tibiæ striped with black; hind tibiæ with three slender wide apart spines on each side. Fore wings fawn-colour, extending to the tip of the abdomen, with a white spot and a black dot at the base, and with a grass-green stripe, which extends along the lateral keel and ends in a white spot; subcostal space pellucid for half the length from the base, black from thence to the spot; inner border of the right fore wing grass-green from the base to three-fourths of the length. Hind wings not apparent. Length of the body 3 lines.

*a. Santarem.* From Mr. Bates' collection.

## 5. PHYLLOPALPUS PULCHER.

*Fœm.* *Niger, gracilis; caput prothorace latius, vertice frontaque ochraceis; palpi articulo 3o dilatato; antennæ longæ, gracillimæ, albo late fasciatæ, basi ochraceæ; prothorax ochraceo trivittatus et quadriguttatus; oviductus fulvus, arcuatus; pedes longi, gracillimi, albido vittati; alæ anticæ ferruginæ, abdomen paullo superantes, basi*

*ochracea, costa viridi alba, vitta discoidali nigricante diffusa; alæ posticæ nigrae, abdomen longe superantes, apice spatulate alboque marginate.*

*Female.* Black, slender. Head a little broader than the prothorax; vertex and front ochraceous; hind border black. Eyes livid. Third joint of the palpi elliptical, dilated. Antennæ very slender, longer and perhaps twice longer than the body, with a broad white band, ochraceous at the base. Prothorax with ochraceous sides and with an ochraceous stripe, on each side of which there are two ochraceous dots. Oviduct tawny, curved upward, as long as the abdomen; hind femora whitish on the inner side, with two oblique whitish stripes on the outer side and with ochraceous tips; hind tibiæ with three slender wide apart spines. Fore wings ferruginous, extending a little beyond the tip of the abdomen; costa greenish white; a diffuse blackish stripe in the disk, black and determinate near the base, which is ochraceous. Hind wings black, extending much beyond the abdomen, with spatulate vertical white-bordered tip. Length of the body  $3\frac{1}{2}$  lines.

Amazon Region. In Mr. Saunders' collection.

#### 6. PHYLLOPALPUS ? NIGROVARIUS.

*Mas. Niger; abdomen albidum; pedes albi, tibiis anterioribus basi tarsisque anterioribus apice nigricantibus, tibiis posticis utrinque tripinosis; alæ anticæ diaphana, latiusculæ, abdomen paullo superantes, striga subcostali, striga discali angulata fasciæque subapicali nigris; alæ posticæ nullæ?*

*Male.* Black. Eyes rather prominent. Abdomen whitish above. Legs whitish. Anterior tibiæ blackish at the base; anterior tarsi blackish at the tips; hind tibiæ with three slender spines beyond the middle. Fore wings pellucid, extending a little beyond the abdomen, with a black subcostal streak, with a black subapical band, and with an angular black streak in the disk. Hind wings not extending beyond the fore wings. Length of the body 3 lines.

The description is taken from an injured specimen.

Mexico. In Mr. Saunders' collection.

#### 7. PHYLLOPALPUS ? GRACILIS.

*Mas. Pallide testaceus, tomentosus; antennæ gracillimæ, corpore longiores; venter apice piceus; cerci abdomine longiores; alæ anticæ latiusculæ, abdomen paullo superantes; alæ posticæ abdomine duplo longiores.*

*Male.* Pale testaceous, tomentose. Third joint of the palpi slightly securiform. Antennæ very slender, longer than the body. Abdomen piceous at the tip beneath. Cerci longer than the abdomen. Legs slender, hind tibiæ with three spines beyond the middle. Fore wings extending a little beyond the abdomen, which they exceed in breadth. Hind wings about twice the length of the abdomen. Length of the body 4 lines.

a. Natal. From M. Guéinzins' collection.



## 8. PHYLLOPALPUS LYCOIDES.

Mas. *Luteus, linearis; caput piceum; palpi nigri, articulo 3o oblique truncato; antennæ nigrae, gracillimæ; pedes nigri, longiusculi, tibiis anticis vix dilatatis, femoribus posticis luteis; alæ anticæ luteæ aut piceæ, abdominis apicem attingentes; alæ posticæ abdomine plus duplo longiores.*

*Male.* Luteous, slender, linear. Head piceous. Eyes rather prominent. Palpi black, rather long; third joint obliquely truncated. Antennæ black, very slender. Legs black, slender, rather long; coxæ and hind femora luteous; hind tibiæ with slender spines. Fore wings extending to the tip of the abdomen. Hind wings pellucid, more than twice the length of the abdomen, black along the costa. *Var. β.*—Fore wings piceous, luteous at the base. Length of the body  $2\frac{1}{2}$  lines.

a. Ceylon. Presented by Dr. Hooker.

b. Ceylon. Presented by Dr. Thwaites.

mm. Fore wings of the male very broad.

n. Prothorax not narrower in front.

## Genus 24. EUREPA.

*Mas et fœm.* Corpus gracile, tomentosum, sublineare. Caput inter oculos subquadratum. Oculi subprominuli. Palporum articulus 3us securiformis. Antennæ corpore duplo longiores. Prothorax transversus. Cerci abdomine multo longiores. Oviductus corpore fere duplo longiores. Tibiæ posticæ utrinque serratæ et trispinosæ. Alæ anticæ abdominis apicem attingentes (*mas.*) aut breviores (*fœm.*), tympano maximo, venis transversis paucis. Alæ posticæ breves.

*Male and female.* Body slender, tomentose, nearly linear. Head as broad as the prothorax, shining in front, somewhat quadrate and slightly prominent between the eyes. Eyes rather prominent. Third joint of the palpi slightly securiform. Antennæ slender, about twice the length of the body. Prothorax transverse, in structure like that of *Nemobius*. Dorsal segments of the abdomen overlapping the ventral segments. Cerci much longer than the abdomen. Oviduct nearly twice the length of the body. Legs moderately slender; hind tibiæ minutely serrated and with three postmedial spines on each side. Fore wings as long as the abdomen in the male, rather more than half the length of the abdomen in the female; tympanum extremely broad; transverse veins four. Hind wings shorter than the abdomen.

## 1. EUREPA MARGINIPENNIS.

Mas. *Picea, subpilosa, fulvo conspersa; prothorax testaceo bivittatus, lateribus nigris; abdomen nigrum, apice cercisque piceis; pedes picei, femoribus posticis fulvis piceo strigatis; alæ anticæ cineræ, tympano diaphano.*

Fœm. *Nigra, capitis latera subtus fulva; palpi picei; prothorax piceus, lineis duabus testaceis, lateribus nigris; venter apice pallide testaceus; pedes fulvescente; alæ anticæ fulvæ.*

Acheta? marginipennis, White, *Grey's Journ. Exp. App.* ii. 467.

*Male.* Piceous, thinly pilose. Head and prothorax speckled or interlaced with tawny. Eyes livid, blackish on the outer side. Prothorax black on each side, this hue limited by two testaceous stripes along the lateral keels. Abdomen black, shining; tip and cerci piceous. Legs piceous; hind femora tawny, obliquely streaked with piceous on the outer side. Fore wings cinereous; veins brownish; mediastinal and scapular veins whitish; tympanum and hind wings pellucid. Length of the body  $5\frac{1}{2}$  lines.

*Female.* Black. Head tawny on each side below the eyes. Palpi piceous. Antennæ tawny at the base. Prothorax piceous, black on each side, the two colours separated by a testaceous line. Ventral segments piceous, pale testaceous at the tip. Cerci and oviduct piceous. Fore wings tawny. Length of the body 5 lines.

*a—c.* King George's Sound. Presented by Sir G. Grey.

*d.* Swan River. Presented by Sir J. Richardson.

*nn.* Prothorax much narrower in front.

#### Genus 25. LERNECA.

*Mas.* Corpus fusiforme, tomentosum, sat gracile. Caput breve, antice vix carinatum. Oculi prominuli, subrotundi. Palpi graciles; articulus 3us subsecuriformis, 2o longior. Antennæ gracillimæ, corpore multo longiores. Prothorax transversus, antice angustus. Cerci corpore longiores. Pedes sat graciles; tibiæ posticæ utrinque subserratæ et tri-spinosæ. Alæ anticæ latiusculæ, abdomen paullo superantes, apice reticulatæ, spatio subcostali lato, venis obliquis fere parallelis. Alæ posticæ valde longiores.

*Male.* Body fusiform, tomentose, rather slender. Head short, shining, slightly prominent in front. Eyes prominent, nearly round. Palpi slender; third joint slightly securiform, longer than the second. Antennæ very slender, much longer than the body. Prothorax transverse, much narrower in front. Cerci somewhat longer than the body. Legs rather slender and long; hind tibiæ very minutely serrated on each side; three slender spines on each side beyond the middle. Fore wings rather broad, reticulated near the tips, extending a little beyond the abdomen; subcostal space broad, with oblique nearly parallel veins. Hind wings extending much beyond the fore wings.

#### I. LERNECA VARIPES.

*Mas.* *Fulva; caput antice piceum; palpi albi; prothorax fusco subconspersus, lateribus piceis; pedes picei, femoribus posticis testaceo lineatis.*

*Male.* Tawny. Head in front and eyes piceous. Palpi white. Prothorax slightly speckled with brown, piceous between the keels and the side borders. Legs piceous; hind femora with many oblique parallel testaceous lines on the outer side. Length of the body 5 lines.

Amazon Region. In Mr. Saunders' collection.

## Genus 26. SALMANIA.

*Mas.* Corpus tomentosum, sat angustum, supra planum. Caput breve, antice subcarinatum, prothorace vix angustius. Oculi sat magni, subprominuli. Palporum articulus 3us clavatus, 2o paullo longior. Prothorax transversus, antice paullo angustior, lateribus antice rotundatis. Cerci corpore longiores. Pedes sat robusti; tibiæ posticæ utrinque subtiliter serratæ et spinis tribus armatæ. Alæ anticæ abdominis apicem fere attingentes, apice subreticulatæ, tympano sat parvo. Alæ posticæ abdominis apicem attingentes.

*Male.* Body tomentose, rather slender, flat above. Head short, prominent between the sockets of the antennæ, as broad as the fore border of the prothorax. Eyes slightly elongated, rather large and prominent. Third joint of the maxillary palpi clavate, a little longer than the second. Prothorax transverse, a little narrower in front; sides rounded in front. Metasternum large. Cerci somewhat longer than the body. Legs rather stout, moderately long; hind tibiæ minutely serrated on each side, where there are three rather long and slender spines beyond the middle. Fore wings extending nearly to the tip of the abdomen; tympanum rather small; apical part slightly reticulated; subcostal space moderately broad, with oblique nearly parallel veins. Hind wings extending to the tip of the abdomen.

## I. SALMANIA SORDIDA.

*Mas.* *Picea*; *prothoracis latera nigricantia*; *femora postica lineis exterioribus obliquis cinereis*; *alæ anticæ luridæ, piceo venosæ, apud costam nigricantes.*

*Male.* Piceous, dull. Head shining in front. Sides of the prothorax blackish. Hind femora with oblique parallel cinereous lines on the outer side. Fore wings lurid; veins piceous; subcostal space blackish. Length of the body 7 lines.

a. North Australia. Presented by J. R. Elsey, Esq.

ll. Fore wings coriaceous.

m. Fore wings not reticulated.

## Genus 27. SCLEROPTERUS.

*Gryllus* (*Scleropterus*, *Hag.*) *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 232.

## I. SCLEROPTERUS CORIACEUS.

*coriaceus*, *Hag. MSS.* *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 232, pl. 20, f. 7.

Java.

2. *SCLEROPTERUS CICINDELOIDES*.

*Gryllus* (*Scleropterus*) *cicindeloides*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 233.

Java.

3. *SCLEROPTERUS ERYTHROCEPHALUS*.

*Fœm.* *Ater, nitens; caput rufum, palpis antennisque nigris, his gracillimis corpore fere triplo longioribus; prothorax pubescens; oviductus arcuatus, abdomine vix brevior; pedes postici longissimi, femoribus fulvis, tibiis utrinque trispinosis.*

*Mas?*—*Caput atrum; tarsi postici basi testacei.*

*Female.* Deep black, shining. Head red. Eyes livid, very prominent. Palpi black. Antennæ black, extremely slender, nearly thrice the length of the body. Prothorax pubescent. Oviduct curved upward, almost as long as the abdomen. Hind legs very long; femora tawny; tibiæ with six spines which are not in opposite pairs. Fore wings like those of *S. ater*. Length of the body 2 lines.

*a, b.* Natal. From M. Gueinzus' collection.

*Male?* Head deep black. Hind tarsi testaceous at the base.

*c.* W. Africa. From Mr. Fraser's collection.

4. *SCLEROPTERUS ATER*.

*Mas.* *Ater, nitens; antennæ gracillimæ, sordide testaceæ, basi nigre, corpore plus duplo longiores; prothorax pubescens; cerci testacei; oviductus fulvus, arcuatus; ala antica convexa, subtilissime strigata, abdominis apicem attingentes.*

*Female.* Deep black, shining. Eyes whitish, very prominent. Third joint of the palpi truncated. Antennæ dingy testaceous, extremely slender, black at the base, more than twice the length of the border. Prothorax pubescent. Cerci and oviduct as long as the abdomen. Cerci testaceous. Oviduct tawny, curved upward. Legs black, slender. Fore wings convex, very finely striated, extending to the tip of the abdomen. Hind wings not apparent. Length of the body 2 lines.

The fore wings of this species are much more finely striated than those of *S. mauricus*.

*a.* Sierra Leone. Presented by the Rev. D. F. Morgan.

5. *SCLEROPTERUS MAURICUS*.

*Fœm.* *Niger, nitens; palporum articulus 3us clavatus, truncatus; antenna gracillima, corpore plus duplo longiores; prothorax cinereo-pubescens; oviductus arcuatus, abdomine non longior; pedes fulvi, tibiis posticis longis utrinque trispinosis; ala antica convexa, striata, abdominis apicem attingentes.*

*Female.* Black, shining. Eyes piceous, very prominent. Third joint of the palpi clavate, truncated. Antennæ extremely slender, more than

twice the length of the body. Prothorax with cinereous down. Cerci and oviduct a little shorter than the abdomen. Cerci very slender. Oviduct curved upward. Legs tawny; hind legs long, their tibiæ with three slender spines alternately on each side. Fore wings convex, extending to the tip of the abdomen, with no lateral keels. Hind wings not apparent. Length of the body 2 lines.

*a.* New Zealand. Presented by the Rev. W. Colenso.

*b, c.* New Zealand. Presented by Col. Bolton.

*mm.* Fore wings reticulated.

#### Genus 28. LEBUSSA.

*Fœm.* Corpus robustum, tomentosum. Caput prothorace paullo angustius. Palporum articulus 3us securiformis. Antennæ gracillimæ, corpore multo longiores. Prothorax margine antico hirsuto. Cerci breves. Oviductus subarcuatus, abdomine longior. Pedes sat validi; tibiæ posticæ ntrinque serratæ et spinosæ. Alæ anticæ abdomine breviores, crebre et inordinate reticulatæ. Alæ posticæ nullæ.

*Female.* Body stout, tomentose. Head a little narrower than the prothorax. Third joint of the maxillary palpi securiform. Antennæ very slender, much longer than the body. Prothorax hirsute along the fore border. Cerci short. Oviduct slightly curved upward, longer than the abdomen. Legs rather stout; hind tibiæ serrated along each side, with six spines along the outer side and with four along the inner side.\* Fore wings extending to three-fourths of the length of the abdomen, irregularly and rather thickly reticulated; the longitudinal veins irregular, except those in the subcostal space. Hind wings not apparent.

#### 1. LEBUSSA TENUICORNIS.

*Fœm.* Ferruginea; caput antice testaceo guttatum; abdomen nigricans; cerci picei; oviductus ferrugineus; femora postica piceo strigata; tibiæ posticæ subtus nigricantes.

*Female.* Ferruginous. Fore part of the head with many small irregular testaceous dots. Eyes piceous. Abdomen blackish. Cerci piceous. Oviduct ferruginous. Hind femora piceous on the outer side, with slightly marked oblique streaks; their under side dull tawny; hind tibiæ blackish beneath. Length of the body 6 lines.

*a.* St. Domingo. From Mr. Tweedie's collection.

*ii.* Hind legs very long.

*j.* Fore femora and fore tibiæ not spiny.

*k.* Eyes not very prominent.

*l.* Second joint of the hind tarsi very distinct.

#### Genus 29. PODOSCIRTUS.

*Podoscirtus, Serv. Hist. Orth.* 361.

#### 1. PODOSCIRTUS CROCINUS.

*crocinus, Serv. Hist. Orth.* 363.

Madagascar.

- ll. Second joint of the hind tarsi hardly apparent.  
m. Wings complete.

Genus 30. PLATYDACTYLUS.

*Gryllus*, *Deg.*, *Oliv.*, *Guérin*—*Acheta*, *Fabr.*—*Platydactylus*, *Brullé*, *Hist. Nat. Ins.* ix. 176. *Serv. Hist. Orth.* 363. *Eneoptera*, *Burm. Handb. Ent.* ii. 736—*Gryllus* (*Platydactylus*) *Haan*, *Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 233.

America.

1. PLATYDACTYLUS SURINAMENSIS.

*Gryllus surinamensis*, *Deg. Ins.* iii. 519, pl. 43, f. 1—*Gryllus brasiliensis*, *Oliv. Enc. Meth.* vi. 634—*Acheta brasiliensis*, *Fabr. Ent. Syst.* ii. 30—*Gryllus Servillei*, *Guér. Icon. Regn. Anim.* pl. 54, f. 1—*Platydactylus surinamensis*, *Brullé, Hist. Nat. Ins.* ix. 176. *Serv. Hist. Orth.* 365, pl. 9, f. 1—*Eneoptera Brasiliensis*, *Burm. Handb. Ent.* ii. 736—*Gryllus* (*Platydactylus*) *brasiliensis*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 233.

a. Demerara. From Mr. Bowers' collection.

2. PLATYDACTYLUS VICINUS.

*vicinus*, *Serv. Hist. Orth.* 365—*surinamensis*, *mas.*?  
Buenos Ayres.

3. PLATYDACTYLUS BICOLOR.

*bicolor*, *Scudder, Cent. Orth. Dec. Gryll.*  
Bogota.

4. PLATYDACTYLUS CONSIMILIS.

*Fœm.* *Testaceus, tomentosus; caput facie lineaque transversa nigricante marginata pallide flavis; oviductus abdomini aquilongus; cerci breviores; tibie posticæ serratæ, extus quadrispinosæ, intus quinque spinosæ; alæ antica abdomen superantes, linea subcostali e guttis nigris; alæ posticæ valde longiores.*

*Female.* Testaceous, tomentose. Head shining in front, pale yellow towards the mouth and with a pale yellow transverse line between the eyes; this line is diffusely bordered with blackish on the hind side. Eyes tawny, slightly prominent. Third joint of the palpi slightly securiform. Abdomen shining, with three piecous dorsal stripes, the middle stripe concise, the other two broad and incomplete. Cerci rather shorter than the oviduct. Oviduct slightly curved upward, black at the tip, as long as the abdomen. Hind tibia serrated on each side, with four spines on the outer side and with five spines on the inner side. Fore wings extending beyond the abdomen, in structure like those of *P. surinamensis*; a row of black dots along the extemo-medial vein; apical triangle pale cinereous. Hind wings extending much beyond the fore wings. Length of the body 13 lines.

The cerci are shorter than those of the typical species (*P. surinamensis*) and the hind tibiæ are rather shorter and stouter and more strongly serrated.

a. ——— ?

#### 5. PLATYDACTYLUS COLUMBICUS.

*Fœm.* *Fulvus, tomentosus; caput breve, antice nitens, nigro plagiatum; palporum articulus 3us apice piceus et oblique truncatus; prothorax antice angustior; abdomen piceum; cerci fulvi, abdomine non breviores; oviductus testaceus, apice niger, corpore rix brevior; pedes longiusculi, femoribus posticis fusco substriyatis, tibiis posticis utrinque serratis et quadrispinosis; alæ anticæ pallide testacæ, abdomen longe superantes, incondite reticulatæ, venis longitudinalibus subrectis, carina laterali nigricante punctata; alæ posticæ longiores.*

*Female.* Tawny, tomentose. Head shining in front: disk of the face blackish. Eyes slightly prominent, partly blackish near the hind border. Third joint of the palpi piceous towards the tip, which is obliquely truncated and excavated. Antennæ very slender, about twice the length of the body. Prothorax not longer than broad, a little narrower in front. Abdomen shining, piceous. Cerci tawny, as long as the abdomen. Oviduct testaceous, with a black tip, nearly as long as the body. Legs rather long; hind femora obliquely and indistinctly streaked with brown on the outer side; hind tibiæ minutely serrated and with four rather slender spines on each side. Fore wings pale testaceous, extending much beyond the tip of the abdomen, with blackish dots along the externo-medial vein, irregularly reticulated between the nearly straight and parallel longitudinal veins; apical triangle pale cinereous. Hind wings pale cinereous, extending much beyond the fore wings; costa and veins pale testaceous. Length of the body  $10\frac{1}{2}$  lines.

It much resembles *P. consimilis*; the hind tibiæ are rather shorter, and the reticulation of the fore wings is more regular.

a. Columbia. From M. Sallé's collection.

#### 6. PLATYDACTYLUS VELUTINUS.

*Fœm.* *Testaceus, tomentosus, subvelutinus; caput breve, antice nitens pallide testaceum; oculi parri; palporum articulus 3us subsecuriformis; prothoracis latera rotundata; abdomen piceum; cerci abdomine longiores; oviductus fulvus, apice niger, cercis multo longior; pedes anteriores breves; pedes postici longi, tibiis tarsisque piceis, tibiis utrinque setosis extus trispinosis intus quinque spinosis; alæ anticæ confertim et incondite reticulatæ, abdomen longissime superantes; alæ posticæ longiores.*

*Female.* Testaceous. Head and prothorax tomentose, slightly velvety. Head short, pale testaceous and shining in front. Eyes piceous, small, rather prominent, remote from the hind border. Third joint of the palpi slightly securiform. Antennæ very slender, about twice the length of the body. Prothorax not longer than broad; side borders rounded. Abdomen

and cerci piceous, the latter longer than the former. Oviduct tawny, black at the tip, much longer than the cerci. Four anterior legs short; hind legs long; hind tibiæ and hind tarsi piceous; hind tibiæ minutely setose along each side, with three spines along the outer side and with five along the inner side. Fore wings wholly and irregularly reticulated, extending very much beyond the abdomen. Hind wings cinereous, extending somewhat beyond the fore wings. Length of the body 8 lines.

It agrees with the typical species in the reticulation of the fore wings; the hind tibiæ are a little shorter than those of *P. columbicus*.

a. Santarem. From Mr. Bates' collection.

#### 7. PLATYDACTYLUS SIMILIS.

Fœm. *Testaceus, tomentosus, sat gracilis; caput antice subcarinatum; palporum articulus 3us oblique truncatus; prothorax antice paullo angustior; abdominis dorsum piceum; cerci breves; oriductus subarcuatus, abdomine longior; tibiæ posticæ serratæ, extus quinque spinosæ, intus septem spinosæ; alæ anticæ abdomen longe superantes, alis posticis breviores.*

*Female.* Testaceous, tomentose, rather slender. Head as broad as the fore border of the prothorax, prominent between the sockets of the antennæ; fore part shining. Eyes piceous, slightly prominent, rather small, nearly round. Third joint of the palpi clavate, obliquely truncated, longer than the second. Antennæ long, slender; first joint rather long and stout. Prothorax transverse, a little narrower in front; sides rounded. Abdomen piceous above. Cerci testaceous, about one-third of the length of the abdomen. Oviduct slightly curved upward, black at the tip, longer than the abdomen. Hind tibiæ minutely serrated and with moderately long slightly curved spines on each side; five spines on the outer side and seven on the inner side. Fore wings extending much beyond the tip of the abdomen; transverse sectors oblique and irregular in the disk, regular and directly transverse in the pellucid apical triangle; subcostal space with about fourteen oblique veins and with numerous transverse sectors. Hind wings extending somewhat beyond the fore wings. Length of the body 8 lines.

The smaller size and the more slender tibiæ distinguish this species from *P. velutinus*, *P. columbicus* and *P. consimilis*.

a, b. St. Domingo. From Mr. Tweedie's collection.

#### 8. PLATYDACTYLUS CONIGUUS.

Mas. *Testaceus, pubescens, subnitens; caput nigricante minutatum; prothorax litura obscuriore antice furcata; abdominis discus piceus; cerci abdominis dimidio longiores; tibiæ posticæ utrinque serratæ, extus quadrispinosæ, intus quinque spinosæ; alæ anticæ abdomen longe superantes, linea subcostali e guttis nigris, tympano nullo; alæ posticæ valde longiores.*

*Male.* Testaceous, pubescent, slightly shining. Head prominent between the sockets of the antennæ; an irregular blackish mark between the eyes, which are rather prominent. Third joint of the palpi clavate,



obliquely truncate. Prothorax transverse, with a darker furcate mark in the disk, the forks curved outward; sides rounded. Disk of the abdomen piceous. Cerci more than half the length of the abdomen. Four anterior legs short; hind tibiæ minutely serrated on each side, with four spines on the outer side and with five on the inner side. Fore wings extending much beyond the abdomen, irregularly reticulated, with a row of black dots along the externo-medial vein. Hind wings extending much beyond the fore wings. Length of the body 9 lines.

This may be the male of *P. columbicus*; it differs from the latter in the number of spines along the hind tibiæ. The fore wings have no tympanum.

Para. In Mr. Saunders' collection.

#### 9. PLATYDACTYLUS CALIGINOSUS.

Mas. *Piceus, tomentosus; caput antice fulvum; antennæ gracillimæ, corpore plus duplo longiores; prothorax fulvo bivittatus; abdomen nigrum, maculis subtus lateralibus segmentisque ventralibus fulvis; cerci fulvi, abdomine breviores; alæ anticæ testaceo-cinereæ, abdominis apicem fere attingentes, vitta subcostali nigricante, tympano bene determinato; alæ posticæ valde longiores.*

*Male.* Piceous, tomentose. Head tawny in front. Eyes tawny, not prominent. Third joint of the palpi clavate. Antennæ very slender, more than twice the length of the body. Prothorax transverse, with two tawny stripes adjoining the inner sides of the lateral keels. Abdomen black, with a large tawny spot on the hind border of each dorsal segment beneath; ventral segments tawny. Cerci tawny, shorter than the abdomen. Four anterior legs moderately long and stout. Fore wings testaceous-cinereous, extending nearly to the tip of the abdomen, with a blackish stripe along the scapular vein; tympanum distinct; space beyond slightly reticulated; branches of the mediastinal vein numerous, nearly parallel. Hind wings extending much beyond the fore wings. Length of the body 9 lines.

The specimen described is deprived of the hind legs, and therefore its affinities cannot be well ascertained.

a. British Guiana. Presented by Sir R. Schomburgk.

#### 10. PLATYDACTYLUS? PLANUS.

Fœm. *Testaceus, gracilis; palporum articulus 3us securiformis; prothorax subsulcatus, carinis lateralibus vix determinatis; cerci corpore breviores; oviductus rectus, longus; alæ anticæ abdomen longe superantes; alæ posticæ valde longiores.*

*Female.* Testaceous, slender, shining. Head almost as broad as the prothorax. Eyes piceous, slightly elongated, not prominent. Third joint of the palpi slightly securiform. Antennæ longer than the body. Prothorax about as long as broad, with a slight longitudinal furrow; lateral keels not prominent; sides rounded. Cerci somewhat shorter than the body. Oviduct straight, as long as the cerci; tip black. Legs rather stout; four anterior legs short. Fore wings extending much beyond the abdomen; transverse sectors numerous, regular; subcostal space with

oblique nearly parallel veins and at the tip with a few transverse sectors. Hind wings extending much beyond the fore wings. Length of the body  $4\frac{1}{2}$  lines.

It has most resemblance to *P. similis*, but is much smaller and the reticulation of the fore wings is very different and much more simple. It has some affinity to *Eucoptera*, and may be considered as the representative of a new genus.

a. Brazil. Presented by J. P. G. Smith, Esq.

## S. Africa.

### 11. PLATYDACTYLUS AFRICANUS.

Mas. *Testaceus, gracilis, tomentosus, subcylindricus; caput subcarinatum, postice sublongatum; palporum articulus 2us piceo maculatus, 3us apice piceus truncatus; abdomen piceum, fasciis ventraeque fulvis; cerci abdomine breviores; tibiæ posticæ utrinque serratæ et quadrispinosæ; alæ abdominis apicem attingentes; alæ anticæ apice reticulatæ, spatio subcostali lato venis undulatis.*

*Male.* Testaceous, slender, tomentose, nearly cylindrical. Head keeled between the sockets of the antennæ, shining in front. Eyes slightly prominent, at some distance from the hind border. Second joint of the palpi with a piceous spot; third piceous and obliquely truncated at the tip, longer than the second. Antennæ very slender, about thrice the length of the body. Prothorax not longer than broad, slightly narrower in front; sides rounded. Abdomen piceous, with a tawny band on the fore border of each segment; under side wholly tawny. Cerci tawny, thickly pilose, much shorter than the abdomen. Legs moderately long and slender; hind femora with indistinct oblique darker streaks on the outer side; hind tibiæ and hind tarsi sometimes piceous; hind tibiæ serrated and with four slender spines on each side; spines alternate, not in pairs. Fore wings extending to the tip of the abdomen; a piceous stripe along the mediastinal vein; tips reticulated; tympanum large; subcostal space broad, with eleven oblique undulating nearly parallel veins. Hind wings pellucid, not longer than the fore wings. Length of the body  $7\frac{1}{2}$  lines.

This differs from the American species in the much shorter hind wings. The tympanum is somewhat different in structure from that of *P. caliginosus*.

a, b. Natal. From M. Guenzins' collection.

### 12. PLATYDACTYLUS FULIGINOSUS.

Fœm. *Fuscescens, tomentosus; caput antice testaceum, nitens; palporum articulus 3us oblique truncatus; antennæ piceæ, basi testacæ, corpore duplo longiores; oviductus abdomine paullo longior; tibiæ posticæ serratæ, quadrispinosæ; alæ anticæ abdomine breviores, linea subcostali nulla; alæ posticæ nullæ.*

*Female.* Brownish, slender, tomentose. Head testaceous and shining in front. Third joint of the palpi obliquely truncated. Antennæ piceous, testaceous at the base, about twice the length of the body. Cerci testaceous towards the base, a little longer than the abdomen. Oviduct piceous, a

little longer than the abdomen. Hind tibiæ serrated and with four wide apart spines on each side. Fore wings rather shorter than the abdomen, with a blackish line along the lateral keel. Hind wings not apparent. Length of the body 8 lines.

It is much broader than the preceding species, from which it especially differs in the different structure of the hind tibiæ and in the long hind wings.

a. Natal. From M. Gueinzus' collection.

### S. Asia.

#### 13. PLATYDACTYLUS TRANSVERSUS.

Mas. *Fulvus, piceo conspersus; caput piceo univittatum, testaceo quadrilineatum; palporum articulus 3us oblique truncatus; antennæ corpore triplo longiores; prothorax piceo univittatus, carinis lateralibus bene determinatis testaceo et nigricante marginatis; alæ anticæ pallide cinereæ, fascia vitta guttisque paucis exterioribus nigris; alæ posticæ longiores.*

*Male.* Tawny. Head and prothorax thickly and minutely speckled with piceous. Head with a slight ridge on each side between the sockets of the antennæ, and with four pale testaceous longitudinal lines, of which the inner pair include a piceous stripe. Eyes piceous, elongated, slightly prominent, narrowest in front. Third joint of the palpi clavate, obliquely truncated, longer than the second. Antennæ very slender, about thrice the length of the body. Prothorax slightly transverse, somewhat narrower above in front, with a piceous stripe; lateral keels sharply defined, testaceous on the inner side, blackish on the outer side; sides much rounded in front. Fore wings pale cinereous; veins testaceous, a black stripe along the mediastinal vein; a black band near the base; three black dots on the border of the tympanum and one towards the hind border and a little nearer the base; subcostal space broad, with above twenty nearly parallel veins, those towards the base more oblique than the others; apical space reticulated. Hind wings longer than the fore wings. Length of the body 10 lines.

The specimen described is mutilated, and some of its characters cannot be ascertained. In the structure of the fore wings it differs more than the African species from the American.

a. Silhet. From Mr. Argent's collection.

#### 14. PLATYDACTYLUS PLANUS.

Mas. *Testaceus, gracilis, tomentosus; caput subcarinatum, postice subproductum; prothorax fuscescente subquadriplagiatus; pedes postici longi, femoribus fulvo substrigatis, tibiis utrinque serratis et quinque spinosis; alæ anticæ abdominis apicem attingentes, apices versus reticulatæ, spatio subcostali albido-venoso; alæ posticæ paullo longiores.*

*Male.* Testaceous, tomentose, slender. Head shining in front, with a slight keel between the sockets of the antennæ. Eyes rather remote from

the hind border of the head. Ocelli elongated, approximate. Antennæ long, slender. Prothorax narrower in front, with two indistinct brownish patches on each side; hind border slightly rounded. Anterior legs short. Hind legs long; femora with indistinct tawny streaks; tibiæ serrated and with five spines on each side. Fore wings extending to the tip of the abdomen, largely reticulated towards the tips; tympanum thickly striated; subcostal space broad, whitish testaceous, with the usual veins. Hind wings extending a little beyond the fore wings. Length of the body  $13\frac{1}{2}$  lines.

The spines of the hind tibiæ arranged in opposite pairs. The smaller head and the less prominent eyes distinguish this species from the preceding one.

a. N. Hindostan. From Dr. Hooker's collection.

Fœm.? *Vertex et frons piceæ; ocelli pallide lutei, longi, approximati; palporum articulus 3us fusiformis; prothoracis discus piceus; cerci piceæ, basi testacei, oviductu breviores; pedes postici femoribus apice tibiisque basi piceis, tibiis quadrispinosis; alæ anticæ confertim reticulatæ, spatio subcostali diaphano albido-venoso; alæ posticæ paullo longiores.*

*Female?* Head piceous above. Eyes piceous, small. Ocelli pale luteous, elongated, approximate. Third joint of the palpi fusiform. Prothorax with a piceous disk. Cerci piceous, testaceous towards the base, as long as the abdomen. Oviduct a little longer than the cerci. Hind femora at the tips and hind tibiæ at the base piceous. Hind tibiæ with four pairs of spines. Fore wings extending much beyond the abdomen, reticulated from the base to the tips; subcostal space pellucid, with whitish veins. Hind wings extending a little beyond the fore wings. Length of the body  $6\frac{1}{2}$  lines.

b. N. Hindostan. From Capt. Reid's collection.

#### 15. PLATYDACTYLUS PALLIDUS.

Fœm. *Testaceus, tomentosus; caput anticæ vix carinatum; prothorax carinis lateralibus bene determinatis nigro bipunctatis; cerci oviductu paullo longiores, abdomine non breviores; alæ anticæ reticulatæ, abdomen superantes; alæ posticæ valde longiores.*

*Female.* Testaceous, tomentose. Head shining, slightly prominent between the sockets of the antennæ. Eyes piceous, rather small, not prominent. Third joint of the palpi clavate, much longer than the second. Prothorax hardly transverse, slightly narrower towards its fore border; lateral keels sharply defined, with a black dot at each end. Abdomen shining. Cerci as long as the abdomen, a little longer than the oviduct, which is piceous at the tip and is slightly curved downward. Fore wings extending beyond the abdomen; transverse sectors numerous and regular in the hind part as well as in front of the mediastinal vein, whose branches are thuteen in number and successively more slanting; apical triangle pellucid. Hind wings extending much beyond the fore wings. Length of the body 9 lines.

The legs of the specimen described are mutilated.

a. Silhet. From Mr. Argent's collection.

## 16. PLATYDACTYLUS HELVOLUS.

*Platydictylus helvolus*, *Serv. Orth.* 366—*Gryllus dorsalis*, *Burm. Handb. Ent.* ii. 733—*Gryllus* (*Phalangopsis*) *helvolus*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 235.

Java. Borneo. Japan.

## 17. PLATYDACTYLUS INDECORUS.

*Fœm.* *Fulvus, tomentosus; caput subcarinatum, nigro bivittatum et unimaculatum; prothorax nigro bivittatus, lateribus subrectis; cerci oviductu paullo breviores; oviductus rectus; pedes pubescentes, fusco conspersi, tibiis posticis utrinque setosis subserratis et quadrispinosis; alæ anticæ inordinatim reticulatæ, abdomen longe superantes, punctis quatuor subcostalibus albidis; alæ posticæ valde longiores.*

*Female.* Tawny, tomentose, slender. Head with two black stripes on the vertex; these stripes join a large black spot in front, where there is a prominent ridge between the eyes; sides testaceous. Eyes small, not prominent. Palpi testaceous; third joint obliquely truncated. Prothorax transverse, a little narrower in front, with two black stripes; in a line with the stripes on the head; space testaceous between the stripes and the sides, which are nearly straight. Dorsum of the abdomen mostly piceous. Cerci a little shorter than the oviduct, which is straight and as long as the abdomen and has a black tip. Legs stout, pubescent, speckled with brown; hind tibiæ setose, very minutely serrated and with four spines on each side; spines on one side alternate with those on the other. Fore wings irregularly reticulated, extending much beyond the abdomen, with four whitish points along the scapular vein; space between the keels and the costa pellucid, with seven very oblique branches of the mediastinal vein (of which the seventh is forked) and with regular transverse sectors. Hind wings extending much beyond the fore wings. Length of the body 7 lines.

The hind tibiæ are shorter than in most species of this genus and it approaches *P. continuus*, which differs still more from the typical form.

Siam. In Mr. Saunders' collection.

## Ceylon.

## 18. PLATYDACTYLUS PRÆCIPUUS.

*Fœm.* *Testaceus, tomentosus; caput anticæ subcarinatum; palporum articulus 3us oblique truncatus; prothorax carinis indeterminatis, lateribus subreflexis; cerci corpore vix breviores; oviductus abdomine multo longior; tibiæ posticæ utrinque serratæ et quadrispinosæ, spinis interioribus arcuatis; alæ anticæ abdomen paullo superantes; alæ posticæ valde longiores.*

*Female.* Testaceous, tomentose. Head as broad as the prothorax, prominent between the sockets of the antennæ. Eyes prominent, slightly and transversely elongated, narrowest in front. Third joint of the palpi clavate, obliquely truncated, longer than the second. Antennæ piceous testaceous towards the base, very much longer than the body; first joint

thick. Prothorax transverse, broadest in front; sides slightly reflexed; lateral keels hardly apparent. Cerci nearly as long as the body. Oviduct much longer than the abdomen, black at the tip. Hind tibiæ serrated and with four long wide apart spines on each side; spines on the inner side curved, alternate with those on the outer side. Fore wings extending a little beyond the tip of the abdomen; veins in the subcostal space very oblique. Hind wings extending much beyond the fore wings. Length of the body 11 lines.

The long spines of the hind tibiæ distinguish it from the species previously described.

a. Ceylon. From Mr. Macgillivray's collection,

#### 19. PLATYDACTYLUS VARIPENNIS.

Mas. *Ferrugineus, tomentosus, gracilis, fere linearis; caput pallido sex-lineatum, antice subcarinatum, facie fulva; antennæ corpore plus duplo longiores; prothorax subproductus, antice paullo angustior lateribus perparum rotundatis; venter picco vittatus; cerci abdomine paullo breviores; pedes nigricante fasciati, tibiis posticis utrinque quadrispinosi; alæ anticæ abdomen longe superantes, guttis subcostalibus nigricantibus guttisque apicem versus fuscis; alæ posticæ longiores.*

*Male.* Ferruginous, tomentose, slender, nearly linear. Head prominent between the sockets of the antennæ, with six pale longitudinal lines on the vertex; face tawny, shining. Eyes nearly round. Third joint of the palpi slightly clavate, longer than the second. Antennæ much more than twice the length of the body. Prothorax a little narrower in front, a little longer than broad; sides very slightly rounded. Abdomen with a piccons stripe beneath. Cerci a little shorter than the abdomen. Legs with irregular blackish bands; hind tibiæ not serrated, with four short spines on each side. Fore wings extending much beyond the abdomen, with blackish dots along the scapular vein and with a few brown dots in the apical reticulated parts; tympanum intersected by an oblique vein; subcostal space pellucid, with sixteen branches of the mediastinal vein which are more or less curved and are most slanting towards the base. Hind wings extending beyond the fore wings. Length of the body  $7\frac{1}{2}$  lines.

It is narrower than nearly all the other species of the genus, and the hind tibiæ are comparatively short.

a. Ceylon. From Dr. Thwaites' collection.

#### Australasia

#### 20. PLATYDACTYLUS QUADRATUS.

*Gryllus (Platydactylus) quadratus, Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins. 234.*

Java.

## 21. PLATYDACTYLUS NOVÆ-GUINÆÆ.

Gryllus (Platydactylus) Novæ-Guinææ, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 233.

New Guinea.

## 22. PLATYDACTYLUS VITTATUS.

Gryllus (Platydactylus) vittatus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 234.

Padang.

## 23. PLATYDACTYLUS GAIMARDI.

Gaimardi, *Serv. Hist. Orth.* 366—Gryllus (Platydactylus) Gaimardi, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 234.

New Guinea. Banjermassing. Australia.

## 24. PLATYDACTYLUS NOTABILIS.

Mas. *Ferrugineus, tomentosus; caput antice subcarinatum et fulvo immaculatum; prothorax fulvo subtessellatus; cerci abdomine non breviores; tibiæ posticæ utrinque serratæ et quadrispinosæ; alæ anticæ abdomen superantes, venis ex parte maculis duabus fasciaque exteriore testaceis, tympano minino; alæ posticæ valde longiores.* Var.  $\beta$ .—*Fulvus; prothorax testaceo subtessellatus; alæ anticæ maculis fasciaque subobsoletis.* Fœm.—*Oviductus subarcuatus, corpore brevior.*

*Male.* Ferruginous, tomentose, slightly shining. Head prominent and with a tawny spot between the sockets of the eyes. Eyes piceous, slightly elongated and prominent. Third joint of the palpi clavate, longer than the second. Prothorax transverse, divided into compartments by some tawny lines; the vertical part on each side much broader in front. Cerci fully as long as the abdomen. Legs elongate; hind tibiæ very long, serrated on each side; four straight spines on the outer side alternate with four curved spines on the inner side. Fore wings extending beyond the abdomen, regularly reticulated towards the tips; veins partly testaceous; a testaceous spot on each side across the scapular vein and a testaceous band nearer the tip; tympanum very small; subcostal space pellucid, with eleven testaceous branches of the mediastinal vein, those near the base much more approximate to each other and more slanting than the others. Hind wings extending much beyond the fore wings. Var.  $\beta$ .—Tawny. Prothorax with testaceous lines. *Female.*—Like Var.  $\beta$ . of the male. Oviduct slightly curved upward, black at the tip, much longer than the abdomen. Fore wings regularly reticulated; transverse sectors very slanting. Length of the body 9—11 lines.

Very nearly allied to *P. præcipuus*.

Amboina and Aneiteum.

*a.* Ceram. From Madame Ida Pfeiffer's collection.

## 25. PLATYDACTYLUS VARIUS.

*Mas.* *Piceus*; *caput antice et utrinque testaceum, prothorace paullo angustius*; *palpi testacei*; *prothorax fuscia abbreviata furcata maculisque duabus lateralibus testaceis*; *cerei abdomine non breviores*; *pedes graciles, femoribus tibiisque quatuor testaceis piceo fasciatis, tibiis posticis extus trispinosis intus unispinosis*; *alæ anticæ cineræ, abdomen superantes, venis piceo marginatis*; *alæ posticæ longiores.*

*Male.* Piceous, shining. Head tawny in front and about the eyes, testaceous about the mouth, a little narrower than the prothorax. Eyes elongated, rather prominent. Palpi testaceous; third joint slightly securiform. Antennæ very much longer than the body, tawny at the base. Prothorax much broader than long, broadest in front, with an irregular furcate abbreviated testaceous band and with two testaceous spots on each side. Cerei about as long as the abdomen. Legs long, slender; four posterior femora and tibiæ testaceous, with piceous bands; hind tibiæ not serrated, with three long slender spines on the outer side and with one on the inner side. Fore wings cinereous, extending somewhat beyond the abdomen, piceous about the veins; tympanum with two transverse veins, of which the exterior one is much curved inward; apical part reticulated; subcostal space with twenty-one piceous veins, which from the first outward are successively less oblique. Hind wings extending somewhat beyond the fore wings. Length of the body 9 lines.

The very slender hind tibiæ and their long spines chiefly characterize this species.

a. *Ceram.* From Madame Ida Pfeiffer's collection.

## 26. PLATYDACTYLUS SIGNATIPENNIS.

*Fœm.* *Fulvus*; *caput nigrum, subtus piceum*; *antennæ corpore duplo longiores*; *prothorax nigricante punctatus et guttatus*; *venter nigro vittatus*; *cerei abdomine non breviores*; *oviductus abdomine multo longior*; *pedes anteriores picei, testaceo conspersi*; *alæ anticæ ferruginæ, acutæ, abdomen longe superantes, vitta flava bis interrupta*; *alæ posticæ multo longiores.*

*Female.* Tawny, shining. Head black, piceous beneath, prominent between the sockets of the antennæ. Eyes, palpi and antennæ piceous. Third joint of the palpi very slightly securiform. Antennæ very slender, full twice the length of the body. Prothorax with several blackish points and dots; sides rounded. Abdomen with a black ventral stripe. Cerei as long as the abdomen. Oviduct much longer than the abdomen; tip black. Four anterior legs piceous, stout, rather short, speckled with testaceous; femora at the base and coxæ testaceous. Fore wings ferruginous, acute, extending much beyond the abdomen, with three yellow streaks along the keel on each side; first streak before the middle; second beyond the middle, longer than the first and than the third; transverse sectors



numerous, regular. Hind wings extending much beyond the fore wings. Length of the body 5 lines.

The specimen described is deprived of its hind legs.

a. Celebes. From Madame Ida Pfeiffer's collection.

### 27. PLATYDACTYLUS AUSTRALIS.

Mas. *Sordide testaceus, tomentosus; caput antice subcarinatum, fascia anteriore nigra flavo trilineata; palporum articulus 3us apice excavatus, oblique truncatus; antennæ corpore plus duplo longiores; abdomen piceum, apice testaceum; cerci abdomine vix breviores; tibiæ posticæ utrinque serratæ et quinque-spinosæ; alæ anticæ testaceo-cinereæ, abdominis apicem attingentes; alæ posticæ valde longiores.*

*Male.* Dull testaceous, tomentose. Head as broad as the prothorax, prominent between the sockets, fore part shining, with a broad black band including three transverse yellow lines. Eyes testaceous, slightly elongated, rather prominent, narrowest in front. Palpi testaceous; third joint clavate, obliquely truncated, excavated at the tip, longer than the second. Antennæ ferruginous, piceous towards the base, more than twice the length of the body; first joint large. Prothorax transverse; sides slightly rounded. Abdomen piceous, testaceous at the tip. Cerci testaceous, nearly as long as the abdomen. Hind tibiæ minutely serrated, and with five rather short spines on each side. Fore wings testaceous-cinereous, extending to the tip of the abdomen; space towards the tip reticulated; subcostal space with twelve oblique slightly curved veins, those towards the base very near each other, the twelfth forked. Hind wings extending much beyond the fore wings. Length of the body 12 lines.

The structure of the fore wings of this species is very different from that of *P. subnotatus*. The space towards the tips is much larger and the veins near the costa are more remote from each other. It resembles *P. transversus* in structure.

a. Australia. From Mr. Macgillivray's collection.

### 28. PLATYDACTYLUS CONTINUUS.

Fœm. *Testaceus, gracilis, pubescens; caput longiusculum, antice carinatum, vittis tribus nigricantibus antice connexis; antennæ articulo 1o subdilato; prothorax nigro subconspersus et bivittatus, lateribus rectis; cerci abdomine paullo longiores; oviductus rectus, abdomine non longior; pedes breviusculi, sat validi, fusco conspersi, tibiis posticis utrinque setosis et quadrispinosis; alæ anticæ abdomen longe superantes, vitta subcostali fusca pallido notata; alæ posticæ valde longiores.*

*Female.* Testaceous, slender, pubescent. Head slightly elongate, very prominent between the sockets of the antennæ, three blackish stripes on the vertex, united in front. Eyes dark reddish, elongated, slightly prominent. Third joint of the palpi clavate, excavated beneath, longer than the second. Antennæ blackish, pale and with blackish rings towards the base; first joint slightly dilated on the inner side. Prothorax longer than

broad, slightly narrower in front, with a few black speckles and with two black stripes; sides straight. Cerci a little longer than the oviduct, which is straight and has a black tip and is as long as the abdomen. Legs rather short and stout, speckled with brown; hind tibiæ setose and not serrated on each side, four spines on one side alternate with the same number on the other. Fore wings reticulated, extending much beyond the abdomen; transverse sectors oblique; a brown stripe along the scapular vein including various small pale marks; subcostal space pale cinereous, with irregular transverse sectors and with ten very slanting branches of the mediastinal vein, the tenth forked. Hind wings extending much beyond the fore wings. Length of the body 9 lines.

This species has much affinity to *P. indecorus*, but recedes still more from the typical form of the genus. The longitudinal veins and the reticulation of the fore wings are more regular than they are in *P. indecorus*.

N. Australia. In Mr. Saunders' collection.

### Country unknown.

#### 29. PLATYDACTYLUS SUBNOTATUS.

*Mas.* *Sordide testaceus, tomentosus; caput antice subearinatum, spatio anteriore picco; palpi picci, articulo 3o clavato; prothoracis latera picea; abdomen piceum, subtus ferrugineum; cerci abdomine paullo breviores; pedes ferruginei, tibiis posticis utriusque serratis et trispinosis; ala antice abdominis apicem attingentes, tympano cinereo, strigis duabus lateralibus piceis, ala postica valde longiores.*

*Male.* Dull testaceous, tomentose. Head as broad as the prothorax, prominent between the sockets of the antennæ, piceous and shining from thence to the mouth. Eyes livid, large, prominent, slightly elongated, narrower in front. Palpi piceous; third joint clavate, longer than the second. Antennæ piceous, very slender, much longer than the body, testaceous towards the base; first joint piceous, small, round. Prothorax piceous between the keels and the sides, which are rounded; lateral part broadest in front. Abdomen piceous, ferruginous beneath. Cerci a little shorter than the abdomen. Legs ferruginous; hind tibiæ minutely dentate and with three slender spines on each side; spines on one side alternate with those on the other. Fore wings extending to the tip of the abdomen; tympanum cinereous; apical part irregularly reticulated; subcostal space with above twenty oblique veins, which are most approximate to each other and most regular near the base; a piceous streak along the mediastinal vein to nearly two-thirds of the length. Hind wings extending much beyond the fore wings. Length of the body 9 lines.

*a.* ———?

*mm.* Wings none.

*n.* Spines of the hind tibiæ very short.

#### Genus 31. JARANDA.

*Fem.* Corpus robustum, convexum, apterum, subtilissime punctatum. Caput breve, prothorace vix angustius, antice vix emarginatum. Oculi subelongati, sat parvi. Palporum articulus 3us clavatus, 2o longior. Pro-

thorax transversus, carinis lateralibus indeterminatis, lateribus rotundatis. Cerci oviductu breviores. Oviductus corpori æquilongus. Pedes robusti, longiusculi; femora postica apice subtus nodosa; tibiæ posticæ utrinque serratæ et quadrispinosæ.

*Female.* Body stout, convex, shining, extremely minutely punctured. Head short, hardly narrower than the prothorax, slightly prominent between the sockets of the antennæ. Eyes rather small, slightly elongated, not prominent. Third joint of the palpi clavate, longer than the second. Prothorax transverse; lateral keels indeterminate; sides rounded. Cerci shorter than the oviduct, which is as long as the body. Legs stout, rather long; hind femora with a short stout appendage beneath at the tips; hind tibiæ serrated and with four short spines on each side, spines on the one side alternate with those on the other. Wings wholly wanting.

#### I. LARANDA TIBIALIS.

*Fœm.* *Nigra; prothorax luteo bimaculatus; abdominis segmentum basale margine postico rufescente; tibiæ rufæ.*

*Female.* Black. Eyes piceous. Prothorax with a luteous spot on each side in the fore part of the disk. Hind border of the first abdominal segment reddish. Cerci and oviduct piceous. Tibiæ and tarsi red. Hind femora obliquely striated on the outer side. Length of the body 9 lines.

a. Rio Janeiro. Presented by the Rev. H. Clark.

m. Spines of the hind tibiæ long.

#### Genus 32. ZAORA.

*Fœm.* Corpus convexum, apterum, breviusculum, subpubescens. Caput subcarinatum, thorace brevius et paullo angustius. Oculi magni, oblongi, non prominuli. Palpi maxillares graciles, longiusculi; articulus 3us fere linearis, 2o longior. Antennæ gracillimæ, corpore plus duplo longiores. Prothorax transversus; latera valde rotundata. Cerci corpore non breviores. Pedes longi, graciles; tibiæ posticæ biserialim quadrispinosæ.

*Female.* Body convex, apterous, rather short, slightly pubescent. Head ridged between the sockets of the antennæ, shorter and a little narrower than the prothorax; face vertical. Eyes large, oblong, not prominent, near the hind border. Maxillary palpi slender, rather long; third joint nearly linear, longer than the second. Antennæ very slender, much more than twice the length of the body. Prothorax rather broader than long; sides very much rounded. Cerci full as long as the body. Oviduct rather shorter than the body. Legs long, slender; hind tibiæ with four spines on each side, those on the one side alternate with those on the other; first joint of the hind tarsi armed with two long spines.

This genus perhaps belongs to the following family.

#### I. ZAORA CINCTIPES.

*Mas.* *Testaceus, tomentosus; caput carina vittisque tribus (una interlineata) anterioribus liturisque adhuc anterioribus nigricantibus; antennæ corpore triplo longiores; thorax piceo notatus; cerci abdomine paullo longiores; pedes fusco fasciati.*

*Male.* Testaceous, tomentose. Head with a blackish ridge between the eyes and with three anterior blackish stripes, the hind part of the middle stripe interlaced; some blackish marks on the face. Eyes tawny, prominent. Antennæ piceous, testaceous at the base, about thrice the length of the body. Prothorax, mesothorax and metathorax with some irregular piceous spots. Cerci a little longer than the abdomen. Legs with brown bands on the femora and on the tibiæ. Length of the body 6 lines.

The specimen described is without hind legs.

a. Jamaica. From Mr. Gosse's collection.

### 2. ZAORA MORBILLOSA.

*Mas.* Testacea, tomentosa; caput nigro quinque vittatum; palporum articulus 3us subsecuriformis; antennæ piceæ; prothorax nigro submarginatus, fascia nigricante indeterminata abbreviata fulvo biotata, lateribus rectis; mesothorax et metathorax nigricante fasciati; abdomen fulvum nigricante conspersum et maculatum, vitta nigricante testaceo guttata.

*Male.* Testaceous, tomentose, nearly cylindrical. Head shining, with five broad black stripes on the vertex; middle stripe including a testaceous line; outer pair very short; a horse-shoe-shaped black mark in front of the middle stripe. Eyes piceous, slightly elongated, very slightly convex. Third joint of the palpi slightly securiform, a little longer than the second. Antennæ piceous, testaceous at the base. Prothorax with a very narrow black border, and with a blackish broad irregular abbreviated middle band which contains a transverse tawny spot on each side; lateral keels much rounded; vertical part broadest in front; sides straight. Mesothorax and metathorax with blackish bands, whose hind borders are dentate. Abdomen tawny; dorsal segments with a blackish stripe which includes a testaceous dot on the hind border on each segment, with blackish speckles and with transverse rows of blackish dots. Four anterior legs rather short and stout, thickly beset with black bristles. Length of the body  $7\frac{1}{2}$  lines.

a. S. Africa. Presented by Sir A. Smith.

### 3. ZAORA PARDALIS.

*Fæm.* Testacea, tomentosa; caput striga ramosa antice furcata strigisque duabus lateralibus nigris; antennæ nigre; prothorax fasciis duabus nigris subinterruptis, 1a lata abbreviata, 2a informi utrinque attenuata; abdomen nigro punctatum guttatum et plagiatum; cerci corpore paullo longiores; oviductus corpore paullo brevior; pedes nigro fasciati.

*Female.* Testaceous, tomentose. Head shining, with a black ramose streak on the vertex, forked in front; a black streak on each side extending from the eye to the face. Antennæ black, about thrice the length of the body. Prothorax with two slightly interrupted black bands; first band on the fore border broad, abbreviated; second near the hind border, irregular, attenuated on each side. Dorsal abdominal segments with black points, with a few black patches on each side, and with a row of black dots along

the hind border of each segment. Cerci a little longer than the body. Oviduct nearly as long as the body; tip piceous. Legs with black bands, which in the femora are interrupted beneath. Length of the body 7 lines.

a. N. Australia. Presented by J. R. Elsey, Esq.

*kk.* Eyes very prominent.

*l.* Legs stout.

Genus 33. ORBEGA.

*Fœm.* Corpus gracile, nitens, fere lineare. Oculi valde prominuli, subproducti, sat magni. Palporum articulus 3us oblique truncatus, 2o æquilongus. Prothorax subtransversus, antice paullo angustior; latera antice latiora. Oviductus abdomine non brevior. Cerci longiores. Pedes validi, longiusculi; tibiæ posticæ utrinque serratæ et quadrispinosæ.

*Female.* Body slender, smooth, shining, nearly linear. Head as broad as the prothorax. Eyes rather large, very prominent, slightly elongated. Palpi slender; third joint obliquely truncated at the tip, as long as the second. Prothorax slightly transverse, slightly narrower in front above; vertical part on each side much broader in front. Cerci longer than the oviduct, which is as long as the abdomen. Legs stout, rather long; hind tibiæ serrated and with four spines on each side, spines on the outer straight, alternate with the curved spines on the inner side.

#### 1. ORBEGA PALLIDA.

*Fœm.* *Pallide testacea; caput vittis quatuor fulvis interruptis; prothorax litura cithariformi vittisque duabus piceis; femora postica strigatis; alæ vix ullæ.*

*Female.* Pale testaceous. Head with four interrupted tawny stripes on the vertex. Prothorax with a piceous somewhat lyre-shaped figure in the disk and with a piceous stripe on each side. Hind femora with oblique streaks; tibiæ with three piceous spines on the outer side and with four on the inner side. Wings rudimentary, with blackish stripes. Length of the body  $7\frac{1}{2}$  lines.

a. ———? From Mr. Macgillivray's collection.

*ll.* Legs slender.

Genus 34. NISITRA.

*Mas et fœm.* Corpus gracile. Caput parvum; vertex brevis; facies subproducta. Oculi valde prominuli. Palporum articulus 3us subclavatus. Antennæ gracillimæ, corpore plus duplo longiores. Cerci abdominis dimidio breviores. Oviductus corpore non brevior. Pedes longi, graciles; femora postica abrupte attenuata; tibiæ posticæ subserratæ, quadrispinosæ. Alæ anticæ abdominis apicem attingentes, maris tympano bene determinato. Alæ posticæ abdomen longe superantes.

*Male and female.* Body slender. Head small; vertex short; face somewhat elongated. Eyes very prominent. Third joint of the palpi subclavate. Antennæ very slender, more than twice the length of the body.

Cerci less than half the length of the abdomen. Oviduct as long as the body. Legs long, slender: hind femora abruptly attenuated at half the length; hind tibiæ minutely serrated and with four spines on each side, the spines on one side alternate with those on the other. Fore wings extending to the tip of the abdomen. Tympanum of the male moderately large. Hind wings extending much beyond the abdomen.

#### 1. NISITRA MARGINATA.

Mas et fœm. *Niger*; *caput antice subtusque, pectus, venter et prothoracis latera pallide flava; femora subtus testacea; alæ anticæ luridæ, vitta subcostali nigra; alæ posticæ diaphanæ, uigricante late marginatæ.*

*Male and female.* Black. Head, except the vertex and the front, pale yellow. Eyes reddish. Palpi pale yellow. Antennæ black. Pectus, sides of the prothorax and abdomen beneath pale yellow. Legs black; femora testaceous beneath. Fore wings lurid, black along the lateral keel. Hind wings pellucid, broadly bordered with blackish, this hue decreasing in breadth from the costa to the interior angle. Length of the body  $6\frac{1}{2}$  lines.

Borneo.

a. Sumatra. From Sir S. Raffles' collection.

hh. Prothorax very long and narrow.

i. Head elongated.

#### Genus 35. ŒCANTHUS.

*Gryllus*, Scop. *Ent. Carn.* 32. *Burm. Handb. Ent.* ii.—*Acheta*, Fabr., Charp., *Cyryllo*, Panz.—*Gryllomyia*, Seidl. *Œcanthus*, Serv. *Rev. Hist. Orth.* 358.

#### Europe.

##### 1. ŒCANTHUS PELLUCENS.

*Schaff.*, *Icon. Ins. Ratisb.* pl. 138, f. 4, 5—*Semblis lutaria*, *Petagna, Instit. Ent.* pl. 4, f. 2—*Meconema varia*, *Fisch. de Waldh. Orth. Ross.* pl. 8, f. 6—*Œcanthus pellucens*, *Brullé. Hist. Nat. An. Art.* ix. 174, pl. 18, f. 1. *Serr. Hist. Orth.* 360. *Fisch. Orth. Eur.* 165, pl. 9, f. 14. *Blanch. Hist. Nat. Ins.* iii. 31, pl. 8, f. 3—*Œcanthus italicus*, *Stoph. Ill. Brit. Ent. Mand.* vi. 6. *Ramb. Faune. And.* 41—*Gryllus pellucens*, Scop. *Ent. Carn.* 324—*Gryllus italicus*, *Oliv. Enc. Méth.* vi. 32. *Latr. Gen.* iii. 99—*Acheta Allioni?* *Fabr. Sp. Ins.*—*Acheta italica*, *Fabr. Ent. Syst.* ii. 32. *Panz. Faun. Ins. Germ.* 22, pl. 17. *Charp. Hor. Ent.* 79. *Cyryllo, Spec. Ins. Neap.* pl. 7, f. 5, 6—*Acheta aquea?* *Fabr. Ent. Syst. Suppl.* 192—*Gryllus (Œcanthus) italicus*, *Burm. Handb. Ent.* ii. 731.

a—c. Italy. Presented by Dr. Leach.

d. Provence. From Prof. Westwood's collection.

e. Sierra Leone. Presented by the Rev. D. F. Morgan.

f. W. Africa. From Mr. Fraser's collection.

## N. America.

2. *ŒCANTHUS NIVEUS*.

*Gryllus niveus*, *Deg. Ins.* iii. 522, pl. 43, f. 6. *Oliv. Enc. Meth.* vi. 637—*Œcanthus niveus*, *Serv. Ann. Sci. Nat.* xxii. 135; *Hist. Orth.* 361. *Harris, Cat. Ins. Mass.* 56; *Rep. 3rd Ed.* 154, f. 71, 72. *Fitch, 3rd Rep. Nox. Ins. N. York*, 131. *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 431—*Œcanthus cylindricus*, *Say, MSS. Harris, Cat. Ins. Mass.* 56—*Œcanthus fasciatus*, *Fitch, 3rd Rep. Nox. Ins. N. York*, 132.

a. N. America.

b. Mexico. From Mr. Shuckard's collection.

c, d. Jamaica. From Mr. Gosse's collection.

3. *ŒCANTHUS BIPUNCTATUS*.

*Gryllus bipunctatus*, *Deg. Ins.* iii. pl. 43, f. 7. *Oliv. Enc. Meth.* 18—*Gryllus (Œcanthus) bipunctatus*, *Burm. Handb. Ent.* ii. 732.

Pennsylvania.

4. *ŒCANTHUS NIGRICORNIS*.

*Fœm.* *Testaceus, gracilis; caput subproductum, nigro trivittatum; palporum articulus 3us clavatus, oblique truncatus, 2o longior; antennæ nigræ; prothorax subproductus, testaceo bistrigatus; venter niger; oviductus niger, abdomine paullo brevior; pedes nigri, gracillimi, tibiis anticis basi subdilatis, femoribus posticis basi testaceis, tibiis posticis extus sex-spinosis intus quinque-spinosis; alæ anticæ cinereæ, reticulatæ, abdomen longe superantes; alæ posticæ valde longiores.*

*Female.* Testaceous, slender, shining. Head slightly elongated, with three black stripes extending from the hind border, one between the eyes and one on each side below the eyes. Eyes elongated, slightly prominent. Third joint of the palpi clavate, obliquely truncated, longer than the second. Antennæ black, testaceous at the base, very much longer than the body. Prothorax slightly longer than broad, fore border and hind border testaceous; two longitudinal testaceous streaks in the disk. Ventral segments black. Cerci and oviduct a little shorter than the abdomen, the latter black. Legs black, very slender; fore tibiæ slightly dilated and excavated on the inner side near the base; hind femora testaceous towards the base; hind tibiæ with six minute spines on the outer side and with five on the inner side. Fore wings cinereous, extending much beyond the abdomen, regularly reticulated; mediastinal vein with nine oblique branches. Hind wings extending much beyond the fore wings. Length of the body  $7\frac{1}{2}$  lines.

a. Illinois. Presented by E. Doubleday, Esq.

5. *ÆCANTHUS VARICORNIS*.

Mas. *Pallide testaceus; caput productum; palpi graciles, filiformes; antennæ nigro unifusciatæ; prothorax longiusculus, lateribus rectis; pedes gracillimi, tibiis posticis biseriatim, serratis et spinosis; alæ anticæ diaphanæ, latissimæ, abdomen longissime superantes; alæ posticæ valde longiores.*

*Male.* Pale testaceous, smooth, shining. Head elongated, a little narrower than the fore border of the prothorax. Eyes rather small, hardly convex. Palpi slender, filiform; third joint longer than the second. Antennæ full twice the length of the body, black towards the base, testaceous at the base. Prothorax narrower in front; sides straight. Legs very slender; hind tibiæ minutely serrated on each side and with a few short slender spines beyond the middle. Wings pellucid. Fore wings very broad, extending much beyond the abdomen; veins very pale testaceous; mediastinal vein with fourteen oblique branches; eight near the base, approximate to each other; the other six remote from each other. Hind wings brilliantly iridescent, extending much beyond the fore wings; veins white. Length of the body 6 lines.

The colour of the antennæ and the broader fore wings distinguish this species from *Æ. niveus*.

a. Mexico. From Mr. Shuckard's collection.

6. *ÆCANTHUS FORMOSUS*.

Fœm. *Pallide testaceus, gracillimus; caput productum; palpi graciles, filiformes; prothorax longus, lateribus rix excavatis; venter nigricante bivittatus; oviductus abdomine brevior; pedes gracillimi, tibiis posticis biseriatim setulosus; alæ anticæ inordinatim reticulatæ, nigro quadrimaculatæ, abdomen sat superantes: alæ posticæ valde longiores.*

*Female.* Pale testaceous, very slender. Head elongated, rather shorter than the prothorax. Eyes small, elongated, slightly prominent. Palpi slender, filiform. Prothorax twice longer than broad, narrower in front; sides very slightly concave. Abdomen with two blackish stripes beneath. Oviduct shorter than the abdomen; tip piceous. Legs very slender; hind tibiæ very minutely setulose on each side, not serrated nor spinose. Fore wings extending rather beyond the abdomen, irregularly reticulated above and between the branches of the mediastinal vein, which are also irregular; two black spots on each side, one pair in the middle, the other nearer the base. Hind wings extending much beyond the fore wings. Length of the body  $7\frac{1}{2}$  lines.

a. Mexico. From M. Salle's collection.

7. *ÆCANTHUS?* FLAVIPES.

*Acheta flavipes, Fabr. Ent. Syst. ii. 30.*

Isle St. Thomas.



8. *ŒCANTHUS PERUVIANUS.*

Mas. *Pallide testaceus, nitens, gracillimus; palpi filiformes; prothorax elongatus, lateribus rectis; pedes gracillimi, tibiis posticis subserratis; alæ antica diaphanæ, latissimæ, abdomen longe superantes.*

Mas. Pale testaceous, shining, very slender. Head elongated, as long as the prothorax. Eyes small, piceous, not prominent. Palpi filiform; third joint longer than the second. Prothorax much longer than broad; sides straight. Legs very slender; hind tibiæ very minutely serrated. Wings pellucid; veins whitish. Fore wings very broad, extending much beyond the abdomen, not reticulated; mediastinal vein with about twelve oblique parallel branches. Hind wings extending much beyond the fore wings. Length of the body 6 lines.

The colour of the antennæ distinguishes this species from *Œ. varicornis*.

Peru. In Mr. Saunders' collection.

9. *ŒCANTHUS TENUIS.*

Fœm. *Testaceo-albidus, gracillimus; caput productum, prothorace paullo brevius; palpi filiformes, gracillimi; antennæ corpore duplo longiores; prothorax elongatus, lateribus fere rectis; cerci abdomine breviores; oviductus abdomine vix brevior; pedes gracillimi, tibiis posticis biserialim spinosis; alæ anticæ albæ, reticulatæ, abdomen longe superantes; alæ posticæ valde longiores.*

Female. Testaceous-whitish, shining, very slender. Head elongated, a little shorter than the prothorax. Eyes piceous, slightly elongated and prominent. Palpi filiform, very slender; third joint a little longer than the second. Antennæ full twice the length of the body. Prothorax much longer than broad; sides almost straight. Cerci shorter than the abdomen. Oviduct almost as long as the abdomen; tip piceous. Legs very slender; hind tibiæ with a very few spines on each side near the tips. Fore wings white, extending much beyond the abdomen, regularly reticulated; subcostal space with five very oblique branches of the mediastinal vein. Hind wings pellucid, extending much beyond the fore wings. Length of the body 5 lines.

More slender than *Œ. pellucens*.

a, b. Santarem. From Mr. Bates' collection.

## S. Asia.

10. *ŒCANTHUS RUFESCENS.*

rufescens, *Serv. Hist. Orth.* 361.

Bombay.

11. *ŒCANTHUS SINENSIS.*

Fœm. *Testaceus; caput productum; palpi filiformes; prothorax elongatus, antice subangustior, lateribus fere rectis; venter nigro bivittatus; pedes graciles; alæ anticæ abdomine breviores.*

*Female.* Testaceous, shining, slender. Head elongated, almost as long as the prothorax. Eyes piceous, elongated, not prominent. Palpi slender, filiform; third joint longer than the second. Prothorax much longer than broad, slightly narrower in front; sides nearly straight. Abdomen with a black stripe on each side beneath. Legs slender. Wings much shorter than the abdomen. Length of the body 5 lines.

The description is incomplete, and the specimen here recorded is mutilated, and apparently has not attained its ultimate state.

a. China. Presented by G. T. Laye, Esq.

### Australasia.

#### 12. *ŒCANTHUS GRACILIS.*

*Gryllus* (*Œcanthus*) *gracilis*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 236, pl. 20, f. 8.

Javo. Borneo. Celebes.

#### 13. *ŒCANTHUS LINEATUS.*

*Mas.* *Pallide testaceus, gracillimus; caput productum; palpi filiformes; antennæ gracillimæ, corpore plus duplo longiores; prothorax elongatus, antice angustior; abdomen linea dorsali nigricante; cerci abdomine breviores; pedes gracillimi, tibiis sex-spinosis; alæ anticæ diaphanæ sat latæ, abdomen longe superantes, vitta subcostali testacea; alæ posticæ valde longiores.*

*Male.* Pale testaceous, very slender. Head elongated, much shorter than the prothorax. Eyes brownish, small, elongated. Palpi slender, filiform; third joint longer than the second. Antennæ very slender, more than twice the length of the body. Prothorax longer than broad, narrower in front. Abdomen with a blackish line above. Cerci shorter than the abdomen. Legs very slender; hind tibiæ with six short slender spines on the outer side. Wings pellucid. Fore wings moderately broad, not reticulated, extending much beyond the abdomen; a testaceous stripe along the mediastinal vein, from which there are nine oblique branches to the costa, those near the base approximate. Hind wings extending much beyond the fore wings. Length of the body 8 lines.

Moreton Bay. Fiji Isles. In Mr. Saunders' collection.

ii. Head not elongated.

#### Genus 36. LAUREPA.

*Mas.* *Corpus gracile. Caput non productum, antice subcarinatum. Oculi sat prominuli. Palporum articulus 3us clavatus, oblique truncatus, 2o longior. Antennæ graciles, corpore plus duplo longiores. Prothorax transversus, antice subangustior, lateribus rectis. Cerci abdomine breviores. Pedes vix graciles, tibiis posticis biserialim serratis extus quadrispinosis intus septem-spinosis. Alæ anticæ abdomen non superantes, apices versus reticulatæ, tympano bene determinato. Alæ posticæ abdomen longe superantes.*

*Male.* Body slender. Head not elongated, slightly prominent between the sockets of the antennæ, much shorter than the prothorax, which it equals in breadth. Eyes moderately large, rather prominent. Third joint of the palpi clavate, obliquely truncated, a little longer than the second. Antennæ slender, much more than twice the length of the body. Prothorax not longer than broad, slightly narrower in front; lateral keels not prominent; sides straight. Cerci much shorter than the abdomen. Legs moderately stout; hind tibiæ minutely serrated on each side, with four spines on the outer side and with seven on the inner side. Fore wings not extending beyond the abdomen, moderately broad, reticulated towards the tips; tympanum well developed; mediastinal vein emitting twelve oblique branches to the costa. Hind wings extending much beyond the fore wings.

*L. valida* may be considered as the type of this genus; the other species may be separated from it when the examination of more specimens affords sufficient characters for the establishment of new genera.

#### 1. LAUREPA VALIDA.

Mas. *Testacea; abdomen piceum, basi testaceum; alæ posticæ pallide cinereæ.*

*Male.* Testaceous, shining. Abdomen piceous, testaceous towards the base. Hind wings pale cinereous; costa pale testaceous. Length of the body 6–7½ lines.

*a.* Jamaica. Presented by Sir J. Hearsay.

*b—d.* Jamaica. From Mr. Gosse's collection.

#### 2. LAUREPA DISCALIS.

Fœm. *Testacea, gracilis; caput breve, antice subcarinatum, vertice lineisque duabus posticis lateralibus nigris; antennæ nigre, corpore triplo longiores; prothorax nigro trivittatus, vitta media latissima, lateribus rotundatis; oviductus nigricans, abdomine paullo longior; tibiæ posticæ biseriatim setulosæ et sexspinosæ; alæ anticæ abdomine breviores, vitta postica nigricante; alæ posticæ abdomen longe superantes.*

*Female.* Testaceous, slender, shining. Head short, prominent between the sockets of the antennæ; vertex black; a black stripe on each side between the eye and the hind border. Eyes prominent. Antennæ blackish, very slender, testaceous at the base, about thrice the length of the body. Prothorax transverse, not narrower in front, with three black stripes; middle stripe as broad as the disk of the vertex; lateral stripes continuous with those of the head; lateral keels well defined; sides much rounded. Cerci shorter than the abdomen. Oviduct blackish, a little longer than the abdomen. Legs very slender; hind femora abruptly attenuated beyond the middle; hind tibiæ minutely setulose, and with six slender spines on each side. Fore wings rather shorter than the abdomen, irregularly reticulated, with a broad blackish stripe along the hind

border; longitudinal veins on each side straight, strongly marked. Hind wings extending very much beyond the abdomen. Length of the body 6 lines.

a. Natal. From M. Guenzius' Collection.

### 3. LAUREPA CONGRUA.

Fæm. *Testacea; caput breve, antice subcarinatum; antennæ corpore valde longiores; prothorax transversus, antice paullo angustior, lateribus rotundatis; cerci abdomine breviores; tibiæ posticæ biserialim subserrate et spinosæ; alæ anticæ ordinatim reticulatæ, abdomen superantes, linea subcostali nigricante; alæ posticæ valde longiores.*

*Female.* Testaceous, slender, shining. Head not elongated, prominent between the sockets of the antennæ. Eyes prominent, slightly elongated. Third joint of the palpi clavate, obliquely truncated, a little longer than the second. Antennæ much longer than the body. Prothorax transverse, a little narrower in front; sides rounded. Cerci shorter than the abdomen. Legs rather slender; hind tibiæ very minutely serrated, with a few slender spines. Fore wings extending beyond the abdomen, regularly reticulated; longitudinal veins straight, parallel to each other; mediastinal vein emitting ten oblique parallel branches; a blackish line along the scapular vein; apical triangle pellucid. Hind wings extending much beyond the fore wings. Length of the body 6 lines.

a. Philippine Isles. From Mr. Cuming's collection.

### 4. LAUREPA AUSTRALIS.

Fæm. *Testacea; caput breve, antice subcarinatum; antennæ gracillimæ, corpore fere triplo longiores; prothorax transversus, antice paullo angustior, lateribus rotundatis; cerci abdomine vix breviores; pedes vix graciles, tibiis posticis biserialim serratis setulosis et quadri spinosis; alæ anticæ ordinatim reticulatæ, abdomen longe superantes, linea subcostali nigra interrupta; alæ posticæ valde longiores.*

*Female.* Testaceous, slender. Head not elongated, prominent between the sockets of the antennæ. Eyes prominent. Antennæ very slender, nearly thrice the length of the body. Prothorax transverse, a little narrower in front; sides rounded. Cerci nearly as long as the abdomen. Oviduct curved upward, black at the tip, as long as the abdomen. Legs moderately stout; hind tibiæ minutely serrated and setulose and with four spines on each side, spines on the one side alternate with those on the other. Fore wings regularly reticulated, extending much beyond the abdomen; mediastinal vein emitting nine oblique parallel veins, the intermediate spaces regularly reticulated; a black interrupted line along the scapular vein. Hind wings extending much beyond the fore wings. Length of the body 7 lines.

The interrupted line on the fore wings distinguishes it from *L. congrua*.

a. Australia. Presented by the Haslar Hospital.

## 5. LAUREPA FRONTALIS.

Mas. *Testacea; caput breve, antice nigricans et carinatum; prothorax transversus, antice paullo angustior, utrinque nigricans, lateribus fere rectis; abdominis dorsum nigro fasciatum; cerci breves; alæ anticæ abdomen longe superantes, tympano minimo, venæ mediastinalis ramis nigricantibus; alæ posticæ valde longiores.*

*Male.* Testaceous, slender, shining. Head not elongated, blackish and keeled in front. Eyes very prominent. Antennæ tawny. Prothorax transverse, a little narrower in front, blackish on each side, where it is vertical; sides nearly straight. Abdomen with black abbreviated dorsal bands. Cerci short. Fore wings extending much beyond the abdomen; tympanum very small, near the base; longitudinal veins parallel; transverse sectors regular; subcostal space whitish, with ten or eleven oblique blackish branches of the mediastinal vein. Hind wings extending much beyond the fore wings. Length of the body 8 lines.

a. N. Australia. Presented by J. R. Elsey, Esq.

## 6. LAUREPA UNICOLOR.

Mas. *Fulva; caput non productum, antice vix carinatum; palporum articulus 3us securiformis; antennæ corpore plus duplo longiores; prothorax transversus, lateribus vix connexis, cerci abdomine breviores; tibiæ posticæ vix setulosæ, extus quadri spinosæ, intus sex-spinosæ; alæ anticæ cinereæ, reticulatæ, abdomen superantes; alæ posticæ longiores.*

*Male.* Tawny, shining. Head much shorter than the prothorax, slightly prominent between the sockets of the antennæ. Eyes piceous, prominent. Third joint of the palpi very slightly securiform, longer than the second. Antennæ more than twice the length of the body. Prothorax transverse, not narrower in front; sides very slightly rounded. Cerci much shorter than the abdomen. Legs rather slender; hind tibiæ hardly setulose, with four minute spines on the outer side and with six on the inner side. Fore wings cinereous, extending beyond the abdomen, regularly reticulated above and in the subcostal part, where there are eight oblique branches of the mediastinal vein; transverse sectors along the scapular vein pale testaceous. Hind wings extending somewhat beyond the fore wings. Length of the body 7 lines.

a. Navigator's Island. Presented by the late Duke of Northumberland.

## 7. LAUREPA OBSCURELLA.

Mas. *Fulva; caput breve, antice subcarinatum; antennæ gracillimæ, corpore plus duplo longiores; prothorax subtransversus, antice angustior, lateribus fere rectis; cerci breves; pedes sat validi, tibiis posticis utrinque subserratis extus quinque spinosis intus septem-spinosis; alæ anticæ abdomen superantes, apices versus reticulatæ, tympano sat magno; alæ posticæ valde longiores.*

*Male.* Tawny, slender, shining. Head not elongated, slightly prominent between the eyes. Eyes prominent. Palpi slender; third joint

obliquely truncated, a little longer than the second. Antennæ very slender, more than twice the length of the body. Prothorax narrower in front, slightly transverse; lateral keels well defined; sides almost straight. Cerci not more than half the length of the abdomen. Legs moderately stout; hind tibiæ minutely serrated on each side, with five slender spines on the outer side and with seven on the inner side. Fore wings rather narrow, extending somewhat beyond the abdomen, reticulated beyond the tympanum; subcostal space with fourteen or fifteen oblique parallel branches of the mediastinal vein. Hind wings extending much beyond the fore wings. Length of the body 8 lines.

a. ——— ?

gg. Fore wings extremely long.

h. Body stout.

### Genus 37. TARRAGA.

*Mas.* Corpus robustum. Caput convexum, antice productum. Oculi parvi, longiusculi, prominuli. Palpi longi, graciles, filiformes; articulus 3us truncatus, 2o paullo longior. Antennæ graciles, corpore valde longiore. Prothorax magnus, postice latior, transverse impressus, lateribus margineque postico valde rotundatis. Abdomen brevissimum, apice bispinosum. Pedes graciles; tibiæ spinosæ; femora postica subincrassata, apices versus attenuata. Alæ anticæ longissimæ, inordinatim reticulatæ.

*Male.* Body stout. Head convex, as broad as the fore part of the prothorax; face elongated. Eyes small, elongated, prominent. Palpi long, slender, filiform; third joint truncated at the tip, a little longer than the second. Antennæ slender, very much longer than the body. Prothorax large, transversely and broadly impressed near the fore border, which is straight; no lateral keels; sides much rounded; hind part elongated, much rounded, covering the base of the fore wings. Abdomen very short, with two spines at the tip. Cerci short? Legs slender, moderately long; hind femora slightly incrassated, attenuated towards the tips; tibiæ sulcate, with four apical spines; anterior tibiæ armed with four rather long spines on each side; hind tibiæ with six short spines on each side; tarsi 3-jointed; first and third joints long; second very short. Wings very long, about thrice the length of the abdomen. Fore wings thickly and irregularly reticulated; left wing covering the right one; two branches of the interno-median vein extending across the wing; mediastinal vein remote from the scapular vein; space between the two and between the former and the costa irregularly reticulated; space between the scapular and the externo-median vein with regular transverse sectors.

The single specimen of this genus will not allow a complete description of its characters. It has most affinity to *Phalangopsis*.

#### 1. TARRAGA OBSCURA.

*Mas.* Nigra; caput antice fulvum; prothorax postice fulvescens; femora subtus testacea; femora postica testaceo reticulata; alæ cinerea, picco venosa.

*Male.* Black. Head tawny near the mouth. Eyes piceous. Hind part of the prothorax dark tawny. Four anterior femora testaceous towards the base beneath; hind femora irregularly reticulated with testaceous above, testaceous beneath with a row of black dots on each side. Wings dingy cinereous; veins piceous, those towards the costa pale testaceous. Length of the body 10 lines.

*a.* Hindostan. Presented by Sir J. Hearsay.

*lh.* Body very slender.

#### Genus 38. NOCERA.

*Mas.* Corpus gracillimum. Caput breve, spina brevi armatum. Oculi parvi, subrotundi, valde prominuli. Palpi longi, filiformes, gracillimi; articulus 3us 2o paullo longior. Antennæ gracillimæ, corpore quadruplo longiores; articuli 1us et 2us incrassati. Prothorax elongatus; latera fere recta. Abdomen sat longum; sexualia magna. Cerci abdomine breviores. Pedes longi, gracillimi, femoribus tibiisque spinosis, tarsis quadri-articulatis. Alæ anticæ angustæ, longissimæ, inordinatim reticulatæ, tympano nullo.

*Male.* Body very slender. Head short, with a short spine above the sockets of the antennæ. Eyes small, nearly round, very prominent. Palpi long, filiform, very slender; third joint a little longer than the second. Antennæ very slender, about four times the length of the body; first joint elongated, very stout; second stout, elliptical. Prothorax much longer than broad; sides nearly straight. Abdomen moderately long; sexual appendages large. Cerci much shorter than the abdomen. Legs long, very slender; four anterior femora and tibiæ armed with long slender spines, those of the tibiæ slightly curved; hind femora and hind tibiæ armed with very short spines, which are more numerous than those of the anterior legs; hind femora slender; tarsi short; fourth joint long, slender, with two claws. Wings narrow, more than thrice the length of the abdomen. Fore wings irregularly reticulated; no tympanum; longitudinal veins straight; branches of the mediastinal vein numerous, very short.

This genus has most affinity to *Æcanthus*.

#### 1. NOCERA PALLIDA.

*Mas.* *Straminea*; *oculi nigri, stramineo reticulatæ*; *alæ diaphanæ, venis pallidissime stramineis*.

*Male.* Straw-colour. Eyes black, reticulated with straw-colour. Wings pellucid; veins very pale straw-colour. Length of the body 5 lines.

*a.* Samoa Islands. From the Rev. T. Powell's collection.

*ff.* Third joint of the maxillary palpi directly truncated.

Genus 39. TRIGONIDIUM.

Trigonidium, *Ramb. MSS. Serv. Hist. Orth.* 349. *Fisch. Orth. Eur.* 169.

1. TRIGONIDIUM CICINDELOIDES.

*cicindeloides*, *Ramb. Faune And.* 39. *Fisch. Orth. Eur.* 169, pl. 9, f. 5—  
*paludicola*, *Géné, MSS. Serv. Hist. Orth.* 351.

S. Europe.

2. TRIGONIDIUM DESJARDINSII.

*Desjardinsii*, *Serv. Hist. Orth.* 351.

Mauritius.

3. TRIGONIDIUM LONGIPENNE.

*longipenne*, *Serv. Hist. Orth.* 354.

Mauritius.

4. TRIGONIDIUM LINEATOCOLLE.

*Trigonidium?* *lineatocolle*, *Serv. Hist. Orth.* 352.

Java.

5. TRIGONIDIUM PACIFICUM.

*pacificum*, *Scudder, Cent. Orth. Dec. Gryll.*

Hawaiian Isles.

6. TRIGONIDIUM TAPROBANENSE.

*Fœm.* *Piceum, pubescens*; caput vittis tribus facieque sordide testaceis; oculi magni; prothorax testaceo bicittatus; oviductus abdomine vix brevior; tibiæ posticæ utrinque trispinosa, testaceo fasciata; alæ anticæ cinereæ, fusco septem-guttatæ, abdominis apicem attingentes; alæ posticæ duplo longiores.

*Fœmale.* Piceous, pubescent. Fore part of the head and three stripes on the vertex dingy testaceous. Eyes livid, large, prominent. Third joint of the palpi directly truncated. Prothorax with a dingy testaceous spot on each side. Oviduct nearly as long as the abdomen. Tibiæ with some dingy testaceous bands; hind tibiæ with three long slender spines. Fore wings cinereous, extending to the tip of the abdomen, with seven brown dots, five of which form a line in the disk and two are near the end of the hind border. Hind wings pellucid, full twice the length of the fore wings. Length of the body 2 lines.

*a.* Ceylon. From Dr. Thwaites' collection.



*ce.* Fore anterior legs very long.

*f.* Hind femora not abruptly attenuated.

#### Genus 40. LUZARA.

*Mas.* Corpus robustum. Caput breve, antice subcarinatum et quadrifoveolatum. Oculi subprominuli, sat parvo. Palporum articulus 3us subsecuriformis, 2o longior. Antennæ graciles. Prothorax transversus, transverse impressus; latera subreflexa, antice convexa. Cerci corpore breviores. Pedes longi, sat graciles, femora postica crassa; tibiæ posticæ utrinque serratæ, extus quadrispinosæ, intus trispinosæ. Alæ breves?

*Male.* Body stout, smooth, shining. Head short, prominent between the sockets of the antennæ, with two excavations on each side in front of the eyes, which are rather small and slightly prominent. Mandibles large. Palpi moderately long and stout; third joint very slightly securiform, longer than the second. Antennæ slender. Prothorax transverse, transversely and slightly impressed in the middle, not narrower in front; lateral keels not defined; sides slightly reflexed, rounded in front. Cerci rather shorter than the body. Legs long, rather slender; hind femora thick; hind tibiæ minutely serrated on each side, with four wide apart spines on the outer side and with three on the inner side. Wings a little more than half the length of the abdomen.

*L. rufipennis* is the type of this genus, which has most affinity to *Platydictylus*. The specimen described does not appear to have attained its full development.

#### 1. LUZARA RUFIPENNIS.

*Mas.* *Niger; caput antice fulvum; antennæ testaceo annulatæ; prothorax testaceo bimaculatus, rufescente marginatus; abdomen fulvo conspersum; cerci fulvi, basi nigricantes; femora postica fulva, nigro oblique strigata; alæ anticæ rufæ.*

*Male.* Black. Head tawny about the mouth and with the lateral palpi of the same hue. Sockets of the antennæ and ocelli testaceous. Eyes piceous, small. Maxillary palpi piceous. Antennæ testaceous at the base, and with some testaceous rings. Prothorax with a reddish border and with a testaceous spot on each side in front. Abdomen with tawny speckles; under side mostly tawny. Cerci tawny, blackish towards the base. Four anterior legs mostly tawny. Hind femora tawny, black towards the tips and with black oblique streaks on the outer side. Fore wings red. Length of the body  $9\frac{1}{2}$  lines.

*a.* Columbia. From M. Sallé's collection.

#### 2. LUZARA? FERRUGINEA.

*Fœm.* *Ferruginea, robusta, sabetosa; caput prothorace angustius, facie livida, margine postico utrinque nigro; palpi articulo 3o oblique truncato; cerci corpore paullo breviores; oviductus rufescens, corpore vix brevior; pedes quatuor anteriores longiusculi, femoribus piceo variis, tibiis tarsisque nigricantibus, tibiis testaceo fasciatis; alæ*

*anticae abdomine duplo breviores, venis longitudinalibus bene determinatis; alae posticae nullae.*

*Female.* Ferruginous, stout, slightly setose. Head rather small, narrower than the prothorax, black on each side of the hind border, dull tawny in front, livid about the mouth. Eyes tawny. Third joint of the maxillary palpi obliquely truncated. Abdomen pubescent. Cerci about three-fourths of the length of the body. Oviduct reddish, nearly as long as the body. Legs setose; four anterior legs rather long; femora varied with piceous; tibiae and tarsi blackish; tibiae with a testaceous band; tarsi testaceous at the base. Fore wings about half the length of the abdomen, with straight strongly marked longitudinal veins, and with slight indistinct transverse veinlets. Hind wings obsolete. Length of the body 8 lines.

This species may form a new genus when there are more specimens whereby to ascertain its characters. It has some affinity to *Nemobius*.

a. Ceylon. Presented by Dr. Templeton.

*ff.* Hind femora abruptly attenuated beyond the middle.

*g.* Spines of hind tibiae short.

#### Genus 41. PHALANGOPSIS.

Phalangopsis, *Serr. Rev.* 70; *Hist. Orth.* 367. *Brullé, Hist. Nat. Ins.* ix. 175. *Burm. Handb. Ent.* ii. 721. *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 234.

- a. First and third joints of the hind tarsi equal in length.  
 b. Hind femora marbled.  
 c. Fore wings sulphur-coloured. - - - - - *helvola*.  
 cc. Fore wings brownish. - - - - - *marmorata*.  
 ccc. Fore wings pale cinereous. - - - - - *pilosa*.  
 bb. Hind femora with three black bands. - - - *bicolor*.  
 aa. First joint of the hind tarsi rather less than twice longer than the third. *longicornis*.  
 aaa. First joint of the hind tarsi twice longer than the third.  
 b. Fore wings brownish.  
 c. Hind tibiae with short spines.  
 d. Hind tibiae shorter than the femora. - - - *microcephala*.  
 dd. Hind tibiae longer than the femora. - - - *albicornis*.  
 cc. Hind tibiae with long spines. - - - *Buqueti*.  
 bb. Fore wings luteous. - - - - - *fuscicornis*.  
 aaaa. First joint of the hind tarsi thrice longer than the third joint.  
 b. Fore tibiae and middle tibiae without rings.  
 c. Antennae and cerci brownish.  
 d. Spines of the hind tibiae short. - - - *reticulata*.  
 dd. Spines of the hind tibiae long. - - - *spectrum*.  
 cc. Antennae and cerci luteous. - - - *japonica*.  
 bb. Fore tibiae and middle tibiae with rings.  
 c. Fore legs somewhat short. - - - *annulipes*.  
 cc. Fore legs very long.  
 d. Tarsi whitish. - - - *longipes*.  
 dd. Tarsi brown. - - - *picticeps*.

## 1. PHALANGOPSIS FUSCICORNIS.

fuscicornis, *Serv. Hist. Orth.* 370.

Brazil.

## 2. PHALANGOPSIS ARACHNOIDES.

Acheta arachnoides, *Westw. Nat. Libr.* xxxiv. 248, pl. 6, f. 1.

a, b. Jamaica. Presented by the Entomological Club.

## 3. PHALANGOPSIS RETICULATA.

Acheta reticulata, *Fabr. Ent. Syst.* ii. 30. *Stoll, Saut. et Grill.* pl. 3, f. 14.—Phalangopsis tessellata, *Serv. Orth.* 370.—Acheta longicornis, *Afz.*

a. Whydah. From Mr. Fraser's collection.

Cape Coast.

W. Africa. From Mr. Hewitson's collection.

Gambia. Presented by F. Walker, Esq.

## 4. PHALANGOPSIS ANNULIPES.

annulipes, *Serv. Rev.* 70; *Hist. Orth.* 369. *Burm. Handb. Ent.* ii. 722. *Blanch. Hist. Nat. Ins.* iii. 32.

Port au Prince.

## 5. PHALANGOPSIS LONGIPES.

longipes, *Serv. Rev.* 70; *Hist. Orth.* 369, pl. 12, f. 1. *Burm. Handb. Ent.* i. 722. *Blanch. Hist. Nat. Ins.* iii. 31.

S. America.

## 6. PHALANGOPSIS ANNULATA.

annulata, *Bilimek, Verh. Zool. Bot. Gess. Wien.* xvii. 904.

Cave Cocahuamilpa in Mexico.

## 7. PHALANGOPSIS MARMORATA.

Gryllus (Phalangopsis) marmoratus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 235.

Japan.

## 8. PHALANGOPSIS PILOSA.

Gryllus (Phalangopsis) pilosus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 235.

Java. Borneo.

## 9. PHALANGOPSIS BICOLOR.

Gryllus (Phalangopsis) bicolor, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 235.

Java.

## 10. PHALANGOPSIS MICROCEPHALUS.

Gryllus (Phalangopsis) microcephalus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 236.

Sumatra. Japan.

## 11. PHALANGOPSIS BUQUETI.

Buqueti, *Serr. Hist. Orth.* 367—Gryllus (Phalangopsis) Buqueti, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 236.

Java. Japan.

## 12. PHALANGOPSIS JAPONICA.

Gryllus (Phalangopsis) japonicus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 236.

Japan.

## 13. PHALANGOPSIS HELVOLA.

Phalangopsis helvola, *Serr. Hist. Orth.*—Gryllus dorsalis, *Burm. Handb. Ent.* ii. 733—Gryllus (Phalangopsis) helvolus, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 235.

Japan. Java.

## 14. PHALANGOPSIS ALBICORNIS.

Mas. *Niger*; caput vertice testacco-rittato, fronte facieque fulvis; antennæ albidae, basi nigricantes, corpore triplo longiores; prothorax lituris duabus anticis testaceis arcuatis; cerci testacei, abdomine longiores; pedes graciles, femoribus tursisque basi testaceis, tibiis testaceis basi apiceque nigris, tibiis posticis utrinque bispinosis; alæ anticae fusciscente cinereae, corpore duplo longiores, apice reticulate.

*Male.* Black, shining. Head small, as broad as the fore border of the prothorax; vertex with a testaceous stripe; front and face tawny. Eyes not prominent. Palpi slender; third joint slightly securiform, much longer than the second. Antennæ whitish, blackish at the base, thrice the length of the body. Prothorax transversely impressed, with a curved testaceous mark on each side in front; sides rounded in front; hind border straight. Abdomen very short. Cerci testaceous, longer than the body. Legs long, slender; femora and tarsi testaceous towards the base; tibiæ testaceous, black at the base and at the tips; hind tibiæ with two slender spines on each side near the tips. Fore wings brownish cinereous, twice the length of the body, reticulated towards the tips; veins pale testaceous. Length of the body 5 lines.

a. N. Hindostan. From Capt. Reid's collection.

## 15. PHALANGOPSIS LONGICORNIS.

Mas. *Testacea*; palporum articulus 3us clavatus, 2o valde longior; antennæ gracillimæ, corpore quintuplo longiores; prothorax niger, vittis duabus flavis interruptis; pedes graciles, tibiis posticis nigricante trifasciatis utrinque trispinosis; alæ anticae abdomen longissime superantes, apices versus inordinatim reticulate, tympano magno.

*Male.* Testaceous. Head small, shining, as broad as the fore border of the prothorax. Eyes prominent. Third joint of the palpi clavate, much longer than the second. Antennæ very slender, about five times the length of the body. Prothorax black, transverse, narrower in front, with an interrupted yellow stripe on each side; sides straight. Abdomen very short. Cerci long, slender. Legs long, slender; fore tibiæ with a silvery excavation on the inner side near the base; hind tibiæ with three blackish bands, and with three long slender spines on each side. Fore wings extending very much beyond the abdomen, irregularly reticulated near the tips; tympanum large. Length of the body  $4\frac{1}{2}$  lines.

Singapore. In Mr. Saunders' collection.

#### 16. PHALANGOPSIS PICTICEPS.

*Mas.* *Piceus*; *caput antice flavum et nigro quadrivittatum*; *palporum articulus 3us clavatus, 2o longior*; *prothorax transversus, flavo pallido marginatus, lateribus anticis valde rotundatis*; *cerci robusti*; *pedes graciles, tarsi basi fulvis, tibiis posticis utrinque trispinosis*; *alæ anticæ breves, costæ pallide flavæ.*

*Male.* Piceous, slightly shining. Head yellow and shining in front; four black stripes on the front and two on the face. Eyes large, prominent, slightly elongated. Third joint of the palpi clavate, longer than the second. Antennæ long, slender. Prothorax transverse, bordered with pale yellow; sides much rounded in front. Abdomen moderately long, dull tawny beneath. Cerci stout. Legs long, slender; tarsi tawny towards the base; hind tibiæ with three long slender spines on each side; the spines on one side alternate with those on the other. Fore wings much shorter than the abdomen; costæ pale yellow. Length of the body 8 lines.

The specimen described has probably not attained its full development.

a. Hindostan. Presented by Major-Gen. Hardwicke.

#### 17. PHALANGOPSIS? PUMILA.

*Gryllus pumilus*, *Burm. Handb. Ent.* ii. 732.

W. Indies.

#### Sect. n.

*Mas.* Corpus breve, pubescens. Caput parvum. Oculi mediocres, non prominuli. Palpi longiusculi, sat graciles; articulus 3us vix securiformis, 2o valde longior. Prothorax transversus, antice angustior. Cerci abdomine non breviores. Pedes graciles, longissimi, tibiis posticis utrinque trispinosis. Alæ anticæ abdomine breviores, tympano magno.

*Male.* Body short, dull, pubescent. Head small. Eyes moderately large, not prominent. Maxillary palpi rather long and slender, minutely setulose; third joint very slightly securiform, much longer than the second. Antennæ very slender, more than thrice the length of the body. Prothorax narrower in front, very much broader than long. Cerci as long as the abdomen. Legs slender, very long; hind femora a little shorter than the hind tibiæ, keeled on each side, much attenuated towards the tips; anterior tibiæ with two slender spines at the tips, much longer than the tarsi; hind

tibiæ about twice the length of the hind tarsi, armed with spines at the tips and with three long spines on the outer side at wide intervals, and alternate with three on the inner side. Fore wings flat, shorter than the abdomen; tympanum large; subcostal area narrow. Hind wings not apparent.

#### 18. PHALANGOPSIS SPECTRUM.

Mas. *Picea*, venter, femoribus alisque anticis sordide ferrugineis.

*Male*. Piceous. Under side of the abdomen, femora and fore wings dull ferruginous. Fore wings dark cinereous along the basal part of the costa. Length of the body  $5\frac{1}{2}$  lines.

*a*. Tejuca. Presented by Mrs. R. Bennett.

*dd*. Hind tibiæ without lateral spines.

*e*. Prothorax produced hindward.

#### Genus 42. CYCLOPTILUM.

*Cycloptilum*, Scudder, *Cent. Orth. Dec. Gryll.*

#### 1. CYCLOPTILUM SQUAMOSUM.

*squamosum*, Scudder, *Cent. Orth. Dec. Gryll.*

Texas.

*ee*. Prothorax not produced hindward.

*f*. Body stout.

#### Genus 43. ORNEBIUS.

*Ornebius*, Guér. *Icon. R. Anim.* 330.

*Mas*. Corpus fere lineare, sat planum. Caput parvum. Oculi parvi, non prominuli. Palporum articulus 3us oblique truncatus. Antennæ longæ, graciles; femora postica valde incrassata; tibiæ posticæ glabræ. Alæ brevissimæ.

*Male*. Body nearly linear, rather flat and narrow. Head small, not broader than the fore border of the prothorax. Eyes small, at some distance from the hind border. Third joint of the palpi obliquely truncated. Antennæ long, slender. Prothorax very much longer than broad; fore border little more than half the breadth of the hind border, which is slightly rounded. Cerci shorter than the body. Legs short, slender; hind femora much incrassated; hind tibiæ smooth, without spines. Wings very short.

#### 1. ORNEBIUS XANTHOPTERUS.

*xanthopterus*, Guér. *Icon. R. Anim.* 330.

*Mas*. *Ochraceus*, tomentosus; abdomen nigrum, basi testaceum; cerci picei, basi testacei; pedes testacei; alæ antica pallide luteæ.

*Male*. Ochraceous, tomentose. Eyes piceous. Mandibles with black tips. Abdomen black, testaceous at the base. Cerci piceous, testaceous at the base. Legs testaceous. Fore wings pale testaceous. Length of the body  $4\frac{1}{2}$ —5 lines.

*a, b*. Mauritius. From Madame Ida Pfeiffer's collection.

## 2. ORNEBIUS NIGRIPALPIS.

nigripalpis, *Guér. Icon. R. Anim.* 330.

Pondicherry.

## 3. ORNEBIUS SORDIDUS.

*Mas.* *Subochraceus, tomentosus; palpi nigri; antennæ testaceæ, gracillimæ, corpore multo longiores, basi nigricantes; prothorax albo submarginatus; cerci pallide testacei, corpore vix breviores, basi picei; pedes sordide testacei, piceo plagiati; alæ luridæ, minimæ.*

*Male.* Dull ochraceous, tomentose. Eyes reddish. Palpi black. Antennæ testaceous, very slender, much longer than the body, blackish towards the base. Prothorax narrowly bordered with white. Cerci pale testaceous, nearly as long as the body, piceous towards the base. Legs dull testaceous, femora and tibiæ with some piceous patches. Wings lurid, rudimentary. Length of the body 4 lines.

Dorei, N. Guinea. In Mr. Saunders' collection.

*ff.* Body very slender.

Genus 44. XABEA.

*Mas.* Corpus glabrum, nitens, gracillimum. Caput fusiforme, productum, prothorace brevius. Oculi longiusculi, sat parvi, subprominuli. Palpi graciles, filiformes; articulus 3us 2o valde longior. Antennæ gracillimæ. Prothorax longissimus, antice attenuatus, postice convexus; latera recta. Cerci breves. Pedes gracillimi; femora postica non incrassata; tibiæ posticæ muticæ; tarsi triarticulati, articulo 2o brevissimo. Alæ anticæ latissimæ, abdomen longe superantes, non reticulatæ, tympano maximo. Alæ posticæ valde longiores.

*Male.* Body smooth, shining, very slender. Head fusiform, much elongated, rather shorter than the prothorax and broader than the fore part of the latter. Eyes elongated, rather small, slightly prominent. Palpi slender, filiform; third joint much longer than the second. Antennæ very slender. Prothorax very long, attenuated in front, slightly gibbous near its hind border; sides straight. Cerci less than half the length of the abdomen. Legs very slender, very minutely pubescent; hind femora not incrassated; hind tibiæ unarmed; tarsi three-jointed; second joint extremely short; third nearly half the length of the first; claws very small. Fore wings very broad, extending much beyond the abdomen, not reticulated; tympanum very large. Hind wings extending much beyond the fore wings.

This genus is most nearly allied to *Æcanthus*.

## 1. XABEA DECORA.

*Mas.* *Flavo-alba; caput nigro quinque-vittatum; prothorax nigro quadrivittatus; tibiæ posticæ apice nigre; alæ anticæ diaphanæ, albido venosæ, guttis duabus strigisque nigris.*

*Male.* Yellowish white. Hind part of the head with five black stripes, the middle stripe shorter and broader than the others. Prothorax

with four black stripes; two in the disk, connected in front; one on each side. Tips of the hind tibiæ black above. Wings pellucid; veins whitish. Fore wings with two black dots on each side near the scapular vein; veins mostly accompanied by black streaks. Length of the body  $5\frac{1}{2}$  lines.

a. Sumatra. Presented by W. W. Saunders, Esq.

cc. Face very flat.

#### Genus 45. PLATYBLEMMUS.

*Gryllus*, *Linu.* *L. Duf.*, *Burm.*—*Acheta*, *Fabr.* *Charp.*—*Sciobia*, *Illig.*—*Platyblemmus*, *Serr. Rev. Meth. Hist. Orth.* 352. *Ramb.*—*Platyblemma*, *Erichson*, *Agass. Nomencl. Fisch. Orth. Eur.* 166.

##### 1. PLATYBLEMMUS UMBRACULATUS.

*Gryllus umbraculatus*, *Linu. Syst. Nat.* 695. *Oliv. Enc. Meth.* vi. 636. *Latr. Hist.* xii. 25. *Griff. Anim. Kingd.* xii. pl. 63. f. 2. *Burm. Handb. Ent.* ii. 735. *Blanch. Hist. Nat. Ins.* iii. 33. *L. Duf. Ann. Sci. Phys. Brux.* vi. 313, pl. 96, f. 6—*Acheta umbraculata*, *Fabr. Ent. Syst.* ii. 31. *Coqueb. Ill. Icon.* iii. pl. 21, f. 2. *Charp. Hor. Ent.* 83—*Platyblemmus umbraculatus*, *Serr. Hist. Orth.* 355. *Lucas, Expl. Sci. Alg.* 22, pl. 1, f. 8—*Platyblemma lusitanicum*, *Fisch. Orth. Eur.* 167, pl. 9, f. 11, 12.

a—c. Spain. Presented by Major Parry.

d. Spain. Presented by the Rev. H. Clark.

e, f. Algeria. From M. Parzudaki's collection.

##### 2. PLATYBLEMMUS RAMBURI.

*Ramburi*, *Serr. Hist. Orth.* 355.

Spain.

##### 3. PLATYBLEMMUS CALIENDRUM.

*Platyblemma caliendrum*, *Fisch. Orth. Eur.* 168, pl. 9, f. 13.

Spain.

##### 4. PLATYBLEMMUS LUSITANICUS.

*Platyblemmus lusitanicus*, *Serr. Hist. Orth.* 354. *Ramb. Faune And.* 36, pl. 2, f. 1, 2—*Platyblemmus Ramburi*, *Serr. Hist. Orth.* 355.

a. Bengal. Presented by W. Masters, Esq.

b. Hindostan. From Mr. Stevens' collection.

c—e. Algesiras. Presented by the Entomological Club.

f. ———? From Mr. Vigors' collection.

g—i. ———?

##### 5. PLATYBLEMMUS DELECTUS.

*delectus*, *Serr. Hist. Orth.* 356.

Bengal.

##### 6. PLATYBLEMMUS VELATUS.

*velatus*, *Serr. Hist. Orth.* 354.



The following species also belong to this family:—

BRACHYTRYPES? ORIENTALIS.

*Acheta orientalis*, *Fabr. Ent. Syst.* ii. 30—*Gryllus orientalis*, *Burm. Handb. Ent.* ii. 735.

Hindustan. Java.

GRYLLUS? CRUCIS.

*Acheta crucis*, *Fabr. Ent. Syst.* ii. 32.

Isle St. Croix.

NEMOBIUS? MINUTUS.

——— *Deg. Ins.* iii. 524, pl. 43, f. 8—*Gryllus minutus*, *Linn. Syst. Nat.* ii. 694—*Acheta minuta*, *Fabr. Ent. Syst.* ii. 33.

Surinam.

NEMOBIUS?? PULICARIUS.

*Gryllus pulicarius*, *Burm. Handb. Ent.* ii. 732.

Jamaica.

ENEOPTERA? UNICOLOR.

unicolor, *Scudder, Cent. Orth. Dec. Gryll.*

Manilla.

## A D D E N D A.

Since the preceding pages were printed I have been indebted to the kindness of S. H. Scudder, Esq., of Boston, U. States, for his recent publications on *Dermaptera*, whereby I am enabled to make some additions to the list of *Gryllide*.

Fam. GRYLLIDÆ, page 1.

Subfam. GRYLLOTALPINA, *Scudder*.

Genus SCAPTERISCUS.

*Scapterisus*, *Scudder*, *Revision of the large stylated Fossorial Crickets*, 6.

1. SCAPTERISCUS OXYDACTYLUS.

*Gryllotalpa oxydactyla*, page 3.

2. SCAPTERISCUS TENUIS.

*tenuis*, *Scud. Rev. Foss. Crickets*, 8, pl. 1, f. 7.

Brazil.

3. SCAPTERISCUS MEXICANUS.

*Gryllotalpa Mexicana*, page 3.

4. SCAPTERISCUS DIDACTYLUS.

*Gryllotalpa didactyla*, page 3.

5. SCAPTERISCUS VICINUS.

*vicinus*, *Scud. Rev. Foss. Crickets*, 12, pl. 1, f. 4, 23.

South and Central America.

6. SCAPTERISCUS AGASSIZII.

*Agassizii*, *Rev. Foss. Crickets*, 13, pl. 1, f. 9, 10.

Switzerland. (Introduced from Central America?).

7. SCAPTERISCUS PARVIPENNIS.

*Gryllotalpa parvipennis*, page 4—*Scapterisus variegatus*, *Scud. Rev. Foss. Crickets*, 14, pl. 1, f. 8, 20.

8. SCAPTERISCUS ABBREVIATUS.

*abbreviatus*, *Scud. Rev. Foss. Crickets*, 14, pl. 1, f. 8, 20.

Pernambuco.

## Genus GRYLLOTALPA, page 1.

## GRYLLOTALPA AUSTRALIS.

australis, *Erichs. Archiv. Nat.* viii. 249. *Scud. Rev. Foss. Crickets*, 16,  
pl. 1, f. 5, 16, 24, 25,  
Australia.

## GRYLLOTALPA AZTECA.

azteca, *Sauss. Rev. Zool.* 1859, 316. *Gerst. Arch. Nat.* xxvi. 2, 404.  
Mexico.

## GRYLLOTALPA FOSSOR.

fossor, *Scud. Rev. Foss. Crickets*, 21, pl. 1, f. 11, 28, 29.  
Africa.

## GRYLLOTALPA ORYCTES.

oryctes, *Scud. Rev. Foss. Crickets*, 22, pl. 1, f. 12, 30, 31.  
China.

## GRYLLOTALPA COLUMBIA.

longipennis, page 3—Columbia, *Scud. Rev. Foss. Crickets*, pl. 1, f. 15, 16.

## Genus TRIDACTYLUS, page 7.

## TRIDACTYLUS MIXTUS.

*Xya mixta*, *Hald. Proc. Acad. Nat. Sci. Phil.* vi. 364. *Gerst. Arch. Nat.*  
xx. 2, 245.  
Texas.

## TRIDACTYLUS ILLINOIENSIS.

illinoensis, *Thomas, Proc. Ent. Soc. Phil.* i. 104.  
Illinois.

## TRIDACTYLUS TIBIALIS.

tibialis, *Guér. Icon. Regne Anim. Ins.* 366. *Erichs. Arch. Nat.* xiii. 139.  
New Orleans.

Subfam. GRYLLINA, *Scud.*

## GRYLLUS TOMENTOSUS.

tomentosus, *Eversm. Bull. Mosc.*, 1859, i. 127.  
Kirgis Steppes.

## GRYLLUS MARGINATUS.

marginatus, *Eversm. Bull. Mosc.* 1859, i. 127.  
Kirgis Steppes.

## GRYLLUS PUBESCENS.

pubescens, *Eversm. Bull. Mosc.* 1859, i. 127.

Kirgis Steppes.

## GRYLLUS TERES.

teres, *Schaum, Monats. Berl. Acad.* 1853.

Mozambique.

## GRYLLUS ACUMINIPENNIS.

acuminipennis, *Fairm. Arch. Ent.* ii. 257.

Gabon.

## GRYLLUS HERMEDORFENSIS.

Hermedorfensis, *Zeller, Stett. Ent. Zeit.* 1856, 23.

## GRYLLUS OCEANICUS.

oceanicus, *Le Guillon Rev. Zool.* 1841, 293.

Tahiti.

## Genus NEMOBIUS, page 56.

## NEMOBIUS TOLTECUS.

toltecus, *Sauss. Rev. Zool.* 1859, 316. *Gerst. Arch. Nat.* xxvi. 2, 401.  
Mexico.

## NEMOBIUS VITTATUS.

vittatus, *Scud. Bost. Journ. Nat. Hist.* vii. 430. *Gerst. Arch. Nat.* xxix.  
2, 356.

U. States.

## Genus PAROCCANTHUS.

Paroocanthus, *Sauss. Rev. Zool.* 1859, 317.

## 1. PAROCCANTHUS MEXICANUS.

Mexicanus, *Sauss. Rev. Zool.* 1859, 317. *Gerst. Arch. Nat.* xxvi. 2, 401.  
Mexico.

## Genus PHYLLOSCYRTUS.

Phyllosecyrus, *Guér. Icon. Regne Anim. Ins.* 333.

## 1. PHYLLOSCYRTUS ELEGANS.

elegans, *Guér. Icon. Regne Anim.* 333. *Erichs. Arch. Nat.* xiii. 138.  
*Gerst. Ent. Zeit. Stett.* xxiv. 427.

Mexico. Columbia.

## Genus PARAGRYLLUS.

Paragryllus, *Guér. Icon. Regne Anim.* 329; *Sagra, Hist. Nat. Cuba*, 354.  
*Erichs. Arch. Nat.* xii. 2, 138.

## 1. PARAGRYLLUS MARTINII.

Martinii, *Guér. Icon. Regne Anim.* 329.  
Cuba.

## Genus HOMOEGRYLLUS.

Homoeogryllus, *Guér. Lefebure, Voy. Abyss.* 201. *Icon. Regne Anim.*  
201, 325.

## 1. HOMOEGRYLLUS XANTHOGRAPHUS.

xanthographus, *Guér. Lefebure, Voy. Abyss.* 1849, 201. *Icon. Regne Anim.*  
336, pl. 6, f. 2.

Abyssinia.

## 2. HOMOEGRYLLUS TRICAUDATUS.

tricaudatus, *Fairm. Arch. Ent.* 258.

Gabon.

## Genus EUSCYRTUS.

Euscyrus, *Guér. Icon. R. Anim.* 334.

## 1. EUSCYRTUS BIVITTATUS.

bivittatus, *Guér. Icon. R. Anim.* 334.

Mauritius.

## Genus HISPINUS.

Hispinus, *Stal. Ofv. K. V. Ak. Forh.* 1855, 351.

## 1. HISPINUS AFER.

afér, *Stal. Ofv. K. V. Ak. Forh.* 1855, 351.

Natal.

## Genus PLATYDACTYLUS, page 76.

## PLATYDACTYLUS SAULCYI.

Sauleyi, *Guér. Icon. Regne Anim. Ins.* 330. *Erichs. Arch. Nat.* xiii. 2,  
139. *Guér. Sagra, Hist. Nat. Cuba*, 354.

Cuba.

## PLATYDACTYLUS MARGINIPENNIS.

marginipennis, *Guér. Icon. Regne Anim. Ins.* 330.

Pondicherry.

Genus *ŒCANTHUS*, page 92.*ŒCANTHUS* *ANGUSTIPENNIS*.

*angustipennis*, *Fitch, Trans. N. Y. St. Agric. Soc.* xvi. 411.  
New York.

*ŒCANTHUS* *DISCOLORATUS*.

*discoloratus*, *Fitch, Trans. N. Y. St. Agric. Soc.* xvi. 411.  
New York.

*ŒCANTHUS* *FASCIATUS*.

*fasciatus*, *Fitch, Trans. N. Y. St. Agric. Soc.* xvi. 412.  
New York.

*ŒCANTHUS* *FUSCIPES*.

*fuscipes*, *Fitch, Trans. N. Y. St. Agric. Soc.* xvi. 411.  
New York.

*ŒCANTHUS* *PUNCTULATUS*.

*punctulatus*, *Fitch, Trans. N. Y. St. Agric. Soc.* xvi. 413.  
Southern States.

Genus *PHALANGOPSIS*, page 104.*PHALANGOPSIS* *AZTECA*.

*Azteca*, *Sauss. Rev. Zool.* 1859, 209. *Gerst. Arch. Nat.* xxvi. 2, 405.  
Mexico.

*PHALANGOPSIS* *MACULATA*.

*maculata*, *Harris, Treat. Ins. Ed.* 1862, 155, f. 93.  
Massachusetts.

*PHALANGOPSIS* *SCABRIPES*.

*scabripes*, *Hald. Proc. Acad. Nat. Sci. Philad.* vi. 364. *Gerst. Archiv. Nat.*  
xx. 246.  
Alabama.

*PHALANGOPSIS* *BREVIPES*.

*P. (Dailinia) brevipes*, *Hald. Proc. Amer. Ass. Adv. Sci.* ii. 346. *Schaum,*  
*Arch. Nat.* xviii. 241.  
River Plate.

*PHALANGOPSIS* *GRACILIPES*.

*P. (Dailinia) gracilipes*, *Hald. Proc. Amer. Ass. Adv. Sci.* ii. 346. *Schaum,*  
*Arch. Nat.* xviii. 211.  
Pennsylvania.

## PHALANGOPSIS ROBUSTA.

P. (Daibinia) robusta, *Hald. Proc. Amer. Ass. Adv. Sci.* ii. 346. *Schaum, Arch. Nat.* xviii. 241.

U. States.

## Genus ECTATODERUS.

Ectatoderus, *Guér. Icon. Regne Anim.* 336.

## 1. ECTATODERUS NIGRIVENTRIS.

nigriventris, *Guér. Icon. Regne Anim.* 337, pl. 6, f. 3.

E. Africa.

## Genus ARCHEGOGRYLLUS.

Archegogryllus, *Scud. Proc. Bost. Soc. Nat. Hist.* xi.

## ARCHEGOGRYLLUS PRISCUS.

priscus, *Scud. Proc. Bost. Soc. Nat. Hist.* xi.

Fossil.





## S U P P L E M E N T

TO THE

## C A T A L O G U E O F B L A T T A R I Æ.

*Note.*—The Catalogue of *Blattariæ* published in 1868 was unavoidably incomplete, as I was not able to have access to Brunner von Wattenwyl's 'Nouveau Système des Blattaires,' nor to obtain information respecting it. References, therefore, to the above work and descriptions of a few new species are here added as a Supplement to the Catalogue.

Fam. BLABERIDÆ, C. B. 1.

Genus BLABERA, C. B. 1.

BLABERA STOLLII.

*Stollii*, *Watt. Blatt.* 374—*Blatta gigantea*, *Stoll. Spect.* pl. 1 d, f. 1.  
Cayenne.

BLABERA FUSCA.

*fusca*, *Watt. Blatt.* 376.  
Cuba. Chili.

BLABERA POSTICA.

*postica*, *Erichs. Schomb. Fauna von Brit. Guiana*, 580. *Wett. Blatt.* 379—  
*monstrosa*? *Stal. Ofv. K. V. Ak. Forh.* 1855, 351.  
Guiana.

BLABERA LIGATA.

*ligata*, *Watt. Blatt.* 381.  
Buenos Ayres.

Genus MONACHODA, C. B. 10.

MONACHODA LATISSIMA.

*latissima*, *Watt. Blatt.* 370.  
Bahia.

Genus MONASTRIA, *C. B.* 11.

MONASTRIA SEMIALATA, *C. B.* 11.

*Monachoda granosa*, *Watt. Blatt.* 367.

Fam. POLYPHAGIDÆ, *C. B.* 13.

Heterogamidæ, *Watt. Blatt.* 350.

Genus POLYPHAGA, *C. B.* 13.

POLYPHAGA ALGERICA.

*Heterogamia algerica*, *Watt. Blatt.* 356.

*a.* Algeria. From M. Parzudaki's collection.

POLYPHAGA AFRICANA.

*Blatta africana*, *Linn. Mus. Lud.* 108; *Syst. Nat.* 688. *Oliv. Enc. Meth.* iv. 317—*Polyphaga ursina*, *C. B.* 13—*Heterogamia africana*, *Watt. Blatt.* 357.

POLYPHAGA CONSPERSA.

*Sav. Descr. Egypte, Hist. Nat.* ii. *Orth.* pl. 2, f. 8, 11—*Heterogamia conspersa*, *Watt. Blatt.* 358.

Egypt. Syria.

POLYPHAGA LIVIDA.

*Heterogamia livida*, *Watt. Blatt.* 359.

Isle of Cyprus.

Genus LATINDIA, *C. B.* 15.

*Corydidæ*, *p.* *Watt, Blatt.* 334.

LATINDIA SIGNATA.

*signata*, *Watt. Blatt.* 345, pl. 10, f. 49.

Brazil.

Fam. PANESTHIDÆ, *C. B.* 20.

Genus PANESTHIA, *C. B.* 20.

De Wattenwyl considers *P. javanica* to be identical with *P. athiops* and *P. angustipennis* to be distinct from *P. athiops*. He also observes that *P. regina* is identical with *P. morio* and that *P. mandarina* is the female of *P. transversa*.

PANESTHIA SERRATISSIMA.

*serratissima*, *Watt. Blatt.* 394.

Ternate.

PANESTHIA AUSTRALIS.

*australis*, *Watt. Blatt.* 396—*morio?* *C. B.* 24.

Australia.

Fam. PLANETICIDE, *C. B.* 25.

Genus PLANETICA, *C. B.* 25.

According to De Wattenwyl *Planetica aranea* is identical with *Archiblatta Hoeverii*.

Fam. PANCHLORIDÆ, *C. B.* 25.

Genus PANCHLORA, *C. B.* 25.

PANCHLORA AZTECA, *C. B.* 29.

*lactea*, *Watt. Blatt.* 277.

Genus LEUCOPHÆA.

Subgenus *Leucophæa*, *Watt. Blatt.* 278.

1. LEUCOPHÆA SURINAMENSIS.

*Panchlora Surinamensis*, *C. B.* 25—*Pycnosulus obscurus*, *Scudder, Boston Journ. Nat. Hist.* vii. 424.

LEUCOPHÆA NIGRA.

*Panchlora (Leucophæa nigra)*, *Watt. Blatt.* 280.

Birmah.

Genus GYNA.

*Gyna*, *Watt. Blatt.* 266.

1. GYNA VETULA.

*vetula*, *Watt. Blatt.* 267—*Panchlora Caffrorum?* *Stal. Ofv. K. V. Ak. Forh.* 1856.

Natal.

2. GYNA MACULIPENNIS.

*Panchlora maculipennis*, *C. B.* 183—*Gyna maculipennis*, *Watt. Blatt.* 268, pl. 6, f. 30.

3. GYNA POMPOSA.

*pomposa*, *Watt. Blatt.* 269.

Genus NAUPHÆTA, *C. B.* 37.

NAUPHÆTA LÆVIGATA.

*Blatta lævigata*, *C. B.* 87—*Nauphæta circumvagans*, *C. B.* 37—*Periplaneta marginicollis?* *C. B.* 135.

NAUPHÆTA CINEREA, *C. B.* 37.

*bivittata?* *C. B.* 37.

## NAUPHÆTA TESTACEA.

testacea, *Watt. Blatt.* 284.

St. Thomas, West Coast of Africa.

## NAUPHÆTA PALLIDA.

pallida, *Watt. Blatt.* 286.

Cuba.

## Genus PARANAUPHÆTA.

Paranauphæta, *Watt. Blatt.* 397.

## 1. PARANAUPHÆTA BASALIS.

Nauphæta basalis, *C. B.* 38.

## 2. PARANAUPHÆTA CIRCUMDATA.

Nauphæta circumdata, *C. B.* 38.

## 3. PARANAUPHÆTA RUFIPES.

rufipes, *Watt. Blatt.* 400.

Ternate.

## 4. PARANAUPHÆTA LYRATA.

Nauphæta lyrata, *C. B.* 37.

## 5. PARANAUPHÆTA BILUNATA.

Nauphæta bilunata, *C. B.* 38.

Genus PROSCRATEA, *C. B.* 43.PROSCRATEA DIMIDIATA, *C. B.* 43.

marginata, *Watt. Blatt.* 326.

Madagascar.

Fam. ZETOBORIDÆ, *C. B.* 45.Genus ZETOBORA, *C. B.* 45.ZETOBORA MONASTICA, *C. B.* 45.

transversa, *Watt. Blatt.* 290, pl. 7, f. 34.

## ZETOBORA LIMBATA.

limbata, *Watt. Blatt.* 291—perspicua? *C. B.* 46.

Brazil.

ZETOBORA NIMBATA, *C. B.* 52.

castanea, *C. B.* 52.

## ZETOBORA GUTTIPENNIS.

Mas. *Nigra*; *caput antice fulvum*; *antennæ piceæ, filiformes, submoniliformes, corpore paullo breviores*; *prothorax scaber, caput superans, ferrugineo antice marginatus, sulcis nonnullis parvis longitudinalibus*; *ventris latera fulvo strigata*; *pedes fulvi*; *alæ anticæ ferruginæ, abdomen longissime superantes, testaceo guttatæ, basi nigricantes*; *alæ posticæ cinereæ, striga costali nigricante.*

*Male.* Black, smooth and shining beneath. Head small, concealed by the prothorax, tawny towards the mouth. Eyes transversely elongated, approximate on the vertex. Palpi tawny, nearly filiform; third joint very much longer than the second. Antennæ piceous, filiform, submoniliform, a little shorter than the body. Prothorax scabrous, transversely elliptical, narrowly bordered with ferruginous in front and on each side, its breadth about twice its length; a few short longitudinal furrows on the disk. Pectus tawny. Abdomen beneath with short transverse tawny streaks along each side. Cerci black, short, lanceolate. Legs tawny, setulose, moderately long and stout; hind tibiæ with seven or eight spines on the outer side and with three on the inner side. Fore wings ferruginous, very much longer than the body, blackish and more coriaceous towards the base, adorned except near the base with numerous testaceous dots; longitudinal veins forked. Hind wings cinereous, as long as the fore wings, with a blackish costal streak. Length of the body 8 lines; of the wings 30 lines.

The greater length of the wings compared to that of the abdomen distinguishes it from other species of the genus. It has most resemblance to *Z. rugosa*, from which it decidedly differs in the markings of the fore wings.

*a, b.* Eastern slope of the mountains of S. Mexico. From Mr. Janson's collection.

## Genus PHILOBORA.

*Philobora*, *Watt. Blatt.* 294.

## 1. PHILOBORA CONSPERSA.

*Proscratea conspersa*, *C. B.* 43.

## 2. PHILOBORA CONSPURCATA.

*Zetobora conspurcata*, *C. B.* 52.

## 3. PHILOBORA ELEGANS.

*elegans*, *Watt. Blatt.* 297.

Brazil.

## Genus ONISCOSOMA.

*Oniscosoma*, *Watt. Blatt.* 298.

## 1. ONISCOSOMA GRANICOLLIS.

*Zetobora granicollis*, *C. B.* 50—*Oniscosoma castanea*, *Watt. Blatt.* 300.

Fam. HORMETICIDÆ, *C. B.* 54.

Genus BRACHYCOLA, *C. B.* 54.

BRACHYCOLA ROBUSTA, *C. B.* 54.

*Hormetica levigata*, *C. B.* 55.

BRACHYCOLA VITTATA.

*vittata*, *Watt. Blatt.* 336.

Minas Geraes.

BRACHYCOLA VERRUCOSA.

*Hormetica verrucosa*, *Watt. Blatt.* 331.

Venezuela.

Genus PARAHORMETICA.

*Parahormetica*, *Watt. Blatt.* 385.

1. PARAHORMETICA MONTICOLLIS.

*Hormetica monticollis*, *C. B.* 55.

2. PARAHORMETICA TUMULOSA.

*tumulosa*, *Watt. Blatt.* 385, pl. 12, f. 56.

Genus HOMALODEMAS.

*Homalodemas*, *Stal, Ofv. K. V. Ak. Forh.* 1856, xiii. 166.

1. HOMALODEMAS EXARATA.

*exarata*, *Stal, Ofv. K. V. Ak. Forh.* 1856, xiii. 166.

Natal.

Genus GROMPHADORHINA.

*Gromphadorhina*, *Watt. Blatt.* 333.

1. GROMPHADORHINA PORTENTOSA.

*Gromphadorhina portentosa*, *Watt. Blatt.* 333—*Panesthia portentosa*,  
*C. B.* 182.

Genus DASYPOSOMA.

*Dasyposoma*, *Watt. Blatt.* 387.

1. DASYPOSOMA PUNCTULATA.

*Cryptocercus punctulatus*, *Scudder, Boston Journ. Nat. Hist.* vii. 420—  
*Dasyposoma punctulata*, *Watt. Blatt.* 389.

U. States.

## 2. DASYPOSOMA NIGRA.

nigra, *Watt. Blatt.* 388, pl. 13, f. 57.

Brazil.

## 3. DASYPOSOMA BICOLOR.

bicolor, *Watt. Blatt.* 388.

Brazil.

Fam. DIPLOPTERIDÆ, *C. B.* 56.

Genus PROSOPLECTA, *C. B.* 56.

Cassidodes, *Watt. Blatt.* 261.

PROSOPLECTA COCCINELLA, *C. B.* 56.

Cassidodes ligata, *Watt. Blatt.* 262, pl. 6, f. 28.

Genus PLECTOPTERA, *C. B.* 56.

PLECTOPTERA PORCELLANA, *C. B.* 56.

Ceratinoptera porcellana, *Watt. Blatt.* 79.

PLECTOPTERA POEYI, *C. B.* 56.

Ceratinoptera Poeyi, *Watt. Blatt.* 79.

Genus DIPLOPTERA, *C. B.* 57.

Eleutheroda, *Watt. Blatt.* 264.

DIPLOPTERA DYTISCOIDES.

Blatta dytiscoides, *Serv. Hist. Orth.* 102—Diploptera silpha, *C. B.* 57—  
Eleutheroda dytiscoides, *Watt. Blatt.* 265, pl. 6, f. 29.

DIPLOPTERA MINOR.

Eleutheroda minor, *Watt. Blatt.* 265—Diploptera silphoides, *C. B.* 57.

Fam. CORYDIDÆ, *C. B.* 58.

Genus CORYDIA, *C. B.* 58.

CORYDIA NUPTIALIS.

nuptialis, *Gerst. Arch. für Naturg.* xxvii. 113. *Watt. Blatt.* 338, pl. 10,  
f. 46—Gueriniana, *C. B.* 58.

CORYDIA CARUNCULIGERA.

carunculigera, *Gerst. Arch. für Naturg.* xxvii. 112. *Watt. Blatt.* 337.

Isle Luzon.

## CORYDIA WESTWOODI.

Westwoodi, *Gerst. Arch. für Naturg.* xxvii. 114. *Watt. Blatt.* 339.  
Assam.

## CORYDIA AENA.

aena, *Watt. Blatt.* 310.  
Hindostan.

Genus HYPERCOMPSEA, *C. B.* 61.

Diaphana, *Fieb. MSS.* *Watt. Blatt.* 348.

HYPERCOMPSEA FENESTRINA, *C. B.* 61.

Diaphana Fieberi, *Watt. Blatt.* 349, pl. 10, f. 51.

## Fam. CHORISONEURIDÆ.

Chorisonneuridæ, *Watt. Blatt.* 251.

## Genus 1. OXYHALOA.

Oxyhaloa, *Watt. Blatt.* 252.

## 1. OXYHALOA MURRAYI.

Murrayi, *Watt. Blatt.* 253, pl. 6, f. 25.  
Old Calabar.

## 2. OXYHALOA MINOR.

minor, *Watt. Blatt.* 254.  
Chartum.

## 3. OXYHALOA FERRETI.

Blatta Ferreti, *Reich et Fairm. Voy. Abyss.* iii. 420, pl. 27, f. 1, 2.  
Abyssinia.

## 4. OXYHALOA FULVICEPS.

Proseratea fulviceps, *C. B.* 44—densta, *Thunb. Stal. Ofv. K. V. Ak. Forh.*  
1856, 167.

## Genus 2. CHORISONEURA.

Chorisonaura, *Watt. Blatt.* 255.

## 1. CHORISONEURA NIGRIFRONS.

Blatta nigrifrons, *C. B.* 90—Chorisonaura nigrifrons, *Watt. Blatt.* 256,  
pl. 6, f. 26.

## 2. CHORISONEURA GRACILIS.

Blatta literata? *C. B.* 91.—Blatta gracilis, *C. B.* 92—Chorisonaura flavo-  
antennata, *Watt. Blatt.* 257.



## 3. CHORISONEURA DISCOIDALIS.

*Blatta discoidalis*, *C. B.* 92.

## 4. CHORISONEURA MYSTECA.

*Blatta mysteca*, *C. B.* 91.

## 5. CHORISONEURA SORDIDA.

*sordida*, *Watt. Blatt.* 258.

Brazil.

## Genus 3. AREOLARIA.

*Areolaria*, *Fieb. MSS. Watt. Blatt.* 259.

## 1. AREOLARIA FIEBERI.

*Fieberi*, *Watt. Blatt.* 260, pl. 6, f. 27.

Batavia.

## 2. AREOLARIA BIPUNCTATA.

*bipunctata*, *Watt. Blatt.* 261.

Philippine Isles.

Fam. BLATTIDÆ, *C. B.* 63.

*Ectobidæ*, *Watt. Blatt.* 51—*Phyllodromidæ*, *Watt. Blatt.* 74—*Epilampridæ*,  
*Watt. Blatt.* 147.

Genus PHORASPIS, *C. B.* 63.

## PHORASPIS MODESTA.

*modesta*, *Watt. Blatt.* 161.

Brazil.

Genus PHLEBONOTUM, *C. B.* 65.

*Paraphoraspis*, *Watt. Blatt.* 163.

PHLEBONOTUM PALLENS, *C. B.* 65.

*Paraphoraspis pallens*, *Watt. Blatt.* 165.

## PHLEBONOTUM NOTATUM.

*Paraphoraspis notata*, *Watt. Blatt.* 164, pl. 4, f. 18.

Ceylon. Australia.

Genus EPILAMPRA, *C. B.* 67.

## EPILAMPRA FUSCA.

*fusca*, *Watt. Blatt.* 170.

Venezuela.

## EPILAMPRA GRACILIS.

gracilis, *Watt. Blatt.* 170, pl. 4, f. 20.

Australia.

## EPILAMPRA CINCTA.

cineta, *Watt. Blatt.* 172.

Country unknown.

## EPILAMPRA PUNCTATA.

punctata, *Watt. Blatt.* 173.

Ceylon.

## EPILAMPRA CINERASCENS.

cinerascens, *Watt. Blatt.* 173.

The larger spots on the fore wings of this species distinguish it from *E. subconspersa* and from *E. adjuncta*. *E. conferta* is much allied to *E. cinerascens*, and may be a variety of *E. proxima*.

Brazil.

## EPILAMPRA CASTANEA.

castanea, *Watt. Blatt.* 174—*lucida?* *C. B.* 67.

Brazil.

EPILAMPRA VERTICALIS, *C. B.* 75.

socia, *C. B.* 76.

## EPILAMPRA PROXIMA.

proxima, *Watt. Blatt.* 176—*maculifrons?* *C. B.* 76.

Brazil.

## EPILAMPRA TRUNCATA.

truncata, *Watt. Blatt.* 178.

Sydney.

## EPILAMPRA MACULATA.

maculata, *Watt. Blatt.* 179.

Java.

## EPILAMPRA AURICULATA.

auriculata, *Watt. Blatt.* 181.

Bengal.

## EPILAMPRA? KERAUDRENI.

*Blatta Keraudrenii*, *Le Guillon, Rev. Zool.* 292—*Epilampira? Keraudrenii*, *Watt. Blatt.* 182.

Triton Bay, New Guinea.

## EPILAMPRA PLANA.

plana, *Watt. Blatt.* 183.  
Ceylon.

## EPILAMPRA DILATATA.

dilatata, *Watt. Blatt.* 185.  
Australia.

## EPILAMPRA INCONSPICUA.

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Philippine Isles.

## EPILAMPRA FERRUGINEA.

ferruginea, *Watt. Blatt.* 187.  
Brazil.

## EPILAMPRA PFEIFERÆ.

Pfeiferæ, *Watt. Blatt.* 188.  
Borneo.

## EPILAMPRA BADIA.

badia, *Watt. Blatt.* 189.

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Buqueti, *C. B.* 75.

## EPILAMPRA DOLESCHALI.

Doleschali, *Watt. Blatt.* 194—insueta? *C. B.* 202.  
Amboina.

EPILAMPRA BRASILIENSIS, *C. B.* 70.

sabulosa, *C. B.* 70.

EPILAMPRA INQUINATA, *C. B.* 75.

notabilis, *C. B.* 202.

## EPIILAMPRA DOTATA.

Fœm. *Picea, fusiformis, subtilissime striata, subtus testacea; caput testaceum, prothoracem non superans, vertice piceo; oculi invicem sut remoti; antennæ testaceæ, nigro late fasciatæ; prothorax testaceo marginatus, margine antico subeucellato, margine postico sub-producto; venter nigro vittatus et conspersus; cerci testacei, piceo vittati; pedes robusti, tibiis tarsisque posticis supra piceis; alæ anticæ coriaceæ, abdomen longe superantes; alæ posticæ semicoriaceæ, postice cineræ.*

*Female.* Piceous, fusiform, very minutely striated, testaceous beneath. Head testaceous, not extending beyond the prothorax; vertex piceous. Eyes testaceous, moderately wide apart. Antennæ testaceous, shorter than the body; a broad black band near the base composed of about twenty joints. Prothorax longer than half its breadth, bordered very narrowly with pale testaceous; fore border slightly hooded; sides hardly angular; hind border slightly elongated. Abdomen beneath thinly speckled with black and having a black stripe which is abbreviated at each end; supra-anal lamina bilobed, testaceous, except towards the base. Cerci testaceous, lanceolate, with a piceous stripe above. Legs testaceous, stout; spines black at each end; hind tibiæ and hind tarsi piceous above; arolia large. Wings extending much beyond the abdomen, rounded at the tips. Fore wings coriaceous, corneous towards the base. Hind wings cinereous, semicoriaceous; discoidal area, except toward the tip and costal area, dark brown. Length of the body 21—23 lines; of the wings 48-50 lines.

Of the two specimens here described one has the prothorax more widened than the other.

Singapore. Sarawak. In Mr. Saunders' collection.

## EPIILAMPRA VARIA.

Fœm. *Lutescens, fusiformis, sparse punctata, subtus nigro conspersa; caput prothoracem paullo superans, vitta lituris disco anteriore strigisque quatuor transversis nigris; oculi invicem remoti; palpi piceo bimaculati; prothorax longiusculus, disco otomisque marginalibus nigris, margine postico recto; venter vitta apiceque nigris; cerci fusiformes, piceo strigati; pedes crassi, breves, nigro vittati et conspersi; alæ anticæ corneæ, fusco conspersæ, abdomine paullo breviores; alæ posticæ fusæ, semicoriaceæ, apud costam cineræ fusco conspersæ.*

*Female.* Dull luteous, fusiform, smooth, shining. Head and prothorax thinly punctured. Head extending a little beyond the prothorax; vertex marbled with black on each side of a slender stripe of the ground hue; disk of the front and of the face black; face with two transverse black streaks on each side. Eyes testaceous, wide apart. Second and third joints of the palpi with a piceous spot on the outer side. Prothorax much longer than half its breadth, with black speckles round the disk, which is black; fore border truncated; sides slightly rounded, slanting outward to the hind border, which is straight. Pectus, under side of abdomen and legs speckled with black. Abdomen beneath with a black stripe which towards

the tip is much dilated and occupies the whole breadth; supra-anal lamina notched. Cerci fusiform, with a piceous streak on the upper side. Legs thick, short; femora and tibiæ striped with black. Wings a little shorter than the abdomen. Fore wings corneous, mottled with brown; covered part of the right wing brown, coriaceous; costa slightly rounded. Hind wings brown, semicoriaceous; costal space cinereous, speckled with brown. Length of the body 13 lines; of the wings 22 lines.

Sarawak. In Mr. Saunders' collection.

#### EPILAMPRA ADUSTA.

**Fœm.** *Testacea, plana, longi-orata; caput prothoracem non superans, plagis duabus anticis nigris; oculi invicem remoti; prothorax tuberculatus, margine antico inciso, margine postico fere recto, plaga magna fusciscente subquadrata antice incisa et utrinque nigricante; abdomen latum, subtus nigricante bivittatum; pedes robusti, breves; alæ anticæ coriacæ, abdominis apicem vix attingentes, lituris pallidis fuscisque; alæ posticæ cineræ.*

*Female.* Testaceous, flat, elongate-oval, dull above, shining beneath. Head not extending beyond the prothorax; a black patch on the front and another on the face. Eyes black, wide apart. Prothorax tuberculate, rather longer than half its breadth, notched behind the head; sides rounded; hind border nearly straight; a large brownish subquadrated patch extending to the hind border, notched in front, where it is blackish on each side. Scutellum with a blackish mark on each side. Abdomen much broader than the thorax; under side with two curved blackish stripes which are connected near the tip; supra-anal lamina bilobed. Legs stout, short; femora with short spines. Wings hardly extending to the tip of the abdomen. Fore wings coriaceous, varied with pale brown and with some pale testaceous spots which are partly bordered with brown, and thus having a resemblance to the plumage of a pheasant; costa slightly rounded. Hind wings cinereous. Length of the body 10 lines; of the wings 18 lines.

This species differs still more than *E. varia* from the typical form of *Epilampra*, and the two following species are still more aberrant.

Sarawak. In Mr. Saunders' collection.

#### EPILAMPRA BASIFERA.

**Mas.** *Testacea, fusiformis; oculi invicem sat remoti; antennæ fulvæ, corpore breviores; prothorax semicircularis, subtuberculatus, subhyalinus, caput longe superans; margine antico non truncato, margine postico vix rotundato; cerci breviusculi; pedes robusti, sat breves; alæ anticæ coriacæ, dense punctatæ, fusco notatæ, abdomen superantes, trunco humerali basi flavo; alæ posticæ cineræ.*

*Male.* Testaceous, fusiform, slightly shining above, more shining beneath. Head smooth. Eyes black, rather wide apart. Antennæ tawny, shorter than the body. Prothorax nearly semicircular, extending much beyond the head, thinly and minutely tuberculate, slightly hyaline; tubercles darker than the ground hue; fore border not truncated; hind border hardly rounded, accompanied with short longitudinal ridges.

Abdomen notched at the tip. Styles very slender. Cerci lanceolate, rather short. Legs rather short and thick; femora with slender spines. Wings extending somewhat beyond the abdomen. Fore wings coriaceous, thickly and minutely punctured; humeral trunk pale yellow at the base; some brownish marks of various size like those of the preceding species; costa slightly rounded. Hind wings cinereous, hardly coriaceous; wings pale testaceous. Length of the body 11 lines; of the wings 25 lines.

Ceram. In Mr. Saunders' collection.

#### EPILAMPRA STRIGIFRONS.

*Fœm.* *Testacea, fusiformis; caput striga frontali nigra; oculi invicem remoti; antennæ nigricantes, corpore breviores; prothorax aspere punctatus, antice rotundatus, caput sat superans, margine postico fere recto; cerci brevissimi; alæ anticæ coriacæ, dense punctatæ, abdomine breviores, costâ rotundata; alæ posticæ breviores, cinereæ, apud costam testacæ.*

*Female.* Testaceous, fusiform, dull above. Head with a black streak on the front. Eyes tawny, wide apart. Antennæ blackish, shorter than the body. Prothorax extending somewhat beyond the head, rather longer than half its breadth, roughly and thinly punctured; fore border and sides regularly rounded, hind border nearly straight. Supra-anal lamina notched. Cerci very short. Legs moderately long and stout; femora with short spines. Fore wings coriaceous, thickly and minutely punctured, rounded at the tips, much shorter than the abdomen; costa rounded; covered part of right wing shining, semi-coriaceous. Hind wings cinereous, testaceous along the costa, shorter than the fore wings. Length of the body 14 lines; of the wings 20 lines.

a. Philippine Isles. From Mr. Cuming's collection.

#### EPILAMPRA RAMIFERA.

*Mas.* *Fulva; oculi testacci, invicem remoti, subtus nigro marginati; prothorax transverse et subtilissime striatus, testaceo pallido marginatus, margine postico producto subangulato; abdomen testaceum, apice integrum; alæ amplæ, apice rotundatæ, abdomen longe superantes; alæ anticæ basi obscuriores, area discoidali albido plagiata, striga ramosa picea; alæ posticæ cinereæ, apud costam testacæ.*

*Male.* Tawny, fusiform, smooth, shining, testaceous beneath. Head extending a little beyond the prothorax. Eyes testaceous, wide apart, black-bordered beneath. Antennæ testaceous. Prothorax transversely and irregularly elliptical, narrowly bordered with pale testaceous, transversely and extremely minutely striated; fore border truncated, arched; hind border elongated and slightly angular. Abdomen testaceous, entire at the tip. Cerci moderately long. Legs rather stout, armed with stout spines. Wings ample, rounded at the tips, extending much beyond the abdomen. Fore wings coriaceous, darker and corneous towards the base; discoidal area with some whitish patches; some of the anterior longitudinal veins forked; a piceous streak along the humeral trunk emitting branches along the veins in front; intermediate veins distinct; transverse sectors very

regular. Hind wings cinereous, testaceous along the costa; veins testaceous. Length of the body 18 lines; of the wings 44 lines.

Sumatra. In Mr. Saunders' collection.

#### EPILAMPRA POLYSPILA.

*Fœm.* Testacea, fusiformis; caput prothoracem non superans, fasci vitta lineisque duabus anterioribus nigris; prothorax punctis guttisque plurimis piceis, plaga utrinque attenuata maculisque duabus posticis nigris, margine postico vix producto; venter piceo guttatus, maculis lateralibus nigris; alæ latæ, abdomen superantes; alæ anticæ striga plagis nonnullis guttisque plurimis piceis, vitta apud alam dextram ferruginea obliqua postice diffusa; alæ posticæ subtestacæ, area anali pallide cinerea.

*Female.* Testaceous, smooth, shining, fusiform. Head not extending beyond the prothorax, with a black band between the eyes and with a short and very broad black stripe on the front, on each side of which there is a black line. Eyes piceous, moderately wide apart. Antennæ piceous, stout, tawny at the base. Prothorax transversely and irregularly elliptical, with numerous piceous dots and points, and with a large black patch which is very near the hind border and is attenuated in front, where it has a black patch on each side; fore border slightly arched, not truncated, more rounded than the hind border, which is very slightly elongated. Abdomen beneath with numerous piceous dots, with a row of large black spots along each side, and with a ferruginous disk to the apical abdominal segment; supra-anal lamina bilobed. Legs reddish tawny, stout, rather short, armed with stout spines. Wings broad, extending beyond the abdomen, rounded at the tips. Fore wings coriaceous, corneous towards the base, with a piceous streak along the humeral trunk, with some piceous patches and with many piceous dots and points, some of the anterior longitudinal veins forked; intermediate veins distinct; transverse sectors very regular; right wing with an oblique ferruginous stripe which is diffuse on the hind side. Hind wings slightly testaceous, ferruginous along the apical part of the costa; anal area pale cinereous; veins testaceous. Length of the body 22 lines; of the wings 45 lines.

Sarawak. In Mr. Saunders' collection.

#### EPILAMPRA PARVICOLLIS.

*Mas.* Fusca, fusiformis, subtus testacea; caput prothoracem paullo superans; prothorax testaceus, parvus, fusco conspersus, testaceo pallido marginatus, litura discoidali scutiformi, margine postico producto angulato; alæ ferruginæ, sat angustæ, apice truncatæ, abdomen longissime superantes; alæ anticæ maculis nonnullis magnis areaque apicali testaceo-cinereis; alæ posticæ subcoriaceæ, venulis transversis albidis.

*Male.* Brown, fusiform, smooth, shining, testaceous beneath. Head extending a little beyond the prothorax. Eyes lurid, moderately wide apart. Antennæ piceous, slender, testaceous at the base. Prothorax testaceous, small, broader than long, narrowly bordered with pale testaceous,

minutely and very thickly speckled with brown; a scutcheon-shaped mark in the disk, distinguished by its impressed border, much broader in front than behind; fore border slightly truncated and arched, sides very obtusely angular; hind border elongated and angular. Abdomen with the supra-anal lamina bilobed. Cerci slender. Legs rather short and slender; spines black. Wings ferruginous, rather narrow, truncated at the tips, extending very much beyond the abdomen. Fore wings coriaceous, corneous towards the base; apical space and a few large spots testaceous-cinereous; anterior longitudinal veins forked; intermediate veins distinct; under side with a costal piceous stripe. Hind wings slightly coriaceous; transverse sectors whitish. Length of the body 12 lines; of the wings 34 lines.

Sarawak. In Mr. Saunders' collection.

#### EPILAMPRA CONCINNULA.

*Fœm.* *Testacea, fusiformis; caput nigro conspersum, prothoracem superans; prothorax conferte et subtilissime punctatus, testaceo pallido marginatus, margine postico producto rotundato; abdomen nigro fasciatum; alæ apice truncatæ, abdomen longe superantes; alæ anticæ cinereæ, fusco conspersæ, fulvo sex-fasciatæ; alæ posticæ testaceæ, area anali diaphana.*

*Femalc.* Testaceous, fusiform, smooth, shining. Head extending rather beyond the prothorax; vertex and the adjoining part of the front minutely speckled with black. Eyes piceous, rather wide apart. Antennæ piceous, slender, testaceous at the base. Prothorax narrowly bordered with pale testaceous, transversely and irregularly elliptical, thickly and very minutely punctured; punctures piceous; fore border very slightly arched and truncated; hind border elongated and rounded in the middle. Abdomen with black bands which in the middle occupy the whole length of each segment; supra-anal lamina bilobed. Cerci slender, black above. Legs stout, rather short; spines with piceous tips. Wings extending much beyond the abdomen, with truncated tips. Fore wings emereous, coriaceous, with six oblique and very irregular tawny bands and with many brown flecks; some of the anterior longitudinal veins forked; intermediate longitudinal veins distinct, sometimes treble; transverse sectors very regular. Hind wings testaceous; costal area speckled with black towards the tip, anal area pellucid. Length of the body 16 lines; of the wings 40 lines.

Timor. In Mr. Saunders' collection.

#### Genus HOMALOPTERYX.

*Homalopteryx*, *Watt. Blatt.* 195.

##### 1. HOMALOPTERYX MACASSARIENSIS.

*Epilampira macassariensis*, *Haan, Verh. Nat. Gesch. Ned. Ind. Bez.* 51, pl. 18, f. 7.

Amboina. Celebes.



## 2. HOMALOPTERYX CAPUCINA.

capucina, *Watt. Blatt.* 196, pl. 5, f. 21.

Venezuela. Columbia.

Genus PSEUDOMOPS, *C. B.* 77.

PSEUDOMOPS OBLONGATA, *C. B.* 77.

tolteca, *C. B.* 78. According to De Wattenwyl, who observes that *P. mexicana*, *C. B.* 77, *P. Sallei*, *C. B.* 77, and *P. cincta*, *C. B.* 78, are one species.

PSEUDOMOPS PRUINOSA.

Thyrrocera (*C. Pachnopteryx*) pruinosa, *Watt. Blatt.* 117.

Philippine Isles.

PSEUDOMOPS HISTRIO, *C. B.* 83.

*Blatta lateralis*? *C. B.* 90.

PSEUDOMOPS SIGNATA.

Thyrrocera signata, *Watt. Blatt.* 119.

Philippine Isles.

PSEUDOMOPS VITTATA.

Thyrrocera vittata, *Watt. Blatt.* 119.

Cambodia.

PSEUDOMOPS NIGRA.

Thyrrocera nigra, *Watt. Blatt.* 120.

Hindustan.

PSEUDOMOPS SOROR.

Thyrrocera soror, *Watt. Blatt.* 120.

Celebes.

PSEUDOMOPS DISCICOLLIS.

*Blatta discicollis*, *C. B.* 92.

PSEUDOMOPS LINEATA.

Ischnoptera lineata, *C. B.* 112.

Genus ELLIPSIDIUM, *C. B.* 84.

Apolyta, *Watt. Blatt.* 112.

1. ELLIPSIDIUM AUSTRALE.

Apolyta pellucida, *Watt. Blatt.* 114.

Sydney.

## Genus APHLEBIA.

Aphlebia, *Watt. Blatt.* 66.

## 1. APHLEBIA MARGINATA.

Blatta punctata, *C. B.* 90.

## 2. APHLEBIA INFUMATA.

infumata, *Watt. Blatt.* 68—Blatta ericetorum, *Woll. Ann. Nat. Hist.* 1858, 21.

Madeira.

## 3. APHLEBIA CINCTICOLLIS.

Blatta cincticollis, *Lucas, Exp. Alg.* 8, pl. 1, f. 3—Blatta bivittata? *Brullé, Iles Canaries*, 75, pl. 5, f. 1—Aphlebia cincticollis, *Watt. Blatt.* 69.

Algeria.

## 4. APHLEBIA MACULATA.

Blatta maculata, *C. B.* 90.

## 5. APHLEBIA PUNCTATA.

Blatta punctata, *C. B.* 90—Megerlei, *Fieb. Lotos*, iii. 94.

## 6. APHLEBIA BREVIPENNIS.

Blatta brevipennis, *Fisch. Orth. Eur.* 102, pl. 7, f. 12—Aphlebia brevipennis, *Watt. Blatt.* 72.

Istria. Servia.

## 7. APHLEBIA TRIVITTATA.

Blatta trivittata, *C. B.* 93.

## 8. APHLEBIA SUBAPTERA.

Blatta subaptera, *C. B.* 152.

## Genus CERATINOPTERA.

Ceratinoptera, *Watt. Blatt.* 75.

## 1. CERATINOPTERA DIAPHANA.

Blatta diaphana, *C. B.* 86.

## CERATINOPTERA PICTA.

picta, *Watt. Blatt.* 76, pl. 1, f. 4.

Brazil.

## 3. CERATINOPTERA CASTANEA.

castanea, *Watt. Blatt.* 77.

Brazil.

## 4. CERATINOPTERA PERUVIANA.

Peruviana, *Watt. Blatt.* 78.

Peru.

Genus BLATTA, *C. B.* 86.

## BLATTA ALBICINCTA.

*Blatta albicincta*, *Watt. Verh. Zool. Bot. Wien.* 1861, 286—*Ectobia albicincta*, *Watt. Blatt.* 56.

## BLATTA NICÆENSIS.

*Nicatensis*, *C. B.* 232.

## BLATTA MARCIDA.

*marcida*, *Ericks. Arch. Naturg.* viii. 248—*Ectobia? marcida*, *Watt. Blatt.* 61.

Tasmania.

## BLATTA LUCIDA.

*Ectobia (Theganopteryx) lucida*, *Watt. Blatt.* 62.

Australia?

## BLATTA COGNATA.

*Phyllodromia cognata*, *Watt. Blatt.* 92.

Hindostan.

## BLATTA MINOR.

*Phyllodromia minor*, *Watt. Blatt.* 94.

Brazil.

## BLATTA AUSTRALIÆ.

*Phyllodromia Australiæ*, *Watt. Blatt.* 95.

Sydney.

## BLATTA INVERSA.

*Phyllodromia inversa*, *Watt. Blatt.* 96.

Java.

## BLATTA SPURIA.

*Phyllodromia spuria*, *Watt. Blatt.* 96.

Fiji Isles.

## BLATTA CORDOFANA.

*Phyllodromia Cordofana*, *Watt. Blatt.* 97.

Cordofan. Chartum.

## BLATTA TENELLA.

*Blatta tenella*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 166—*Phyllodromia?*  
*tenella*, *Watt. Blatt.* 99.

Natal.

## BLATTA VINULA.

*Blatta vinula*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 166—*Phyllodromia*  
*vinula*, *Watt. Blatt.* 100.

Natal.

## BLATTA CIRCUMCINCTA.

*Blatta circumcincta*, *Riche et Fairm. Voy. Abyss.* iii. 421, pl. 27, f. 3—  
*Phyllodromia circumcincta*, *Watt. Blatt.* 100.

Abyssinia.

## BLATTA MISELLA.

*Blatta misella*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 166—*Phyllodromia?* aut  
*Ceratinoptera?* *misella*, *Watt. Blatt.* 101.

Natal.

## BLATTA FEMORATA.

*Phyllodromia femorata*, *Watt. Blatt.* 101.

Sydney.

## BLATTA FERRUGINEA.

*Phyllodromia ferruginea*, *Watt. Blatt.* 102.

Hindustan.

## BLATTA VILIS.

*Phyllodromia vilis*, *Watt. Blatt.* 103.

Malacca.

## BLATTA SORDIDA.

*Phyllodromia sordida*, *Watt. Blatt.* 101—*Blatta notulata?* *C. B.* 93.

Cambodia.

## BLATTA HIEROGLYPHICA.

*Phyllodromia hieroglyphica*, *Watt. Blatt.* 105.

Borneo. Tahiti.

## BLATTA CONSPERSA.

*Phyllodromia conspersa*, *Watt. Blatt.* 106.

Brazil.

## PHYLLODROMIA FASCIATA.

*Phyllodromia fasciata*, *Watt. Blatt.* 107.

Brazil.

## BLATTA VITREA.

*Phyllodromia vitrea*, *Watt. Blatt.* 109, pl. 2, f. 8.

## BLATTA LATIPENNIS.

*Phyllodromia latipennis*, *Watt. Blatt.* 109.

Ceylon. Australia. New Zealand.

## BLATTA AMPLA.

*Phyllodromia? ampla*, *Watt. Blatt.* 111.

Natal.

## BLATTA PROTERVA.

*Phyllodromia? proterva*, *Watt. Blatt.* 111.

Natal.

BLATTA CUBENSIS, *C. B.* 90.

a. St. Domingo. From Mr. Tweedie's collection.

BLATTA MYSTICA, *C. B.* 91.

a. Mexico. From M. Sallé's collection.

## BLATTA MAJUSCULA.

*Mas. Testacea, fusiformis; caput prothoracem paullo superans, luteo fasciatum, fronte lutea testaceo uniguttata; oculi invicem vix remoti; prothorax lateribus latissime diaphanis valde rotundatis; abdominis latera picea; cerci longissimi; alæ testaceo-cinereæ, abdomen longe superantes; alæ anticæ semicoriaceæ.*

*Male.* Testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; a luteous band on the fore part of the vertex; front luteous, with a testaceous dot. Eyes piceous, hardly remote from each other. Prothorax rather longer than half its breadth, very broadly pellucid on each side; fore border truncated; sides much rounded; hind border straight. Abdomen piceous on each side above and beneath; styles distinct. Cerci very long. Legs moderately long and stout; femora with slender spines. Wings testaceous-cinereous, extending much beyond the abdomen; veins testaceous. Fore wings semicoriaceous; veins prominent; some of the longitudinal veins forked; transverse sectors regular. Hind wings not paler than the fore wings. Length of the body 7 lines; of the wings 18 lines.

Chau-ti-bon, Siam. In Mr. Saunders' collection.

## BLATTA MARMORATA.

**Fœm.** *Pallide livida, fusiformis; caput latum, prothoracem paullo superans, guttis discoque anteriore nigris; oculi invicem remoti; prothorax plaga magna nigro-fusca, lateribus valde rotundatis; pectus et abdomen nigro-fusca; cerci longi; pedes breviusculi, sat robusti; alæ anticæ abdomen longe superantes, fusco pallido subnebulosæ, plagis duabus nigro-fuscis; alæ posticæ diaphanæ.*

**Female.** Pale livid, fusiform, smooth, shining. Head broad, extending a little beyond the prothorax; vertex with black dots on the hind border; disk of the front black. Eyes pale reddish, wide apart. Antennæ pale livid. Prothorax a little longer than half its breadth, much narrower in front; fore border truncated; sides much rounded; hind border straight; a large blackish brown irregularly oval patch in the disk, undulating on each side. Pectus and abdomen blackish brown. Cerci pale livid, long. Legs pale livid, rather short and stout. Wings extending much beyond the abdomen. Fore wings slightly clouded with pale brown, adorned with two blackish brown patches, one near the base, the other at a little beyond the middle; costa rounded. Hind wings pellucid; veins pale. Length of the body 4 lines; of the wings 10 lines.

Mount Ophir. In Mr. Saunders' collection.

## BLATTA HUMERALIS.

**Mas.** *Testacea, fusiformis; caput latiusculum, prothoracem non superans, antice ochraceo fasciatum; oculi invicem remoti; antennæ pallide testaceæ; prothorax longiusculus, lateribus sat late pellucidis valde rotundatis; cerci longissimi, fusco fasciati; pedes breves, graciles; alæ anticæ hyalinæ, membranaceæ, abdomen longe superantes, vitta discoidali fulva; alæ posticæ nigro-fuscæ.*

**Male.** Testaceous, fusiform, smooth, shining. Head rather broad, not extending beyond the prothorax; an ochraceous band on the front between the sockets of the antennæ. Eyes piceous, wide apart. Antennæ pale testaceous, slender, setose. Prothorax much longer than half its breadth, rather broadly pellucid on each side; fore border truncated; sides much rounded; hind border straight. Cerci slender, very long, with pale brown bands. Legs short, slender; spines very slender. Wings extending much beyond the abdomen. Fore wings hyaline, membranaceous, with a tawny stripe extending in the disk from the base nearly to the tip; a brown streak along the humeral trunk; costa very slightly rounded. Hind wings blackish brown. Length of the body  $4\frac{1}{2}$  lines; of the wings 11 lines.

Singapore. In Mr. Saunders' collection.

## BLATTA PICICOLLIS.

**Fœm.** *Testacea, fusiformis; caput prothoracem paullo superans, vertice fusco; oculi invicem sat approximati; palpi apice picei; antennæ piceæ, corpore multo longiores; prothorax longiusculus, lateribus subrotundatis, margine postico subproducto, vittis duabus undulatis fuscatis fasciæque posticæ abbreviati fuscis connexis; abdomen*

*nigro-fuscum, testaceo fasciatum, vittis duabus ventralibus e guttis nigris; cerci subtus fulvi; alæ anticæ fulvæ, semicoriacæ, apud costam testaceæ, abdomen longe superantes; alæ posticæ nigricantes, costa testacea.*

*Female.* Testaceous, fusiform, smooth, shining. Head extending a little beyond the prothorax; vertex brown. Eyes livid, somewhat approximate to each other. Third joint of the palpi piceous. Antennæ piceous, slender, testaceous at the base, much longer than the body. Prothorax much longer than half its breadth; fore border slightly truncated; sides slightly rounded, slanting outward towards the hind border, which is slightly elongated in the middle; disk with two undulating brown stripes, which are united in front and join an abbreviated brown band near the hind border and emit from the middle of each inner side a broad hindward curved streak. Abdomen blackish above, excepting the hind borders of the segments; under side with a row of black dots along each side; supra-anal lamina bilobed. Cerci long, tawny beneath. Legs rather long and slender; femora with rather stout spines. Wings extending much beyond the body. Fore wings tawny, semicoriaceous, testaceous along the costa, which is very slightly rounded; longitudinal veins simple; intermediate longitudinal veins distinct. Hind wings blackish, testaceous along the costa. Length of the body 6 lines; of the wings 14 lines.

This species appears to consist of the genera *Blatta* and *Epilampra*. It may be most allied to *B. hieroglyphica*.

Celebes. In Mr. Saunders' collection.

#### BLATTA BIPUNCTATA.

*Fœm.* *Picea, elliptica; caput rufum, latiusculum, prothoracem perpaullo superans, facie picea; oculi invicem remoti; prothoracis latera valde rotundata, albo marginata; ventris discus fulvus; pedes breviusculi, sat robusti, tarsis posticis rufescentibus; alæ anticæ coriacæ, abdomen paullo superantes, striga basali alba obliqua, punctis duabus discoidalibus pallide flavis, costa rotundata.*

*Female.* Piceous, elliptical, smooth, shining. Head red, rather broad, extending very little beyond the prothorax; face and palpi piceous. Eyes livid, wide apart. Antennæ piceous, slender, testaceous towards the base. Prothorax rather longer than half its breadth, narrowly bordered with white on each side; fore border slightly truncated; sides much rounded; hind border straight. Abdomen tawny in the disk beneath. Legs rather short and stout; hind tarsi reddish; spines slender. Wings extending a little beyond the abdomen. Fore wings coriaceous, with a white oblique basal streak which extends to the hind border; two elongated nearly contiguous pale yellow points in the disk; intermediate longitudinal veins very distinct; costa rounded. Hind wings not paler than the fore wings. Length of the body 4 lines; of the wings 8 lines.

Celebes. In Mr. Saunders' collection.

## BLATTA LATICEPS.

*Fœm.* *Badia, fusiformis; caput rufum, latissimum, prothoracem sut superans; oculi maximi, invicem subapproximati; palpi fuscii, apice testacei; antennæ gracillimæ; prothorax longiusculus, flavo bivittatus, lateribus diaphanis rotundatis; pectus testaceum; venter ochraceus, lateribus fuscis; pedes testacei; alæ anticæ semicoriaceæ, abdomen sut superantes, vitta costali hyalina pallide flava; alæ posticæ nigro-fuscæ, costa testacea.*

*Female.* Chestnut-brown, fusiform, smooth, shining. Head red, very broad, extending somewhat beyond the prothorax. Eyes brown, very large, slightly approximate to each other. Palpi brown; tips testaceous. Antennæ brown, setose, very slender. Prothorax much longer than half its breadth, with a pale yellow stripe and an exterior pellucid space on each side; fore border slightly rounded, sides rounded; hind border straight. Pectus testaceous. Abdomen ochraceous beneath, broadly brown-bordered on each side. Legs testaceous, short, stout; spines of the femora short, slender. Wings extending rather beyond the abdomen. Fore wings semi-coriaceous, with a pale yellow hyaline costal stripe; intermediate longitudinal veins distinct; costa slightly rounded. Hind wings blackish brown; costa testaceous. Length of the body  $4\frac{1}{2}$  lines; of the wings 10 lines.

It seems to be most allied to *B. sordida*.

Singapore. In Mr. Saunders' collection.

## BLATTA CIRCUMDUCTA.

*Mas.* *Testacea, fusiformis; caput piceum, prothoracem paullo superans, margine antico testaceo; oculi invicem remoti; antennæ piceæ; prothorax annulo maximo nigricante, margine antico lateribusque hyalinis pallide flavis; ventris latera fusco maculata; alæ anticæ subcoriaceæ, abdomen longe superantes, area costali hyalina; alæ posticæ fuscescentes.*

*Male.* Testaceous, fusiform, smooth, slender. Head piceous, extending a little beyond the prothorax; sockets of the antennæ, fore border and palpi testaceous. Eyes brownish, wide apart. Antennæ brown, testaceous at the base. Prothorax a little longer than half its breadth, with a very large blackish ringlet; fore border and sides pale yellow, hyaline, rounded; hind border straight. Abdomen with brown spots along each side beneath. Legs moderately long and slender; femora with short slender spines. Wings extending much beyond the abdomen. Fore wings slightly coriaceous; costal area pellucid for three-fourths of the length from the base; intermediate longitudinal veins distinct; costa hardly rounded. Hind wings brownish. Length of the body 5 lines; of the wings 12 lines.

Australia. In Mr. Saunders' collection.



## BLATTA LONGIUSCULA.

Mas. *Testacea, longi-fusififormis; caput prothoracem perpaullo superans, vertice fronteque nigris; oculi invicem remoti; antennæ fuscæscentes; prothorax longiusculus, lateribus hyalinis subrotundatis; pedes graciles; alæ anticæ angustæ, semicoriacæ, abdomen superantes; alæ posticæ diaphanæ.*

*Male.* Testaceous, elongate-fusifiform, smooth, shining. Head extending very little beyond the prothorax; vertex and front black. Eyes piceous, wide apart. Antennæ brownish, slender, testaceous at the base. Prothorax much longer than half its breadth, much narrower in front, pellucid on each side; fore border slightly truncated; sides and hind border slightly rounded. Abdomen long, pale testaceous. Legs slender, moderately long. Wings extending beyond the abdomen. Fore wings narrow, semicoriaceous; anterior longitudinal veins forked; intermediate longitudinal veins distinct. Hind wings pellucid; anal area with white veins. Length of the body 5 lines; of the wings  $11\frac{1}{2}$  lines.

S. Australia. In Mr. Saunders' collection.

## BLATTA PATULA.

Mas. *Ochracea, lata, fusiformis; caput prothoracem paullo superans; oculi invicem remoti; prothoracis latera late diaphana, valde rotundata; abdomen alas superans; cerci longiusculi; pedes breves, robusti; alæ anticæ semicoriacæ, apud costam diaphanæ; alæ posticæ diaphanæ.*

*Male.* Ochraceous, broad, fusiform, smooth, shining. Head extending a little beyond the prothorax. Eyes piceous, wide apart. Antennæ slender. Prothorax longer than half its breadth, broadly pellucid on each side; fore border truncated; sides much rounded; hind border straight. Abdomen longer than the wings. Cerci rather long. Legs stout, short; femora setose. Fore wings semicoriaceous, pellucid along the costa; some of the veins forked; intermediate longitudinal veins distinct. Hind wings pellucid; veins white. Length of the body 5 lines; of the wings 8 lines.

Sydney. In Mr. Saunders' collection.

## BLATTA LATIRUPTA.

Mas. *Ochracea, fusiformis; caput prothoracem paullo superans; oculi invicem remoti; antennæ piceæ, corpore paullo longiores; prothorax linea media vittisque duabus albis, lateribus diaphanis rotundatis; abdominis dorsum strigis lateralibus transversis nigricantibus; pedes brevisculi, sat graciles, femoribus setosis; alæ anticæ subcoriacæ, abdomen non superantes, vitta costali lata albida diaphana; alæ posticæ diaphanæ.*

*Male.* Ochraceous, fusiform, smooth, shining. Head extending a little beyond the prothorax. Eyes tawny, wide apart. Antennæ piceous, testaceous at the base, a little longer than the body. Prothorax longer than half its breadth, with a white middle line and with a white stripe and

an exterior pellucid space on each side; fore border hardly truncated; sides rounded, slanting outwards towards the hind border, which is straight. Abdomen as long as the wings, with transverse blackish streaks along each side above. Cerci moderately long. Legs rather short and slender; femora setose. Fore wings slightly coriaceous, with a broad whitish pellucid costal stripe; hind part pale testaceous in the left wing, pellucid in the right wing. Hind wings pellucid. Length of the body 4 lines; of the wings 7 lines.

New South Wales. In Mr. Saunders' collection.

Genus PSEUDOPHYLLODROMIA.

*Pseudophyllodromia*, *Watt. Blatt.* 111.

1. PSEUDOPHYLLODROMIA ORNATA.

*ornata*, *Watt. Blatt.* 112, pl. 3, f. 9.

Philippine Isles.

Genus TEMNOPTERYX.

*Temnopteryx*, *Watt. Blatt.* 83.

1. TEMNOPTERYX CAPENSIS.

*capensis*, *Watt. Blatt.* 84, pl. 2, f. 6.

Cape.

2. TEMNOPTERYX INCONSPICUA.

*inconspicua*, *Watt. Blatt.* 85.

Cape.

3. TEMNOPTERYX FULVA.

*fulva*, *Watt. Blatt.* 85.

Java.

4. TEMNOPTERYX VIRGINICA.

*virginica*, *Watt. Blatt.* 86.

Virginia.

5. TEMNOPTERYX TARASCA.

*Blatta Tarasca*, *C. B.* 86.

6. TEMNOPTERYX DEROPELTIFORMIS.

*deropeltiformis*, *Watt. Blatt.* 87.

N. America.

Genus ISCHNOPTERA, *C. B.* 112.

ISCHNOPTERA BRASILIENSIS.

*Brasilensis*, *Watt. Blatt.* 130, pl. 3, f. 12—*Clara?* *C. B.* 114.

Brazil.

## ISCHNOPTERA HIMALAYICA.

Himalayica, *Watt. Blatt.* 129.

Himalaya.

## ISCHNOPTERA INDICA.

Indica, *Watt. Blatt.* 130.

Malacca.

## ISCHNOPTERA AUSTRALICA.

Australica, *Watt. Blatt.* 131—*marginalis*? *C. B.* 119.

New South Wales.

## ISCHNOPTERA RUFa.

rufa, *Watt. Blatt.* 131, pl. 3, f. 13.

Brazil.

## ISCHNOPTERA MARGINATA.

marginata, *Watt. Blatt.* 132—*rubiginosa*, *C. B.* 121.

Brazil.

## ISCHNOPTERA ARCTA.

arcta, *Watt. Blatt.* 132.

Ceylon.

ISCHNOPTERA OCCIDENTALIS, *C. B.* 113.

borealis, *Watt. Blatt.* 133.

ISCHNOPTERA UHLERIANA, *C. B.* 113.

*Ectobia lithophila*, *Seudder, Bost. Journ.* 1862, 418.

ISCHNOPTERA COULONIANA, *C. B.* 113.

lata, *Watt. Blatt.* 135—*elongata*? *C. B.* 114.

N. America.

## ISCHNOPTERA PROCERA.

procera, *Watt. Blatt.* 137.

Ceylon.

## ISCHNOPTERA? STRIGOSA.

*Blatta strigosa*, *C. B.* 88.

## ISCHNOPTERA? STRIGATA.

*Blatta strigata*, *Blanch., Gay, Hist. Chile Zool.* vi. 17. *Orth.* pl. 1, f. 4.

Chili.

## ISCHNOPTERA ATRA.

*Deropeltis atra*, *Watt. Blatt.* 244.

Cape.

## ISCHNOPTERA INTERMEDIA.

*Deropeltis intermedia*, *Watt. Blatt.* 244.

Natal.

## ISCHNOPTERA INTEGERRIMA.

*Deropeltis integerrima*, *Watt. Blatt.* 245.

Zanzibar.

## ISCHNOPTERA RUGOSICOLLIS.

*Deropeltis rugosicollis*, *Watt. Blatt.* 245.

Java?

## ISCHNOPTERA MACRA.

*Ischnoptera macra*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 165—*Deropeltis?*  
*macra*, *Watt. Blatt.* 246.

S. Africa.

## ISCHNOPTERA BIVITTATA.

*Deropeltis bivittata*, *Watt. Blatt.* 247.

Cape.

## ISCHNOPTERA FLAVOMARGINATA.

*Deropeltis flavomarginata*, *Watt. Blatt.* 247.

Cape.

## ISCHNOPTERA GIBBICOLLIS.

*gibbicollis*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 165.

Natal.

## ISCHNOPTERA MELANOPHILA.

Mas. *Nigra, subtilissime punctata, fere linearis; caput prothoracem sat superans; oculi invicem sat remoti; antennæ validæ; prothorax subellipticus; abdomen basi piecum; pedes longiusculi; alæ antica coriacea, abdomen longe superantes; alæ posticae arca anali nigro-cinerea.*

*Male.* Black, extremely finely punctured, nearly linear. Head extending somewhat beyond the prothorax. Eyes lurid, rather wide apart. Antennæ robust. Prothorax dull, transversely subelliptical; fore border truncate; sides much rounded; hind border very slightly rounded. Mesothorax, metathorax and base of the abdomen piecous. Legs rather long; femora with somewhat stout spines. Wings extending much beyond the abdomen. Fore wings coriaceous; veins very prominent. Hind wings semicoriaceous; anal area blackish cinereous, membranaceous. Length of the body 15 lines; of the wings 39 lines.

The larger size, the darker colour and the black head distinguish this species from *I. erythrocephala*. It is very much larger than *I. atra*.

a. Zanzibar. From Dr. Kirk's collection.

#### ISCHNOPTERA HASTIFERA.

Mas. *Testacea, fusiformis; caput prothoracem non superans; antennæ corpore longiores; prothorax nigro bivittatus, lateribus dilatatis subreflexis, margine postico perparum rotundato; cerci longi; pedes graciles; alæ anticæ angustæ, abdomen longe superantes, vitta antemedialis nigra lanceolata; alæ posticæ pallide cinereæ, apud costam subtastacæ.*

*Male.* Testaceous, fusiform, smooth, dull. Head not extending beyond the prothorax. Eyes black, wide apart. Antennæ slender, setulose, longer than the body. Prothorax with two rather broad black stripes; fore border hardly truncated; sides dilated, rounded and slightly reflexed; hind border very slightly rounded. Cerci long, lanceolate. Legs slender; femora with slender spines. Wings extending much beyond the abdomen. Fore wings narrow, with a black lanceolate stripe which extends in the disk from the base to beyond the middle; anal furrow distinct; hind part of the right wing cinereous. Hind wings pale cinereous, with a testaceous tinge along the costa; veins pale testaceous; transverse sectors hardly numerous. Length of the body 5 lines; of the wings 13 lines.

a. S. Africa. Presented by Sir A. Smith.

#### ISCHNOPTERA REVERSA.

Mas. *Ferrugineo-rufa, fusiformis, subtus fulva; oculi invicem vix remoti; palpi picei, basi ferruginei; antennæ fulvæ, basi nigricantes; prothorax longiusculus, bisulcatus, lateribus subrotundatis subreflexis; cerci apice picei; pedes sat graciles, tibiis tarsisque nigris, his apice rufis; alæ anticæ semicoriacæ, abdomen longe superantes; alæ posticæ luridæ.*

*Male.* Ferruginous-red, fusiform, smooth, shining, tawny beneath. Head not extending beyond the prothorax. Eyes piceous, hardly wide apart. Second and third joints of the palpi piceous. Antennæ tawny, a little longer than the body, blackish towards the base. Prothorax narrower in front, very much longer than half its breadth; fore border truncated; sides slightly rounded and reflexed; hind border almost straight; two oblique furrows in the disk. Cerci stout, rather long, piceous towards the tips. Legs moderately long and stout; tarsi, except their tips, tibiæ and tips of femora black; femora with slender spines. Wings extending much beyond the abdomen. Fore wings semicoriaceous; intermediate longitudinal veins distinct. Hind wings lurid. Length of the body 7 lines; of the wings 16 lines.

Singapore. In Mr. Saunders' collection.

## ISCHNOPTERA SINENSIS.

Mas. *Lutea, glabra; caput prothoracem perpaullo superans; palporum articulus 3us piccus; antennæ nigrae; prothorax margine postico utriusque subtruncato; alæ apice nigricantes, abdomen longe superantes; alæ posticæ vitta discoidali nigricante.*

*Male.* Luteous, smooth, shining. Head extending very little beyond the prothorax. Eyes tawny, small, wide apart, each including a black streak. Palpi slender, filiform; third joint piccus, much longer than the second. Antennæ black, a little longer than the body, luteous at the base. Prothorax much broader than long, slightly truncated in front and on each side of the hind border. Legs moderately long and stout; femora with short slender spines; tibiæ with long rather stout spines. Wings extending much beyond the abdomen, blackish at the tips, nearly alike in structure. Hind wings with a blackish stripe in the disk. Length of the body 6 lines; of the wings 16 lines.

It is closely allied in structure to *I. australis*, but the latter is much larger and has pale antennæ.

a. Hong Kong. Presented by J. C. Bowring, Esq.

## ISCHNOPTERA CONFERTA.

Mas. *Testacea, elliptica, subtiliter punctata; caput prothoracem paullo superans, guttis quatuor posticis discoque antico nigris; palpi supra picei; antennæ piceæ, submoniliformes; prothorax nigricante punctatus, macula discoidali maxima nigra angulis anticis productis; femora setulosa; alæ anticæ abdomen longe superantes, striga basali subcostali nigricante.*

*Male.* Testaceous, shining, elliptical, thickly and minutely punctured. Head small, extending a little beyond the prothorax, four black dots on the hind border of the vertex; disk of the front and of the face black. Eyes blackish, wide apart. Palpi mostly piccus above. Antennæ piceous, submoniliform. Prothorax very much broader than long, with blackish punctures; a very large rhomboidal black spot in the disk, its fore angles elongated and acute; hind border slightly rounded. Legs short, stout; femora setulose; tibiæ with long stout spines. Wings extending much beyond the abdomen. Fore wings with a blackish streak along the mediastinal vein. Hind wings as long as the fore wings; the pale lines along the veins most distinctly marked. Length of the body 6 lines; of the wings 15 lines.

Chan-ti-bon, Siam. In Mr. Saunders' collection.

## ISCHNOPTERA? OBLIQUA.

Mas. *Albido-testacea, fusiformis, aspere punctata; caput rufo-fulvum, picco fasciatum, caput paullo superans, margine antico albido-testaceo; oculi invicem remoti; antennæ testaceæ; prothorax vittis duabus nigris obliquis; pedes breves, graciles; alæ anticæ subcoriacea, abdomen longe superantes, striga basali subcostali fusca; alæ posticæ albido diaphanae.*

*Male.* Whitish testaceous, fusiform, rather thinly and roughly punctured. Head reddish tawny, extending a little beyond the prothorax; a piceous band on the fore part of the vertex, fore part of the face and palpi whitish testaceous. Eyes piceous, wide apart. Antennæ testaceous. Prothorax a little longer than half its length, narrower in front, deflexed on each side, with two black stripes which diverge from each other hindward; fore border truncated; sides slightly rounded and reflexed, forming two obtuse angles with the hind border, which is nearly straight. Cerci moderately long and slender. Legs short, slender; femora and tibiæ with short slender spines. Wings extending much beyond the abdomen. Fore wings slightly coriaceous, wholly coriaceous at the base; some of the longitudinal veins forked; transverse sectors slightly irregular; a brown streak along the basal part of the humeral trunk. Hind wings whitish hyaline. Length of the body  $7\frac{1}{2}$  lines; of the wings 17 lines.

This species has some affinity to the genus *Zetobora*.

Brazil. In Mr. Saunders' collection.

#### ISCHNOPTERA? SICCA.

*Fœm.* *Pallide cinerea, fusiformis, subtiliter punctata; caput punctis quatuor strigae anteriore triramosa nigris; oculi invicem subapproximati; antennæ piceæ; prothorax caput fere superans, nigro bistrigatus, utrinque impressus, lateribus vix angulatis; venter nigricante punctatus et bivittatus; pedes breves, graciles; alæ anticæ fere membranaceæ, nigricante subconsersæ, abdomen longe superantes.*

*Female.* Pale cinereous, fusiform, thickly and minutely punctured. Head hardly extending to the fore border of the prothorax; four black points on the front and an anterior broad black streak which emits a clubbed branch on each side. Eyes black, slightly approximate to each other. Antennæ slender, piceous. Prothorax a little longer than half its breadth, rounded and very slightly arched in front, impressed on each side in the disk in front of two longitudinal black streaks; sides hardly angular; hind border straight. Abdomen beneath with blackish points and with two irregular blackish stripes. Cerci rather short. Legs short, slender; femora with short slender spines. Wings extending much beyond the abdomen. Fore wings nearly membranous, coriaceous at the base, with some minute blackish speckles. Hind wings pellucid; veins whitish. Length of the body  $5\frac{1}{2}$  lines; of the wings 13 lines.

It may be distinguished from the other species of the genus by its broader prothorax, and has some likeness to the *Zetobora*.

a. Santarem. From Mr. Bates' collection.

#### ISCHNOPTERA? PUNCTOSA.

*Fœm.* *Cinerea, fusiformis, subtilissime punctata; caput testaceum, plaga maculisque tribus anterioribus nigris; oculi invicem non approximati; prothorax tuberculatus, caput sat superans, anticæ fornicatus, plaga postica nigra, lateribus fere angulatis; abdomen testaceum; pedes breves, graciles; alæ anticæ subcoriaceæ, fusco guttatæ, abdomen longe superantes; alæ posticæ diaphanæ.*

*Female.* Cinereous, fusiform, very minutely punctured. Head testaceous; front with a black patch and with three anterior black spots. Eyes black, moderately wide apart. Antennæ piceous. Prothorax rather longer than half its breadth, thinly tuberculate, hooded in front and extending somewhat beyond the head; fore border rounded; sides nearly angular; hind border slightly rounded; a transverse black patch on the hind part of the disk. Abdomen testaceous. Legs short, slender; femora unarmed. Wings extending much beyond the abdomen. Fore wings slightly coriaceous, with numerous irregular brown dots; transverse sectors numerous, irregular. Hind wings pellucid, with a whitish costal streak and with whitish veins. Length of the body 4 lines; of the wings 16 lines.

Australia. In Mr. Saunders' collection.

ISCHNOPTERA? LITURATA.

*Blatta liturata*, *Serv. Orth.* 103.

Java.

Genus PERIPLANETA, *C. B.* 124.

PERIPLANETA FLAVICINATA.

*flavicinata*, page 130.

PERIPLANETA LIGATA.

*ligata*, *Watt. Blatt.* 234—*marginifera*, *C. B.* 144.

PERIPLANETA CONTRARIA, *C. B.* 131.

*thoracica*, var. *Watt. Blatt.* 236.

PERIPLANETA VICINA.

*vicina*, *Watt. Blatt.* 236.

PERIPLANETA ALBILATERA.

*albilatera*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 167. *Watt. Blatt.* 237.  
Natal.

PERIPLANETA? CAFFRA.

*caffra*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 166. *Watt. Blatt.* 239.  
Natal.

PERIPLANETA WAHLBERGI.

*Wahlbergi*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 167. *Watt. Blatt.* 239.  
Natal.

PERIPLANETA DILUTA.

*diluta*, *Stal, Ofv. K. V. Ak. Forh.* 1856, 167. *Watt. Blatt.* 239.  
Natal.



## PERIPLANETA ORBA.

Orba, *Stal, Ofv. K. V. Ak. Forh.* 1856, 167. *Watt. Blatt.* 240.  
Natal.

## PERIPLANETA PICEA.

picea, *Watt. Blatt.* 224.  
Isle of Sambelong.

## PERIPLANETA RHOMBIFOLIA, C. B. 130.

decorata, *Watt. Blatt.* 224.

## PERIPLANETA ORNATA.

ornata, *Watt. Blatt.* 235.  
Hindostan.

## PERIPLANETA ROTUNDATA.

rotundata, *Watt. Blatt.* 231.  
Fiji Isles.

## PERIPLANETA ATERRIMA.

Mas. *Atra, fusiformis, nitens, subtilissime punctata; caput parce punctatum, prothoracem perpaullo superans; oculi invicem remoti; prothorax longiusculus, foveolis nonnullis indeterminatis; abdomen apice incisum, segmentorum angulis posticis productis acutis; pedes subtus fimbriati, femoribus posticis supra spina apicali armatis; alæ anticæ corneæ, apices versus coriaceæ, abdomen paullo superantes; alæ posticæ coriaceæ.*

*Male.* Deep black, fusiform, shining, very thickly and minutely punctured. Head thinly punctured, extending very little beyond the prothorax; sockets of the antennæ whitish. Eyes piceous, wide apart. Prothorax much longer than half its breadth, with some shallow excavations in the disk; fore border truncated, about one-fourth of the length of the hind border; sides rounded; hind border straight. Hind angles of the abdominal segments elongated, acute; supra-anal lamina and subanal lamina notched, the former fringed with tawny hairs; styles long, slender. Cerci lanceolate, long, stout. Legs long, robust; femora and tibiæ fringed beneath with short hairs; femora armed with long stout spines; hind femora with a stout apical spine above. Wings extending a little beyond the abdomen. Fore wings corneous, coriaceous towards the tips. Hind wings coriaceous. Length of the body 18 lines; of the wings 34 lines.

Peru. In Mr. Saunders' collection.

## PERIPLANETA OCULATA.

Fam. *Picea, fusiformis, subtus albida; caput albidum, prothoracem perpaullo superans, nigro fasciatum; oculi invicem remoti; prothorax plaga maxima picea maculas duas albas includente, lateribus nigro marginatis; venter rufescens, lateribus albidis; pedes pallide flavi, crassi, breviusculi, spinis piceis; alæ anticæ coriaceæ, basi corneæ, abdomen non superantes, vitta costali albida attenuata; alæ posticæ nigro-fuscæ.*

*Female.* Piceous, fusiform, smooth, shining, whitish beneath. Head whitish, extending very little beyond the prothorax; a black band between the eyes, which are black and wide apart from each other. Antennæ piceous, tawny towards the base. Prothorax whitish, much longer than half its breadth, very narrowly bordered with black on each side; a very large piceous patch, extending to the hind border, near which there are two round whitish spots; fore border truncated; sides very slightly rounded, slanting outward to the hind border, which is straight. Abdomen beneath reddish, whitish along each side. Legs pale yellow, thick, rather short; spines piceous. Wings not extending beyond the abdomen. Fore wings coriaceous, corneous towards the base; a whitish costal stripe tapering from the base to three-fourths of the length. Hind wings blackish brown. Length of the body 10 lines; of the wings 20 lines.

Australia. In Mr. Saunders' collection.

## PERIPLANETA CONVEXA.

Mas. *Nigra, glabra, convexa, elliptica; caput prothoracem paullo superans; palpi picei; prothorax brevi-conicus; cerci breves, lati; pedes breves, crassi; alæ anticæ coriaceæ, abdomen paullo superantes, costa rotundata.*

*Male.* Black, smooth, shining, convex, elliptical. Head extending a little beyond the prothorax. Eyes livid, transversely elongated, wide apart. Palpi piceous. Antennæ slender, setaceous, much longer than the body. Prothorax short-conical, its length a little more than half its breadth; sides slightly rounded. Cerci broad, short. Legs short, thick; femora with a few spines; spines of the tibiæ numerous, long, stout. Fore wings coriaceous, convex, extending a little beyond the abdomen; costa and tips rounded; covered part of the right wing membranous and slightly paler. Hind wings as long as the fore wings and like the membranous part of the latter.

a. Moreton Bay. From Mr. Diggles' collection.

## Genus PARATROPES, C. B. 149.

## PARATROPES MEXICANA.

mexicana, *Watt. Blatt.* 151, pl. 4, f. 15.

Mexico.

## PARATROPES PHALERATA.

*Nyctibora phalerata*, *Ericks. Schomb. Faune Brit. Guiana*, 580—*Paratropa phalerata*, *Watt. Blatt.* 152.

British Guiana.

## Genus TIVIA.

*Mas.* Corpus fusiforme, depressum, supra opacum. Caput parvum, prothoracem non superans. Oculi invicem remoti. Antennæ graciles. Prothorax subtilissime punctatus, antice subfornicatus, margine antico setoso, lateribus deflexis rotundatis, margine postico recto. Cerci graciles, lanceolati. Pedes graciles; femora subtus setosa. Alæ anticæ coriaceæ, abdomen longe superantes, costa subrotundata.

*Male.* Body fusiform, flat, dull above, shining beneath. Head small, not extending beyond the prothorax. Eyes wide apart. Antennæ slender. Prothorax extremely minutely punctured, as long as half its breadth, slightly hooded in front, deflexed on each side; fore border and sides rounded, setose; hind border straight. Cerci slender, lanceolate, moderately long. Legs slender; femora setose beneath. Wings extending much beyond the abdomen. Fore wings coriaceous; costa slightly rounded.

This genus has some affinity with *Paratropes*. A resemblance may be traced between it and *Polyphaga* and *Zetobora*.

## 1. TIVIA SIMULATRIX.

*Mas.* *Picea*, subtus testacea; caput margine antico palpisque testaceis; prothorax margine antico lateribusque albidis; cerci apice picei.

*Male.* Piceous, testaceous beneath. Head towards the fore border and palpi testaceous. Prothorax whitish-bordered in front and on each side. Cerci piceous towards the tips. Hind wings not paler than the fore wings. Length of the body  $4\frac{1}{2}$  lines; of the wings 10 lines.

a. Lake Ngani. From Mr. Anderson's collection.

## Genus OPISTHOPLATIA.

*Opisthoplatia*, *Watt. Blatt.* 198.

## 1. OPISTHOPLATIA ORIENTALIS.

*Polyzosteria orientalis*, *C. B.* 152—*Opisthoplatia orientalis*, *Watt. Blatt.* 199, pl. 5, f. 22.

## 2. OPISTHOPLATIA? OCCIDENTALIS.

*Polyzosteria occidentalis*, *C. B.* 153.

## 3. OPISTHOPLATIA? AUSTRALIS.

*Polyzosteria australis*, *C. B.* 153.

## 4. OPISTHOPLATIA? LITURATA.

*Blatta liturata*, *Serv. Hist. Orth.* 103. *Haan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 38, pl. 48, f. 8, 9—*Opisthoplatia? liturata*, *Watt. Blatt.* 201.

Java.

Genus POLYZOSTERIA, *C. B.* 152.

Group 1. *Watt. Blatt.* 204.

## POLYZOSTERIA MACULATA.

*maculata*, *Watt. Blatt.* 206.

Swan River.

POLYZOSTERIA SUBVERRUCOSA, *C. B.* 153.

*reflexa*, *Watt. Blatt.* 208.

## POLYZOSTERIA NOBILIS.

*nobilis*, *Watt. Blatt.* 209.

Swan River.

Group 2. PLATYZOSTERIA, *Watt. Blatt.* 204.

## POLYZOSTERIA MELANARIA.

*melanaria*, *Erichs. Wieg. Arch. Nat.* viii. 247. *Watt. Blatt.* 210.  
New South Wales. Tasmania.

## POLYZOSTERIA ATERRIMA.

*aterrima*, *Erichs. Wieg. Arch. Nat.* viii. 248. *Watt. Blatt.* 211.  
Tasmania.

## POLYZOSTERIA PUNCTATA.

*punctata*, *Watt. Blatt.* 211.

Sydney.

## POLYZOSTERIA ALBOMARGINATA.

*albomarginata*, *Watt. Blatt.* 212.

Sydney.

## POLYZOSTERIA SUBAPTERA.

*subaptera*, *Watt. Blatt.* 212.

Adelaide. Melbourne.

## POLYZOSTERIA SCABRA.

*scabra*, *Watt. Blatt.* 213.

Sydney.

## POLYZOSTERIA CASTANEA.

castanea, *Watt. Blatt.* 214.

Sydney.

## POLYZOSTERIA NITIDA.

nitida, *Watt. Blatt.* 214.

Amboina. Ternate.

## POLYZOSTERIA RUFOVITTATA.

rufovittata, *Watt. Blatt.* 215—*Periplaneta mysteca?* *C. B.* 136.

Mexico.

## POLYZOSTERIA OPACA.

opaca, *Watt. Blatt.* 216.

Cuba.

## POLYZOSTERIA TRUNCATA.

truncata, *Watt. Blatt.* 217.

New South Wales. New Zealand.

## POLYZOSTERIA NOVÆ-SEELANDIÆ.

Novæ-Seelandiæ, *Watt. Blatt.* 218.

New Zealand.

## POLYZOSTERIA RUFOTERMINATA.

rufotermidata, *Watt. Blatt.* 219.

Australia.

## POLYZOSTERIA SOROR.

soror, *Watt. Blatt.* 220.

Amboina.

## POLYZOSTERIA LIGATA.

ligata, *Watt. Blatt.* 220.

Port Curtis, N. Australia.

## Genus LOBOPTERA.

Loboptera, *Watt. Blatt.* 79.

## 1. LOBOPTERA DECIPIENS.

*Polyzosteria decipiens*, *C. B.* 152.

## 2. LOBOPTERA INDICA.

indica, *Watt. Blatt.* 82.

Fam. PERISPHÆRIDÆ, *C. B.* 168.

Genus PERISPHÆRIA, *C. B.* 168.

PERISPILERIA SCABRICOLLIS.

unicolor, *C. B.* 170—*Ischnoptera scabricollis*, *C. B.* 115.

PERISPHÆRIA CRURALIS.

cruralis, *Stal, Ofv. K. V. Ak. Forh.* 1858.

PERISPILERIA CINGULATA, *C. B.* 168.

*Blatta latissima?* *Herbst, Fuessl. Arch.* 184, pl. 49, f. 2.

PERISPHÆRIA DISCOIDALIS.

discoidalis, *Watt. Blatt.* 310.

Cape.

Genus PARASPHÆRIA.

*Parasphæria*, *Watt. Blatt.* 311.

1. PARASPHÆRIA OVATA.

*Blatta ovata*, *Blanch., Gay, Hist. Chile, Zool.* vi. 14. *Orth.* pl. 1, f. 3—*Polyzosteria Geissei*, *C. B.* 168—*P. valliviana*, *C. B.* 168—*Hommetica chilensis*, *C. B.* 55—*Parasphæria ovata*, *Watt. Blatt.* 312.

2. PARASPHÆRIA LINEARIS.

*Ischnoptera linearis*, *C. B.* 115—*Parasphæria lineatis*, *Watt. Blatt.* 314.

3. PARASPHÆRIA CASTANEA.

castanea, *Watt. Blatt.* 315.

Brazil.

Fam. ANAPLECTIDÆ, *C. B.* 181.

Genus ANAPLECTA, *C. B.* 181.

ANAPLECTA BIVITTATA.

bivittata, *Watt. Blatt.* 63.

Brazil.

# CATALOGUE

OF

## LOCUSTIDÆ.

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### Fam. 2. LOCUSTIDÆ.

Locustides, *Leach, Ed. Enc.*—Gryllidæ, *Steph.*—Locustariæ, *Latr. Zett. Serv. Hist. Orth.* 370. *Scudder*—Locustina, *Burm. Handb. Ent.* ii. 664. *Fischer, Orth. Eur.* 187.

The synopsis of the genera of this family is deferred to a later part of the Catalogue in order that it may be made more complete by means of information from Mr. Scudder, who is engaged in the publication of a work on these tribes.

### Genus 1. CERBERODON.

Cerberodon, *Perty, Del. An. Art.* 120—Listroscelis, *Serv. Rev. Hist. Orth.* 396. *Brullé.*

#### 1. CERBERODON VIRIDIS.

Cerberodon viridis, *Perty, Del. An. Art.* 120, pl. 23, f. 10—Listroscelis viridis, *Serv. Hist. Orth.* 397.

*a, b.* Brazil.

*c.* Para. Presented by R. Graham, Esq.

*d.* Para. From Mr. Bates' collection.

#### CERBERODON ARMATUS.

Listroscelis armata, *Serv. Rev.* 64; *Hist. Orth.* 398, pl. 11, f. 1.

Brazil.

### Genus 2. MONOCEROPHORA.

*Mas.* Corpus gracile, convexum, glabrum, fere cylindricum. Caput magnum, cornu longo lanceolato oblique ascendente armatum; frons abrupte declivis, antice striata; facies bifoveolata: labrum longi-ovale. Oculi parvi, fere rotundi, valde prominuli. Palpi longi, graciles, apice incrassati. Antennæ graciles, corpore multo longiores. Prothorax elongatus, sulcis duobus transversis subangulatis. Prosternum, mesosternum et metasternum bispinosa. Abdomen angustum; sexualia parva. Pedes graciles, longissimi; femora quatuor anteriora biseriatim quadrispinosa; femora postica biseriatim decemspinosa; tibiæ quatuor anteriores spinis

quinque longis biseriatis armatae; tibiae posticae spinis plurimis parvis biseriatis armatae; tarsi lati. Alae corpore valde longiores. Alae anticae angustae, confertissime reticulatae.

*Male.* Body slender, convex, smooth, nearly cylindrical. Head large, perpendicular and dilated in front; a long lanceolate acute horn ascending obliquely from between the sockets of the antennae; fore part of the front transversely and minutely striated; face with two longitudinal grooves; labrum elongate-oval. Eyes small, nearly round, very prominent. Mandibles large, curved. Palpi long, slender, filiform, thinly pubescent, incrassated at the tips. Maxillary palpi about twice the length of the labial palpi; first joint very short; second about twice the length of the first; third about thrice the length of the second; fourth a little shorter than the third; fifth as long as the fourth. First joint of the labial palpi very short; second nearly thrice the length of the first; third very much longer than the second. Antennae very slender, very much longer than the body; first and second joints incrassated. Prothorax a little longer than broad, with two slightly angular transverse furrows. Prosternum, mesosternum and metasternum each armed with two slender obtuse spines. Abdomen slender; apical appendages small. Cerci stout, lanceolate, clothed with long hairs. Legs slender, very long; fore coxae armed with an acute lanceolate spine; four posterior coxae armed with a shorter obtuse spine; four anterior femora with four rather short and slender spines on each side; hind femora with ten minute spines on each side; fore tibiae with five pairs of spines, the four first extremely long, the fifth much shorter than the fourth; middle tibiae with five pairs of rather long spines, which from the first to the fifth successively decrease in length, three shorter spines on the upper side; hind tibiae with seventeen minute spines on each side. Tarsi four-jointed; first, second and third joints broad; fourth slender, as long as the three preceding together. Wings very much longer than the body. Fore wings narrow, thickly and very minutely reticulated, independently of the transverse sectors, which are irregular and not numerous. Hind wings with very numerous transverse sectors.

This genus and *Cerberodon* will form a group in the family, and may be distinguished from the neighbouring genera by their very prominent eyes, by the spines on the fore femora, and by the structure of the fore wings.

#### MONOCEROPHORA MINAX.

*Mas.* *Rufescente fulva; caput nigrum, lateribus rufescente fulvis; palpi flari, apice fuscii; prothorax nigro univittatus; abdomen testaceum, nigro bivittatum; tibiae quatuor anteriores spinis nigris apice rufis; alae anticae ferruginea, fulvo venosa, basi pallidiores; alae posticae cinerea.*

*Male.* Reddish tawny. Head black, reddish tawny on each side. Eyes tawny. Palpi yellow; tips brown. Antennae piceous, red towards the base; first and second joints blackish. Prothorax with a black stripe which is broadest in front. Pectus and abdomen testaceous, the latter with an irregular black stripe on each side. Hind femora indistinctly streaked on each side; four anterior femora blackish beneath, with black spines; spines of the four anterior tibiae black, with red tips; spines of the



hind tibiæ wholly black; tarsi piceous. Fore wings ferruginous, paler towards the base; veins tawny. Hind wings cinereous; veins blackish. Length of the body 16 lines; of the fore wings 51 lines.

a. Pernambuco. Presented by — Spooner, Esq.

### Genus 3. DEINACRIDA.

*Anostotoma* (Deinacrida) *White, Gray's Zool. Misc. Pt. 2, 78; Dieffenbach's New Zealand. ii. 280.*

#### 1. DEINACRIDA HETERACANTHA.

*heteracantha, White, Gray's Zool. Misc. Pt. 2, 71. Dieffenbach's N. Zealand, ii. 280. Zool. Voy. Erebus and Terror, xi. 24, pl. 5, f. 1.*

a. New Zealand. Presented by Dr. Dieffenbach.

b, c. New Zealand. Presented by Dr. Sinclair.

d. New Zealand.

### Genus 4. ANOSTOSTOMA.

*Anostostoma, G. R. Gray, Mag. Nat. Hist. Ser. 2, i. 141. Serv. Hist. Orth. 385—Stenopelmatus, Burm.*

#### 1. ANOSTOSTOMA AUSTRALASIE

*australasiæ, G. R. Gray, Mag. Nat. Hist. Ser. 2, i. 143, f. 16. Serv. Hist. Orth. 388. Duncan, Nat. Libr. xxxiv. 254, pl. 14.*

a. Australia.

b. Moreton Bay. From Mr. Strange's collection.

c. Australia. Presented by the Entomological Club.

#### 2. ANOSTOSTOMA FEMORALIS.

*Mas. Ferruginæ, subtilissime punctata; caput nigricans, prothorace paullo latius, inter antennis subcarinatum, labro flavo; palpi maxillares nigricantes, basi testacei; palpi labiales testacei; abdomen breve, filis duobus apicalibus brevissimis; pedes nigri, femoribus rufis apice nigris, femoribus posticis oblique striatis supra serratis, tibiis triseriatim luteo spinosis.*

*Male.* Ferruginous, very finely punctured. Head shining, blackish, a little broader than the prothorax, slightly ridged between the antennæ; three yellow dots representing the ocelli; labrum yellow. Eyes livid. Mandibles tawny. Maxillary palpi blackish; first and second joints testaceous; third, fourth and fifth joints testaceous at the base. Labial palpi testaceous. Antennæ black. Prothorax transverse, with three very slight transverse furrows, of which the first and second are interrupted. Prosternum with two spines. Abdomen short, with two apical filiform appendages which are shorter than the cerci. Legs black; coxæ and femora red, the latter black towards the tips; four anterior coxæ with a stout spine; hind femora serrated above, obliquely ridged on the outer side; tibiæ with long stout luteous black-tipped spines which are arranged in three series, those of the hind tibiæ more numerous than the others; four

anterior tarsi luteous in the middle and beneath; hind tarsi luteous beneath; claws luteous. Length of the body 17 lines.

The hind tarsi are not so slender as those of *A. Australasiæ*.

a. ———? From the collection of the Zoological Society.

### 3. ANOSTOSTOMA CUNICULATOR.

cuniculator, *Coquerel, A. S. E. F. 2me Ser.* vi. 282, pl. 8, f. 6.

Madagascar.

## Genus 5. GNATHOCLITA.

Gnathoclita, *Haan, Verk. Nat. Gesch. Ned. Ind. Bez. Ins. Sauss. Rev. Zool.* 1861, 129.

### 1. GNATHOCLITA VORAX.

*Gryllus vorax*, *Stoll, Saut. et Gryll.* pl. 4 e, f. 19, 20—*Anostostoma vorax*, *Serr. Hist. Orth.* 389—*Gnathoclita vorax*, *Sauss. Rev. Zool.* 1861, 130.

Surinam. Amazon Region.

### 2. GNATHOCLITA? CRASSIDENS.

*Anostostoma crassidens*, *Blanch., Gay, Hist. Chile*, vi.

Chili.

### 3. GNATHOCLITA? MONSTROSA.

*Locusta monstrosa*, *Herbst, Nat. Freun. Berl. Neue Schrift.* iv. 112, pl. 1, f. 1—5—*Anostostoma Herbstii*, *Gray, Mag. Nat. Hist.* i. 143, f. 17. *Serr. Hist. Orth.* 388.

Surinam.

### 4. GNATHOCLITA? TOLTUCA.

*Anostostoma tolteca*, *Sauss. Rev. Zool.* 1861, 130.

Orizaba.

## Genus 6. HEMIDEINA.

*Mas et fem.* Corpus longum, convexum, nitens, glabrum, subcylindricum, apterum. Caput magnum. Palpi longi, graciles. Antennæ longissimæ. Prothorax subtransversus, margine subreflexo. Oviductus subarcuatus, plus minusve elongatus. Pedes robusti, longiusculi; femora postica uniseriatim unispinosa; tibiæ quatuor anteriores biseriati quadrispinosæ; tibiæ posticæ subdilatae, spinis quatuor longis crassis biseriati armatae.

*Male and female.* Body long, convex, shining, wingless, nearly cylindrical, generally smooth. Head large, generally a little broader than the prothorax, very convex above, slightly prominent between the antennæ. Palpi long, slender. Antennæ very long, generally slender. Prothorax slightly transverse; border generally slightly reflexed. Abdomen elongate.

Oviduct curved upward, more or less long. Legs stout, rather long; four anterior femora unarmed; hind femora with a single row of three minute spines; four anterior with four minute spines on each side; hind tibiæ more or less dilated, with four long thick spines on each side; tarsi slender.

The dilated hind tibiæ are the most distinctive character of this genus.

#### I. HEMIDEINA CAPITOLINA.

Mas. *Flava, punctata; caput maximum, carinatum, flavescens quadristrigatum, fronte nigra striata rufescente fasciata, facie flava, labro palpisque fulvis, his apice piceis; antennæ fulvæ; prothorax niger, lateribus flavis; mesothorax nigro conspersus et bimaculatus; abdomen vitta maculari et segmentorum marginibus posticis nigris; cerci fulvi; femora biseriatim nigro strigata; tibiæ posticæ rufescentes, subdilatae.*

*Male.* Yellow, shining, thinly punctured. Head extremely large, broader than the prothorax, reddish and very convex above, keeled and with four yellowish streaks between the eyes; front black, transversely striated, with a reddish band; face yellow; labrum tawny. Mandibles black. Palpi tawny, first and second joints short; third and fourth long, of nearly equal length; fifth longer than the fourth, subclavate, and piceous at the tip. Third joint of the labial palpi clavate, piceous. Antennæ tawny, very much longer than the body. Prothorax black, transverse, broader than the mesothorax, broader in front, irregularly bordered on each side with yellow, this hue extending for a short space along the fore border and along the hind border. Mesothorax with a black spot on each side and with some minute black marks. Metathorax and abdominal dorsal segments with a row of black spots and with black bands on the hind borders, the spots successively widening to the apical segment. Apical appendages and cerci tawny, the former twice the length of the latter. Legs stout, rather long; femora with a row of interrupted black streaks on each side; hind femora beneath with a few denticulations on each side and towards the tip with a single row of four minute black-tipped spines; four anterior tibiæ with four small black-tipped spines on each side; hind tibiæ reddish, slightly dilated, with two small black-tipped spines beneath and with four thick piceous spines on each side, the spines on the inner side much longer than those on the outer; tarsi reddish. Length of the body 18—21 lines.

<sup>4</sup>The head of this species is very large and resembles that of *Anostostoma* in structure, and it approaches much nearer than the following species to that genus.

a. New Zealand. Presented by Miss Rye.

b. New Zealand. Presented by Capt. Stokes.

## 2. HEMIDEINA THORACICA.

*Deinacrida thoracica*, White, *Zool. Voy. Erebus and Terror*, xi. 25, pl. 5, f. 2.

*a—d.* New Zealand. Presented by Sir J. C. Ross.

*e.* New Zealand. (In trunks of trees). From M. Pelerin's collection.

*f, g.* New Zealand. Presented by Dr. Sinclair.

*h, i.* New Zealand. Presented by Sir A. Smith.

*j—m.* New Zealand. Presented by Col. Bolton.

## 3. HEMIDEINA FIGURATA.

**Fœm.** *Lutea; caput fulvum, fronte transverse striata; prothorax litura nigra subcithariformi; mesothorax, metathorax et abdominis segmenta nigro marginata; abdomen compressum, vitta dorsali nigra apicem versus dilatata; oriductus fulvus, arcuatus, apice piceus, abdominis dimidio longior; pedes robusti, brevisculi, tibiis posticis subdilatis.*  
**Var. β.**—*Caput testaceum. Mas.—Caput nigricans; abdomen non vittatum, apice nigrum.*

**Female.** Luteous, convex, shining. Head tawny, thinly and finely punctured, with a slight forked keel between the sockets of the antennæ; front finely and transversely striated. Eyes slightly prominent. Palpi tawny; fifth joint subelavate, longer than the fourth; third joint of the labial palpi clavate. Antennæ very much longer than the body. Prothorax transverse; sides slightly reflexed; a very slender longitudinal furrow and with two much curved transverse furrows; several connected black marks in the disk forming a somewhat lyre-shaped figure. Mesothorax, metathorax and abdominal dorsal segments with a black band on the hind border of each, these bands attenuated on each side. Mesothorax with a few irregular black marks. Metathorax with a black patch on each side. Abdomen compressed, with a black stripe which is dilated towards the tip. Oviduct tawny, curved upward, piceous towards the tip, a little more than half the length of the abdomen. Legs stout, rather short; femora with a row of short oblique blackish streaks on each side; hind femora with a single row of three minute black-tipped spines near the tip; four anterior tibiæ with four minute black-tipped spines on each side; hind tibiæ with four long thick black-tipped spines on each side and with three minute spines beneath. **Var. β.**—Head testaceous. Spines of the legs not black at the tips. **Male.**—Head blackish, larger than that of the female. Abdomen without a stripe, wholly black towards the tip. Length of the body 15—21 lines.

The stripe on the abdomen distinguishes this species from *H. thoracica*.

*a.* Port Nicholson, New Zealand. "In wood." "Weta' of natives."

From Mr. Earl's collection.

*b.* New Zealand. Presented by Dr. Sinclair.

*c.* New Zealand. Presented by Miss Rye.

## 4. HEMIDEINA ABBREVIATA.

*Fœm.* *Fulva, punctata; caput breve, carina plana; palpi testacei; prothorax sulco antico transverso, sulcis duobus obliquis sulcoque tenui longitudinali; abdomen suturis apiceque nigricantibus; cerci fulvi; oviductus piceus, subarcuatus, abdominis dimidio brevior; pedes testacei, crassi, brevisculi, tibiis posticis rufescentibus.*

*Female.* Tawny, convex, shining, thinly punctured. Head short, as broad as the prothorax, with a slight keel which is flattened between the sockets of the antennæ. Eyes black, slightly prominent. Mandibles black at the tips. Palpi testaceous. Antennæ tawny, long, testaceous at the base. Prothorax with a very slender longitudinal furrow, with an oblique furrow on each side and an anterior transverse furrow. Abdomen with blackish bands on the sutures of the dorsal segments; tip wholly blackish. Cerci tawny. Oviduct piceous, very slightly curved, less than half the length of the abdomen. Legs testaceous, thick, rather short; femora with oblique interrupted blackish streaks on each side, indistinct on the inner side; hind femora beneath with a single row of three minute piceous spines towards the tip; four anterior tibiæ with four minute piceous spines on the outer side and with three on the inner side; hind tibiæ reddish, with four long thick piceous spines on each side; tarsi tawny. Length of the body 14 lines.

The shorter abdomen and much shorter oviduct distinguish it from the preceding species.

a. New Zealand. Presented by Henry Drew, Esq.

“These insects were found in caves half a mile within. Mr. Drew supposed them to feed upon a species of Lichen.”

## 5. HEMIDEINA PRODUCTA.

*Fœm.* *Fulva, cylindrica, punctata; caput nigrum, facie clypeoque fulvis; palpi testacei; prothorax sulcis duobus obliquis nigricantibus; abdomen longum, segmentis piceo marginatis; oviductus subarcuatus, abdomine brevior; pedes robusti, longiusculi, tibiis posticis subdilatis.*

*Female.* Tawny, cylindrical, shining, thinly punctured. Head black; face and labrum tawny. Eyes ferruginous, prominent. Palpi testaceous; fourth joint of the maxillary palpi longer than the third; third joint of the labial palpi clavate, black at the tip. Antennæ piceous, tawny at the base. Prothorax slightly transverse, with an oblique blackish furrow on each side. Abdomen long; hind borders of the segments piceous. Oviduct slightly curved, rather shorter than the abdomen. Legs stout, rather long; femora with a row of short oblique interrupted black streaks on each side; hind femora with a single row of small black spines which from the first to the fourth successively increase in size; four anterior tibiæ with three rather small black-tipped spines on each side, excluding the apical spines; fore tibiæ contracted near the base; hind tibiæ slightly dilated, with four long

thick black spines on each side and with three minute spines. Length of the body 19 lines.

Slightly narrower than *H. figurata*, to which it is closely allied.

*a, b.* New Zealand. Presented by Dr. Sinclair.

*c.* New Zealand. Presented by Henry Diew, Esq.

#### 6. HEMIDEINA TIBIALIS.

*Fœm.* *Fulva, punctata; caput carina subsulcata, fronte striata; palpi apice piceo; prothorax sulcis duobus obliquis, sulco longitudinali tenuissimo, plaga antica picea; abdominis segmenta piceo marginata; oviductus vix arcuatus, abdomine paullo brevior; pedes breves, crassi, tibiis posticis dilatatis biscriatim quadrispinosis.*

*Female.* Tawny, convex, shining, thinly punctured. Head not broader than the prothorax, with a slight grooved keel between the sockets of the antennæ; front transversely striated. Eyes piceous. Mandibles with piceous tips. Palpi piceous at the tips; fourth joint of the maxillary palpi longer than the third; third joint of the labial palpi clavate. Antennæ very much longer than the body. Prothorax slightly transverse; a very slender middle furrow and an oblique furrow on each side; a piceous patch in front. Abdomen with a narrow piceous band on the hind border of each dorsal segment. Oviduct hardly curved, a little shorter than the abdomen. Legs short, thick; femora with a row of short oblique black streaks on each side; hind femora with a single row of four minute black-tipped spines near the tip; four anterior tibiæ with four small black-tipped spines on each side; fore tibiæ contracted near the base; hind tibiæ dilated, with four long and very stout black spines on each side. Length of the body 15 lines.

The shorter and broader hind tibiæ distinguish it from *H. figurata*.

*a.* New Zealand. Presented by Capt. Stokes.

#### 7. HEMIDEINA ATTENUATA.

*Fœm.* *Testacea, angusta, punctata; caput supra piceum, carina subfoveolata, facie antica clypeoque testaceis; palpi labiales apice fulvi; antennæ piceæ, sat validæ; prothorax fasciis duabus nigris valde indeterminatis, lateribus subreflexis; abdomen nigricante conspersum, apicem versus subcompressum; oviductus subarcuatus, abdomine multo brevior; pedes crassi, tibiis posticis tarsisque ferrugineis illis subdilatatis.*

*Female.* Testaceous, convex, narrow, shining, somewhat roughly punctured. Head piceous, not broader than the prothorax, with a slight grooved keel between the sockets of the antennæ; face in front, labrum and under side testaceous. Eyes livid, small. Palpi testaceous; fifth joint of the maxillary palpi subclavate, as long as the fourth; lateral palpi tawny towards the tips. Antennæ piceous, long, rather stout, testaceous at the base. Prothorax with two very irregular black stripes; each of the inner pair composed of three spots, a black middle spot between the third pair of spots; the outer pair speckled with testaceous, abbreviated in front; borders slightly reflexed. Abdomen minutely blackish speckled, slightly compressed

towards the tip. Oviduct slightly curved, much shorter than the abdomen. Legs thick, moderately long; femora with oblique interrupted black streaks on each side; hind femora beneath with a few slight denticulations on each side, and near the tip with a single row of four small piceous spines which to the fourth successively increase in size; four anterior tibiæ with four short spines on each side; fore tibiæ compressed towards the base; hind tibiæ ferruginous, slightly dilated, with three small spines beneath, with three thick spines on the outer side and with four on the inner side, those on the inner side longer than those on the outer; tarsi ferruginous. Length of the body 15 lines.

The shorter oviduct and the more dilated hind tibiæ distinguish this species from *H. thoracica*.

New South Wales. In Mr. Saunders' collection.

#### 8. HEMIDEINA FUSIFERA.

*Fœm.* *Lutea, punctata; caput piceum, carina subfoveolata, facie labroque luteis; palpi lutei, apice picei; prothorax litura nigra subcithariformi, sulcis duobus obliquis; mesothorax, metathorax et abdominis segmenta marginibus posticis nigricantibus; abdomen compressum; oviductus subarcuatus, abdomine vix brevior; pedes crassi, tibiis posticis rufescentibus subdilatatis biserialim quadrispinosis.*

*Female.* Luteous, convex, shining, punctured. Head piceous, not broader than the prothorax, with a slight grooved keel between the sockets of the antennæ; face and labrum luteous. Eyes piceous, small. Palpi luteous; fifth joint of the maxillary palpi piceous, about one-fourth of the length of the fourth; third joint of the labial palpi piceous, clavate, as long as the second. Prothorax transverse, with a black somewhat lyre-shaped figure in the disk and with an oblique furrow on each side; borders slightly reflexed. Mesothorax, metathorax and dorsal segments of the abdomen with a blackish band on each hind border. Mesothorax and metathorax with a few black speckles. Abdomen compressed. Oviduct slightly curved, almost as long as the abdomen. Legs thick; femora with oblique interrupted black streaks on each side; hind femora with a few denticulations on each side and with a single row of four small spines; four anterior tibiæ with three small spines on each side; hind tibiæ reddish, slightly dilated, with four thick spines on each side, those on the inner side much longer than those on the outer; tarsi reddish. Length of the body 18 lines.

*a.* Richmond River, Australia. From Mr. Leicester's collection.

#### Genus 7. LICOLA.

*Mas.* Corpus crassum, glabrum. Caput subglobosum, prothorace latius. Palpi maxillares longi. Antennæ corpore plus duplo longiores. Prothorax antice latior, sulcis duobus transversis, 2o interrupto. Cerci dense pilosi. Pedes robusti; femora intermedia extus, trispinosa, intus quadrispinosa; femora postica septemspinosa; tibiæ quatuor anteriores quinquespinosæ; tibiæ posticæ extus quadrispinosæ, intus quinquespinosæ.

*Male.* Body stout, convex, smooth, shining. Head very convex, rather broader than the prothorax. Maxillary palpi long. Antennæ much more than twice the length of the body. Prothorax transverse, broadest in front, with two transverse furrows; the first very near the fore border; the second interrupted in the middle. Abdomen with two apical valves. Cerci thickly beset with long hairs, about one-fourth of the length of the abdomen. Legs stout, bristly; fore femora unarmed; middle femora with three small teeth on the outer side and with four on the inner side; hind femora with seven small spines; fore tibiæ with five long spines besides those at the tip, the two on the inner side much longer than the three on the outer side; middle tibiæ with five spines of equal size, two on the outer side and three on the inner side; hind tibiæ with four long spines on the outer side and with five on the inner side. Fore wings a little longer than the hind wings; transverse sectors regular.

#### 1. LICOLA COULONI.

*Anostostoma Couloui*, *Sauss. A. S. E. F. Ame Ser. i.* 490, pl. 12.

a. Java.

#### Genus 8. GRYLLACRIS.

*Gryllacris*, *Serr. Rev. Orth.; Hist. Orth.* 392. *Burm. Handb. Ent.* ii. 717. *Gerst. Wieg. Arch.* xxvi. 245.

The following sections are chiefly copied from De Gerstäcker's monograph. The four long spines on each side of the fore tibiæ are common to the genus except the species of the last section, and are therefore only mentioned when they differ slightly from the typical form.

- a. Winged species. Four anterior tibiæ with five pairs of rather long spines.
- b. Hind wings light-coloured, mostly yellow, their transverse veins bordered with black or brown on both sides.
- c. Fore wings with black transverse veins.

#### 1. GRYLLACRIS LINEOLATA.

*lineolata*, *Serr. Hist. Orth.* 396. *Haan, Bijdragen tot der kennis der Orthoptera*, 219. *Gerstäcker, Wieg. Archiv.* xxvi. 250.

Java.

#### 2. GRYLLACRIS PARDALINA.

*pardalina*, *Gerst. Wieg. Arch.* xxvi. 252.

- a. Ceylon. From the Rev. J. Wenham's collection.
- b. Ceylon. Presented by Dr. Templeton.
- c. Ceylon. From Dr. Thwaites' collection.



## GRYLLACRIS PLAGIATA.

*Fœm.* *Lutea, sat gracilis; caput supra rufum, lateribus nigris; ocelli flavi; palpi testacei, articulis 3o 4oque piceis; prothorax nigro bifasciatus; abdomen vittis duabus nigris angulosis abbreviatis; oviductus subarcuatus, abdomine vix brevior; pedes longiusculi, sat graciles, femoribus apices versus nigro fasciatis; alæ anticæ testaceo-albidæ, nigro biplagiata, venulis transversis nigricantibus fusco marginatis; alæ posticæ pallide cinereæ, venulis transversis nigricantibus fusco submarginatis.*

*Female.* Luteous, smooth, shining, rather slender. Head very little broader than the prothorax, red above, black on each side. Eyes piceous, elongated, rather prominent. Ocelli yellow. Mandibles black. Palpi testaceous; third joint of the maxillary palpi piceous except at the base; fourth piceous, subclavate, testaceous at the tip, almost as long as the third; third joint of the labial palpi clavate. Prothorax a little longer than broad, slightly narrower in front; a black band on the hind border and another on the fore border which is slightly rounded and reflexed; a slight longitudinal furrow and an oblique furrow on each side. Abdomen with an abbreviated black zigzag stripe on each side. Cerci about one-fourth of the length of the oviduct. Oviduct slightly curved upward, nearly as long as the abdomen. Legs pubescent, rather long and slender; femora with a black subapical band; hind femora with eight minute black-tipped spines on each side; hind tibiæ with eight small black-tipped spines on each side. Fore wings testaceous-whitish, as long as the hind wings; longitudinal veins luteous; transverse sectors except towards the base blackish, slightly bordered with brown; a black patch at the base and another in the disk at one-third of the length. Hind wings pale cinereous; longitudinal veins luteous; transverse sectors blackish, indistinctly bordered with brown. Length of the body 16 lines; of the wings 36 lines.

*a.* Silhet. From Mr. Stainforth's collection.

*cc.* Fore wings with the longitudinal and transverse veins yellow.

## 4. GRYLLACRIS MACULICOLLIS.

*maculicollis, Serv. Ann. Sci. Nat. xxii. 139; Hist. Orth. 394. Burm. Handb. Ent. ii. 718. Haan, Bijd. Orth. 220. Gerst. Wiegmann's Arch. xxvi. 253.*

Singapore.

*a.* Corea. Presented by Capt. Sir E. Belcher.

*b, c.* Java.

*d.* ———? From Mr. Children's collection.

## 5. GRYLLACRIS SPURCATA.

*Mas. Fulva; prothorax sulcis duobus transversis arcuatis utrinque connexis; pedes testacei, robusti, femoribus tibiisque apice tarsisque fulvis; alæ anticæ testaceæ; alæ posticæ pallide cinereæ, fasciis octo latis nigricantibus.*

*Male.* Tawny, smooth, shining. Head very little broader than the prothorax, prominent between the eyes, which are piceous and prominent. Fourth joint of the maxillary palpi subclavate, much longer than the third; third joint of the labial palpi clavate. Prothorax with a reflexed border and with two transverse curved furrows which are united on each side; fore border slightly rounded. Legs testaceous, stout, pubescent; hind femora with ten minute black-tipped spines on each side; hind tibiae with seven short black-tipped spines on the outer side and with six on the inner side; tarsi and tips of the femora and of the tibiae tawny. Fore wings testaceous, as long as the hind wings; veins pale. Hind wings pale cinereous, with eight blackish broad bands including the black transverse sectors; subapical band much narrower than the others; transverse veins along the costa luteous. Length of the body 14 lines; of the wings 32 lines.

It has most resemblance to *G. maculicollis*, but the bands of the hind wings are more regular and are not connected near the exterior border, and the last band is much nearer the exterior border.

a. ———.

#### 6. GRYLLACRIS MARGINATA.

*Fæm.* Testacea; frons subsuleata; antennæ corpore plus triplo longiores; prothorax sulcis duobus angulatis; oviductus rufescens, arcuatus, abdomine aequalongus; tibiæ posticæ macula basali nigra; alæ posticæ pallide lutea, fasciis quatuor nigricantibus, 4a latissima marginali.

*Female.* Testaceous. Head prominent and with a slight longitudinal furrow between the sockets of the antennæ. Eyes piceous. Fourth joint of the maxillary palpi subclavate, longer than the third. Antennæ more than thrice the length of the body. Prothorax transverse, with slightly reflexed borders and with an angular furrow on each side. Oviduct reddish, curved, as long as the abdomen. Legs pubescent; hind femora with ten minute black-tipped spines on each side and with black tips; hind tibiae with seven small black-tipped spines on each side and with a black spot near the base. Fore wings as long as the hind wings; veins luteous. Hind wings pale luteous, with four blackish bands; first, second and third bands broad, slightly dislocated; fourth very broad, extending to the border, partly connected with the third, partly divided in the right wing, including three rows of transverse sectors, the latter black. Length of the body 15 lines; of the fore wings 32 lines.

It has most affinity to *G. maculicollis* and to *G. spurcata*, from which it is distinguished by the more luteous hind wings and by their broad blackish border.

Sarawak. In Mr. Saunders' collection.

#### 7. GRYLLACRIS VITIPES.

*Fæm.* Testacea; antennæ piceæ, basi testacea; prothorax transversus, sulcis duobus obliquis unoque transverso antico; oviductus valde arcuatus, abdominis dimidio longior; femora nigro vittata; alæ posticæ pallide testacea, fusco sex fasciata.

*Female.* Testaceous, shining. Head a little broader than the prothorax, globose above. Mandibles black. Fourth joint of the maxillary palpi rather longer than the third; tip black. Antennæ piceous, testaceous at the base. Prothorax transverse, without markings; a transverse furrow near the fore border and an oblique furrow on each side. Cerci lanceolate, finely pubescent, about one third of the length of the oviduct. Oviduct curved upward, rather more than half the length of the abdomen. Femora striped with black; four anterior femora finely setulose beneath; hind femora with about five minute teeth beneath; hind tibiæ with seven minute spines on each side. Fore wings contracted towards the tips, as long as the hind wings; veins of the ground hue; transverse sectors regular. Hind wings paler and more diaphanous, somewhat longer than the abdomen, with six rather irregular brown bands between the transverse sectors, these bands more irregular on the right wing than on the left one. Length of the body 14 lines; of the wings 27 lines.

The much shorter and more curved oviduct, the striped femora and the less distance of the last band from the exterior border of the hind wings distinguish it from *G. maculicollis*.

a. Philippine Isles. From Mr. Cuming's collection.

#### 8. GRILLACRIS SIGNIFERA.

*Gryllus* (*Tettigonia*) *signifera*, *Stoll, Saut. et Gryll.* 26, pl. 12 a, f. 50.

a, b. Silhet. From the Rev. Mr. Stainforth's collection.

#### 9. GRILLACRIS CONTRACTA.

*Fœm. Fulva; caput vitta brevi frontali testacea maculas duas fulvas includente; palporum articulus 5us piceus, subclavatus; prothorax sulcis duobus angulatis; oviductus piceus, perparum arcuatus, abdomine vix longior; pedes breviusculi, sat robusti; alæ anticæ pallide testaceæ; alæ posticæ fasciis sex angustis deviis nigricantibus.*

*Female.* Tawny, smooth, shining. Head a little broader than the prothorax, with a short testaceous stripe between the eyes, including two tawny spots. Eyes piceous. Fifth joint of the maxillary palpi subclavate, piceous except towards the base, a little longer than the fourth; third joint of the labial palpi capitate. Antennæ very slender, much more than twice the length of the body. Prothorax a little broader than long, with slightly reflexed borders; an angular furrow on each side. Cerci about one-sixth of the length of the oviduct; the latter piceous, very slightly curved upward, hardly longer than the abdomen. Legs rather short and stout; hind femora with about seven minute spines on each side, these spines successively increasing in size to the apical one; hind tibiæ with seven rather short spines, attenuate on one side or on the other side. Fore wings pale testaceous, as long as the hind wings; veins a little darker. Hind wings whitish, with six slender blackish bands on the black transverse sectors; these bands towards the base are successively more irregular, the submarginal one very slender. Length of the body 15 lines; of the fore wings 22 lines.

It much resembles *G. signifera*, but the legs are shorter and a little more slender; the hind wings are a little shorter and their bands are fewer and less regular.

a. Hindostan. From Archdeacon Clerk's collection.

#### 10. GRYLLACRIS FUSCIFRONS.

fuscifrons, *Gerst. Wieg. Arch.* xxvi. 255—tessellata? *Haan, Bijd. Orth.* 220.

Java.

A specimen from Bourn in Mr. Saunders' collection appears to be a variety of this species. The oviduct is much longer than the abdomen. The hind wings have six broad black bands and some intermediate black dots; the bands are more regular in the right wing than in the left; the sixth is narrower than the others, and there is an exterior black line.

#### 11. GRYLLACRIS HEROS.

heros, *Gerst. Wieg. Arch.* xxvi. 257.

Amboina.

#### 12. GRYLLACRIS VITTATA.

*Fœm.* *Fulva; caput nigrum, fulvo trimaculatum; palpi testacei, prothorax sulcis nigro marginatis; oviductus arcuatus, abdomine paullo longior; alæ antiçæ testacæ, vitta discoidali nigricante informi abbreviata, venulis transversis nonnullis nigricante nebulosis; alæ postica flavo-albæ, fasciis septem nigris sat latis.*

*Female.* Tawny. Head black, as broad as the prothorax, with three elongated tawny spots between the eyes, the middle one in advance of the other two. Eyes tawny. Palpi testaceous; fifth joint of the maxillary palpi much longer than the fourth; third joint of the labial palpi clavate. Prothorax with a transverse furrow near the fore border and an oblique furrow on each side; furrows bordered with black. Cerci about one-fourth of the length of the oviduct. Oviduct curved upward, a little longer than the abdomen. Legs thick; hind femora with seven spines on each side, these spines successively increasing in size to the apical one; hind tibiæ with seven shorter spines on the outer side and with six on the inner side; the spines on the one side alternate with those on the other. Fore wings testaceous, a little shorter than the hind wings, with an irregular abbreviated discoidal blackish stripe, some of the adjoining transverse sectors clouded with blackish; the other veins tawny, except those in the stripe. Hind wings yellowish white, with seven black irregular rather broad bands; longitudinal veins tawny; transverse sectors black. Length of the body 15 lines; of the fore wings 35 lines.

The stripe on the fore wings and the broad bands on the hind wings distinguish it from *G. fuscifrons*; the former character distinguishes it from *G. heros*, from which it differs in the veins of the fore wings, which are not whitish at the base.

a. Tenasserim. Presented by J. C. D. V. Packman, Esq.

## 13. GRYLLACRIS MACULIPES.

Mas. *Flava, fronte subcarinata; prothorax linea media antice dilatata plagisque duabus magnis strigas quatuor emittentibus nigris; pedes breviusculi, femoribus fascia subapicali lata nigra, tibiis nigro bifasciatus; alæ anticæ pallide testaceæ; alæ posticæ albide, fasciis sex fuscis angustis subangulosis.*

*Male.* Yellow, smooth, shining. Head red, as broad as the prothorax, minutely punctured in front, slightly grooved between the eyes, which are black; clypeus pale yellow in front. Mandibles piceous. Palpi pale yellow; fifth joint of the maxillary palpi notched at the tip, rather longer than the fourth; apical joint of the labial palpi clavate. Prothorax transverse; borders slightly reflexed; markings black; a black line dilated in front, and on each side a large black patch which emits two streaks in front and two behind. Cerci extending very little beyond the tip of the abdomen. Legs rather short, moderately stout; femora with a broad black subapical band; hind femora with five minute black spines on the outer side and with fewer on the inner side; fore tibiæ black at the base and at the tip; four posterior tibiæ with a black band near the base and another near the tip; hind tibiæ with six minute black-tipped spines on each side. Fore wings pale testaceous, almost as long as the hind wings; veins a little darker. Hind wings whitish, with six slender brown slightly zigzag bands on the transverse sectors, which are black; submarginal sectors without a band. Length of the body 11 lines; of the wings 24 lines.

a. Corea. Presented by Capt. Sir E. Belcher.

Fœm? *Flava; caput rufum, margine postico maculisque duabus anticis flavis; prothorax strigis quatuor obliquis maculaque lineolam emittente nigris; oviductus subrectus, abdomine paullo longior.*

*Female?* Yellow. Head red, yellow about the hind border, and with a yellow spot on each side of the clypeus. Apical joint of the labial palpi capitate. Prothorax with two broad oblique black streaks on each side, the anterior streaks joining the fore border, the hind pair having between them a round black spot which emits a short line in front. Oviduct nearly straight, a little longer than the abdomen. Fore tibiæ with two black bands, one near the base, the other near the tip. Bands of the hind wings less regular than those of the male.

The bands on the legs distinguish it from *G. signifera* and from *G. maculicollis*. The bands of the hind wings are less regular than those of *G. signifera*, and are more separated from each other than those of *G. maculicollis*.

b. Sarawak, Borneo. From Mr. Wallace's collection.

## 14. GRYLLACRIS TESSELLATA.

*Locusta tessellata, Drury, Exot. Ins. ii. 80, pl. 42, f. 3—Gryllacris tessellata, Gerst. Wieg. Arch. xxvi. 258.*

Isle Johanna, near Madagascar.

## 15. GRYLLACRIS PUNCTIPENNIS.

Mas. *Testacea; palpi pallidiores; antennæ gracillimæ, corpore quintuplo longiores; prothorax transverse bisulcatus, litura scutiformi albido-testacea; alæ posticæ luteæ, fasciis octo guttularibus nigris.*

*Male.* Testaceous, smooth, shining. Head a little broader than the prothorax, prominent between the sockets of the antennæ. Palpi pale testaceous. Maxillary palpi filiform; fourth joint subclavate, a little longer than the third. Apical joint of the labial palpi clavate. Antennæ very slender, about five times the length of the body. Prothorax with a whitish testaceous scutcheon-shaped figure which consists of a middle longitudinal line and a patch on each side; borders slightly reflexed; two transverse curved furrows. Legs rather stout; hind femora with eight minute spines on each side; four anterior tibiæ with four long spines on each side; hind tibiæ with seven short spines on the outer side and with six on the inner side. Fore wings as long as the hind wings; veins pale. Hind wings luteous, with eight irregular and interrupted black bands; these bands consist of spots which emit a line at each end; the spots in each band from the first to the seventh successively larger and more elongated; a black festooned line beyond the eighth band and a more exterior pale festooned line. Length of the body 15 lines; of the wings 30 lines.

Batchian. In Mr. Saunders' collection.

## 16. GRYLLACRIS ORNATA.

Fem. *Testacea; caput piceum, vertice postico, strigam inter oculos, maculis duabus longiusculis maculaque anteriore rotunda testaceis, facie palpisque ferrugineis; antennæ testacæ, basi picæ, corpore sextuplo longiores; prothorax sulcis duobus obliquis, lateribus anticis cyaneo-nigris; reuter piceus; oviductus corpore multo longior; pedes sat graciles, femoribus subtus cyaneo-nigris, femoribus posticis uniseriatim sexspinosis, tibiis posticis extus sexspinosis intus quinquespinosis; alæ lineis plurimis transversis e guttis fuscis.*

*Female.* Testaceous, convex, smooth, shining. Head piceous, not broader than the prothorax, not prominent between the antennæ; hind part of the vertex testaceous; a streak between the eyes, an elongated spot on each side and an anterior round spot testaceous; face, mandibles and palpi ferruginous. Antennæ testaceous, piceous at the base, about six times the length of the body. Prothorax transverse, with an oblique furrow on each side; borders slightly reflexed; sides bluish black in front. Abdomen piceous beneath. Oviduct much longer than the body. Legs rather slender; four anterior femora ferruginous, bluish black beneath; hind femora bluish black beneath, where there is a single row of four small and two larger and posterior spines; hind tibiæ with six very minute black-tipped spines on the outer side and with five on the inner side. Wings much longer than the body. Fore wings with about twelve transverse lines of minute brown dots. Hind wings cinereous, also with lines of brown dots. Length of the body  $7\frac{1}{2}$  lines; of the wings 20 lines.

The specimen described has a rudimentary reproduced hind leg complete in all its parts, but without spines.

a. Moreton Bay. From Mr. Diggles' collection.

ccc. Fore wings with the longitudinal and transverse veins dark-coloured.

17. GRYLLACRIS PODOCAUSTA.

podocausta, *Hagenbach, MSS.*; *Haan, Bijd. Orth.* 220. *Gerst. Wieg. Arch.* xxvi. 259.

Java.

b. Hind wings dark, brownish or bluish black.

c. Transverse veins of the hind wings whitish.

18. GRYLLACRIS RUFICEPS.

ruficeps, *Serv. Ann. Sci. Nat.* xxii. 139; *Hist. Orth.* 394. *Guér. Belanger, Voy. Ind. Orient. Zool.* 495. *Ins.* pl. 4, f. 2. *Haan, Bijd. Orth.* 220. *Gerst. Wieg. Arch.* xxvi. 259.

Java.

19. GRYLLACRIS NIGRIPENNIS.

nigripennis, *Gerst. Wieg. Arch.* xxvi. 261.

Malabar.

20. GRYLLACRIS LINEOSA.

Fœm. *Testacea*; palporum articulus 4us apice piceus, antennæ nigricantes, basi testaceæ; prothorax plagis duabus trigonis maculisque duabus intermediis nigris; oviductus valde arcuatus, abdomine paullo brevior; pedes sat validi, femoribus posticis fusco vittatis; alæ posticæ nigricantes, fasciis septem gracillimis albidis.

*Female.* Testaceous, shining, smooth. Head as broad as the prothorax. Mandibles black. Palpi filiform; fifth joint of the maxillary palpi piceous and truncated at the tip, a little longer than the fourth. Antennæ blackish, testaceous at the base. Prothorax transverse; fore border very slightly undulating; an oblique furrow on each side and a very slight transverse furrow near the fore border; a large triangular black patch on each side and an intermediate black spot on each side near the fore border. Cerci about one-fourth of the length of the oviduct. Oviduct much curved upward, a little shorter than the abdomen. Legs moderately stout; hind femora with a short brown stripe on the outer side, with eight minute black-tipped spines on the outer side and with five on the inner side; hind tibiæ with seven minute black-tipped spines on each side. Fore wings of one colour, very little longer than the hind wings. Hind wings blackish, with seven very slender whitish bands along the transverse sectors, which are also whitish. Length of the body 11 lines; of the fore wings 30 lines.

It is closely allied to *G. nigripennis*, and the labrum agrees with the description of that species. The head and prothorax are not darker than the fore wings, and the bands on the hind wings are on both sides of the transverse veins.

a. ———?

## 21. GRYLLACRIS DISCOIDALIS.

Mas. *Lutea; frons subsulcata; palpi pallide testacei; antennæ gracilimæ, corpore plus triplo longiores; prothorax sulcis duobus obliquis sulcoque transverso antico; pedes robusti; alæ anticæ pallide testaceæ; alæ posticæ nigricantes, albido guttatæ et marginatæ.*

*Male.* Luteous, smooth, shining. Head a little broader than the prothorax, with a shallow furrow between the sockets of the antennæ. Eyes blackish, prominent. Palpi pale testaceous; fifth joint of the maxillary palpi subelavate, truncated at the tip, a little longer than the fourth; apical joint of the labial palpi capitate. Antennæ very slender, more than thrice the length of the body. Prothorax transverse, with an oblique furrow on each side and a transverse furrow near the fore border, which is slightly arched. Cerei less than one-fourth of the length of the abdomen. Legs stout; hind femora with about nine small spines on each side, these spines successively increasing in size to the apical one; hind tibiæ with eight rather short spines on the outer side and with seven alternate spines on the inner side. Fore wings pale testaceous, a little shorter than the hind wings; veins luteous. Hind wings blackish, whitish only along the costa and along the exterior border; the six bands are elsewhere confluent and include four rows of whitish dots; the seventh band is distinct from the others; the submarginal line of transverse sectors has no band. Length of the body 12 lines; of the wings 36 lines.

It shows a transition between the species with dark bands and those with pale bands. It has most affinity to *G. maculicollis*.

a. ———? From Mr. Children's collection.

## 22. GRYLLACRIS ATRATA.

Mas. *Nigra; frons testacea; palpi piceï; antennæ fulvæ; prothorax sulcis duobus obliquis; pedes robusti, breviusculi, femoribus fulvis apice nigris; alæ nigricantes, renulis transversis albidis.*

*Male.* Black, smooth, shining. Head depressed between the sockets of the antennæ; front testaceous. Eyes ferruginous, very prominent. Palpi piceous; fourth joint of the maxillary palpi subelavate, much longer than the second. Antennæ tawny. Prothorax transverse, with two oblique furrows on each side and with slightly reflexed borders. Legs rather short and stout; femora tawny, black towards the tips; hind femora with six spines on each side, the spines successively increasing in size to the apical one; hind tibiæ with six rather short spines on each side. Wings blackish. Fore wings as long as the hind wings; veins whitish; a few of the longitudinal veins forked; transverse sectors very numerous, mostly regular.



Hind wings with black longitudinal veins and with whitish transverse sectors. Length of the body 12 lines; of the wings 28 lines.

This species resembles *G. venosa* in the somewhat shorter spines of the four anterior tibiæ.

Sarawak. In Mr. Saunders' collection.

cc. Transverse veins of the hind wings mostly dark.

23. GRYLLACRIS NIGRILABRIS.

nigrilabris, *Gerst. Wieg. Arch.* xxvi. 262.

Singapore.

24. GRYLLACRIS SERVILLEI.

Servillei, *Haan, Bijl. Orth.* 220. *Gerst. Wieg. Arch.* xxvi. 263.

Borneo.

25. GRYLLACRIS FUMIGATA.

fumigata, *Gerst. Wieg. Arch.* xxvi. 264.

Java.

26. GRYLLACRIS FUMOSA.

*Fœm.* *Fulva*; *frons vix sulcata*; *antennæ corpore quadruplo longiores*; *prothorax sulcis duobus obliquis*; *oviductus subarcuatus, corpore vix brevior, apice nigricans*; *alæ anticæ testaceæ*; *alæ posticæ fuscæ, albo punctatæ, anticæ albo guttatæ et maculatæ, apud costam testaceæ, venulis transversis nigricante marginatis.*

*Female.* Tawny. Head a little broader than the prothorax, prominent and hardly furrowed between the sockets of the antennæ. Eyes very prominent. Fifth joint of the maxillary palpi subclavate, somewhat longer than the fourth; third joint of the labial palpi clavate. Antennæ about four times the length of the body. Prothorax with slightly reflexed borders and with two oblique furrows on each side. Oviduct slightly curved, almost as long as the body, blackish at the tip. Legs of one colour; hind femora with eight minute black-tipped spines on each side; hind tibiæ with six rather short and slender black-tipped spines on each side. Fore wings testaceous, as long as the hind wings; veins luteous. Hind wings brown; transverse sectors bordered with blackish; several white points in the areolets, and towards the costa several white dots or spots; costal space testaceous. Length of the body 16½ lines; of the wings 36 lines.

It is most allied to *G. nigrilabris*, but the labrum is not black and the tarsi are not darker at the tips.

Sarawak. In Mr. Saunders' collection.

- aa.* Hind wings pellucid, with pale transverse veins.  
*b.* Legs partly black.

## 27. GRYLLACRIS BORNEENSIS.

Borneensis, *Haan, Bijd. Orth.* 219, pl. 19, f. 7. *Gerst. Wieg. Arch.* xxvi. 264.

Borneo.

## 28. GRYLLACRIS TIBIALIS.

tibialis, *Serv. Hist. Orth.* 393. *Haan, Bijd. Orth.* 219. *Gerst. Wieg. Arch.* xxvi. 266.

Java.

## 29. GRYLLACRIS COMBUSTA.

combusta, *Gerst. Wieg. Arch.* xxvi. 267.

Sydney.

## 30. GRYLLACRIS BRACHYPTERA.

brachyptera, *Gerst. Wieg. Arch.* xxvi. 269.

Luzon.

## 31. GRYLLACRIS ÆQUALIS.

*Acheta æqualis*, *Wlk. Ann. Nat. Hist. 3rd Ser.* iv. 221.

*a, b.* Ceylon. Presented by Dr. Templeton.

*c.* Ceylon. From Dr. Thwaites' collection.

*d.* Ceylon. From Mr. Janson's collection.

## 32. GRYLLACRIS INSIGNIS.

*Fœm.* *Lutea; caput prothorace vix latius, strigis quatuor vittisque duabus undulatis nigris, fronte rugulosa; palpi pallide flavi; antennæ nigrae, basi luteæ nigro unimaculatæ; prothorax ritta dilatata strigam guttasque duas luteas includente fasciaque postica informi nigris; arioductus fulvus, subarcuatus, abdomine multo longior; pedes longiusculi, femoribus piceo substrigatis, tibiis anticis supra nigris, tibiis quatuor posterioribus basi nigro unifasciatis; alæ pallide cineræ.*

*Female.* Luteous, convex, smooth, shining. Head hardly broader than the prothorax, slightly prominent between the antennæ; four irregular black streaks on the vertex, the outer pair short; two undulating black stripes connected between the eyes, where they join the outer pair of streaks before mentioned and extend to the labrum, which is rather large and mostly tawny; front finely rugulose. Eyes piceous, prominent. Palpi pale yellow; fifth joint of the maxillary palpi hardly incrassated at the tip, not longer than the fourth; third joint of the labial palpi clavate, obliquely truncated, longer than the second. Antennæ black, not less than twice the length of the body, luteous and with a black spot at the base. Prothorax slightly transverse, with a curved transverse furrow which forms on each side an angle with an oblique furrow; an irregular black band on the hind

border and a black stripe which is dilated on the fore border, and in the middle a luteous dot on each side and a posterior luteous streak, the latter ending in a dot; sides straight. Oviduct tawny, slightly curved upward, much longer than the abdomen. Legs stout, rather long; femora indistinctly streaked with piceous; hind femora with three minute black-tipped spines on the outer side and with two on the inner side, the first of the latter extremely minute; fore tibiæ black above; four posterior tibiæ with a black band near the base; hind tibiæ with four minute black-tipped spines on the outer and with five on the inner side. Wings pale cinereous, full as long as the body; veins pale. Length of the body 16 lines; of the wings 36 lines.

The markings of the head and of the prothorax will distinguish it from *G. tibialis*, to which it seems to have most resemblance.

a. Sydney. Presented by Dr. Sinclair.

### 33. GRYLLACRIS ALIENA.

*Fœm.* *Testacea; caput prothorace latius, antice rugulosum, vertice subglobo, fascia frontali lata nigra; prothoracis latera fere recta; oviductus brevis, valde recurvus; pedes longiusculi, pubescentes, tibiis basi piceo unifasciatis; alæ abdominis dimidio paullo longiores.*

*Female.* Testaceous, smooth, shining. Head rather broader than the prothorax, somewhat tumid on the fore part of the vertex; a broad black band on the front, which is transversely and finely rugulose; face largely rugulose. Eyes piceous, prominent. Mandibles black. Fifth joint of the maxillary palpi longer than the fourth, hardly incrassated at the tip; third joint of the labial palpi clavate, truncated. Prothorax slightly transverse, with a transverse furrow near the fore border and with an oblique furrow on each side; border slightly reflexed, sides nearly straight. Oviduct about one-third of the length of the abdomen, over which it is recurved. Legs stout, pubescent, rather long; hind femora with six minute black spines on each side, four on the inner side extremely minute; tibiæ with a piceous band near the base; hind tibiæ with six minute black-tipped spines on each side. Wings rudimentary, a little more than half the length of the abdomen; fore wings shorter than the hind wings. Length of the body 14 lines.

The specimen described is probably immature. The much-retracted oviduct distinguishes it from the other species here described.

a. Silhet. From the Rev. J. Stainforth's collection.

### 34. GRYLLACRIS PUNICEA.

*punicea, Gerst. Wieg. Arch. xxvi. 270.*

Ceylon.

## 35. GRYLLACRIS POSTICA.

*FÆM.* *Lutea, sat gracilis; frons pallide testacea; oviductus subarcuatus, abdomine longior; pedes robusti, femoribus posterioribus apice subtus nigris, tibiis posticis nigro late unifasciatis; alæ diaphane, testaceo pallido venosæ; alæ anticæ testaceo vix suffusæ, venulis transversis subcostalibus basi fuscis.*

*Female.* Luteous, smooth, shining, rather slender. Head very little broader than the prothorax; front pale testaceous. Eyes piceous, prominent. Palpi pale testaceous; fifth joint of the maxillary palpi subclavate, truncated, longer than the fourth; third joint of the labial palpi clavate. Prothorax transverse, with reflexed borders and with an oblique furrow on each side. Oviduct slightly curved upward, rather longer than the abdomen. Legs stout; four posterior femora black beneath at the tips; hind femora with four small spines on each side, the fourth larger than the others; hind tibiæ with six spines on the outer side and with four on the inner side, and with a broad black band near the base. Wings pellucid, of equal length; veins pale testaceous. Fore wings with a very slight testaceous tinge; transverse veinlet along the costa towards the base brown; arcolelets towards the tip in front of the scapular vein extremely small. Length of the body 14 lines; of the wings 36 lines.

a. ———?

## 36. GRYLLACRIS SIGNIGERA.

*Mas.* *Flava, sat gracilis; caput vittis duabus angustis, fascia vittisque duabus anterioribus angustis nigris; antennæ nigrae, basi luteæ nigro notatæ; prothorax vitta dilatata lincolam interruptum guttasque duas flavas includente fasciæque postica nigris; abdomen ferrugineum, suturis testaceis; pedes robusti, tibiis anticis nigricantibus, tibiis posterioribus nigro unifasciatis; alæ pallide cineræ, testaceo venosæ.*  
*FÆM.*—*Capitis vertex nigro quadrivittatus; thoracis fascia utrinque valde dilatata; oviductus subarcuatus, abdomine perpaullo brevior.*

*Male.* Yellow, rather slender. Head as broad as the prothorax, with two slender black stripes on the vertex, with a black band between the eyes and with a deeply-notched black stripe on each side of the front and of the face; front and face punctured. Eyes ferruginous. Fifth joint of the maxillary palpi subclavate, much longer than the fourth; third joint of the labial palpi capitate. Antennæ black, much more than twice the length of the body, luteous at the base, where there is generally a black spot. Prothorax slightly transverse; a black band on the hind border, extending partly along each side; a black stripe, dilated in the middle, including a yellow dot on each side and an interrupted yellow line; a transverse furrow near the fore border and an angular furrow on each side. Abdomen piceous above; sutures testaceous. Legs stout, rather long; hind femora with three rather short spines on the outer side; hind tibiæ with five minute spines on each side; fore tibiæ blackish above; fore tarsi tawny; four posterior tibiæ with a black band near the base. Wings pale cinereous; veins pale testaceous; transverse sectors numerous, regular. Length of the body 18 lines; of the wings 36 lines. *Female.*—Stripes on

the vertex sometimes interrupted and dislocated; a shorter exterior black stripe on each side. Band of the prothorax much dilated on each side. Oviduct slightly curved upward, very little shorter than the abdomen.

The pale veins of the wings distinguish it from *G. amplipennis*, *signatifrons*, *translucens* and *pallidula*. *G. phryganoides* differs from it in the fore wings, which are luteous at the base. *G. personata* has red spots on the prothorax, and the wings of *G. rubrinervosa* have red veins.

a. New South Wales. From Mr. Pamplin's collection.

b, c. Australia. From Mr. Dame's collection.

d. Australia. From Mr. Stutchbury's collection.

### 37. GRYLLACRIS GENUALIS.

Mas. *Testacea; caput prothorax paullo latius, inter oculos subprominulum; palporum articulus 5us apice piceus, 4o paullo longior; prothorax sulcis duobus obliquis, macula antica transversa fasciæque postica abbreviata testaceis; pedes validi, breviusculi, femoribus apice tibiisque basi nigris, femoribus posticis biserialim quinque-spinosis, tibiis posticis biserialim sex-spinosis; alæ anticæ confertim reticulatæ, piceo venosæ, abdomine longiores; alæ posticæ cinereæ, adhuc longiores.*

*Male.* Testaceous, convex, smooth, shining. Head a little broader than the prothorax, slightly prominent between the eyes. Eyes ferruginous, slightly prominent. Mandibles with black tips. Fifth joint of the maxillary palpi piceous at the tip, a little shorter than the fourth. Antennæ piceous, testaceous at the base. Prothorax black, transverse, with a slight oblique furrow on each side; a transverse testaceous spot on the fore border and an abbreviated testaceous band on the hind border. Legs stout, rather short; femora with black tips; hind femora with five very minute black spines on each side beneath; tibiæ black at the base; hind tibiæ with six minute black-tipped spines on each side. Fore wings thickly reticulated, longer than the abdomen; veins piceous, testaceous at the base. Hind wings cinereous, longer than the fore wings; veins piceous. Length of the body 8 lines; of the fore wings 18 lines.

a. ——— ?

bb. Legs wholly ferruginous.

### 38. GRYLLACRIS AMPLIPENNIS.

*amplipennis, Gerst. Wieg. Arch. xxvi. 271.*

Malabar.

### 39. GRYLLACRIS PHRYGANOIDES.

*phryganoides, Haan, Bijd. Orth. 219. Gerst. Wieg. Arch. xxvi. 273.*

Java.

### 40. GRYLLACRIS SIGNATIFRONS.

*signatifrons, Serv. Hist. Orth. 393. Gerst. Wieg. Arch. xxvi. 273.*

Java.

## 41. GRYLLACRIS TRANSLUCENS.

translucens, *Serv. Hist. Orth.* 394. *Gerst. Wieg. Arch.* xxvi. 273.  
Java.

## 42. GRYLLACRIS PERSONATA.

personata, *Serv. Ann. Sci. Nat.* xxii. 139; *Hist. Orth.* 395. *Haun, Bijl. Orth.* 220. *Gerst. Wieg. Arch.* xxvi. 273.

Java.

## 43. GRYLLACRIS PALLIDULA.

pallidula, *Serv. Hist. Orth.* 395. *Gerst. Wieg. Arch.* xxvi. 273.

Java.

## 44. GRYLLACRIS RUBRINERVOSA.

rubrinervosa, *Serv. Hist. Orth.* 395. *Gerst. Wieg. Arch.* xxvi. 274.

Country unknown.

*bb.* Hind wings with dark transverse veins.

## 45. GRYLLACRIS LONGA.

*Fæm.* *Testacea, fere cylindrica; capitis vertex globosus, linea pallida longitudinali; prothorax fascia postica nigricante; abdomen longium; oriductus vix arcuatus, abdomine multo longior; pedes robusti, longiusculi; alæ cineræ, fusco venosæ.*

*Female.* Testaceous, smooth, shining, nearly cylindrical. Head a little broader than the prothorax, vaulted and with a pale longitudinal line above, punctured in front. Eyes piceous, prominent. Maxillary palpi pale testaceous; fifth joint subelavate, a little longer than the fourth; labial palpi tawny; third joint capitate. Prothorax slightly transverse, with an angular furrow on each side and with a blackish band on the hind border. Abdomen long. Oviduct hardly curved, much longer than the abdomen. Legs stout, rather long; hind femora with four minute spines on the outer side beyond the middle and with three on the inner side; four anterior tibiæ with five long spines on each side; hind tibiæ with four very minute spines on each side. Wings cinereous, of equal length; veins brown; transverse sectors numerous, regular. Length of the body 24 lines; of the wings 40 lines.

The black band on the hind border of the prothorax distinguishes it from the preceding species of this section.

a. Port Stephen, Australia.

## 46. GRYLLACRIS PICEIFRONS.

*Fæm.* *Testacea; caput prothorace paullo latius, antice subtilissime striatum, vertice subgloboso, fronte picea; antennæ fulvæ; prothorax margine antico subarcuato, lateribus subrotundatis; oriductus subarcuatus, apice piceus, abdomine multo longior; pedes longiusculi; alæ posticæ cineræ.*

*Female.* Testaceous, convex, smooth, shining. Head a little broader than the prothorax, very convex above, slightly prominent between the antennæ; fore part perpendicular, transversely and very finely striated; three yellow dots representing the ocelli; front piceous. Eyes prominent. Fifth joint of the maxillary palpi a little longer than the fourth. Antennæ tawny. Prothorax transverse, with a much-rounded furrow on each side; borders slightly reflexed; fore border much rounded in the middle; sides slightly rounded. Oviduct slightly curved upward, piceous towards the tip, much longer than the abdomen. Legs stout, rather long; hind femora with two rows of minute black spines, eight on the outer side, those on the inner side fewer and more minute; hind tibiæ with six small black-tipped spines on the outer side and with five on the inner side. Wings extending a little beyond the abdomen. Hind wings cinereous. Length of the body 18 lines; of the wings 40 lines.

Ceram or Amboina. In Mr. Saunders' collection.

#### 47. GRYLLACRIS PERLOIDES.

Mas. *Lutea, sat gracilis; caput inter antennas planum, piceo uniplagiatum; palpi testacei; prothorax fasciis duabus nigricantibus, 1a brevi infirmi lineam emittente; alæ pallide cinereæ, testaceo venosæ, venulis transversis fuscescentibus.*

*Male.* Luteous, rather slender. Head hardly broader than the prothorax, flat and with a piceous patch between the sockets of the antennæ; front thickly and minutely punctured. Palpi testaceous; fifth joint of the maxillary palpi filiform, hardly longer than the fourth; third joint of the labial palpi capitate. Prothorax transverse, with a blackish band on the fore border and another on the hind border; the first band short, irregular, emitting a line to the disk. Legs stout; hind femora with four short spines on each side; hind tibiæ with about five very minute spines on each side. Wings pale cinereous, of equal length; veins testaceous; transverse sectors brownish, numerous, regular; transverse veins along the costa of the fore wings oblique, testaceous. Length of the body 15 lines; of the wings 36 lines.

a. Australia. From Mr. Damel's collection.

#### 48. GRYLLACRIS SCITA.

Mas. *Lutea, sat gracilis; caput plaga maxima nigra maculam luteam includente; palpi pallide flavi; antennæ corpore triplo longiores; prothorax fascia postica tenui nigricante; pedes robusti; alæ albidæ, venis pallide testaceis, venulis transversis fuscis; alæ anticæ basi testaceo vix suffusæ.*

*Male.* Luteous, smooth, shining, rather slender. Head very little broader than the prothorax, with a very large flat black frontal patch, which includes a nearly round luteous spot. Eyes black, prominent. Mandibles black. Palpi pale yellow; fifth joint of the maxillary palpi subclavate, longer than the fourth; third joint of the labial palpi clavate. Antennæ very slender, about thrice the length of the body. Prothorax transverse; a narrow blackish band on the hind border; a transverse furrow near the fore border and an oblique furrow on each side. Legs stout;

hind femora with seven very minute black-tipped spines on the outer side and with four on the inner side; hind tibiæ with five minute black-tipped spines on the outer side. Wings whitish, of equal length; veins pale testaceous; transverse sectors brown, numerous, regular. Fore wings with a very slight testaceous tinge in the disk towards the base. Length of the body 15 lines; of the wings 34 lines.

The black frontal patch distinguishes it from *G. longa*.

Hindustan. In Mr. Saunders' collection.

#### 49. GRYLACRIS COLLARIS.

Mas. *Lutea, sat angusta; palpi pallide testacei; prothoracis discus niger, luteo biguttatus; pedes robusti; alæ anticæ testaceo subinctæ, testaceo venosæ, venulis transversis fuscis; alæ posticæ diaphanæ, venulis transversis fuscescentibus.*

*Male.* Luteous, smooth, shining, rather narrow. Head hardly broader than the prothorax. Eyes black, prominent. Palpi pale testaceous; fifth joint of the maxillary palpi subclavate, piceous at the tip, longer than the third. Prothorax with a black disk and with slightly reflexed borders; a luteous dot on each side near the hind border. Legs stout; hind femora with four minute spines and one large subapical spine; hind tibiæ with seven spines on the outer side and with six on the inner side, these spines successively increasing in size. Wings of equal length. Fore wings with a very slight testaceous tinge; longitudinal veins testaceous; transverse sectors brown, regular, very numerous towards the tip. Hind wings pellucid; transverse sectors brownish. Length of the body 13 lines; of the wings 36 lines.

It much resembles *G. amplipennis*, but the head is wholly luteous and the fore wings have no brown stripe.

*a.* Silhet. From the Rev. Mr. Stainforth's collection.

#### 50. GRYLACRIS NOBILIS.

Mas. *Fulva, pubescens; caput brevisculum, prothorace rix latius, fronte substriata; palpi pallide fulvi; antennæ corpore plus quadruplo longiores; prothorax disco piceo, lateribus rectis; abdomen filis duobus apicalibus setosis longiusculis; alæ anticæ pallido venosæ; alæ posticæ cineræ.*

*Male.* Tawny, convex, shining, pubescent. Head rather short, hardly broader than the prothorax; front perpendicular, transversely and very slightly striated. Eyes piceous, slightly prominent. Palpi pale tawny; fifth joint of the maxillary truncated and slightly incrassated at the tip, longer than the fourth; third joint of the labial palpi clavate, subsecuriform. Antennæ more than four times the length of the body. Prothorax transverse, with two transverse furrows, the hinder one curved and joining the fore one on each side; disk mostly piceous; sides straight; border slightly reflexed. Abdomen with two setose apical filaments, which are nearly twice the length of the cerci. Legs stout, rather long; hind femora with nine small black-tipped spines on the outer side and with four on the inner side; these spines to the apical one successively increase in



length; four anterior tibiæ with four very long spines; hind tibiæ with seven black-tipped spines on each side successively increasing in length; tarsi broad. Wings somewhat longer than the body; veins pale. Hind wings cinereous. Length of the body 15 lines; of the wings 36 lines.

Singapore. In Mr. Saunders' collection.

#### 51. GRYLLACRIS NASALIS.

*Fœm.* Testacea; caput supra globosum fusco conspersum, labro nigro; prothorax piceo hiplagiatus; oviductus nigricans, valde arcuatus, abdominis dimidio longior; pedes robusti; alæ anticæ pallide testaceæ; alæ posticæ pallide cinereæ.

*Female.* Testaceous, smooth, shining. Head hardly broader than the prothorax, vaulted and speckled with brown between the eyes, flat between the sockets of the antennæ; labrum black. Eyes prominent; their disks piceous. Fifth joint of the maxillary palpi brown, and very little thicker at the tip, much longer than the fourth; third joint of the labial palpi clavate. Prothorax with a transverse furrow near the fore border and with an oblique furrow on each side dividing a piceous patch; borders slightly reflexed. Cerci and oviduct blackish; the latter much curved upward, testaceous at the base, more than half the length of the abdomen. Legs stout; hind femora with seven minute black-tipped spines on each side; hind tibiæ with six of such spines on each side. Wings of equal length; veins pale testaceous; transverse sectors numerous, regular. Fore wings pale testaceous. Hind wings pale cinereous. Length of the body 15 lines; of the fore wings 30 lines.

*a.* Philippine Isles. From Mr. Cumiug's collection.

#### 52. GRYLLACRIS UNIGUTTATA.

*Fœm.* Testacea; frons nigra, striata, luteo unimaculata; prothorax vittis duabus luteis vittaque intermedia nigra; oviductus rectus, corpore paullo longior; pedes validi, femoribus tibiisque apice tarsisque fulvis; alæ pallide cinereæ, testaceo venosæ.

*Female.* Testaceous, smooth, shining. Head rather broader than the prothorax; front black, very minutely striated, with a nearly round luteous spot at a very little in front of the eyes. Eyes piceous, slightly prominent. Fifth joint of the maxillary palpi very slightly clavate, somewhat longer than the third. Prothorax slightly transverse, with a transverse furrow near the fore border, with an angular furrow on each side, and with a slender black stripe which does not extend to the hind border, and is accompanied by two-pale luteous stripes. Oviduct straight, a little longer than the body. Legs rather stout; hind femora with a few rows of minute spines on each side; hind tibiæ with four very minute spines on each side; tarsi and tips of the femora and of the tibiæ tawny. Wings pale cinereous, of equal length; veins testaceous; transverse sectors numerous, regular; transverse veinlets along the costa of the fore wings oblique. Length of the body 12 lines; of the wings 26 lines.

*a.* Australia. Presented by Sir G. Grey.

## 53. GRILLACRIS ARCTATA.

*Fœm.* Testacea, angustata; caput prothorace perpaullo latius, litura frontali V-formi fasciæque anteriore nigris; palporum articulus 5us apice piceus, 4o rix brevior; oviductus ferrugineus, arcuatus, abdomine longior; pedes robusti, breviusculi, femoribus tibiisque posticis biserialim sexspinosi, tarsi ferrugineis; alæ corpore multo longiores, pallido venosæ.

*Female.* Testaceous, narrow, smooth, shining. Head very little broader than the prothorax, hardly prominent between the antennæ; a black V-shaped mark on the front and a black band on the face. Eyes piceous, slightly prominent. Fifth joint of the maxillary palpi piceous at the tip, almost as long as the fourth. Antennæ piceous, testaceous at the base. Prothorax transverse; sides rounded. Oviduct ferruginous, curved upward, rather longer than the abdomen. Legs stout, rather short; hind femora with six very minute black spines on each side; hind tibiæ with six very minute black spines on each side; tarsi ferruginous. Wings much longer than the body. Fore wings with testaceous veins; transverse sectors numerous, regular. Hind wings pale cinereous. Length of the body 8 lines; of the wings 24 lines.

a. Philippine Isles. From Mr. Cuming's collection.

## 54. GRILLACRIS LÆTA.

*Fœm.* Lutea; caput prothorace paullo latius, fascia interrupta arcuata, guttis duabus punctisque duobus anterioribus necnon strigis duabus punctisque sex adhuc anterioribus nigris; palpi maxillares longissimi, articulis 3o 4o et 5o apice nigris; prothorax disco nigro strigam medianam furcatam strigasque duas obliquas luteas includente; oviductus corpori aequalis; pedes robusti, breviusculi, femoribus tibiisque posticis biserialim sexspinosi; alæ antice pallide cinereæ, confertim reticulatæ, piceo venosæ.

*Female.* Luteous, convex, smooth, shining. Head a little broader than the prothorax; vertex with a semicircular interrupted black band; two black dots and two anterior black points between the antennæ; front and face with two black streaks and three black points on each side; labrum black. Eyes slightly prominent. Maxillary palpi very long; joints successively increasing in length; third, fourth and fifth black at the tips. Antennæ piceous, tawny towards the base, which is luteous and has a black dot. Prothorax transverse; disk black, including a middle luteous streak, which is forked hindward, and an oblique luteous streak on each side. Oviduct nearly as long as the body. Legs stout, rather short; spines black; knees piceous; hind femora with six minute spines on each side beneath; hind tibiæ with six minute black spines on each side; tarsi ferruginous. Wings pale cinereous, longer than the body. Fore wings thickly reticulated; veins piceous, testaceous towards the base. Length of the body 12 lines; of the wings 28 lines.

a. Amoy, China. From Mr. Stevens' collection.

55. *GRYLLACRIS VENOSA*.

Fœm. *Rufescente fulva; prothoracis sulcis duobus angulosis longitudinalibus; oviductus subarcuatus, abdomine æquilongus; pedes breviusculi; alæ albide; alæ anticæ nigro venosæ, venulis transversis plurimis bene determinatis; alæ posticæ fusco venosæ.*

*Female.* Reddish tawny, smooth, shining. Head very little broader than the prothorax, prominent and not furrowed between the sockets of the antennæ. Eyes prominent. Fifth joint of the maxillary palpi subclavate, somewhat longer than the fourth; third joint of the labial palpi clavate. Prothorax transverse, with a zigzag furrow on each side; fore border and hind border slightly reflexed. Oviduct slightly curved, as long as the abdomen. Legs rather short; hind femora with nine minute spines on the outer side and with twelve on the inner side; four anterior tibiæ with rather shorter teeth than those of the more typical species; hind tibiæ with four rather short spines on each side and with two apical spines. Wings whitish. Fore wings as long as the hind wings; veins black; twelve longitudinal veins, a few of them forked; transverse sectors very numerous, nearly all regular. Hind wings with brown veins; eight lines of transverse sectors, those towards the base irregular. Length of the body 13 lines; of the wings 27 lines.

The more regular and less oblique transverse sectors distinguish it from most species of the genus.

Sarawak. In Mr. Saunders' collection.

56. *GRYLLACRIS GRACILIS*.

Mas. *Pallide lutea, gracilis; caput prothorace vix latius, inter oculos subprominulum, vertice picco bimaculato; palporum articulus 5us apice piceus et incrassatus; prothorax sulcis duobus obliquis, lituris duabus nigris fere V-formibus; pedes sat graciles, femoribus posticis biserialim quadrispinosis, tibiis posticis biserialim sexspinosis; alæ diaphanæ, corpore duplo longiores, venis pallide testaceis, apud costam basi fulvis. Fœm.—Vertex macula transversa, fascia arcuata interrupta guttisque duabus anterioribus nigris; oviductus rectus, corpore vix brevior; alæ corpore paullo longiores.*

*Male.* Pale luteous, slender, smooth, shining. Head hardly broader than the prothorax, slightly prominent between the eyes; vertex with a piceous spot on each side. Eyes piceous, prominent. Palpi pale yellow; fourth joint longer than the third; fifth hardly shorter than the fourth, piceous and incrassated at the tip. Prothorax transverse, with an oblique furrow and a black nearly V-shaped mark on each side; borders slightly reflexed. Legs rather slender, moderately long; hind femora black beneath towards the tips, with four minute black spines on each side beneath; hind tibiæ with six minute black-tipped spines on each side; tarsi tawny, broad. Wings pellucid, about twice the length of the body; veins pale testaceous. Fore wings with a slight testaceous tinge in the

disk near the base; interno-median vein forked, its fore fork curved; subcostal veins towards the base tawny. Hind wings with white transverse sectors. Length of the body 8 lines; of the wings 39 lines.

Hindustan. In Mr. Saunders' collection.

*Female.* Head with a transverse black spot, a curved interrupted black band and two anterior black dots on the vertex. Oviduct straight, nearly as long as the body; subcostal veins of the fore wings black towards the base. Length of the body  $10\frac{1}{2}$  lines; of the wings 28 lines.

a. N. Bengal. From Lieut. Campbell's collection.

#### 57. GRYLLACRIS MUNDA.

*Fœm.* *Testacea, gracilis, glabra; caput breve, gutta antica pallide flava; palporum articulus 5us 4o vix longior; prothorax transverse bisulcatus, lateribus subreflexis; oviductus subarcuatus, abdomine paulo brevior; pedes sat graciles, femoribus posticis extus sexspinosis intus multispinosis, tibiis posticis biseriatis sexspinosis; alæ pellucidæ, pallido venosæ; alæ anticæ vitta indeterminata pallide testacea.*

*Female.* Testaceous, slender, smooth, shining, paler beneath. Head short, prominent between the eyes, with a pale yellow dot at a little in front of the antennæ. Eyes elongated, prominent. Palpi very slender; fifth joint of the maxillary nearly linear, hardly longer than the fourth. Antennæ long, slender. Prothorax transverse, with two slight transverse furrows and with a slightly reflexed border; first furrow curved very near the fore border; second near the hind border; sides nearly straight. Abdomen full four times the length of the prothorax. Oviduct very slightly curved, a little shorter than the abdomen. Legs rather slender; hind femora with four minute black-tipped spines on the outer side and with several extremely minute spines on the inner side; hind tibiæ with six minute black-tipped spines on each side. Wings pellucid; veins pale testaceous. Fore wings with a very slight testaceous tinge, which chiefly appears in an irregular discoidal stripe. Hind wings with white transverse sectors. Length of the body  $10\frac{1}{2}$  lines; of the wings 24 lines.

a. Australia. From Mr. Stutchbury's collection.

#### 58. GRYLLACRIS MACROCERA.

*Mas.* *Lutea; caput fascia angulata striga anteriore lituraque luniformi nigris; antennæ corpore octuplo longiores; prothorax anticæ latior, latioribus subangulatis; alæ anticæ pallido venosæ; alæ posticæ diaphanæ.*

*Male.* Luteous. Head as broad as the prothorax; an irregular black band on the vertex emitting in front a black streak, which ends in a black crescent-shaped mark. Eyes piceous. Palpi with the usual structure. Antennæ about sixty-four lines in length, and thus eight times the length of the body. Prothorax transverse, much narrower behind than in front, with a transverse furrow near the fore border and an oblique furrow on each side; side borders slightly angular. Legs stout; hind femora with eleven very minute black spines on each side; hind tibiæ with six minute

black-tipped spines on each side. Wings rather longer than the body; veins pale. Hind wings pellucid. Length of the body 8 lines; of the wings about 20 lines.

New Hebrides. In Mr. Saunders' collection.

#### 59. GRYLLACRIS ANGUSTA.

Fœm. *Testacea, angusta, cylindrica; palpi pallidiores; antennæ corpore plus duplo longiores; abdomen productum; oviductus subarcuatus, abdominis dimidio paullo longior; pedes robusti, breves, tibiis posticis apice tantum spinosis; alæ minimæ.*

*Female.* Testaceous, narrow, cylindrical, smooth, shining. Head broader than the prothorax. Eyes tawny. Palpi pale testaceous; fifth joint of the maxillary palpi very little thicker towards the tip, much longer than the fourth; third joint of the labial palpi clavate. Antennæ more than twice the length of the body. Prothorax slightly transverse, with slightly reflexed borders, a little broader in front, with a transverse furrow near the fore border and an undulating furrow on each side. Abdomen long. Oviduct slightly curved upward, a little more than half the length of the abdomen. Legs pubescent, stout, short; hind femora with three minute spines on each side near the tip; hind tibiæ without spines, except at the tips. Wings rudimentary. Length of the body 13 lines.

*a, b.* South Australia. Presented by R. Bakewell, Esq.

Uncertain species belonging to Group *a*.

#### 60. GRYLLACRIS VERTICALIS.

*verticalis*, *Burm. Handb. Ent.* ii. 718. *Gerst. Wieg. Arch.* xxvi. 274.  
Brazil.

#### 61. GRYLLACRIS OCEANICA.

*oceanica*, *Le Guillon, Rev. Zool.* 1841, 293. *Gerst. Wieg. Arch.* xxvi. 274.  
Isle Hamoa.

#### 62. GRYLLACRIS DUBIA.

*dubia*, *Le Guillon, Rev. Zool.* 1841, 293. *Gerst. Wieg. Arch.* xxvi. 274.  
Isle Viti.

#### 63. GRYLLACRIS FRONTALIS.

*frontalis*, *Burm. Handb. Ent.* ii. 718. *Gerst. Wieg. Arch.* xxvi. 274.  
Country unknown.

#### 64. GRYLLACRIS? GLADIATOR.

*Locusta gladiator*, *Fabr. Ent. Syst.* ii. 42—*Gryllacris? gladiator*, *Gerst. Wieg. Arch.* xxvi. 275.  
Tranquebar.

aa. Wingless species. Four anterior tibiæ with the usual structure.

65. GRYLLACRIS BASALIS.

Fœm. *Nigra, subtus lutea; caput prothorace latius, vertice punctato, spinis duabus parvis apud antennis, plagis duabus lateralibus facieque luteis; antennæ corpore fere quadruplo longiores, basi luteæ nigro biguttatæ; prothorax striga antica longitudinali plagisque duabus lateralibus maximis luteis; mesothorax et metathorax lutea uniplagiati; oriductus ferrugineus, arcuatus, abdomini æquilongus; pedes lutei, tibiis quatuor anterioribus basi guttisque nigris, tibiis posticis basi picco bifasciatis.*

*Female.* Black, convex, smooth, shining. Head broader than the prothorax, luteous beneath, punctured above, with a short spine on each side at the base of the antenna; a luteous dot on the front; face luteous; a large luteous patch adjoining the outer side of each eye. Palpi pale yellow; fifth joint of the maxillary palpi incrassated at the tip, a little longer than the fourth; third joint of the labial palpi clavate, obliquely truncated. Antennæ black, very slender, nearly four times the length of the body; first joint luteous, with two black dots. Prothorax transverse, with a transverse furrow near the fore border joining an oblique furrow on each side; a luteous streak joining the fore border and a very large luteous patch on each side. Mesothorax and metathorax with a large luteous patch. Pectus and ventral segments luteous. Oviduct ferruginous, curved upward, as long as the abdomen. Legs luteous, pilose; hind femora with four minute black spines on each side towards the tips; four anterior tibiæ black at the base and with some black dots above, armed on each side with four long spines; fore tibiæ picceous above at the tips; hind tibiæ with two picceous bands at the base and with seven minute black spines on each side; tarsi tawny. Length of the body 9 lines.

a. Bombay. Presented by E. Downes, Esq.

66. GRYLLACRIS COMBINATA.

Mas. *Picca, sat gracilis; caput testaceum, prothorace paullo latius, disco picco; palpi pallide testacei; antennæ basi testaceæ, corpore plus triplo longiores; prothorax subtransversus, disco picco-subnebuloso, lateribus fere rectis; mesothorax et metathorax basi testacei; venter testaceus; pedes breves, crassi.*

*Male.* Picceous, smooth, shining, rather slender. Head a little broader than the prothorax, very convex above, testaceous along the hind border and on each side and towards the mouth; three luteous dots between the eyes, the middle one in advance of the others. Eyes prominent. Palpi pale testaceous; fifth joint of the maxillary slightly thicker at the tip, a little longer than the fourth. Antennæ picceous, testaceous at the base, much more than twice the length of the body. Prothorax slightly transverse, with an oblique furrow on each side; disk mostly clouded with picceous; border slightly reflexed; sides almost straight. Mesothorax and metathorax testaceous at the base. Abdomen testaceous beneath. Legs short, thick; hind femora with three minute black-tipped spines on each

side near the tip; four anterior tibiæ with four hardly long spines on each side. Length of the body 11 lines.

a. Tasmania. Presented by R. Butler, Esq.

#### 67. GRYLLACRIS INCERTA.

Mas. *Testacea; caput prothorace paullo latius, vertice subgloboso, plaga anteriore picea maxima; palpi pallide testacei; prothorax disco piceo, lateribus rectis; pedes breves, pilosi, tibiis posticis non spinosis.*

*Male.* Testaceous, stout, smooth, convex. Head a little broader than the prothorax, somewhat globose above, with a very large piceous patch on the fore part of the vertex and on the basal part of the front, including three testaceous dots, of which the middle is in advance of the others. Palpi pale testaceous; fifth joint of the maxillary longer than the fourth, slightly incrassated at the tip; third joint of the labial clavate, longer than the second. Antennæ not less than twice the length of the body. Prothorax slightly transverse; disk piceous; a slight transverse furrow and two slight oblique furrows; border slightly reflexed; sides straight. Mesothorax, metathorax and abdomen piceous. Legs stout, short, pilose; hind femora with three minute black-tipped spines on each side beneath near the tip; four anterior tibiæ with four hardly long spines on each side; hind tibiæ without spines; tarsi tawny, broad. Length of the body 11 lines.

a. ———?

#### 68. GRYLLACRIS INSOLITA.

Mas. *Picea; caput fulvum, prothorace paullo latius, disco piceo, fronte striata, labro flavo; palpi pallide flavi; antennæ fulvæ; abdomen angustum, ventre testaceo; pedes testacei, sat longi.*

*Male.* Piceous, convex, smooth, shining. Head short, a little broader than the prothorax, tawny behind on each side and in front, with three yellow dots between the antennæ; front transversely and finely striated; labrum yellow. Palpi pale yellow; fifth joint of the maxillary palpi as long as the fourth, tawny and slightly incrassated at the tip. Antennæ tawny. Prothorax transverse, with an angular furrow on each side and with slightly reflexed borders. Abdomen cylindrical, somewhat narrower than the thorax, testaceous beneath. Legs testaceous, stout, moderately long; hind femora with three very minute black-tipped spines on each side beneath near the tips; hind tibiæ with one small subapical spine and with a few minute black-tipped apical spines. Length of the body 13 lines.

Fœm. *Lutea; vertex nigricans; prothorax postice piceus; abdomen ferrugineum; oviductus fulvus, subarcuatus, fere erectus, abdomine vix brevior; pedes pilosi, tibiis posticis non spinosis.*

*Female.* Luteous. Head with a large blackish patch on the vertex. Eyes piceous. Mandibles black towards the tips. Prothorax with the hind part mostly piceous. Abdomen ferruginous. Oviduct tawny, slightly curved, almost erect, nearly as long as the abdomen. Legs stout, pilose, moderately long; hind femora with three minute black-tipped spines on

each side towards the tip; hind tibiæ without spines, except those at the tip. Length of the body 15 lines.

*a, b.* Tasmania. From Dr. Hooker's collection.

*aaa.* Wingless species. Four anterior tibiæ with shorter and generally fewer pairs of spines.

*c.* Hind tibiæ without any spines on the back.

69. *GRYLLACRIS AMBULANS.*

*ambulans*, *Erichson, Wieg. Arch.* viii. 249. *Gerst. Wieg. Arch.* xxvi. 275.

Tasmania.

*cc.* Hind tibiæ with the spines as usual.

70. *GRYLLACRIS CAROLINENSIS.*

*Carolinensis*, *Gerst. Wieg. Arch.* xxvi. 276.

Carolina.

71. *GRYLLACRIS GLOMERINA.*

*glomerina*, *Gerst. Wieg. Arch.* xxvi. 277.

Cape.

72. *GRYLLACRIS SPHINX.*

*sphinx*, *Gerst. Wieg. Arch.* xxvi. 278.

Cape.

Genus 9. *LARNACA.*

*Form.* Corpus glabrum, nitens, subcylindricum, vertice valde rotundato, fronte subpunctata. Prothorax longiusculus, antice subangustior, margine subreflexo, lateribus fere rectis. Cerci graciles. Oviductus brevis, subtus recurvus. Pedes robusti, breviusculi; femora postica crassa, spinis plurimis parvis biserialim armata; tibiæ quatuor anteriores biserialim quinquespinosæ; tibiæ posticæ biserialim septemspinosæ; tibiæ posticæ biserialim septemspinosæ; tarsi latiusculi, articulo 3o brevissimo. Alæ abdomen non superantes.

*Female.* Body convex, smooth, shining, mostly cylindrical. Head hardly broader than the prothorax, much rounded above; fore part perpendicular, with a few punctures; face with a slight middle ridge; labrum elongate. Eyes prominent, nearly elliptical. Antennæ long, slender. Prothorax elongate, a little narrower in front; an angular furrow on each side; border slightly reflexed; sides nearly straight. Cerci slender. Oviduct curved downward, much shorter than the abdomen. Legs stout, rather short; hind femora thick, with a row of fifteen minute spines on each side; four anterior tibiæ with five rather long spines on each side; hind tibiæ with seven small spines on each side; tarsi rather broad; third joint extremely short. Wings extending to the tip of the abdomen. Fore wings with numerous and regular transverse sectors.

This genus hardly differs from *Gryllacris*, except in the structure of the oviduct.



## 1. LARNACA FASCIATA.

Æm. *Lutea*; caput nigro septemguttatum; prothorax vittis duabus nigris deviis ramosis connexis; oviductus ferrugineus; femora nigro unifasciata; tibiæ nigro bifasciatae; alæ anticæ rufescentes, nigro late bifasciatae, apice pallide cinereæ; alæ posticæ albidæ, apice nigricantes.

*Female.* Luteous. Head with four black dots between the eyes, the second in advance of the first and behind the third and the fourth, of which one is on each side; front with a black dot at the base and with three on each side. Mandibles with black tips. Prothorax with four ramose connected and very irregular stripes. Oviduct ferruginous. Femora with a black band near the tip; tibiæ with two black bands, one near the base, the other near the tip; spines of the hind femora and of the hind tibiæ black. Fore wings reddish, with two broad black bands; tips pale cinereous; veins black. Hind wings whitish, blackish at the tips; veins blackish. Length of the body 11 lines; of the wings 16 lines.

a. Sarawak. From Mr. Horsburgh's collection.

## Genus 10. STENOPELMATUS.

*Stenopelmatus*, *Burm. Handb. Ent.* ii. 720.

## Group 1.

## 1. STENOPELMATUS ERINACEUS.

*erinacens*, *Burm. Handb. Ent.* ii. 720.

Australia.

## Group 2.

## 2. STENOPELMATUS TALPA.

*Talpa*, *Burm. Handb. Ent.* ii. 721. *Hald. Stansb. Expl. Utah*, 372.

Mexico. Jalapa.

a. Lower California. Presented by F. Walker, Esq.

## 3. STENOPELMATUS FUSCUS.

*fuscus*, *Hald. Stansb. Expl. Utah*, 372.

Utah.

## Group 3.

## 4. STENOPELMATUS MEXICANUS.

*Mexicanus*, *Sauss. Rev. Zool. Ser. 2*, xi. 210.

Mexico.

## 5. STENOPELMATUS SALLEI.

*Sallei*, *Sauss. Rev. Zool. Ser. 2*, xi. 210.

Mexico.

## 6. STENOPELMATUS MINOR.

minor, *Sauss. Rev. Zool. Ser. 2, xi. 210.*

Mexico.

## 7. STENOPELMATUS SUMICHRASTI.

Sumichrasti, *Sauss. Rev. Zool. Ser. 2, xi. 210.*

Mexico.

## 8. STENOPELMATUS HISTRIO.

histrion, *Sauss. Rev. Zool. Ser. 2, xi. 210.*

Mexico.

## 9. STENOPELMATUS NIETI.

Nieti, *Sauss. Rev. Zool. Ser. 2, xi. 210.*

Mexico.

## Group 4.

## 10. STENOPELMATUS SARTORIANUS.

Sartorianus, *Sauss. Rev. Zool. Ser. 2, xi. 211.*

Mexico.

## 11. STENOPELMATUS CHILENSIS.

Chilensis, *Sauss. Rev. Zool. Ser. 2, xi. 211.*

Chili.

## Group 5.

*Fæm.* Corpus crassum, convexum, glabrum, nitens. Caput breve, prothorace vix latius, carinis duabus parvis inter oculos postice approximatis, fronte facieque punctatis; labro bene determinato. Palpi maxillares longi; articuli 4us et 5us subelavati, 3o longiores. Prothorax transversus, margine antico retracto piloso, lateribus fere rectis. Cerci breves. Oviductus arenatus. Pedes crassi, breves; femora inermia; tibiæ quatuor anteriores biscriatim bispinosæ; tibiæ posticæ biscriatim quinquespinosæ; tarsi graciles.

*Female.* Body very stout, convex, smooth, shining. Head short, hardly broader than the prothorax; front and face rounded, punctured, perpendicular; two slight ridges between the eyes, converging hindward; labrum prominent. Eyes elongated, of moderate size, not prominent. Maxillary palpi long; first and second joints short; fourth and fifth subelavate, of equal length, longer than the third. Third joint of the labial palpi subelavate, longer than the second. Antennæ long, slender. Prothorax transverse; a transverse furrow before the middle; fore border retracted, pilose; sides nearly straight. Abdomen thick. Cerci short. Legs thick, short; femora unarmed; four anterior tibiæ with two short spines on each side; the two on the inner side near the tip long, thick; the first on the outer side small, near the base; the second near the tip, much larger than the first, but much smaller than those on the inner side; apical circle of three spines, one much larger than the others; hind tibiæ

with five stout spines on each side, those from the first to the fifth successively increasing in size; apical circle of six spines; tarsi slender; fourth joint much longer than all the others.

#### 12. STENOPELMATUS POLITUS.

*Fœm.* *Rufus; mandibulæ nigræ, punctatæ; prothorax nigricans, marginæ antico rufæ; abdominis dorsum nigrum; oviductus brevis, apice nigricans; alæ anticae nigræ.*

*Female.* Red. Eyes testaceous. Mandibles black, punctured. Prothorax blackish; fore border red. Abdomen black above. Cerci and oviduct blackish towards the tips; the latter less than one-fourth of the length of the abdomen. Spines of the tibiæ with black tips. Fore wings black. Length of the body 16 lines.

The fore wings of the specimen described are rather shorter than the abdomen, and appear to be not fully developed.

*a.* Orizaba. From M. Sallé's collection.

#### 13. STENOPELMATUS ERYTHROMELAS.

*Fœm.* *Rufescente fulvus; caput prothorace vix latius, antice punctatum; mandibulæ nigricantes; palpi apice piceï; abdomen dorso nigricante, segmentis ventralibus nigro marginatis; oviductus brevis, apice nigricans; tibiæ quatuor anteriores trispinosæ; tibiæ posticæ extus trispinosæ, intus quinquespinosæ.*

*Female.* Reddish tawny, smooth, shining, very stout. Head hardly broader than the prothorax; fore part thickly punctured; mandibles blackish. Eyes piceous, smaller than those of the preceding species. Palpi with piceous tips. Prothorax like that of *S. politus* in structure. Abdomen blackish above; hind borders of the ventral segments black. Oviduct like that of *S. politus*. Fore tibiæ with two spines on the outer side and one on the inner side; first outer spine beyond the middle; second near the tip; inner spines much larger than the others; middle tibiæ also with three spines, but the first on the outer side is nearer the tip; hind tibiæ with three spines on the outer side and with five on the inner side; the first and fifth of the latter are much smaller than the others. Length of the body 14 lines.

This and *S. politus* may be one species. There are traces of wings.

*a.* Mexico. From Mr. Glennie's collection.

#### 14. STENOPELMATUS LYCOSOIDES.

*Mas.* *Rufescente fulvus; caput antice punctatum, prothorace non latius; oculi parvi; palpi apice piceï; abdominis dorsum nigricans, rugulosum; cerci nigricantes, breves, graciles; tibiæ anticae trispinosæ; tibiæ intermediæ quadrispinosæ; tibiæ posticæ extus quadrispinosæ, intus quinquespinosæ.*

*Male.* Reddish tawny, smooth, shining. Head short, not broader than the prothorax, with a band of four piceous spots on the fore part of the vertex; fore part thickly punctured. Eyes small, not prominent. Palpi with piceous tips. Prothorax in structure like that of *S. politus*.

Abdomen blackish and rugulose above. Cerei blackish, short, slender. Legs tawny, very stout; fore tibiæ with two small spines on the outer side beyond the middle and with one larger spine on the inner side near the tip; middle tibiæ with three spines on the outer side and with one spine on the inner side; hind tibiæ with four spines on the outer side and with five on the inner side, the fifth very small. Length of the body 12 lines.

It is apterous, and may be the male of the preceding species. It agrees generally with the description of *S. mexicanus*, but the description of the latter does not quite accord with the specimen here recorded.

a. Mexico. Presented by E. P. Coffin, Esq.

#### Group 6.

*Mas.* Corpus robustum, glabrum. Caput magnum, prothorace latius, inter antennas bicarinulatum, antice subpunctatum; vertex trilineatus; labrum sat magnum. Palpi maxillares longi, graciles. Prothorax antice latior, sulcis duobus transversis, 2a interrupta, marginibus antice et postice subexcavatis, lateribus fere rectis. Abdomen subcompressum, prothorace angustius et plus duplo longius; sexualia parva. Pedes crassi, setulosi, brevisculi; femora postica subtus quinquespinoza; tibiæ antice supra subtusque bispinozæ; tibiæ posticæ extus quadrispinozæ, intus quinquespinozæ.

*Male.* Body stout, convex, smooth, shining. Head large, broader than the prothorax, with three slightly impressed longitudinal lines on the vertex; two short slight keels between the eyes; fore part vertical, very slightly and thinly punctured; labrum rather large. Eyes pyriform, rather small, slightly prominent. Maxillary palpi long, slender. Third joint of the labial palpi clavate, not longer than the second, with a distinct apical vesicle. Prothorax transverse, broader in front, with two transverse furrows, the first near the fore border, the second interrupted in the middle; border slightly reflexed; fore border and hind border slightly excavated; sides nearly straight. Abdomen slightly compressed, narrower than the prothorax and more than twice its length; apical appendages small. Cerei of the usual size. Legs thick, setulose, rather short; hind femora with five very minute spines beneath; fore tibiæ with two small spines beneath and with two larger spines above; hind tibiæ with four small spines on the outer side and with five on the inner side; tarsi slender; third joint very short.

#### 15. STENOPELMATUS PALLIDUS.

*Mns.* *Pallide testaceus; mandibule apice nigra; abdominis segmenta piceo fasciata.*

*Male.* Pale testaceous. Mandibles with black tips. Abdomen with a piceous band on the hind border of each segment. Spines and claws with black tips. Length of the body 11 lines.

a. ———? Presented by the Lords of the Admiralty.

#### Group 7.

*Mas.* Corpus crassum, glabrum. Caput maximum, prothorace latius, antice punctatum et bicarinulatum; vertex valde rotundatus; labrum sat

magnum. Mandibulæ aspere punctatæ. Oculi parvi. Palpi maxillares sat longi; articulus 5us subclavatus, 4o brevior. Prothorax sulcis duobus transversis, 2a undulata, margine subreflexo, lateribus undulatis. Abdomen subcompressum, sat angustum. Pedes breves, crassi; tibiæ anticæ bispinosæ; tibiæ intermediæ trispinosæ; tibiæ posticæ extus trispinosæ, intus quadri-spinosæ.

*Male.* Body thick, convex, smooth, shining. Head very large, broader than the prothorax, very convex above, punctured and vertical in front; two slight broad ridges converging upward from the face; labrum rather large. Mandibles roughly punctured. Eyes small, oval. Maxillary palpi moderately long; fourth joint much longer than the second; fifth subclavate, shorter than the fourth. Third joint of the labial palpi clavate, very little longer than the second. Prothorax transverse; first transverse furrow very near the fore border; second undulating, at a little in front of the middle; border very slightly reflexed; sides undulating. Abdomen slightly compressed, much narrower than the prothorax. Cerci short, lanceolate. Legs short, very thick; femora unarmed, furrowed beneath; tibiæ with an apical circle of six spines; fore tibiæ with two spines beneath; middle tibiæ with one spine on each side and with one above nearer the base; hind tibiæ with three spines on the outer side and with four larger spines on the inner side; tarsi slender; third joint very short.

#### 16. STENOPELMATUS CEPHALOTES.

Mas. *Fulvus; facies piceo fasciata; abdominis dorsum piceum.*

*Male.* Tawny. Face with a piceous band. Mandibles piceous. Abdomen piceous above. Claws and spines of the tibiæ with black tips. Length of the body 15 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wool.

#### Group 8.

#### 17. STENOPELMATUS DREGII.

Dregii, *Burm. Handb. Ent.* ii. 721.

Cape.

#### 18. STENOPELMATUS PATTERSONII.

Gryllus (Acheta) Pattersonii, *Stoll, Saut. et Gryll.* 7, pl. 4 c, f. 16—18  
—*Stenopelmatus Pattersoni*, *Burm. Handb. Ent.* ii. 721.

Cape.

#### 19. STENOPELMATUS PORTENTOSUS.

Gryllus portentosus? *Schrift, Gesellsch. Naturf. Freunde*—*Stenopelmatus portentosus*, *Burm. Handb. Ent.* ii. 721—*Locusta (Anastostoma) portentosa*, *Huan, Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 218.

South Africa.

#### Group 9.

*Fæm.* Corpus crassum, convexum, glabrum, nitens. Caput breve, prothorace paullo latius, antice subretractum. Oculi subprominuli. Palpi maxillares longi; articulus 5us 4o paullo longior. Antennæ graciles.

Prothorax transversus, marginibus subreflexis, lateribus rotundatis. Abdomen breve. Oviductus valde arcuatus, abdomine longior. Pedes validi, brevisculi; femora postica extus trispinosa, intus quinespinosa; tibiæ quatuor anteriores biserialim trispinosæ; tibiæ posticæ biserialim quadrispinosæ; tarsi breves, lati.

*Female.* Body thick, smooth, shining, convex. Head short, a little broader than the prothorax; front and face inclined hindward. Mandibles curved, lanceolate, acute. Eyes of moderate size, slightly elongated and prominent. Palpi slender, filiform. Maxillary palpi long; first and second joints short; third, fourth and fifth long; third and fourth of equal length; fifth a little longer than the fourth. Antennæ long, slender. Prothorax transverse; borders slightly reflexed; sides rounded. Mesothorax and metathorax well developed. Abdomen short. Cerci less than one-fourth of the abdomen. Oviduct much curved upward, rather longer than the abdomen. Legs stout, rather short, slightly pubescent; femora grooved beneath; four anterior femora unarmed; hind femora with three small spines on the outer side and with five on the inner side; four anterior tibiæ with three rather long spines on each side beyond the middle; hind tibiæ almost as long as the hind femora, with four short spines on each side; tarsi with four short broad joints.

## 20. SIENOPELMATUS GUTTIFRONS.

*Fam.* *Fulvus*; *frons nigra, luteo unimaculata*; *antennæ picæ, basi fulvæ*; *abdomen piccum*; *oviductus fulvus.*

*Female.* Tawny. Front black, flat, with a round luteous spot at a little in front of the sockets of the antennæ. Mandibles with black tips. Antennæ piccous, tawny at the base. Abdomen and cerci piccous. Oviduct tawny. Tarsi piccous. Length of the body 7 lines.

*a.* Swan River. Presented by Sir J. Richardson.

## Group 10.

*Fam.* Corpus crassum, glabrum, fere cylindricum. Caput prothorace non latius, supra valde rotundatum, antice punctatum. Oculi parvi. Palpi maxillares sat validi; articulus 5us subclavatus, 4o paullo longior. Prothorax antice paullo latius, sulcis duobus transversis, 2a subundulata. Sternum punctatum. Abdomen vix compressum, prothorace fere quadruplo longius. Oviductus arenatus, cercis duplo longior. Pedes crassi, brevisculi; tibiæ quatuor anteriores biserialim bispinosæ; tibiæ posticæ extus trispinosæ, intus quadrispinosæ. Alæ vix ullæ.

*Female.* Body thick, nearly cylindrical, smooth, shining. Head not broader than the prothorax, very convex above, punctured in front; labrum large, prominent. Mandibles punctured. Eyes small, oval, not prominent. Palpi rather stout, moderately long, with a slight apical vesicle; fifth joint of the maxillary palpi subclavate, a little longer than the fourth; third joint of the labial clavate, longer than the second. Antennæ long, slender. Prothorax transverse, a little broader in front, with two transverse furrows; first near the fore border; second less determinate, slightly undulating. Sternum punctured. Prosternum with a ridge on each side. Abdomen rather long, very slightly compressed, nearly four times the length of the prothorax.

Cerci lanceolate. Oviduct curved upward, about twice the length of the cerci. Legs thick, rather short; femora without spines; tibiæ with an apical circle of six spines; four anterior tibiæ with two spines on the outer side and with two near the tip on the inner side; hind tibiæ with three spines on the outer side and with four larger spines on the inner side; tarsi slender; second and third joints very short. Wings rudimentary.

#### 21. STENOPELMATUS PICEIVENTRIS.

*Fœm.* *Fulvus*; *vertex et prothoracis discus subpicei*; *mandibulæ apice nigre*; *antennæ ferrugineæ, basi fulvæ*; *abdomen piceum, subtus basi fulvum*; *oviductus piceus, apice fulvum.*

*Female.* Tawny. Head above with a slight piceous tinge. Eyes blackish. Mandibles black towards the tips. Antennæ ferruginous, tawny at the base. Disk of the prothorax slightly piceous. Abdomen piceous; under side tawny at the base. Cerci tawny. Oviduct piceous, tawny at the tip. Spines of the tibiæ with black tips. Length of the body 18 lines.

*a.* ———?

#### Group 11.

*Mas.* Corpus convexum, glabrum, nitens, sat robustum, fere cylindricum. Caput prothorace paullo latius; vertex lineolis quatuor longitudinalibus subimpressis, carinulis duabus anterioribus. Prothoracis latera subrotundata. Abdomen prothorace triplo longius. Pedes breviusculi; tibiæ quatuor anteriores trispinosæ; tibiæ posticæ biserialim quinque-spinosæ.

*Male.* Body convex, smooth, shining, rather stout, nearly cylindrical. Head a little broader than the prothorax; vertex rounded, with four slightly impressed longitudinal lines; two slight ridges between the eyes, diverging in front; fore part vertical. Eyes pear-shaped, slightly prominent. Prothorax transverse, with a transverse furrow near the fore border; sides slightly rounded. Abdomen about twice the length of the prothorax. Legs stout, rather short; four anterior tibiæ with two spines on one side and with two larger spines on the other side; hind tibiæ with five spines on each side; tarsi rather slender.

#### 22. STENOPELMATUS ZONATUS.

*Mas.* *Testaceus*; *prothorax piceo bifasciatus*; *abdominis segmenta nigro marginata.*

*Male.* Testaceous. Eyes piceous. Mandibles with black tips. Prothorax with a piceous band on the fore border and another on the hind border. Abdomen with a black band on the hind border of each dorsal segment. Spines and claws with black tips. Length of the body 13 lines.

*a.* ———?

#### Group 12.

*Mas.* Corpus crassum, glabrum. Caput prothorace paullo latius, carinulis duabus inter oculos connexis antice deflexis; frons et facies

transverse striatæ; labrum magnum, subtiliter punctatum. Palpi maxillares longi; articulus 5us subclavatus, 4o paullo brevior. Antennæ longæ. Prothorax sulcis duobus transversis, 2a interrupta, lateribus subreflexis et rotundatis, margine postico subexcavato. Abdomen incrassatum, prothorace plus duplo longius. Pedes crassi, pilosi; femora postica extus quatuor intus plurimis spinis armata; tibiæ quatuor anteriores extus tribus intus duabus spinis armatæ; tibiæ posticæ extus quatuor intus sex spinis armatæ.

*Male.* Body thick, convex, smooth, shining. Head a little broader than the prothorax; two slight ridges between the eyes connected above and diverging towards the front, which, like the face, is finely and transversely striated; labrum large, minutely punctured. Fifth joint of the maxillary palpi subclavate, a little shorter than the fourth; third joint of the labial palpi clavate. Eyes pyriform, rather small, not prominent. Antennæ long, slender. Prothorax transverse, with two transverse furrows, the first near the fore border, the second interrupted and before the middle; sides slightly reflexed and rounded; hind border slightly excavated. Metasternum large. Abdomen very thick, more than twice the length of the prothorax. Cerci lanceolate, short. Legs thick, pilose, moderately long; hind femora with ten or eleven very minute spines on the inner side and with four on the outer side; fore tibiæ with three large spines on the outer side and with two larger spines on the inner side; apical circlelet of all the tibiæ composed of four spines; middle tibiæ with three spines on the outer side, with two on the inner side and with one above; hind tibiæ with four spines on the outer side and with six longer spines on the inner side; tarsi rather long and slender; second joint about half the length of the first; third much shorter than the second; fourth rather shorter than the first.

### 23. STENOPELMATUS PINGUIS.

*Mas.* *Piceus, subtus fulvus; caput margine postico, lateribus fascia frontali, facie, palpis antennisque fulvis; vertex linea longitudinali pallide fulva; abdomen fulvum, lateribus pustulatis; pedes fulvi, femoribus tibiisque supra nigricantibus.*

*Male.* Piceous, tawny beneath. Head with a pale tawny longitudinal line on the vertex; hind border, sides, a band on the front, face, labrum, palpi and antennæ tawny. Eyes testaceous. Abdomen tawny; dorsal segments slightly postulated on each side. Legs tawny; femora and tibiæ blackish above; spines with black tips. Length of the body 22 lines.

- a. South Africa. From Mr. Pearson's collection.  
b. South Africa.

### Group 13.

*Mas.* Corpus robustum, convexum, glabrum, nitens. Caput prothorace latius, inter antennas planum, vertice subgloboso, fronte striata, labro magno. Oculi parvi, longiusculi. Palpi maxillares longi, graciles; articulus 4us 5o longior. Palpi labiales articulo 3o sublavato. Antennæ longæ, graciles. Prothorax breviusculus, marginibus antico et postico subexcavatis, lateribus subundulatis. Metasternum magnum. Abdomen breve, apice laminis duabus lateralibus instructum. Cerci breves. Pedes



robusti, setosi, brevisculi; femora inermia; tibiæ quatuor anteriores biserialitè quadrispinosæ; tibiæ posticæ extus quadrispinosæ, intus quinque-spinosæ.

*Male.* Body stout, convex, smooth, shining. Head broader than the prothorax, very convex above, flat between the antennæ, perpendicular and finely and transversely striated in front; labrum large. Eyes small, elongated. Maxillary palpi long, slender; third and fifth joints shorter than the fourth; apical vesicle very distinct. Labial palpi short; third joint subclavate, longer than the second. Antennæ long, slender. Prothorax very much broader than long, broadest in front, with three transverse furrows; first near the fore border; second interrupted in the middle; third very near the hind border; fore border and hind border slightly excavated; sides slightly undulating. Metasternum large. Abdomen short; tip with large lateral laminae. Cerci short. Legs stout, setose, rather short; femora unarmed; four anterior tibiæ with four stout spines, the two on the outer side longer and more remote from the tips than those on the inner side; hind tibiæ with four small spines on the outer side and with five on the inner side; five rather long spines, forming the apical circlet; tarsi moderately broad.

#### 24. STENOPELMATUS BICOLOR.

*Mas.* Testaceus; vertex lineis quatuor longitudinalibus piceis impressis; prothorax margine antice nigricante, margine postico piceo; abdominis segmenta nigricante marginata; tibiæ piceo vittatæ.

*Male.* Testaceous. Vertex with four longitudinal piceous impressed lines. Eyes piceous. Prothorax blackish along the fore border, irregularly piceous along the hind border. Abdominal segments with a blackish band on the hind border, those towards the tip nearly wholly blackish; apical appendages testaceous. Tibiæ with a piceous stripe on the outer side; spines mostly with black tips. Length of the body 12 lines.

*a.* Cape. Presented by R. W. Townsend, Esq.

#### Genus 11. LEZINA.

*Mas.* Corpus robustum, convexum, subtomentosum. Caput prothorace paullo latius, inter antennas subprominulum; frons recte declivis; clypeus parvus. Palpi graciles, filiformes, subsetulosi, longissimi; articuli 3us, 4us et 5us subæquales. Antennæ corpore plus triplo longiores. Prothorax sulco medio transverso, lateribus subreflexis. Prosternum inerme. Abdomen breve, subclavatum; sexualia parva. Cerci filiformes, setosi, gracillimi, abdomine non breviores. Pedes longi, graciles, subsetosi; femora biserialitè octospinosa; tibiæ quatuor anteriores spinis paucis biserialitè armatæ; tibiæ posticæ spinis plurimis biserialitè armatæ.

*Male.* Body stout, convex, minutely tomentose. Head a little broader than the prothorax, vertical in front, slightly prominent between the sockets of the antennæ; clypeus and mandibles small. Eyes slightly prominent. Maxillary palpi slender, filiform, minutely setulose, very long, about thrice the length of the labial palpi; third, fourth and fifth joints about equal in length. Antennæ very long and slender, more than thrice the length of the body. Prothorax transverse, with a transverse middle

furrow; borders slightly reflexed. Prosternum not dentate. Abdomen not longer than the thorax, slightly increasing in thickness from the base to the tip; apical appendages small. Cerci filiform, setose, very slender, as long as the abdomen. Legs long, slender, slightly setose; femora furnished beneath with two rows of about eight minute spines; four anterior tibiæ with three, four or five spines on each side; hind tibiæ with eleven minute spines on the outer side and with twelve on the inner side and with four long apical spines; tarsi slender.

#### 1. LEZINA CONCOLOR.

Mas. *Testacea*; palporum articulus 5us apice piceus; antennæ piceæ, basi testacea; abdominis segmenta dorsalia marginibus posticis fusciscentibus.

Male. Testaceous. Eyes piceous. Fifth joint of the maxillary palpi piceous at the tip. Antennæ piceous, testaceous towards the base. Hind borders of the abdominal dorsal segments brownish. Spines of the legs with black tips; knees piceous. Length of the body 14 lines.

a, b. Egypt. Presented by J. Burton, Esq.

#### Genus 12. RHAPIDOPHORA.

Rhapidophora, *Serr. Hist. Orth.* 389. *Burm. Germ. Zeits.* ii. 61.

##### 1. RHAPIDOPHORA PICEA.

picea, *Serr. Hist. Orth.* 391.

Java.

a—d. Silhet. From Mr. Argent's collection.

#### Genus 13. HADENÆCUS.

Hadenæcus, *Scud. Journ. Bost. Soc. Nat. Hist.* vii. 439—Rhapidophora, *Fisch. Orth. Eur.* 199.

##### 1. HADENÆCUS PALPATUS.

Gryllus pupus Europæus, *De Vill. Ent.* 451, pl. 1—*Locusta palpata*, *Sulz. Abgek. Gesch. Ins.* 83, pl. 9, f. 2—Rhapidophora palpata, *Charp. Orth.* 44; *Germ. Zeitsch.* iii. 319. *Fisch. Orth. Eur.* 200, pl. 11, f. 1—*Phalangopsis araneiformis*, *Germ. Burm. Handb. Ent.* ii. 722, 1014.

S. France. Dalmatia. Sicily.

##### 2. HADENÆCUS CAVICOLUS.

*Locusta cavicola*, *Kollar, Beitr. Landesk.* iii. 80—*Phalangopsis latebrarum*, *Herr.-Sch. Nomencl.* ii. 15—*latebricola*, 26, Mas.—Rhapidophora cavicola, *Fisch. Orth. Eur.* 201, pl. 11, f. 2.

Carniola. Illyria.

## 3. HADENÆCUS SUBTERRANEUS.

Raphidophora subterranea, *Scudd. Bost. Soc. Nat. Hist.* viii. 8—Hadenæcus subterraneus, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 440—Raphidophora cavernarum? *Sauss. A. S. E. F. 4me Ser.* i. 492.

Mammoth Cave, Kentucky.

## Genus 14. CEUTHOPHILUS.

Ceuthophilus, *Scudder, Journ. Bost. Soc. Nat. Hist.* vii. 433.

## 1. CEUTHOPHILUS MACULATUS.

Ephippigera maculata, *Say, MSS. Han. Cat. Ins. Mass.* 56—Raphidophora maculata, *Harris, Treat. Ins.* 1841, 126. *Fitch, Amer. Journ. Agric.* vi. 146. *Pack. Rep. Nat. Hist. Maine*, 1861, 375. Phalangopsis maculata, *Harris, Treat. 3rd Edit.* 155, f. 73—Raphidophora lapidicola (pars), *Burm. Germ. Zeits. Ent.* ii. 72. *Scudd. Proc. Bost. Soc. Nat. Hist.* viii. 7—Ceuthophilus maculatus, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 434.

a, b. Nova Scotia. From Lieut. Redman's collection.

## 2. CEUTHOPHILUS BREVIPES.

brevipes, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 434.

Maine.

## 3. CEUTHOPHILUS LAPIDICOLUS.

Phalangopsis lapidicola, *Burm. Handb. Ent.* ii. 723—Raphidophora lapidicola (pars), *Burm. Germ. Zeits. Ent.* ii. 72. *Scudd. Proc. Bost. Soc. Nat. Hist.* viii. 7—Ceuthophilus lapidicolus, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 435.

Pennsylvania. Maryland. Georgia.

a, b. Indiana. Presented by F. Walker, Esq.

## 4. CEUTHOPHILUS UHLERI.

Uhleri, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 435.

Maryland.

## 5. CEUTHOPHILUS SCABRIPES.

Phalangopsis scabripes, *Hald. Proc. Ac. Nat. Sci. Phil.* vi. 364—Raphidophora scabripes, *Scudd. Proc. Bost. Soc. Nat. Hist.* viii. 7—Ceuthophilus scabripes, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 436.

Alabama.

## 6. CEUTHOPHILUS DIVERGENS.

divergens, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 436.

Nebraska.

## 7. CEUTHOPHILUS LATENS.

*latens*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 437.

Illinois.

## 8. CEUTHOPHILUS NIGER.

*niger*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 437.

Illinois.

## 9. CEUTHOPHILUS CALIFORNIANUS.

*Californianus*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 438.

San Francisco.

*a-c.* Vancouver's Isle. Presented by Dr. Lyall.

## 10. CEUTHOPHILUS STYGIUS.

*Raphidophora stygia*, *Scudd. Bost. Soc. Nat. Hist.* viii. 9—*Ceuthophilus stygius*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 438.

Kentucky.

## 11. CEUTHOPHILUS AGASSIZII.

*Raphidophora Agassizii*, *Scudd. Proc. Bost. Soc. Nat. Hist.* viii. 11—*Ceuthophilus Agassizii*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 439.

Georgia.

## 12. CEUTHOPHILUS GRACILIPES.

*Phalangopsis gracilipes*, *Hald. Proc. Am. Ass. Adv. Sci.* ii. 346—*Raphidophora gracilipes*, *Scudd. Gen. Rhaph. Proc. Bost. Soc. Nat. Hist.* vii. 7—*Ceuthophilus gracilipes*, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 439.

New York. Illinois. New Jersey.

## 13. CEUTHOPHILUS SCRIPTUS.

*Fœm.* *Pallide luteus*; *vertex lineis quatuor nigris longitudinalibus*; *palporum articulus 3us 4o multo longior, 5o multo brevior*; *prothorax vittis duabus nigris antice et postice dilatatis luteoque guttatis*; *abdomen nigricans, luteo guttatum*; *oriductus piceus, vix arcuatus, apicem versus fulvus et subtus serratus, abdomini aequalongus*; *femora quatuor anteriora bispinosa*; *femora postica spinulosa, piceo strigata*; *tibiæ biseriatis quadrispinosæ*; *tibiæ posticæ subserrate.*

*Female.* Pale luteous, convex, smooth, shining, slightly compressed. Head with four longitudinal black lines on the vertex. Eyes black, nearly round, not prominent. Fourth joint of the maxillary palpi much shorter than the third, piceous at the tip; fifth subclavate, very slightly curved, much longer than the third. Third joint of the labial palpi clavate. Antennæ tawny. Prothorax with two irregular black stripes, each of which is dilated in front and behind into a black patch, which includes some luteous dots. Mesothorax, metathorax and dorsal segments of the abdomen blackish, with numerous luteous dots. Cerei piceous. Oviduct

piceous, hardly curved, tawny towards the tip, where it is serrated beneath, as long as the abdomen, and more than thrice the length of the cerci. Legs rather long and slender; four anterior femora piceous above at the tips, with two spines beneath; hind femora with piceous oblique streaks on the outer side and with several extremely minute spines beneath; tibiæ with four spines alternately on each side; hind tibiæ with longer spines, very minutely serrated on each side. Length of the body 7 lines.

The black lines on the vertex distinguish it from *C. maculatus*.

a. ——— ?

#### 14. CEUTHOPHILUS ZONARIUS.

Æm. *Pallide luteus; palporum articulus 3us 4o longior, 5o multo brevior; prothorax strigis quatuor longitudinalibus nigris, plagis quatuor nigris luteo guttatis; abdominis segmenta fasciis posticis nigris sub-interruptis; oviductus perparum arcuatus, apice serratus, abdomine non brevior; femora antica bispinosa; femora intermedia sexspinosa; femora postica subserrata; tibiæ quatuores biserialim trispinosæ; tibiæ intermediæ supra sexspinulosæ; tibiæ postica biserialim subserrate et quadrispinosæ.*

*Femæle.* Pale luteous. Head not broader than the prothorax, vertical in front. Eyes piceous, nearly round, not prominent. Mandibles with black tips. Fifth joint of the maxillary palpi much longer than the third and nearly twice the length of the fourth. Antennæ tawny. Prothorax with four short longitudinal black streaks in the disk, the outer pair much more slender than the inner pair; two large black patches on each side, each containing some luteous dots. Mesothorax, metathorax and dorsal segments of the abdomen with a black slightly interrupted band on the hind border, the bands on the mesothorax and on the metathorax broader and less regular than those on the abdomen. Cerci nearly one-third of the length of the oviduct; the latter very slightly curved, serrated beneath at the tip, full as long as the abdomen. Fore femora with two minute spines beneath near the tips; middle femora with six minute spines beneath; hind femora very minutely serrated beneath; four anterior tibiæ with three pairs of spines beneath; middle tibiæ with six minute spines above; hind tibiæ very minutely serrated on each side, where there are four spines placed alternately. Length of the body 7 lines.

It agrees with *C. maculatus* in structure, but differs much from it in markings.

a. Vancouver's Isle. Presented by Dr. Lyall.

#### 15. CEUTHOPHILUS GUTTULOSUS.

Æm. *Nigricans, subtus testaceus; caput nigricante biplagiatum; palpi maxillares pallide picei, articulo 3o 4o paullo longiore, 5o paullo brevior; prothorax vitta media liturisque duabus lateralibus ramosis luteis; abdomen vittis quinque luteis guttularibus; oviductus testaceus, perparum arcuatus, apice serratus, abdomine vix brevior; pedes testacei, femoribus tibiisque quatuor anterioribus spinosis apice piceis.*

*Female.* Blackish, testaceous beneath, convex, smooth, shining. Head testaceous, with a blackish patch between the eyes and the hind border, and with another on the front. Eyes piceous, nearly round, slightly prominent. Mandibles with black tips. Maxillary palpi pale piceous; third joint a little longer than the second and than the fourth; fifth testaceous, subelavate, slightly curved, a little longer than the third. Labial palpi piceous, testaceous at the tips; third joint clavate. Antennæ piceous, testaceous towards the base. Prothorax elongate, with a ramose luteous middle stripe and with a large ramose luteous mark on each side. Meta-thorax and abdominal segments with five luteous stripes composed of irregular dots. Oviduct testaceous, very slightly curved, serrated beneath at the tip, nearly as long as the abdomen, and more than twice the length of the cerci, which are testaceous. Legs testaceous; femora and tibiæ piceous above at the tips; four anterior femora with two or three minute spines beneath; four anterior tibiæ with two or three small spines on each side. Length of the body 7 lines.

The specimen described is without hind legs. It has much resemblance to *C. maculatus*.

a. ———?

#### 16. CEUTHOPHILUS? LANCEOLATUS.

*Mas.* *Piceus, subtus testaceus; caput antice testaceum; palpi testacei, articulis 3a 4a 5oque subæqualibus; pedes testacei, piceo varii, femoribus incernibus, tibiis spinosis, tibiis posticis subserratis.*

*Male.* Piceous, convex, smooth, shining, testaceous beneath. Head a little broader than the prothorax, testaceous in front. Eyes black, nearly elliptical, not prominent. Mandibles black towards their tips. Palpi testaceous; third, fourth and fifth joints of the maxillary nearly equal in length; third joint of the labial clavate. Antennæ piceous, testaceous at the base. Prothorax transverse, a little broader in front. Abdomen tapering from the thorax. Cerci testaceous. Legs testaceous; femora without spines; hind femora piceous above at the tips; tibiæ piceous above; four anterior tibiæ with three or four small spines on each side; hind tibiæ minutely serrated on each side, with four long spines, two of which are subapical and two apical. Length of the body  $4\frac{1}{2}$  lines.

The species hardly belongs to the genus *Ceuthophilus*, but the specimen here described is not sufficient for the establishment of a new genus.

a. New Zealand. Presented by H. Drew, Esq. "These insects were found in caves, half a mile within."

#### 17. CEUTHOPHILUS? MARMORATUS.

*Rhaphidophorus marmoratus*, Haan, *Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 217.

Japan.

#### 18. CEUTHOPHILUS CUBENSIS.

*Rhaphidophorus Cubensis*, Haan, *Verh. Nat. Gesch. Ned. Ind. Bez. Ins.* 218.

Cuba.

## Genus 15. SCHÆNOBATES.

Schænobates, *Sauss. Rev. Zool.* 1859, 209.

## 1. SCHÆNOBATES MEXICANUS.

Mexicanus, *Sauss. Rev. Zool.* 1859, 210.

Mexico.

## Genus 16. UDEOPSYLLA.

Udeopsylla, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 442.

## 1. UDEOPSYLLA ROBUSTA.

Phalangopsis (Daihinia) robustus, *Hald. Proc. Am. Ass. Adv. Sci.* ii. 346—  
Udeopsylla robusta, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 442.

Nebraska.

## 2. UDEOPSYLLA NIGRA.

nigra, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 443.

Minnesota.

## Genus 17. DAIHINIA.

Daihinia, *Hald. Proc. Am. Ass. Adv. Sci.* ii. 346. *Sauss. Rev. Zool.* 1859,  
211. *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 443.

## 1. DAIHINIA BREVIPES.

brevipes, *Hald. Proc. Am. Ass. Adv. Sci.* ii. 346. *Girard. Orth. Marcey's  
Expl. Red River, Louisiana,* 246. *Zool.* pl. 15, f. 9—13.

Nebraska.

## 2. DAIHINIA MEXICANA.

Mexicana, *Sauss. Rev. Zool.* 1859, 212.

Mexico.

## Genus 18. TROPIDISCHIA.

Tropidischia, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 440.

## 1. TROPIDISCHIA XANTHOSTOMA.

Raphidophora xanthostoma, *Scudd. Bost. Soc. Nat. Hist.* viii. 12—Tro-  
pidischia xanthostoma, *Scudd. Journ. Bost. Soc. Nat. Hist.* vii. 441.

California.

## Genus 19. CAMPTONOTUS.

Camptonotus, *Uhler, Proc. Ent. Soc. Phil.* ii. 548.

## 1. CAMPTONOTUS SCUDDERI.

Scudderi, *Uhler, Proc. Ent. Soc. Phil.* ii. 551.

Baltimore.

## Genus 20. MACROPATHUS.

*Mas.* Corpus parvum, glabrum, nitens. Caput magnum, prothorace non brevius, antice subplanum. Palpi maxillares gracillimi, longissimi; articulus 4us, 3o longior 2o brevior. Antennæ longissimæ; articulus 1us longus, crassus. Prothorax antice latior, postice productus. Mesothorax et metathorax bene determinati. Abdomen breve, subcompressum. Cerci graciles, setis longis instructi, abdomine vix breviores. Pedes gracillimi, longissimi; femora sexspinosa, basi crassa; genua nodosa; tibiæ quatuor anteriores spinosæ; tibiæ posticæ biserialim spinulosæ; tarsi longissimi, gracillimi.

*Male.* Body small, convex, smooth, shining. Head large, as long as the prothorax; fore part nearly horizontal; labrum prominent. Mandibles small. Eyes small, nearly elliptical, not prominent. Maxillary palpi very slender, longer than the head and the prothorax together; fourth joint a little longer than the third; fifth subclavate, longer than the fourth. Third joint of the labial palpi clavate, longer than the second. Antennæ extremely long; first joint very long and thick. Prothorax broadest in front; hind part elongated, conical. Mesothorax and metathorax much developed. Abdomen short, slightly compressed. Cerci slender, beset with long bristles, nearly as long as the abdomen. Legs very slender, extremely long, thrice longer or more than the body; hind femora with six minute spines beneath, slender except near the base; knees nodose; four anterior tibiæ with four or five slender spines; hind tibiæ with two rows of numerous very minute spines; tarsi very long and slender; first joint about thrice the length of the second; third less than half the length of the second; fourth a little shorter than the second; claws minute. *Female.*—Oviduct very slightly curved upwards, almost as long as the body. Antennæ rather shorter than those of the male.

## 1. MACROPATHUS FULVUS.

*Mas et fœm.* *Fulvus; palpi albidii; tibiæ apices versus tarsique testacea.*

*Male.* Tawny. Eyes piceous. Mandibles with black tips. Palpi whitish. Tibiæ towards the tips and tarsi testaceous, paler in the fore legs than in the others. Antennæ about ninety-six lines in length, and thus more than nine times the length of the body. Length of the body 10 lines.

*a—d.* New Zealand. "In caves, half a mile within." Presented by H. Drew, Esq.

## Group 2.

*Mas.* Corpus robustum. Caput breve; labrum bene determinatum. Palpi longi, graciles; articulus 4us 3o multo longior; 5us 4o multo longior. Antennæ basi robustæ, corpore fere quadriple longiores. Cerci setosi, longiusculi; sat robusti. Pedes longissimi, sat graciles; genua incrassata. *Fœm.*—Oviductus, subarcuatus, abdomine multo longior.



*Male.* Body stout, convex, smooth, shining. Head short; fore part vertical; labrum prominent. Palpi long, slender; fourth joint much longer than the third; fifth much longer than the fourth. Antennæ stout towards the base, nearly four times the length of the body. Thorax and abdomen as in the first group. Cerci lanceolate, setose, rather long and stout. Legs rather slender, very long; femora and four anterior tibiæ armed with a few spines on each side beneath; knees incrassated; hind tibiæ armed with numerous minute spines on each side beneath; first joint of the tarsi more than twice the length of the second; second more than twice the length of the third; fourth as long as the second. *Female.*—Oviduct slightly curved upward, much longer than the abdomen.

## 2. MACROPATHUS FASCIFER.

*Mas.* Testaceous; palpi albidii; prothorax piceo aut nigro bifasciatus; segmentorum abdominalium margines postici picei aut nigri; pedes piceo aut nigro fasciati, tibiis apice tarsisque pallide testaceis.

*Male.* Testaceous. Mandibles with black tips. Eyes and antennæ piceous. Palpi whitish. Prothorax with a piceous or black band on the fore border, and another on the hind border. Mesothorax, metathorax and dorsal segments of the abdomen with piceous or black hind borders. Femora and tibiæ with piceous or black bands; tibiæ towards the tips and tarsi pale testaceous. Length of the body 12 lines.

a—c. New Zealand, in caves. Presented by H. Drew, Esq.

## Group 3.

*Fem.* Corpus altum, subcompressum, arcuatum. Caput brevissimum, transverse substriatum. Palpi longissimi, gracillimi, articuli 3us et 4us æquales; 5us subclavatus, 4o multo longior. Antennæ corpore triplo aut quadruplo longiores. Prothoracis latera subrotundata. Cerci longi, graciles, longissimi; femora quatuor anteriora bispinosa; femora postica quadrispinosa; tibiæ anticæ biseriatim quadrispinosæ; tibiæ intermediæ biseriatim trispinosæ; tibiæ posticæ biseriatim spinulosæ.

*Female.* Body deep, smooth, shining, slightly compressed, arched above. Head very short, vertical in front, where it is transversely and very slightly striated. Eyes elongated, oblique, slightly prominent. Mandibles small. Maxillary palpi very long and slender; third and fourth joints of equal length; fifth subclavate, much longer than the fourth. Third joint of the labial palpi clavate. Antennæ between thrice and four times the length of the body. Prothorax slightly transverse; border not reflexed; sides slightly rounded. Cerci long, slender, beset with long bristles, nearly one-fourth of the length of the oviduct. Oviduct very slightly curved upward, somewhat longer than the body. Legs slender, very long; four anterior femora with two minute spines beneath near the tips; hind femora with four minute spines beneath; four anterior tibiæ with minute apical spines; fore tibiæ with four and middle tibiæ with three minute spines on each side beneath; hind tibiæ with above thirty minute spines on each side beneath (those towards the base extremely small) and with four apical spines, two of which are very long.

## 3. MACROPATHUS ALTUS.

*Fœm.* Testaceous; palpi pallidissime flavi; antennæ fulvæ; prothorax nigricante bifasciatus; abdominis segmenta nigricante unifasciata; oviductus fulvus, apice piccus; femora fasciis duabus fasciis fasciæque apicali nigricante; tibiæ anticæ nigricante bifasciata; tibiæ intermediæ fasciis duabus nigricantibus fasciæque subapicali picca; tibiæ posticæ piccæ, apice subtus testaceæ.

*Female.* Testaceous. Eyes picceous. Palpi very pale yellow. Antennæ tawny. Prothorax with a blackish band on the fore border and another on the hind border. Mesothorax, metathorax and dorsal segments of the abdomen with a blackish band on each hind border. Oviduct tawny, picceous towards the tip. Femora with two brown irregular bands and with a more determinate blackish apical band; fore tibiæ with two blackish bands, pale yellow towards the tips; middle tibiæ with two blackish bands and with an indeterminate picceous band nearer the tip; hind tibiæ picceous, testaceous beneath towards the tips; fore tarsi pale yellow. Length of the body 12 lines.

a. New Zealand. Presented by H. Drew, Esq. "These insects were found in caves, half a mile within."

## Genus 21. LIBANASA.

*Fœm.* Corpus glabrum, nitens, subcompressum. Caput breve. Palpi maxillares labialibus triplo longiores; articuli 3us et 4us subæquales; 5us paullo longior. Antennæ longæ. Prothorax longiusculus; latera valde rotundata. Oviductus arcuatus, abdomini æquilongus. Pedes robusti, longiusculi; femora inermita; tibiæ quatuor anteriores biserialim quadrispinosæ, supra bispinosæ; tibiæ posticæ extus undecimspinosæ, intus novemspinosæ.

*Female.* Body convex, smooth, shining, slightly compressed. Head short, as broad as the prothorax. Eyes oval, not prominent. Maxillary palpi about three the length of the labial; third and fourth joints about equal in length; fifth a little longer. Third joint of the labial palpi subclavate. Antennæ not less than twice the length of the body. Prothorax elongate; sides much rounded. Cerci slender, about one-fourth of the length of the oviduct. Oviduct curved upward, as long as the abdomen. Legs stout, rather long; femora unarmed; hind femora with oblique ridges along the outer side; four anterior tibiæ with four spines along each side and with two spines above; hind tibiæ with eleven spines along the outer side and with nine along the inner side; the four long spines and two apical short spines as usual.

## 1. LIBANASA INCISA.

*Fœm.* Nigra, subtus testacea; caput testaceum, nigro binotatum; antennæ fulvæ, basi testacæ; prothorax vittis duabus latis testaceis nigro unimaculatis et uniguttatis; oviductus fulvus; pedes testacei, femoribus quatuor anterioribus nigro guttatis, femoribus posticis nigro bifasciatis et oblique strigatis.

*Female.* Black, testaceous beneath. Head testaceous, with a black mark on each side between the eye and the hind border. Eyes and palpi testaceous. Antennæ tawny, testaceous at the base. Prothorax with a broad irregular testaceous stripe along each side, including a black spot and a black dot. Sides of the abdomen irregularly testaceous. Oviduct tawny. Legs testaceous; four anterior femora dotted with black on the outer side; hind femora obliquely streaked with black, and with two black bands, one of which is beyond the middle and the other apical. Length of the body 11 lines.

*a.* Natal. From M. Gueinzus' collection.

## 2. LIBANASA?? MACULIFRONS.

*Fœm.* *Nigra, glabra, nitens, postice attenuata; caput maculis sex facieque testaceis; palpi maxillares picei, longissimi, articulis 3o 4o 5oque aequalibus, 5o clavato; antenne piceæ; prothorax longus, lateribus rotundatis; abdomeni lateribus ventree fere erectis; oviductus piceus, subarcuatus, basi fulvus, abdomine longior; pedes testacei, piceo subnebulosi, tibiis anticis biserialim trispinosis.*

*Female.* Black, convex, smooth, shining, tapering from the head to the tip of the abdomen. Head with a band of four testaceous spots on the front and with a testaceous spot on each side of the face, which is also testaceous. Eyes livid, elongated, not prominent. Maxillary palpi piceous, pubescent, very long; third, fourth and fifth joints of equal length; fifth clavate. Antennæ piceous. Prothorax elongated; sides rounded. Abdomen tawny on each side and beneath. Cerci tawny, nearly erect. Oviduct piceous, slightly curved, tawny at the base, rather longer than the abdomen. Legs testaceous, slightly clouded with piceous; fore tibiæ with three rather long spines on each side. Length of the body  $7\frac{1}{2}$  lines.

The specimen described is mutilated.

*a.* New Zealand. Presented by Sir A. Smith.

## Genus 22. MACHAMALA.

*Mas.* Corpus glabrum, nitens, subcompressum, fere fusiforme. Caput inter oculos vix carinatum; frons erecta. Oculi subrotundi. Palpi maxillares longi; articulus 4us 3o multo brevior; 5us subclavatus, subarcuatus, 3o longior. Prothorax longiusculus, antice angustior; latera rotundata. Abdomen lanceolatum; segmentum apicale incisum. Pedes longi, graciles; femora antica subtus spina una subapicali; femora intermedia subtus bispinosa; femora postica crassa, apices versus attenuata, subtus duodecim spinulosa; tibiæ anticæ biserialim trispinosæ; tibiæ intermediæ triseriatim trispinosæ; tibiæ posticæ biserialim serratæ et quadrispinosæ.

*Male.* Body convex, smooth, shining, slightly compressed, nearly fusiform. Head slightly prominent between the eyes, vertical in front. Eyes nearly round, slightly prominent. Third joint of the maxillary palpi longer than the first and second together; fourth much shorter than the third; fifth subclavate, slightly curved, rather longer than the third. Third joint of the labial palpi clavate, as long as the second. Prothorax rather long, narrower in front; sides rounded. Metathorax as usual much developed. Abdomen tapering; dorsal segments from the first to the seventh

successively decreasing in length; eighth a little longer than the seventh; apical segment notched in the middle. Legs long, slender; femora grooved beneath; fore femora with a subapical spine beneath; middle femora with two spines beneath, the second subapical; hind femora thick, attenuated near the tips, with twelve minute spines in a row beneath; fore tibiæ with three spines on each side; middle tibiæ with three rows of spines, three in each row; hind tibiæ minutely serrated and with four spines on each side and with two very long apical spurs; third joint of the hind tarsi about one-third of the length of the second.

#### 1. MACHAMATA ARMATA.

Mas. *Sordide testacea; prothorax fasciis duabus nigris intus parallelis extus deviis; abdomen nigro maculariter quinquevittatum; femora postica piceo oblique strigata.*

*Male.* Dingy testaceous. Prothorax with two black stripes, which are parallel to each other on the inner side, but very irregular on the outer side. Mesothorax, metathorax and dorsal segments of the abdomen with five macular black stripes. Hind femora with oblique piceous streaks along the outer side. Length of the body 7 lines.

a. ———?

#### Genus 23. LICODIA.

*Fem.* Corpus glabrum, nitens, lanceolatum. Caput prothorace paullo latius, inter oculos subcarinatum; frons erecta. Oculi elongati, extantes. Palpi maxillares longi; articulus 4us 3o et 5o paullo longior. Antennæ corpore plus quadruplo longiores. Prothorax longus; latera valde rotundata. Oviductus arcuatus, abdomine vix brevior. Pedes robusti, longiusculi; femora inermitia; tibiæ quatuor anteriores triseriatim spinosæ; tibiæ posticæ extus undecimspinosæ, intus novemspinosæ.

*Female.* Body convex, smooth, shining, tapering from the head to the tip of the abdomen. Head a little broader than the prothorax, prominent between the eyes, vertical in front. Eyes prominent, nearly elliptical. Palpi with the apical vesicle very apparent, resembling an additional joint; fourth joint of the maxillary palpi a little longer than the third and than the fifth; third joint of the labial palpi subclavate. Antennæ more than four times the length of the body. Prothorax elongate; sides much rounded. Abdominal segments successively decreasing in length. Cerci more than half the length of the oviduct. Oviduct curved upward, nearly as long as the abdomen. Legs stout, rather long; femora unarmed; four anterior tibiæ with three rows of spines, from two to four in each row; hind tibiæ with eleven spines on the outer side and with nine on the inner side, with two long subapical spines and with four apical spurs, two of which are long; tarsi slender.

#### 1. LICODIA PALLIPES.

*Fem.* *Picea, subtus testacea; labrum testaceum, macula basali nigricante strigam emittente; palpi pallide flavi; prothoracis latera subpallidiora; cerci apices versus testacei; oviductus fulvus, basi piceus; pedes testacei, piceo nebulosi, tibiis posticis apice tarsisque posticis pallide testaceis.*

*Female.* Piceous, very shining, testaceous beneath. Labrum testaceous, with a blackish basal spot, which emits a streak. Eyes blackish. Mandibles testaceous, black at the tips. Palpi pale yellow. Prothorax slightly paler on each side. Cerci testaceous towards the tips. Oviduct tawny, piceous at the base. Legs testaceous, partly elongated with piceous; tibiæ pale testaceous towards the tips; hind tarsi pale testaceous. Length of the body 9 lines.

*a.* St. Domingo. From Mr. Tweedie's collection.

## 2. LICODIA?? OBLIQUA.

*Fœm.* *Nigricans, subtus testacea; caput testaceum, prothorace perparum latius, vertice nigricante; palpi maxillares pallide testacei, articulo 5o 4o paullo longiore; prothorax strigis quatuor discoidalibus obliquis lateribusque rotundatis indeterminate testaceis; cerci testacei, breves; oviductus fulvus, subarcuatus, basi testaceus, apice piceus, abdomine vix brevior; pedes testacei, robusti, longiusculi, piceo nebulosi, tibiis quatuor anterioribus biserialim trispinosi, supra bispinosi, tibiis posticis biserialim octospinosi calcaribusque duobus subapicalibus longis.*

*Female.* Blackish, convex, smooth, shining, testaceous beneath. Head testaceous, very little broader than the prothorax, blackish above, prominent between the eyes. Eyes piceous, pear-shaped, not prominent. Palpi pale testaceous. Maxillary palpi nearly thrice the length of the labial; fourth joint as long as the third, a little shorter than the fifth, which, like the third joint of the labial palpi, is subclavate. Antennæ tawny, testaceous at the base. Prothorax elongate; sides rounded, narrowly and irregularly testaceous; two oblique testaceous streaks on each side, converging in the disk. Cerci testaceous, short. Oviduct tawny, testaceous at the base, piceous at the tips, slightly curved upward, nearly as long as the abdomen. Legs testaceous, stout, rather long, partly clouded with piceous; femora unarmed; hind femora obliquely ridged along the outer side; four anterior tibiæ with three spines along each side and with two longer spines above; hind tibiæ with eight black-tipped spines along each side (these spines successively increasing in length) and with four long spurs, two of which are subapical and two apical. Length of the body 10 lines.

*a.* ——— ?

## Genus 24. LUTOSA.

*Fœm.* Corpus robustum, glabrum, nitens, subcompressum, fere fusiforme. Caput breve, prothorace fere angustius; frons erecta. Oculi ovales, non extantes. Palpi maxillares, longi, graciles; articulus 4us 3o longior; 5us 4o paullo longior. Antennæ longæ. Prothorax longiusculus; latera rotundata. Cerci breves, graciles. Oviductus valde arcuatus, abdomine longior. Pedes robusti, longiusculi; femora inermia; tibiæ quatuor anteriores biserialim trispinosæ; tibiæ anticæ supra unispinosæ; tibiæ intermediæ supra bispinosæ; tibiæ posticæ biserialim novempinosæ, calcaribus duobus subapicalibus longissimis.

*Female.* Body stout, convex, smooth, shining, slightly compressed, nearly fusiform. Head short, hardly as broad as the prothorax, slightly prominent between the eyes, vertical in front. Eyes oval, not prominent.

Palpi long, slender, fourth joint of the maxillary palpi rather longer than the third; fifth a little longer than the fourth; third joint of the labial palpi subclavate. Antennæ much more than twice the length of the body. Prothorax elongate; sides rounded. Abdominal segments successively decreasing in length. Cerci short, slender. Oviduct much curved upward, somewhat longer than the abdomen. Legs stout, rather long; femora unarmed; hind femora thick, with oblique ridges on the outer side; four anterior tibiæ with three spines on each side; fore tibiæ with one long spine above; middle tibiæ with two long spines above; hind tibiæ with nine minute spines on each side and with four very long spurs, two of which are subapical and two apical; tarsi slender, of the usual structure.

#### 1. LUTOSA MARGINALIS.

*Fœm.* *Rufescente fulva, subtus testacea; caput pallide testaceum, margine postico vittaque guttam testaceam includente nigris; prothorax nigricans, lateribus late pallido testaceis; cerci, oviductus et pedes testacci; femora quatuor anteriora picco vittata; femora postica fulva, basi testacea.*

*Fœmale.* Reddish tawny, testaceous beneath. Head pale testaceous, black along the hind border, and with a black stripe which extends from the hind border between the eyes and includes a testaceous dot. Antennæ tawny, partly picceous towards the base, which is testaceous. Prothorax blackish, broadly pale testaceous along each side. Cerci, oviduct and legs testaceous. Four anterior femora with a picceous stripe; hind femora tawny, testaceous towards the base; spines of the hind tibiæ with black tips. Length of the body 8 lines.

*a.* ———? Presented by the Zoological Society.

#### Genus 25. LUCINA.

*Fœm.* Corpus convexum, opacum, fere fusiforme. Caput inter oculos subcarinatum, prothorace angustius; frons erecta. Oculi pyriformes, valde exstantes. Palpi maxillares graciles, longissimi. Antennæ graciles, longissimæ; articulus Ius longus, crassus. Prothorax sat longus; latera valde rotundata. Abdomen thorace latius. Cerci gracillimi, corpore longiores, setis gracillimis instructi. Oviductus subarenatus, corpore paullo brevior. Pedes gracillimi, longissimi; femora postica basi incrassata; tibiæ posticæ extus apices versus sexspinosæ; tarsi longi, graciles.

*Fœmale.* Body nearly fusiform, convex, smooth, dull. Head narrower than the prothorax, prominent between the antennæ, vertical in front. Eyes pear-shaped, very prominent. Maxillary palpi slender, very long. Antennæ slender, very long; first joint long, stout. Prothorax slightly elongated, much rounded on each side. Abdomen broader than the thorax. Cerci very slender, longer than the body, beset with very slender bristles. Oviduct slightly curved upward, a little shorter than the body. Legs very slender, extremely long; femora and four anterior tibiæ without spines; hind femora incrassated towards the base; hind tibiæ with six spines on the outer side towards the tip; tarsi long, slender; first joint extremely long; second and third very short.

It has some affinity to the genus *Phalangopsis*.

## 1. LUCINA OPILIOIDES.

Fœm. *Picea*; *caput antice testaceum*; *venter fulvus*; *tibiæ quatuor anteriores testaceo bifasciatæ*; *tibiæ posticæ tarsique fulvæ*.

*Female*. Piceous. Head in front and palpi testaceous. Eyes livid. Ventral segments tawny. Four anterior tibiæ with two testaceous bands; tarsi and hind tibiæ tawny. Length of the body 8 lines.

a. Brazil. Presented by Sir C. Stewart.

## 2. LUCINA? PALLICEPS.

Mas. *Picea, tomentosa, arcuata luteo maculata, fere fusiformis*; *caput glabrum, pallide testaceum, fronte longa erecta*; *oculi vix extantes*; *palpi maxillares testacei, longissimi, articulis 1o 2oque piceis, 3o 4oque piceis subæqualibus, 5o subclavato 4o multo longiore*; *antennæ nigrae, basi testaceæ, corpore plus quadruplo longiores*; *cerci abdomine paullo longiores, pilis gracillimis instructi*; *pedes testacei, longissimi, gracillimi, piceo fasciati, genubus unispinosis, tibiis subtus bispinosis*.

*Male*. Piceous, tomentose, nearly fusiform, much arched. Head pale testaceous, smooth, shining, as broad as the prothorax, elongate and vertical in front. Eyes pale piceous, elongate, slightly prominent. Palpi testaceous. Maxillary palpi full four times the length of the labial palpi; first and second joints piceous; third and fourth piceous at the tips, nearly equal in length; fifth subclavate, much longer than the fourth. Third joint of the labial palpi clavate, truncated, a little longer than the second. Antennæ black, testaceous towards the base, more than four times the length of the body. Thorax and dorsum of the abdomen mottled with various luteous spots. Cerci a little longer than the abdomen, beset with long and very slender hairs. Legs testaceous, very long and slender; femora and tibiæ with three piceous bands; knees with a long slender spine; tibiæ with two spines beneath; tarsi long, slender; third joint not more than one-third of the length of the second. Length of the body 5 lines.

The description of the legs applies only to the two anterior pairs, the specimen here mentioned having been deprived of its hind legs. It has much affinity to the genus *Zaora*.

Cambodia. In Mr. Saunders' collection.

## ERRATA.

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## Page 1.

The distinctive characters of the Acrididæ and Locustidæ should be thus—

<i>b.</i> Antennæ long, setaceous. Tarsi 4-jointed.	.	LOCUSTIDÆ.
<i>bb.</i> Antennæ filiform, generally rather short.	.	ACRIDIDÆ.

## Page 47.

*For* 91. GRYLLUS MINUSCULUS *read* 91. GRYLLUS NANUS.

## Page 52.

## 3. MOGOPLISTES TALITRUS.

*talitus*, *Costa alcune Notizie dell' Ent. dell' Isola Ischia*, 4. Ischia.

## Page 79.

*For* 10. PLATYDACTYLUS? PLANUS *read* 10. PLATYDACTYLUS? APERTUS.

## Page 101.

## Genus 37. NOCERA.

## 1. NOCERA PECTINATA.

*Listroscelis pectinata*, *Guér. Voy. Coquille*, 153. *Atlas*, pl. 10, f. 1.  
*Nocera pallida*, page 101.  
 Isle Bourou.

## Page 106.

*Dele* 12. PHALANGOPSIS HELVOLA and references.

## Page 111.

*Dele* BRACHYTROPES ORIENTALIS and references.

## Page 136, fourth line.

*For* *Blatta punctata* *read* *Blatta marginata*.

## Page 138.

*For* PHYLLODROMIA FASCIATA *read* BLATTA FASCIATA.

## Page 208.

*For* 1. LIBANARA INCISA *read* 1. LIBANASA INCISA.



## S U M M A R Y.



This Part of the Catalogue of Dermaptera contains the Gryllidæ, a Supplement to the Catalogue of Blattariæ, and the beginning of the Locustidæ.

The Supplement to the Blattariæ records the new species described in the 'Nouveau Système des Blattaires, par C. Brunner de Wattenwyl,' the most complete work hitherto published on that tribe, and which I was not able to notice in the previous Catalogue. He describes about 378 species, and gives a synopsis of their geographical distribution in 16 regions, of which 2 are European, 4 American, 3 African, 4 Asiatic, 1 Australasian, 1 Australian, and 1 including the Isle in the Pacific and New Zealand. He distributes the genera in eight families, and the primary divisions are like those of De Saussure.

About 378 species of Gryllidæ are registered in this Part, and their geographical distribution is as follows:—

Europe . . . . .	18
Europe and Madeira . . . . .	1
Europe and W. Asia . . . . .	1
Europe and N. Africa . . . . .	1
Europe, N. Africa and W. Africa . . . . .	2
Europe, N. and S. America, N. Africa, S. Asia, Australasia and Australia . . . . .	1
Europe and S. Asia . . . . .	1
N. America . . . . .	35
N. America, Mexico and W. Indies . . . . .	1
Mexico . . . . .	12
Mexico, W. Indies and W. Coast of America . . . . .	1
Mexico and S. America . . . . .	3
W. Indies . . . . .	19
W. Indies and S. America . . . . .	2
W. Coast of America . . . . .	1
S. America . . . . .	52

Africa, Mauritius, S. Asia, Ceylon, Australasia, Australia and New Zealand . . . . .	1
N. Africa . . . . .	4
W. Africa . . . . .	9
W. and S. Africa . . . . .	3
W., S. and E. Africa . . . . .	1
W. and E. Africa . . . . .	1
W. and S. Africa, S. Asia and Australasia . . . . .	1
S. Africa . . . . .	19
E. Africa . . . . .	4
Mauritius . . . . .	4
Madagascar . . . . .	2
W. Asia . . . . .	1
Central Asia . . . . .	3
S. Asia . . . . .	35
S. Asia and Ceylon . . . . .	1
S. Asia and Australasia . . . . .	4
Ceylon . . . . .	11
Australasia . . . . .	36
Australia . . . . .	24
Australia and New Zealand . . . . .	1
New Zealand . . . . .	1
Oceania . . . . .	4
Unknown . . . . .	16

## I N D E X.

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## A.

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 Achetidæ, 1  
 Achetina, 1  
 acuminipennis, 114  
 adusta, 131  
 ænea, 126  
 æqualis, 176  
 æthiops, 120  
 afer, 115  
 affinis, 62  
 Africana, 4, 120  
 Africanus, 7, 80  
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