

Gen. CÆNURGIA, *Walk.*

24. CÆNURGIA REMIPES, *Walk.* (see Vol. IV. p. 164). *Fem.* Lutea, gracilis, nitens, capite guttis tribus nigris, antennarum articulo 3^o lanceolato arista alba, thorace vittis duabus interruptis nigris, abdomine lanceolato, femoribus compressis latiusculis apice nigris, tibiis tarsisque piceis, alis lurido-cinereis.

Female. Luteous, slender, shining. Head a little broader than the thorax, with a black dot on the vertex and another on each side in front. Third joint of the antennæ compressed, lanceolate; arista white, stout, longer than the 3rd joint. Thorax with an interrupted black stripe on each side. Abdomen lanceolate, nearly twice the length of the thorax; oviduct exserted. Legs long; femora compressed, rather broad, with black tips; tibiæ and tarsi piceous. Wings lurid cinereous; veins black; præbrachial vein converging outward towards the cubital vein; discal transverse vein almost straight, parted by nearly its length from the border, and by a little more than twice its length from the præbrachial transverse vein. Length of the body 4 lines; of the wings $5\frac{1}{2}$ lines.

Fam. HIPPOBOSCIDÆ, *Leach.*Gen. ORNITHOMYIA, *Olfers.*

25. ORNITHOMYIA OBSCURATA, n. s. Nigra, nitens, pedibus obscure viridibus robustis setosis, alis obscure cinereis, venis anticis nigris crassis.

Black, shining. Legs dark green, robust, setose. Wings dark cinereous; costal veins black, thick. Length of the body $2\frac{1}{2}$ lines; of the wings 6 lines.

Fam. NYCTERIBIDÆ, *Leach.*Gen. NYCTERIBIA, *Latr.*

26. Nycteribia dubia? *Westw. Zool. Soc. Trans.* i. p. 289.
Inhabits also the Philippine Islands.

Catalogue of the Dipterous Insects collected in Batchian, Kaisaa and Makian, and at Tidon in Celebes, by Mr. A. R. WALLACE, with Descriptions of New Species. By FRANCIS WALKER, Esq., F.L.S.

[Read Nov. 15th, 1860.]

*Batchian.*Fam. STRATIOMIDÆ, *Holiday.*Gen. PTILOCERA, *Wied.*

1. Ptilocera quadridentata, *Fabr.* See Vol. I. p. 7.

Gen. STRATIOMYS, *Geoffroy*.

2. STRATIOMYS *ÆQUALIS*, n. s. *Fæm.* Cupreo-nigra, capite nigro nitente antice rufescente, antennis rufescentibus, thoracis lateribus auratis, scutelli margine pectoreque flavis, hujus disco nigro, abdominis lateribus ventre pedibusque fulvis, femoribus tibiisque nigro fasciatis, alis cinereis, costa fuscescente, halteribus pomaceis.

Female. Cupreous black. Head black, shining, reddish in front, with white tomentum about the eyes. Antennæ reddish, lanceolate towards the tips, shorter than half the breadth of the head. Sides of the thorax gilded; scutellum bordered with yellow, armed with four small spines; pectus yellow, with a black disk. Abdomen black, shining, tawny along each side and beneath. Legs tawny; femora and tibiæ with black bands. Wings cinereous, brownish along the costa; veins black; halteres apple-green. Length of the body 4 lines; of the wings 7 lines.

Gen. CLITELLARIA, *Meigen*.

3. Clitellaria *obesa*, *Walk.* See p. 232.

Gen. MASSICYTA, *Walk.*

4. Massicyta *cerioides*, *Walk.* See Vol. III. p. 78.

Gen. SALDUBA, *Walk.*

5. SALDUBA *HILARIS*, n. s. *Mas et Fæm.* Nigra, gracilis, sublinearis, antennis compressis subarcuatis basi fulvo variis, flagello lineari, thorace vittis quatuor auratis, pedibus luteis, tarsis pallidioribus, tibiis posticis nigris, alis cinereis apice obscurioribus, halteribus pallidis.

Closely allied to *S. diphysoides*, and apparently a local or sub-species.

Male and Female. Black, slender, linear. Proboscis yellow, with a black tip. Antennæ compressed, slightly curved, nearly twice the length of the breadth of the head; scape fusiform, partly tawny; flagellum linear, acuminate, very much longer than the scape. Four stripes on the thorax and border of the scutellum of gilded tomentum. Legs luteous; tarsi white or pale yellow, with black tips; coxæ and hind tibiæ black. Wings cinereous, darker towards the tips; veins black; halteres white or pale yellow. *Male.* Smaller than the female; eyes more approximate but not contiguous. Length of the body 3-4½ lines; of the wings 5-8 lines.

6. SALDUBA *LUGUBRIS*, n. s. *Mas.* Atra, gracilis, linearis, capite nitente, antennis basi fulvis, flagello lineari, thorace vittis duabus cinereis, tarsis albidis, alis nigricantibus.

Male. Deep black, slender, linear. Head shining. Eyes approximate

above. Antennæ nearly linear, much longer than the breadth of the head; scape mostly tawny; flagellum longer than the scape. Thorax with a cinereous stripe on each side. Tarsi whitish, with black tips. Wings blackish; veins black. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

7. *SALDUBA MELANARIA*, n. s. *Mas.* Atræ, gracilis, linearis, capite producto, antennis linearibus vix arcuatis basi fulvis, scutelli margine postico sulcato, tarsis posterioribus albidis, alis nigris.

Male. Deep black, slender, linear. Head and eyes very flat above; the former produced into a short rostrum, on which the antennæ are seated. Antennæ filiform, hardly curved, a little longer than the breadth of the head; scape tawny on the inner side at the base. Thorax elongate; scutellum with a transverse furrow near the hind border. Abdomen hardly longer than the thorax. Posterior tarsi whitish, with black tips. Wings and veins black. Length of the body 3 lines; of the wings 5 lines.

8. *SALDUBA SCAPULARIS*, n. s. *Mas.* Atræ, elongata, capite antico producto, antennis compressis subarcuatis, flagello lanceolato, thorace subpubescente, scutello dentibus quatuor ferrugineis, pedibus piceis, tarsis posterioribus albidis, alis nigricantibus.

Male. Deep black, elongate. Eyes flat and connected above. Antennæ compressed, slightly curved upward, seated on a protuberance of the head, and a little shorter than its breadth; flagellum lanceolate, not longer than the scape. Thorax minutely pubescent; humeral angles acute; scutellum armed with four minute ferruginous teeth. Abdomen fusiform, a little longer and broader than the thorax. Legs piceous; posterior tarsi whitish, with piceous tips. Wings blackish; veins black; halteres piceous. Length of the body 3 lines; of the wings 5 lines.

9. *SALDUBA SINGULARIS*, n. s. *Mas.* Nigra, longa, gracilis, antennis linearibus vix arcuatis, flagello basi rufo, thorace cinereo vittis duabus nigris, scutello inermi, femoribus rufis, tarsis albis, femoribus posticis incrassatis spinosis, alis nigricantibus.

Male. Black, long, slender. Eyes connected above. Antennæ compressed, linear, hardly curved, much longer than the breadth of the head; flagellum red towards the base, about thrice the length of the scape. Thorax with cinereous tomentum, which is interrupted by a black stripe on each side; scutellum prominent, rounded, unarmed. Abdomen deep black, cylindrical, nearly twice the length of the thorax, shining and tumid at the tip. Femora mostly red; tarsi white, with black tips; hind femora incrassated, with minute spines beneath. Wings blackish; veins black. Length of the body $3-4\frac{1}{2}$ lines; of the wings 5-8 lines.

Gen. OBRAPA, *Walk.*

10. *Obrapa perilampoides*, *Walk.* See Vol. III. p. 82.
11. *OBRAPA CELYPHOIDES*, *Walk.* See Vol. IV. p. 83. The description referred to here is incomplete; and therefore the following characters are added:—

Fœm. Atra, obscura, brevis, lata, capite nitente, antennis piceis basi albidis, scutello et postscutello productis, abdomine impresso, tarsis posterioribus luteis, alis limpidis nebula postica nigricante, halteribus albis.

Female. Deep black, dull, short, broad, thick. Head shining, with white tomentum in front. Antennæ piceous, whitish at the base. Scutellum conical, very prominent; the postscutellum projecting beyond it, and forming a rim round its border. Abdomen shorter and broader than the thorax, with impressions above, and with two deeper excavations at the tip. Posterior tarsi luteous. Wings limpid; veins yellow, black for half the length from the base, with a blackish cloud hindward. Halteres white. Length of the body $1\frac{1}{2}$ line; of the wings $2\frac{3}{4}$ lines.

This species may be distinguished from *O. perilampoides* by its narrower body, by its dull colour, by the very different shape of the scutellum, by the cloud on the wings, and by the greater blackness of the veins.

Gen. CHRYSOMYIA, *Macq.*

12. *CHRYSOMYIA BIPARS*, n. s. *Mas.* Læte cyanea, viridi varia, proboscide pedibus halteribusque pallide flavis, antennis abdomineque pallide luteis, alis limpidis.

Male. Bright blue, varied with green. Head a little broader than the thorax. Proboscis and legs pale yellow. Antennæ and abdomen pale luteous, the former very small. Wings limpid; veins and halteres pale yellowish. Length of the body $1\frac{1}{2}$ line; of the wings 3 lines.

Gen. SARGUS, *Fabr.*

13. *SARGUS CONCISUS*, n. s. *Mas.* Læte cyaneus, ore pedibusque albidis, antennis rufescentibus, thoracis lateribus purpureo variis, abdomine purpureo, femoribus tibiisque piceo variis, alis cinereis, halteribus testaceis.

Allied to *S. redhibens*.

Male. Bright blue. Eyes parted above by a very narrow interval. Mouth whitish. Antennæ reddish; 3rd joint round. Thorax varied with purple on each side. Abdomen bright purple. Legs whitish; femora and tibiæ partly piceous. Wings cinereous; veins black; halteres testaceous. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

14. *SARGUS TIBIALIS*, n. s. *Mas.* Cupreo-purpureus, ore antennis pedi-

bus halteribusque albidis, femoribus anterioribus apice tarsis posticis basi necnon femoribus tibiisque posticis nigris, alis cinereis.

Allied to *S. redhibens*.

Male. Cupreous purple. Mouth and antennæ whitish; 3rd joint of the latter round. Thorax with a whitish slender callus along each side. Abdomen elongate subfusiform. Legs whitish; anterior femora towards the tips, hind tarsi towards the base, hind femora and hind tibiæ black. Wings cinereous; veins black; halteres whitish. Length of the body $3\frac{1}{4}$ lines; of the wings 7 lines.

15. *SARGUS QUADRIFASCIATUS*, Walk. See *antè*, p. 146. The description here referred to is incomplete; the following characters are more correct:—

Mas et Fæm. Luteo-fulvus, ore antennis pedibusque testaceis, tibiis posticis nigris, tarsis posticis albis basi nigris, alis subcinereis. *Mas.* Abdomine fasciis duabus nigris. *Fæm.* Abdomine fasciis quatuor nigris.

Male and Female. Luteous tawny. Head black, shining. Eyes parted by a very narrow interval in the female. Mouth and antennæ testaceous; 3rd joint of the latter round. Legs testaceous; hind tibiæ black; hind tarsi white, black towards the base; anterior tarsi with black tips. Wings slightly cinereous; veins black, testaceous at the base. *Male.* Abdomen with two black bands towards the tip, and with black appendages. *Female.* Abdomen with four black bands. Length of the body $3\frac{1}{4}$ –4 lines; of the wings 6–7 lines.

16. *SARGUS TARSALIS*, n. s. *Fæm.* Fulvus, capite nigro nitente, thorace subvittato, abdomine fasciis abbreviatis dilatatis nigricantibus, tibiis posticis nigris, tarsis posticis albidis basi nigris, alis nigricantibus, areolarum discis cinereis.

Allied to *S. repensans*.

Female. Tawny. Head black and shining above. Third joint of the antennæ round. Thorax indistinctly striped. Abdomen with an abbreviated dilated blackish band on each segment. Hind tibiæ black; hind tarsi whitish, black towards the base. Wings blackish; disks of the areolets cinereous; veins black, tawny at the base. Length of the body 6 lines; of the wings 10 lines.

17. *SARGUS DEBILIS*, n. s. *Mas.* Niger, nitens, antennis scutelli spinis pedibus halteribusque albidis, abdomine sublineari, alis nigricantibus.

Allied to *S. redhibens*.

Male. Black, shining. Antennæ and legs and the four minute spines of the scutellum whitish. Abdomen nearly linear, much longer than the thorax. Legs whitish. Wings blackish cinereous; veins black; halteres whitish. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

18. *SARGUS INFICITUS*, n. s. *Mas.* Pallide fulvus, nitens, antennis

pedibusque pallide testaceis, thorace abdomineque nigro vittatis, alis subcinereis apice nigricantibus.

Male. Pale tawny, shining. Eyes connected above; facets rather large. Antennæ pale testaceous, very short. Thorax with a black stripe. Abdomen with an abbreviated black stripe, a little longer and broader than the thorax. Legs pale testaceous. Wings slightly cinereous, blackish towards the tips; veins black, testaceous at the base. Length of the body $1\frac{1}{2}$ line; of the wings 3 lines.

Fam. XYLOPHAGIDÆ, Steph.

Gen. RHYPHOMORPHA, n. g.

Fam. Corpus longifusiforme. Os minimum. Antennæ setacæ, compressæ, dentato-moniliformes, multiarticulatæ, articulis transversis. Abdomen longiconicum. Pedes breves, graciles. Alæ elongatæ.

Female. Body elongate fusiform. Front vertical. Eyes prominent, with very minute facets. Mouth very small. Antennæ setaceous, compressed, submoniliform, about as long as the breadth of the head; the teeth successively decreasing in size; scape very short; joints of the flagellum transverse, nearly twenty in number. Thorax much longer than broad, subquadrate in front; scutellum small, unarmed. Abdomen elongate conical, less than twice the length of the thorax. Legs short, slender. Wings elongate; mediastinal, subcostal, and radial veins ending at beyond half the length of the costa; branches of the cubital vein straight; 1st externo-medial slightly curved; 2nd rudimentary; 3rd curved, united to the 4th, close to the border; subanal and anal veins united on the border; discal areolet about four times as long as broad.

This remarkable genus seems to be allied to *Rachicerus*.

19. RHYPHOMORPHA BILINEA, n. s. *Fam.* Testacea, glabra, nitens, capite nigro, antennis dimidio apicali nigris, thorace guttis duabus vittisque duabus piceis, abdomine vitta basali nigra, alis subcinereis.

Female. Testaceous, smooth, shining. Head black, shining. Antennæ black for nearly half the length from the tips. Thorax with two slender piceous stripes, and with a piceous dot on each side in front. Abdomen with a slender black band at the base. Wings slightly cinereous; veins black, testaceous at the base. Length of the body 3 lines; of the wings 7 lines.

Fam. TABANIDÆ, Leach.

Gen. TABANUS, Linn.

20. TABANUS EXTRICANS, n. s. *Mas.* Piceus, antennis nigris basi rufescentibus, pectore cano, abdomine rufescente apicem versus nigri-

cante, pedibus halteribusque rufescentibus, tarsis anticis femoribusque nigris, alis cinereis.

Male. Piceous. Head hoary behind and beneath. Eyes divided into two distinct parts; 1st part reddish, composed of large facets which successively decrease in size towards each side; 2nd part æneous, on each side of the face, composed of excessively small facets. Antennæ black, reddish at the base; 3rd joint with an extremely minute horn. Pectus hoary. Abdomen conical, reddish, blackish towards the tip and on the disk beneath. Legs reddish; femora, except the tips and fore tarsi, black. Wings cinereous; veins black, reddish towards the base; fore branch of the cubital vein simple, forming a much-rounded angle near the base; halteres pale reddish. Length of the body 5 lines; of the wings 9 lines.

21. *TABANUS INSURGENS*, n. s. *Mas.* Læte fulvus, antennis parvis, abdomine conico elongato, tarsis anticis nigris, alis obscure cinereis, halteribus pallide fulvis.

Male. Bright tawny. Eyes uniform, composed of very minute facets. Proboscis blackish towards the tip. Antennæ short, slender, with hardly any horn. Abdomen conical, very much longer than the thorax. Fore tarsi black. Wings dark cinereous; veins black, tawny towards the base; fore branch of the cubital vein curved and not angular near the base; halteres pale tawny. Length of the body 4 lines; of the wings 9 lines.

Gen. *CHRYSOPS*, *Meigen*.

22. *CHRYSOPS SIGNIFER*, n. s. *Mas.* Niger, capite atro aureo-tomentoso, antennis elongatis basi fulvis, thorace fasciis duabus aureo pilosis, abdomine flavo fasciis tribus apiceque nigris, femoribus obscure rufis, tibiis dilatatis, tarsis posterioribus fulvis, alis cinereis costa fasciisque duabus nigricantibus.

Male. Black. Head deep black and shining in front, with a patch of gilded tomentum on each side of the face, and with a smaller one at the base of the antennæ. Antennæ filiform, tawny towards the base, much longer than the breadth of the head. Thorax with two bands of gilded hairs. Abdomen yellow, blackish at the tip, with a black band at the base, and in the middle with two black bands, which are connected on each side and enclose a triangular space between them. Femora mostly dark red; tibiæ dilated; posterior tarsi tawny. Wings cinereous, blackish along the costa, and with two blackish bands; the 2nd very much broader than the first, which is near the base. Length of the body 4 lines; of the wings 7 lines.

23. *CHRYSOPS PARALLELUS*, n. s. *Fem.* Piceo-niger, linearis, capite atro nitente, antennis obscure rufis, pedibus piceis, alis nigris postice cinereis macula discali punctoque basali albis.

Female. Piceous black, linear. Head deep black, very shining. An-

tennæ dark red, much shorter than the breadth of the head. Abdomen nearly twice the length of the thorax. Legs piceous. Wings black, irregularly cinereous along the hind border, with two cinereous streaks hindward, with a white spot in the disk, and with a white point near the base; veins black; halteres piceous. Length of the body 5 lines; of the wings 9 lines.

Fam. ASILIDÆ, *Leach*.

Subfam. DASYPOGONITES, *Walk*.

Gen. DASYPOGON, *Fabr*.

24. DASYPOGON HONESTUS, *Walk*. (see Vol. III. p. 83). *Mas et Fem*. Rufus, linearis, capite atro, mystace albo, antennis nigris, thorace vitta aurata piceo marginata, abdomine cupreo nigro segmentis rufescente marginatis, femoribus tarsis tibiisque anticis nigris, alis nigricantibus, halteribus testaceis.

Male and Female. Body linear. Head deep black, very shining, with a white line along each side of the face; mystax composed of a few white bristles. Antennæ filiform, shorter than the breadth of the head. Thorax red, with a pale gilded piceous-bordered stripe; pectus gilded. Abdomen cupreous black, nearly twice the length of the thorax; hind borders of the segments reddish. Legs black, stout; knees, posterior tibiæ except the tips, coxæ and trochanters red. Wings blackish; veins black, with the usual structure; halteres testaceous. Length of the body 3-4½ lines; of the wings 5-8 lines.

This species is here characterized again on account of the imperfect state of the specimen which was first described.

25. DASYPOGON GLABRATUS, n. s. *Mas*. Læte ochraceo-rufus, capite atro, mystace albedo, antennis nigris, abdomine cupreo-nigro, tarsis nigris, alis nigricantibus.

Male. Bright ochraceous red. Head deep black, very shining, with a white line along each side of the face; mystax composed of a few whitish bristles. Proboscis black, lanceolate. Antennæ black, slender, filiform, nearly as long as the breadth of the head. Abdomen cupreous black, linear, narrower than the thorax, and about twice its length. Legs stout, slightly spinose; tarsi black. Wings blackish; veins black, with the usual structure. Length of the body 4 lines; of the wings 8 lines.

Subfam. LAPHRITES, *Walk*.

Gen. LAPHRIA, *Fabr*.

26. LAPHRIA CONGRUA, n. s. *Mas*. Læte cyanea, capite pectoreque maculisque duabus humeralibus argenteis, mystace albo nigro, antennis

nigris, abdomine purpureo basi purpurascenti-cupreo apice cyaneo, alis nigricantibus strigis basique cinereis, halteribus albidis.

Male. Bright blue. Head and pectus with silvery white tomentum; mystax with many white bristles and with a few longer black bristles. Antennæ black, about as long as half the breadth of the head; 3rd joint linear, longer than the 1st and 2nd together. Thorax with two silvery-white tomentose humeral spots. Abdomen linear, bright purple, purplish cupreous at the base, mostly bright blue at the tip; hind borders of the ventral segments silvery white. Legs robust, thickly beset with black bristles; anterior femora with numerous white bristles; fore tibiæ with shining white down beneath. Wings blackish, with cinereous streaks towards the base, which is wholly cinereous; veins black; halteres whitish. Length of the body 10 lines; of the wings 16 lines.

27. *LAPHRIA CONSURGENS*, n. s. *Fæm.* *Ænea*, capite pectore maculisque duabus humeralibus argenteis, mystace albo nigro, antennis nigris, thoracis lateribus viridi variis, abdomine purpureo-cyaneo, alis nigricanti-fuscis, halteribus albidis.

Female. *Æneous*. Head and pectus with silvery-white tomentum; mystax with many short white bristles, and with very few long black bristles. Antennæ black, hardly longer than half the breadth of the head; 3rd joint linear, much longer than the 1st and 2nd together. Thorax tinged with green on each side; two silvery-white tomentose humeral spots. Abdomen bright blue, varied with purple; hind borders of the ventral segments whitish. Legs robust, green, varied with blue and purple, beset with a few black bristles; fore tibiæ with very pale gilded tomentum beneath. Wings blackish brown; veins black; halteres whitish. Length of the body 8 lines; of the wings 14 lines.

28. *Laphria tristis*, *Dol.* See *antè*, p. 146.

29. *LAPHRIA CONVENIENS*, n. s. *Mas.* *Nigra*, capite postico argenteo, mystace antennis pedibusque nigris, thorace obscuro, pectore ferrugineo-tomentoso, abdomine nigricanti-cupreo, alis cinereis, dimidio apicali nigro; halteribus pallide luteis.

Allied to *L. partita*.

Male. Black, robust. Head with silvery cinereous tomentum behind; mystax with several black bristles. Antennæ black, nearly as long as half the breadth of the head; 3rd joint elongate fusiform, a little longer than the 1st and 2nd together. Thorax dull; pectus with ferruginous tomentum. Abdomen blackish cupreous, shining. Legs black, very robust, thickly beset with black bristles. Wings cinereous, black for rather less than half the length from the tips; veins black; halteres pale luteous. Length of the body 6 lines; of the wings 10 lines.

This is most likely the male of *L. consentanea*; but, as the wings are

different in colour, it may be a subspecies, and is therefore here described at length.

30. *Laphria consors*, *Walk.* See Vol. III. p. 85.

31. *Laphria comes*, *Walk.* See Vol. III. p. 85.

32. *LAPHRIA ARGENTIFERA*, n. s. *Fœm.* Atra, capite antico abdominisque segmentis tribus argenteis, mystace albo nigro, thorace maculis quatuor auratis, pedibus rufis, alis purpurascenti-nigris, halteribus albis.

Allied to *L. Vulcanus*, of which species *L. ampla* may be a variety.

Female. Deep black, stout. Head white behind, silvery in front; epistoma prominent; mystax composed of short white bristles and of some long black bristles. Antennæ a little longer than half the breadth of the head; 3rd joint linear, nearly twice the length of the 1st and 2nd together. Thorax with two spots of pale gilded tomentum on each side. Abdomen with the three first segments bright silvery. Legs red, stout; coxæ and trochanters black. Wings purplish-black; veins black; halteres white. Length of the body 7 lines; of the wings 14 lines.

33. *Laphria ardescens*, *Walk.* See *antè*, p. 235.

34. *LAPHRIA FLAGRANTISSIMA*, *Walk.* (see Vol. III. p. 86), var. *Fœm.* Nigra, capite mystaceque auratis, proboscide antennisque rufis, thorace subaurato, maculis humeralibus lateribus scutelloque aurato-fulvis, abdomine basi fascisque aurato-fulvis, pedibus læte fulvis, alis luteis apice nigricantibus, halteribus flavescensibus.

Female. Black, stout. Head brightly gilded; mystax composed of some gilded bristles. Proboscis and antennæ red, the latter not longer than half the breadth of the head; 3rd joint lanceolate, twice the length of the 1st and 2nd together. Thorax slightly covered with gilded tomentum; sides, humeral spots, and scutellum tawny, brightly gilded. Abdomen tawny and gilded at the base and on the hind borders of the following segments, the bands successively decreasing in breadth. Legs robust, bright tawny. Wings luteous, blackish towards the tips and about the exterior part of the subanal vein, cinereous along the hind border; halteres yellowish. Length of the body 8 lines; of the wings 16 lines.

35. *LAPHRIA BASIFERA*, n. s. *Mas.* Nigra, capite antico subaurato, mystace albido, thoracis lateribus subaurato tomentosis, pectore albido, abdomine luteo, basi apiceque nigris, pedibus pallide luteis, alis cinereis, halteribus pallide flavis.

Male. Black. Head with cinereous tomentum, slightly gilded in front; mystax composed of several slender whitish bristles. Antennæ full as long as half the breadth of the head; 3rd joint very elongate-fusiform, much longer than the 1st and the 2nd together. Thorax with slightly

gilded tomentum on each side; pectus with whitish tomentum. Abdomen luteous, black at the base and at the tip. Legs robust, pale luteous; coxæ and knees black. Wings cinereous; veins black; halteres pale yellow. Length of the body 5-6 lines; of the wings 10-11 lines.

36. *Laphria manifesta*, Walk. See Vol. III. p. 87.

Subfam. ASILITES, Walk.

Gen. TRUPANEA, Macq.

37. TRUPANEA INTERPONENS, n. s. *Fem.* Nigra, robusta, capite pectore thoracisque lateribus albido-cinereis, epistomate convexo, mystace nigro, barba alba, thorace vittis tribus angustis cinereis, abdomine lanceolato apicem versus attenuato et compresso maculis lateribus trigonis cinereis, pedibus robustis, tibiis anticis subtus rufo tomentosis, tibiis posticis basi rufescentibus, alis luride fuscis, areola radiali schistaceo strigata, halteribus luteis.

Female. Black, robust. Head, pectus, and sides of the thorax with whitish cinereous tomentum; epistoma very prominent; mystax composed of many stout black bristles; beard of white hairs. Third joint of the antennæ lanceolate, shorter than the 1st; arista more than twice the length of the 3rd joint. Thorax with three slender cinereous stripes. Abdomen lanceolate, attenuated and compressed towards the tip, with two lateral triangular cinereous spots on each segment except the three last. Legs very robust, with black spines; fore tibiæ with red tomentum beneath; hind tibiæ reddish towards the base. Wings lurid brown, with a slate-coloured streak in the radial areolet, which is very long; veins black; halteres luteous. Length of the body 10 lines; of the wings 18 lines.

38. TRUPANEA ADDENS, n. s. *Fem.* Nigra, capite pectore thoracis lateribus ventrequæ cinereo tomentosis, capite antico subaurato, epistomate convexo, mystace nigro, barba alba, abdominis segmentis cinereo marginatis, dimidio apicali stylato, tibiis rufis apice nigris, alis cinereis, areolis radiali et cubitali schistaceo strigatis, halteribus fulvis.

Female. Black. Head, pectus, sides of the thorax and abdomen beneath with cinereous tomentum, which is slightly gilded in front of the head; epistoma prominent; mystax composed of many stout black bristles; beard of white hairs. Third joint of the antennæ shorter than the first; arista about thrice the length of the 3rd joint. Thorax cinereous on each side, and with three cinereous stripes. Abdominal segments cinereous on each side and along the hind borders, with the exception of the four last, which are much compressed and form a style. Legs robust, with black spines; tibiæ red except towards the tips. Wings cinereous; radial and cubital areolets with a slate-coloured streak on each; cubital areolet very long; veins black; halteres tawny. Length of the body 7 lines; of the wings 12 lines.

Gen. *ASILUS*, *Linn.*

39. *ASILUS INVOLUTUS*, n. s. *Fœm.* Niger, auratus, barba aurata, mystace nigro setis nonnullis anticis albis, thorace vittis quatuor nigris abdomine fasciis nigris latis subtrigonis apicem versus stylato, pedibus rufis, femoribus nigro vittatis, alis cinereis apud costam nigricantibus.

Allied to *A. determinatus* and to *A. introducens*.

Female. Black, brightly gilded. Mystax composed of several black bristles and of some lower white bristles; beard with gilded hairs. Palpi beset with black hairs and bristles. Third joint of the antennæ lanceolate, shorter than the 1st and 2nd joints together; arista much longer than the 3rd joint. Thorax with four black stripes; the lateral pair abbreviated and dilated. Abdomen with a broad nearly triangular black band on each segment, excepting the apical part, which is stylate, compressed, and much more than one-third of the whole length. Legs red, very robust; stripes of the femora, knees, and tarsi, except the tips, black. Wings cinereous, blackish along the costa and towards the tips; hind branch of the radial vein undulating; halteres luteous. Length of the body 9 lines; of the wings 14 lines.

40. *ASILUS COMPLENS*, n. s. *Fœm.* Niger, capite antico albido subaurato, epistomate convexo, mystace setis albis nonnullisque nigris, antennis brevissimis, thoracis lateribus vittisque tribus cinereis, abdomine lanceolato fasciis cinereis, alis cinereis apice nigricantibus, halteribus flavescentibus.

Female. Black. Head behind, pectus, and sides of the thorax cinereous; front of the head whitish, slightly gilded; epistoma prominent; mystax composed of white and of fewer black bristles. Antennæ very short; 3rd joint shorter than the first, and about one-third of the length of the arista. Thorax with three cinereous stripes. Abdomen lanceolate, not stylate, with a slender cinereous band on the hind border of each segment. Legs not very robust, with a few black hairs and spines. Wings cinereous, blackish towards the tips; veins black; hind branch of the cubital vein undulating; halteres yellowish. Length of the body 7 lines; of the wings 12 lines.

Gen. *OMMATIUS*, *Illiger.*

41. *Ommatius noctifer*, *Walk.* See Vol. II. p. 88.

Gen. *LEPTOGASTER*, *Meigen.*

42. *Leptogaster ferrugineus*, *Walk.* See Vol. III. p. 89.

43. *LEPTOGASTER TARSALIS*, n. s. Niger, capite pectore thoracisque lateribus albo tomentosus, pedibus piceis, trochanteribus posticis albidis longissimis, femoribus subtus flavescentibus, tibiis posticis tarsisque basi albidis, alis subcinereis, halteribus albidis.

Black. Head, pectus, and sides of the thorax with white tomentum. Legs piceous; hind trochanters whitish, very much elongated; femora

yellowish beneath; tarsi and hind tibiae whitish at the base. Wings slightly cinereous, with a black point at the tip of the mediastinal vein; veins black; halteres whitish. Length of the body 4 lines; of the wings 6 lines.

The description of this species is incomplete, owing to the imperfect state of the specimen.

Fam. LEPTIDÆ, *Westw.*

Gen. LEPTIS, *Fabr.*

44. *Leptis ferruginosa*, *Wied.* See Vol. I. p. 118.

45. *LEPTIS IMPAR*, n. s. *Fam.* *Nigra*, capite thoraceque albedo tomentosis, vertice atro, antennis flavis minimis, abdomine apicem versus fascia vittisque duabus luteis, femoribus posterioribus apice femoribusque anticis flavis, tibiis intermediis fulvis, alis subcinereis dimidio apicali fuscescente, areolis discali et posterioribus cinereo maculatis. halteribus fulvis nigro notatis.

Female. Black. Head and thorax with whitish tomentum; vertex of the head deep black. Proboscis mostly yellowish. Antennæ yellow, very small; 3rd joint round. Abdomen towards the tip with a luteous stripe on each side, and a luteous band. Fore femora yellow; middle femora yellow towards the tips; hind femora yellow towards the base and at the tips; middle tibiae dull tawny. Wings slightly cinereous, brownish for half the length from the tips; discal and hinder external areoleta with a large slightly cinereous spot in each; veins black, tawny at the base; halteres tawny, with a black mark towards the tip. Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Gen. CHRYSOPILA, *Maog.*

46. *CHRYSOPILA GUTTIPENNIS*, n. s. *Fam.* *Picea*, antennis flavescens, abdomine nigro apicem versus compresso et attenuato, femoribus flavescens piceo subnotatis, alis amplis nigricanti-fuscis basi maculisque limpidis, halteribus flavescens nigro fasciatis.

Female. Piceous. Proboscis and antennæ yellowish, the latter very short, with a long arista. Abdomen black, compressed and attenuated towards the tip. Femora yellowish; posterior femora slightly marked with piceous. Wings ample, blackish brown, limpid towards the base and with several limpid spots, some of which are confluent, and form a band across the middle; veins black, yellowish at the base; halteres yellowish, with a black subapical band. Length of the body 3 lines; of the wings 6 lines.

Fam. BOMBYLIDÆ, *Lcach.*

Subfam. BOMBYLITES, *Walk.*

Gen. ANTHRAX, *Fabr.*

47. *Anthrax Pelops*, *Walk.* See Vol. III. p. 90.

48. *ANTHRAX CONFIRMATA*, n. s. *Mas.* Nigra, capite antico subaurato, thorace pilis ochraceis marginato, scutello apicem versus piceo, abdomine lateribus basi ochraceo pilosis, fascia interrupta media maculisque quatuor lateralibus subapicalibus pallidioribus, alis nigrescentibus basi costaque nigris.

Male. Black, nearly allied to *A. Tantalus*. Head with a few gilded hairs in front. Thorax and pectus thickly clothed with ochraceous hairs in front and along each side; scutellum piceous along the hind border. Abdomen thickly clothed with ochraceous hairs on each side of the base, with an interrupted middle band, and with two subapical dots on each side of paler hairs; a slender abbreviated ventral stripe of gilded hairs. Wings blackish, very iridescent, black at the base and along the costa. Length of the body 6 lines; of the wings 10 lines.

49. *Anthrax prætendens*, *Walk.* See Vol. IV. p. 111.

0. *Anthrax semiscita*, *Walk.* See Vol. I. p. 118.

51. *Anthrax aterrima*, *Dol.* See Vol. IV. p. 113; et *antè*, p. 149.

Fam. EMPIDÆ, *Leach.*

Gen. EPICEIA, *Walk.*

52. *EPICEIA FERRUGINEA*, *Walk.* (see p. 149), var. *Mas.* Nigra, probosce apicem versus flava, antennis brevissimis, thorace gibboso, abdominis segmentis chalybeo fasciatis, femoribus posticis incrassatis setosis, tarsis fulvis, alis obscure cinereis costa nigricante, halteribus pallide flavis.

Male. Black. Proboscis yellow towards the tip. Antennæ very small; arista four times the length of the 3rd joint. Thorax gibbous. Abdomen with a chalybeous band on the hind border of each segment. Hind femora incrassated and setose; tarsi tawny. Wings dark cinereous, blackish along the costa; veins black; halteres pale yellow. Length of the body $2\frac{1}{4}$ lines; of the wings 5 lines.

Fam. DOLICHOPIDÆ, *Leach.*

Gen. PSILOPUS, *Meigen.*

53. *Psilopus variipennis*, *Walk.* See *antè*, p. 238.

54. *PSILOPUS MARGINALIS*, n. s. *Fam.* Cyanescenti-viridis, purpureo varius, antennis halteribusque nigris, abdominis segmentis nigro fasciatis, tibiis anterioribus obscure fulvis, alis nigris margine postico cinereo.

♀male. Bluish-green, varied with purple. Head purplish-blue. Antennæ black; arista as long as the breadth of the head. Abdomen with a black band on the fore border of each segment. Anterior tibiæ

dull tawny. Wings black, cinereous along the hind border; fore branch of the præbrachial vein much bent; discal transverse vein much curved; halteres black. Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

Fam. SYRPHIDÆ, *Leach*.

Gen. ERISTALIS, *Latr*.

55. ERISTALIS HELOPHILOIDES, n. s. *Mas*. Nigra, antennarum arista nuda, thorace luteo nigro-trivittato, vitta media interlineata, abdomine fascia basali albido-flava, maculis utrinque tribus lateralibus magnis connexis flavis, femoribus posticis valde incrassatis, tibiis rufescentibus, alis cinereis basi fasciæque abbreviata nigricantibus, halteribus pallide flavis.

Male. Black. Head with cinereous tomentum, except a black shining stripe on the very prominent epistoma. Arista simple. Thorax luteous, with three black stripes, the middle one interlined, the lateral pair obliquely intersected. Pectus cinereous. Abdomen with a whitish-yellow basal band, and on each side with three large connected yellow spots; the 3rd pair connected hindward in the disk. Hind femora much incrassated; tibiæ reddish. Wings cinereous, blackish at the base, and with a blackish middle band which is much abbreviated hindward; veins black; halteres pale yellow. Length of the body 5 lines; of the wings 9 lines.

56. *Eristalis splendens*, *Leg*. See Vol. III. p. 95.

57. ERISTALIS LUCILIOIDES, n. s. *Fem*. Læte purpurea, cyaneo-varia, capite albo, antennis piceis, arista nuda, thorace subcano, abdomine fasciis duabus atris, tibiis tarsisque nigris, alis cinereis, halteribus albis.

Female. Bright purple, varied with blue. Head with white tomentum behind and in front, excepting a stripe and the sides of the peristoma, which are black and shining. Antennæ piceous; arista simple. Thorax slightly covered with hoary down; scutellum with black hairs. Abdomen with two deep-black bands. Tibiæ and tarsi black. Wings cinereous, darker towards the tips; veins black; halteres white. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

Gen. EUMERUS, *Meigen*.

58. EUMERUS ARGENTIPES, n. s. *Fem*. Chalybeo-niger, cinereo pit-bescens, abdomine fasciis duabus albis arcuatis interruptis, femoribus posticis subincrassatis, tibiis anterioribus fulvis, tarsis argenteis, alis cinereis apice nigris, halteribus albis.

Female. Chalybeous black, with cinereous down. Head wanting. Abdomen with two arched interrupted white bands. Legs black; hind femora slightly incrassated; knees and anterior tibiæ tawny; tarsi

silvery white; hind tarsi flat, elongated, dilated. Wings cinereous, black towards the tips; veins black; halteres white. Length of the body 3 lines; of the wings 5 lines.

Gen. PARAGUS, *Meigen*.

59. PARAGUS SUBSTITUTUS, n. s. *Mas.* Chalybeo-niger, facie alba, antennis fulvis linea nigricante, abdomine fasciis quatuor chalybeis, pedibus fulvis, femoribus posterioribus nigris, alis cinereis, halteribus albidis.

Male. Chalybeous black, shining. Head broader than the thorax; face white. Antennæ tawny, with a blackish line above. Abdomen with four chalybeous bands. Legs tawny; posterior femora black, with tawny tips. Wings cinereous; veins black; halteres whitish. Length of the body 2 lines; of the wings 3 lines.

Gen. BACCHA, *Fabr.*

60. BACCHA INCISA, n. s. *Fæm.* Obscure rufa, capite vitta cyaneo-nigra, antennis pedibusque fulvis, thorace vitta nigra, abdomine basi compresso postice dilatato fasciis duabus fulvis, femoribus tibiisque posticis nigricante fasciatis, alis limpidis basi costa fasciaque nigricantibus, halteribus fulvis.

Nearly allied to *B. dispar*.

Female. Dull dark red. Head with cinereous tomentum, bluish-black about the base of the antennæ, and with a bluish-black stripe extending from thence to the peristoma. Proboscis, antennæ, and legs tawny. Thorax with a black stripe; metathorax black. Abdomen compressed towards the base, dilated hindward, where there are two curved tawny bands, the hind one abbreviated. Hind femora and hind tibiæ with blackish bands. Wings limpid, blackish at the base and irregularly along the costa, and obliquely at the tips, and with a broad middle blackish band; veins black; halteres tawny. Length of the body 6 lines; of the wings 10 lines.

61. BACCHA TRIPARTITA, n. s. *Mas.* Nigra, capite nigricanti-cyaneo antice fulvo, antennis pedibusque pallide luteis, pectoris lateribus testaceo fasciatis, abdomine compresso fulvo fasciis duabus nigris apicem versus nigricanti-purpureo subdilatato, femoribus posticis nigricante fasciatis, alis subluridis costa exteriore lurida, halteribus fulvis.

Male. Head blackish-blue above, tawny in front. Proboscis, antennæ and legs pale luteous. Pectus with two oblique testaceous bands on each side. Abdomen compressed, tawny, with two black bands; hind part blackish purple, slightly dilated. Hind femora with a blackish band. Wings vitreous, with a slight lurid tinge; costa lurid for nearly half the length from the base, blackish from thence to the tips; veins black, tawny at the base; halteres tawny. Length of the body 5 lines; of the wings 9 lines.

Gen. SYRPHUS, *Fabr.*62. *Syrphus ægrotus*, *Fabr.* See Vol. I. p. 124.63. *Syrphus ericetorum*, *Fabr.* See Vol. III. p. 97.Fam. MUSCIDÆ, *Latr.*Subfam. TACHINIDÆ, *Walk.*Gen. EURYGASTER, *Macq.*

64. *EURYGASTER LIMITARIS*, n. s. *Fam.* Nigra, cinereo tomentosa, capite albo, frontalibus atris, antennarum articulo 3^o lineari, aristæ dimidio basali robusto, thorace vittis duabus nigris, scutelli margine postico rufescente, abdomine fasciis duabus latis interruptis albis, tibiis posticis fimbriatis, alis cinereis basi nigricantibus, alulis albis, halteribus piceis.

Allied to *E. remittens*.

Female. Black, with cinereous tomentum and with black hairs and bristles. Head white; frontalia deep black, slightly widening in front, with bristles along each side; facialia without bristles; epistoma not prominent. Antennæ not reaching the epistoma; 3rd joint linear, rounded at the tip, about four times the length of the 2nd; arista stout for full half its length from the base, rather less than twice the length of the 3rd joint. Thorax with two slender indistinct black stripes; scutellum reddish along the hind border. Abdomen with two broad interrupted white bands on the fore borders of the 2nd and 3rd segments. Legs stout; hind tibiæ thickly fringed with short hairs. Wings cinereous, blackish towards the base; veins black; præbrachial vein forming an obtuse angle at its flexure, very slightly curved inwards from thence to its tip; discal transverse vein hardly undulating, parted by hardly half its length from the border, and by much more than half its length from the flexure of the præbrachial; alulæ white; halteres piceous. Length of the body 6 lines; of the wings 11 lines.

Gen. MASICERA, *Macq.*

65. *MASICERA? FICTA*, n. s. *Fam.* Atræ, capite albido, frontalibus atris, thorace fasciis tribus scutellique margine postico flavescenti-albis, abdomine fasciis tribus flavescenti-albis, 1^a incisa, 3^a apicali, alis cinereis, alulis magnis albis.

Female. Deep black. Head whitish; frontalia deep black, linear. Antennæ reaching the epistoma; 3rd joint linear, full 4 times the length of the 2nd. Thorax with three yellowish-white bands; the 1st extending obliquely across the pectus; the 2nd curved, connected on each side with the 1st; scutellum yellowish, white along the hind border. Abdomen with three yellowish-white bands; the 1st exca-

vated on each side; the 3rd apical, interrupted hindward. Wings cinereous; veins black; præbrachial vein forming a rounded slightly obtuse angle at its flexure, hardly curved from thence to its tip; discal transverse vein hardly undulating, parted by much less than its length from the border, and by about its length from the flexure of the præbrachial; alulæ large, white. Length of the body 3 lines; of the wings 5 lines.

This species resembles some of the *Muscides* in structure, and hardly belongs to the genus *Masicera*.

Subfam. DEXIDES, *Walk.*

Gen. DEXIA, *Meigen*.

66. *DEXIA NIVIFERA*, n. s. *Mas.* Lutea, gracilis, capite argenteo, frontalibus atris, antennarum articulo 3° longissimo, arista subplumosa, thoracis disco nigricante argenteo-tomentoso, abdomine conico fasciis tribus nigris, pedibus longissimis, tibiis tarsisque nigris, alis cinereis, costa fuscescente, alulis subflavescentibus.

Male. Luteous, slender, with black bristles. Head with silvery-white tomentum; frontalia deep black, very narrow on the vertex, widening in front, beset with bristles along each side; facialia without bristles; epistoma hardly prominent. Antennæ almost reaching the epistoma; 3rd joint linear, rounded at the tip, about six times the length of the 2nd; arista black, very much longer than the 3rd joint, slightly plumose. Disk of the thorax blackish, with silvery-cinereous tomentum. Abdomen conical, longer than the thorax, with three black bands; 1st band interrupted on each side; 3rd apical. Legs very long; tibiæ and tarsi black. Wings cinereous, brownish along the costa; veins black, luteous towards the base; præbrachial vein forming an extremely obtuse angle at its flexure, straight from thence till near its tip, where it is slightly curved; discal transverse vein nearly straight, parted by hardly half its length from the border, and by hardly less than its length from the flexure of the præbrachial; alulæ with a slight yellowish tinge. Length of the body 6 lines; of the wings 10 lines.

67. *Dexia alulifera*, *Walk.* See *antè*, p. 157.

Gen. RUTILIA, *Desv.*

68. *RUTILIA SATURATISSIMA*, n. s. *Mas.* Saturatissime viridis, capite argenteo, frontalibus atris trigonis, palpis antennis pedibusque nigris, thorace vittis quatuor interruptis nigris, abdomine nigro fasciis tribus interruptis aurato-viridibus, alis nigricanti-fuscis basi nigris. *Fem.* Frontalibus latis, abdominis segmentis 1° 2°que cupreis.

Male. Brilliant green, with black bristles. Head silvery white on each side of the face and of the eyes; frontalia deep black, triangular.

Palpi, antennæ and legs black. Arista minutely pubescent. Thorax with four interrupted black stripes, bright blue on each side; scutellum purple; pectus black, with a broad interrupted bluish-green band on each side. Abdomen black, with three interrupted golden-green bands, which are entire and more slender beneath; 1st band much excavated on each side behind; 2nd slightly excavated; 3rd entire, broader than the others. Wings blackish-brown, black near the base; alulæ black. *Female*. Frontalia broad, widening slightly in front. First and second bands of the abdomen mostly cupreous. Length of the body 8-9 lines; of the wings 16-18 lines.

69. *RUTILIA FERVENS*, n. s. *Fam.* Aurato-viridis, cyaneo subvaria, frontalibus atris, palpis antennis pedibusque nigris, thorace vittis quatuor angustis interruptis nigris, abdomine nigro fasciis tribus interruptis rufescenti-cupreis, alis luridis basi nigricantibus, alulis obscure cinereis.

Female. Golden-green, slightly varied with blue. Head with cinereous tomentum on each side of the face and of the eyes; frontalia deep black, widening in front. Palpi, antennæ, and legs black; arista minutely pubescent. Thorax with four slender interrupted black stripes; pectus black, with a broad interrupted bluish-green band on each side. Abdomen black, with three interrupted reddish-cupreous bands, which are narrower and entire beneath; 1st and 2nd bands much excavated on each side of the hind border. Wings lurid, blackish near the base; veins black, tawny towards the base; alulæ dark cinereous. Length of the body 8 lines; of the wings 16 lines.

70. *RUTILIA ATRIBASIS*, n. s. *Fam.* Saturate viridis, capite argenteo, frontalibus atris, palpis antennis pedibusque nigris, thoracis lateribus cyaneo purpureoque variis, abdomine nigro fasciis tribus aurato-viridibus, 1^a incisa, 2^a 3^aque interruptis, alis cinereis costa fusca basi nigra, alulis halteribusque nigris.

Female. Deep green. Head silvery white, much narrower than the thorax; frontalia deep black, broad, linear; face, palpi, antennæ, pectus, and legs black. Thorax tinged with blue and purple on each side; pectus with a bluish-green band on each side. Abdomen black, with three golden-green bands; 1st band much broader than the others, deeply notched on its hind border; 2nd and 3rd interrupted. Wings cinereous, more or less tinged with brown along the costa, black towards the base; veins, alulæ and halteres black. Length of the body 8½ lines; of the wings 17 lines.

71. *RUTILIA COMPLICITA*, n. s. *Fam.* Saturate cyanea, capite argenteo, frontalibus atris, palpis nigris apice fulvis, antennis pedibusque nigris, thorace vittis quatuor nigris, scutello obscure purpureo, abdomine nigro fasciis tribus aurato-viridibus, 1^a 2^aque interruptis, 3^a incisa, alis cinereis costa fusca basi nigra, alulis halteribusque nigris.

Female. Deep blue, Head silvery-white; frontalia deep black, widening in front. Palpi black, tawny towards the tips. Antennæ, pectus, legs, and abdomen black. Thorax with four black stripes, tinged with purple on each side; scutellum dark purple; pectus with a blue band on each side. Abdomen with three golden-green bands; 1st band slightly interrupted, notched on the hind border, much broader than the 2nd; 2nd interrupted, excavated on each side behind; 3rd much abbreviated on each side, deeply indented in front; ventral bands more regular. Wings as in the preceding species. Length of the body 8 lines; of the wings 16 lines.

72. *RUTILIA VOLUCELLOIDES*, n.s. *Mas et Fem.* Nigra, capite albidocinereo, frontalibus atris, antennis piceis arista nuda, thoracis lateribus pectoreque cinereis, scutello ferrugineo, abdomine fasciis tribus latis interruptis chalybeo-ferrugineis, alis cinereis basi costæque dimidio basali nigricantibus, alulis albidis.

Male. Black, rather dull, hardly tomentose. Head whitish cinereous; frontalia deep black, widening much in front; epistoma prominent. Eyes almost connected. Antennæ piceous, about half the length of the face; 3rd joint about twice the length of the 2nd; arista simple, stout at the base, about twice the length of the 3rd joint. Sides of the thorax in front and pectus cinereous. Scutellum ferruginous. Abdomen with three broad interrupted ferruginous chalybeous-tinged bands. Wings cinereous, blackish at the base and along more than half the length of the costa; præbrachial vein forming a rounded hardly obtuse angle at its flexure, beyond which it is slightly curved inward; discal transverse vein hardly undulating, parted by hardly one-third of its length from the border, and by much more than half its length from the flexure of the præbrachial; alulæ whitish. Length of the body 5 lines; of the wings 10 lines.

Female. Larger. Eyes slightly parted above. Wings with the discal transverse vein parted by one-fourth of its length from the border, and by rather more than half its length from the flexure of the præbrachial. Length of the body 7 lines; of the wings 14 lines.

73. *RUTILIA TRIKOIDES*, n. s. *Fem.* Nigra, capite parvo subaurato, frontalibus atris, antennarum arista nuda, thorace vittis tribus cinereis, scutello ferrugineo, alis cinereis basi nigricantibus costa fusca, alulis obscure cinereis.

Female. Black, with black hairs and bristles. Head narrower than the thorax, with cinereous slightly gilded tomentum; frontalia deep black, hardly widening in front. Eyes bare. Antennæ not near reaching the epistoma; arista simple, stout at the base, more than twice the length of the 3rd joint. Thorax with three cinereous stripes; sides and pectus mostly cinereous; scutellum ferruginous. Abdomen broader, but not longer than the thorax. Wings cinereous, blackish near the base, brown along the costa; veins black; præbrachial vein

forming a rounded right angle at its flexure, slightly curved inward from thence to its tip; discal transverse vein undulating, parted by one-fourth of its length from the border, and by more than half its length from the flexure of the præbrachial; alulæ dark cinereous. Length of the body 7 lines; of the wings 14 lines.

Subfam. MUSCIDES, *Walk.*

Gen. MUSCA, *Linn.*

74. MUSCA (Gen. *Silbomyia*?) *DIFFUSA*, n. s. *Mas*. Viridis, cyaneo purpureoque varia, capite aurato, frontalibus atris, palpis antennis tibiis tarsisque nigris, pectoris lateribus argenteo quadrimaculatis, alis obscure cinereis basi costaque basali nigris, alulis albis, halteribus nigris.

Male. Green, varied with blue and purple. Head with gilded tomentum; frontalia deep black, very narrow; epistoma piceous, prominent. Palpi, antennæ, tibiæ, and tarsi black. Antennæ not reaching the epistoma. Pectus with two silvery-white spots on each side. Wings dark cinereous, black about the base and along the adjoining part of the costa; veins black; præbrachial vein forming a rounded very obtuse angle at its flexure, nearly straight from thence to its tip; discal transverse vein deeply curved in front, parted by hardly one-third of its length from the border, and by about half its length from the flexure of the præbrachial; alulæ white; halteres black. Length of the body 6 lines; of the wings 14 lines.

75. *Musca* (Gen. *Silbomyia*, *Macq.*) *costalis*, *Walk.* See *antè*, p. 159.

Subfam. HELOMYZIDES, *Fallén.*

Gen. DRYOMYZA, *Fallén.*

76. *Dryomyza semicyanea*, *Walk.* See Vol. III. p. 109.

Gen. HELOMYZA, *Fallén.*

77. HELOMYZA SCUTELLARIS, n. s. *Mas et Fæm.* Testacea, crassa, facie albida, antennis fulvis arista plumosa, scutello postice atro, abdomine maculis quatuor posticis nigris, alis cinereis apud costam sub-luteis, venis apud marginem nigro subnebulosis.

Male and Female. Testaceous, stout. Head black, whitish behind and on the face, with several stout black bristles on the vertex and front. Antennæ tawny, less than half the length of the face; 3rd joint elongate-conical; arista plumose, full thrice the length of the 3rd joint. Scutellum deep black hindward. Abdomen oval, hardly narrower or shorter than the thorax, with a black spot on each side of the 4th and

5th segments. Legs rather short and slender. Wings cinereous, with a luteous tinge along the costa; veins black; tips of the radial, cubital, and præbrachial veins slightly clouded with black; discal transverse vein straight, upright, slightly clouded with brown, parted by more than half its length from the border. *Male*. Discal transverse vein parted from the præbrachial transverse by thrice its length. *Female*. Discal transverse vein parted from the præbrachial transverse by more than twice its length. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

Gen. *XARNUTA*, *Walk.*

78. *Xarnuta leucotelus*, *Walk.* See Vol. I. p. 28.

Eyes in the living insect "silky green, with opal-blue reflexions."

Gen. *SEPEDON*, *Latr.*

79. *SEPEDON COSTALIS*, n. s. *Mas.* Ferruginea, capite pallide luteo guttis duabus nigris, antennis piceis, articulo 1° pallide luteo, 2° longissimo, 3° conico basi luteo, arista alba pubescente, thorace cinerascente vittis duabus obscurioribus, pectore argenteo, pedibus pallide luteis, tarsis piceis, femoribus posticis nigro spinosis, alis obscure fuscis costa pallide cinerea.

Allied to *S. duplicans*.

Male. Ferruginous. Head pale luteous, shining white about the eyes; front depressed, with a black dot on each side; peristoma with a piceous dot on each side. Antennæ piceous, longer than the breadth of the head; 1st joint short, pale luteous; 2nd very long, slender, linear; 3rd conical, pale luteous towards the base, about one-fourth of the length of the 2nd; arista white, minutely pubescent. Thorax slightly cinereous, with two slender parallel approximate darker stripes; sides and pectus darker, the latter with silvery-white tomentum. Abdomen linear, longer and a little narrower than the thorax. Legs pale luteous; hind femora long, robust, armed beneath with minute black spines; fore tibiæ partly piceous; tarsi piceous. Wings dark brown, pale cinereous along the costa for two-thirds of the length from the base; veins black, tawny at the base; discal transverse vein straight, upright, parted by hardly half its length from the border, and by much more than twice its length from the præbrachial transverse vein. Length of the body 5 lines; of the wings 8 lines.

Subfam. BORBORIDES, *Walk.*

Genus *COTAMBA*, *Walk.*

80. *Cotamba fumifera*, *Walk.* See *antè*, p. 247.

Subfam. ORTALIDES, *Haliday*.Gen. LAMPROGASTER, *Macq.*

81. *Lamprogaster marginifera*, *Walk.* See Vol. II. p. 111.

Gen. PTEROGENIA, *Bigot.*

82. *PTEROGENIA VITTIFINIS*, n. s. *Mas et Fém.* Nigra, lata, crassa, capite albido, facie maxima, arista subplumosa, scutelli lateribus luteis, femoribus crassis, tarsis flavescenti-albis, alis albis costa basali lutea fasciis duabus guttisque nigricantibus. *Mas.* Abdomine ovato. *Fém.* Abdomine lanceolato vittis tribus luteis.

Male and Female. Black, broad, thick. Head whitish, black beneath and with a black band on the front; face very large. Antennæ black, not more than half the length of the face; arista minutely plumose, more than twice the length of the 3rd joint. Scutellum rather small, not ascending, luteous along each side. Femora rather thick; tarsi yellowish white. Wings white, luteous along the costa towards the base, with many blackish dots, some of which are confluent along the hind border, and with two blackish bands, which are connected on the hind border; veins black; discal transverse vein straight, parted by one-fourth of its length from the border, and by much more than its length from the præbrachial transverse vein; halteres whitish. *Male.* Abdomen oval, not longer than the thorax. *Female.* Abdomen lanceolate, shining, much longer than the thorax, with three luteous stripes. Length of the body 3 lines; of the wings 6 lines.

83. *PTEROGENIA VARIIPENNIS*, n. s. *Mas.* Nigra, nitens, lata, crassa, capite albido fascia nigra, facie maxima, thorace vittis quatuor albidis, abdomine brevi-conico, pedibus fulvis, femoribus nigris, tarsis albis, alis limpidis guttis plurimis transversis fuscis fascia obliqua abbreviata e guttis nigris, halteribus luteis.

Male. Black, shining, broad, thick. Head whitish, black beneath and with a black band on the front; face very large. Antennæ black, much less than half the length of the face; arista simple, much more than twice the length of the 3rd joint. Thorax with two whitish stripes on each side; scutellum whitish along each side. Abdomen short-conical, shorter than the thorax. Legs tawny; femora mostly black; tarsi white, with black tips. Wings limpid, with a luteous tinge along the costa, with numerous transverse brown dots, and with an oblique middle band which is abbreviated hindward, and is formed of two separate lines of black dots; veins black, luteous towards the base; discal transverse vein straight, upright, parted by hardly one-fourth of its length from the border, and by very much more than its length from the præbrachial transverse vein; halteres luteous. Length of the body 3 lines; of the wings 6 lines.

Gen. PLATYSTOMA; Latr.

84. *PLATYSTOMA ATOMARIA*, n. s. *Mas et Fæm.* Nigra, lata, robusta, subaurato pubescens, capite rufescenti-fulvo punctis nigris, facie maxima, antennis fulvis, thorace vittato, scutello maximo, abdomine subcompresso segmentis cinereo marginatis, tibiis tarsisque fulvis, alis cinereis, guttis plurimis transversis nigricantibus, halteribus sordide albidis.

Male and Female. Black, broad, stout, dull, thinly clothed with slightly gilded pubescence. Head reddish tawny, whitish behind and about the eyes, with three black points on the vertex; front with four black points in a line at the base of the antennæ; face very large, with a black dot on each side at the end of the groove in which the antenna rests; epistoma not prominent. Antennæ tawny, little more than half the length of the face; 3rd joint slender, linear; arista bare, slender, very much longer than the 3rd joint. Thorax with a not pubescent stripe; scutellum very large, elongate-conical, slightly ascending, extending far over the abdomen. Abdomen slightly compressed, a little shorter and much narrower than the thorax; hind borders of the segments cinereous; oviduct long, stylate, tawny towards the tip. Femora stout; tibiæ and tarsi tawny. Wings cinereous, with very numerous transverse blackish dots, some of which are confluent; alulæ dark cinereous, very large; halteres dingy whitish. Length of the body 4 lines; of the wings 7 lines.

85. *PLATYSTOMA PRODUCTA*, n. s. *Fæm.* Cinereo-nigra, robusta, elongata, capite luteo, facie nigro vittata, antennis fulvis articulo 3 longissimo, thorace vittis quatuor cinereis, abdomine basi subtusque rufescente, tibiis posterioribus rufis apice nigris, femoribus tibiisque anticis rufo strigatis, alis cinereis punctis guttis fasciisque tribus exterioribus nigricantibus, halteribus piceis.

Female. Cinereous black, stout, elongate. Head luteous, brighter above than in front, white behind and about the eyes; a ferruginous point on each side of the vertex; face with a black stripe between the white grooves for the antennæ. Antennæ tawny, a little more than half the length of the face; 3rd joint linear, slender, full six times the length of the 2nd; arista simple, full twice the length of the 3rd joint. Thorax with four slender cinereous stripes; sides and pectus also cinereous; humeral calli tawny. Abdomen a little shorter and narrower than the thorax, reddish on each side and beneath; oviduct black, short. Posterior femora red towards the tips; posterior tibiæ red, with black tips; fore femora and fore tibiæ slightly streaked with red. Wings cinereous, with numerous blackish points and transverse dots; apical part with three blackish bands, the 1st interrupted; veins black; discal transverse vein straight, upright, parted by full one-third of its length from the border, and by more than its length

from the præbrachial transverse vein; halteres piceous. Length of the body 4 lines; of the wings 8 lines.

Gen. DACUS, *Fabr.*

86. DACUS PUBISETA, n. s. *Mas.* Cyaneus, elongatus, capite argenteo, facie fulva palpis nigris apice fulvis, antennis fulvis articulo 3^o longissimo arista alba pubescente, thorace vittis tribus cinereis, abdomine compresso cupreo-purpureo, femoribus halteribusque albis, alis subcinereis nigro bifasciatis, fascia 1^a incompleta, 2^a lata vittam costalem emittente.

Allied to *D. divergens* and to *D. addens*,

Male. Blue, elongate. Head with silvery-white tomentum behind, in front, and about the eyes; disk of the face tawny, its grooves for the antennæ alongside of the eyes. Palpi black, with tawny tips. Antennæ tawny, as long as the face; 3rd joint slender, six times the length of the 2nd, slightly broader towards the tip which is rounded; arista white, much longer than the 3rd joint, densely pubescent except towards the tip. Thorax with three cinereous stripes; pectus silvery whitish; scutellum with two long apical bristles. Abdomen compressed, cupreous-purple, varied with blue, much longer and narrower than the thorax. Legs purplish-black, with silvery-whitish tomentum; femora white, except towards the tips. Wings slightly cinereous, with two black bands; 1st band incomplete; 2nd broad, emitting a costal stripe to the tip of the wing; veins black; discal transverse vein upright, slightly curved outward, parted by about one-fourth of its length from the border, and by rather less than its length from the præbrachial transverse vein, which is long and very oblique; halteres white. Length of the body 6 lines; of the wings 10 lines.

87. DACUS DISCIPENNIS, n. s. *Fem.* Fulvus, capite lutescente, facie nigro biguttata, antennis facie longioribus, arista nuda, thoracis disco piceo-nigro strigis maculisque duabus lateralibus flavis, abdomine fusiformi ferrugineo segmento 2^o fulvo, pedibus fulvis, tarsis halteribusque pallide flavis, alis subcinereis, dimidio antico vittaque postica fuscis.

Allied to *D. emittens*.

Female. Tawny. Head more luteous; face with a black dot in the groove for the antenna on each side. Antennæ longer than the face; 1st and 2nd joints rather long; 3rd linear, slender, oblique at the tip, about thrice the length of the 2nd; arista bare, much longer than the 3rd joint. Metathorax and disk of the thorax and of the pectus piceous black; an oblique yellow streak on each side of the pectus, and a large spot of the same colour on each side of the metathorax. Abdomen fusiform, ferruginous, longer and a little narrower than the thorax; 2nd segment tawny. Legs tawny; tarsi pale yellow. Wings slightly cinereous, dark brown on half the breadth from the costa,

and with a diffuse brown stripe hindward; the dark costal part diffuse towards the tip of the wing; veins black; discal transverse vein undulating, parted by one-fourth of its length from the border, and by a little more than its length from the præbrachial transverse vein, which is oblique; halteres pale yellow. Length of the body 4 lines; of the wings 8 lines.

88. *Dacus pectoralis*, Walk. See Vol. III. p. 114.

89. *DACUS AREOLATUS*, n. s. *Fœm.* Fulvus, capite pallide flavo, facie guttis quatuor nigris, antennarum articulo 3^o longissimo, thorace vittis duabus nigris lituris nonnullis scutelloque flavis, abdomine brevelliptico, oviductu gracili cylindrico longissimo, pedibus flavescentibus, alis limpidis vittis duabus connexis fuscis 2^a furcata, halteribus pallide flavis.

Female. Tawny. Head pale yellow, except the disk of the front, which is pale tawny; face with two black dots in the groove for the antenna on each side. Antennæ a little longer than the face; 3rd joint linear, slender, rounded at the tip, six times the length of the 2nd; arista simple, a little longer than the 3rd joint. Thorax with two black stripes; two calli and a short hinder stripe on each side, scutellum, a spot on each side of the metathorax, and an oblique streak on each side of the pectus yellow. Abdomen short-elliptical, not longer than the thorax, terminated by a slender cylindrical oviduct, which is as long as the preceding part. Legs yellowish. Wings limpid, with a brown costal stripe which is dilated towards the tips, and with a brown irregular forked hindward stripe which is twice connected with the costal stripe; two elongated limpid spots included in the brown part; veins black, tawny towards the base; discal transverse vein almost straight, parted by one-fourth of its length from the border, and by a little more than its length from the oblique præbrachial transverse vein; halteres pale yellow. Length of the body 3 lines; of the wings 5 lines.

90. *DACUS STRIGIFINIS*, n. s. *Fœm.* Testaceus, elongatus, capite maculis duabus nigris, antennarum articulo 3^o epistoma attingente, thorace vittis tribus piceis, abdomine fusiformi, alis limpidis costa fuscescente, vena transversa discali fusco nebulosa.

Female. Testaceous, elongate. Head with a piceous point on the vertex, and with a black spot on each of the grooves for the antennæ. Antennæ reaching the epistoma; 3rd joint linear, slender, rounded at the tip, about four times the length of the 2nd; arista bare, much longer than the 3rd joint. Thorax with three indistinct piceous stripes. Abdomen fusiform, narrower and a little longer than the thorax. Wings limpid; costa brownish; veins testaceous; discal transverse vein straight, clouded with brown, parted by one-sixth of its length from the border, and by about its length from the præbrachial transverse vein. Length of the body 3 lines; of the wings 6 lines.

91. *Dacus sepsoides*, Walk. See *ant*, p. 163.

Gen. *ADRAMA*, *Walk.*

92. *Adrama selecta*, *Walk.* See Vol. III. p. 118.

93. *ADRAMA CONSORS*, n. s. *Fœm.* Fulva, longa, gracilis, capite macula nigra, antennarum articulo 3^o lineari latiusculo, arista subpubescente, thorace maculis duabus anticis nigris, abdomine longi-fusiformi pubescente, pedibus longiusculis, femoribus muticis, alis limpidis costa nigra.

Female. Tawny, long, slender. Head with a black spot on the front. Antennæ nearly reaching the epistoma; 3rd joint linear, rather broad, rounded at the tip; arista minutely pubescent, very much longer than the 3rd joint. Thorax with a black spot on each side in front. Abdomen elongate-fusiform, pubescent, a little narrower than the thorax, and nearly twice its length. Legs rather long; femora unarmed. Wings limpid; costa black to the tips; veins black, tawny at the base; discal transverse vein straight, upright, parted by one-sixth of its length from the border, and by very much more than its length from the præbrachial transverse vein. Length of the body 4½ lines; of the wings 7 lines.

Gen. *STRUMETA*, *Walk.*

94. *STRUMETA REPLETA*, n. s. *Fœm.* Pallide lutea, capite parvo, antennis fulvis basi nigris arista plumosa, thorace vittis sex nigris, abdomine longi-ovato fasciis quatuor nigris, 2^a 3^aque subinterruptis, 4^a apicali, femoribus nigris, alis nigricanti-fuscis latiusculis vittis duabus guttisque luteis et albis.

Female. Pale luteous. Head much narrower than the thorax. Antennæ tawny, black at the base, not more than half the length of the face; 3rd joint about twice the length of the 2nd; arista thinly plumose, full twice the length of the 3rd joint. Thorax with six black stripes; the two lateral pair abbreviated; pectus with a black disk and a black stripe on each side; metathorax and base of the scutellum black. Abdomen elongate-oval, a little longer than the thorax, with four black bands, the 4th apical, the 2nd and 3rd slightly interrupted. Femora black. Wings blackish-brown, rather broad, with luteous costal dots, and with white marginal dots, with a luteous subcostal stripe, and with a white posterior stripe; veins black; discal transverse vein almost straight, slightly oblique, parted by one-fourth of its length from the border, and by about its length from the præbrachial transverse vein. Length of the body 3 lines; of the wings 7 lines.

Gen. *ORTALIS*, *Fallén.*

95. *ORTALIS TARSALIS*, n. s. *Fœm.* Cyanea, nitens, capite supra atro antice piceo, palpis pedibusque nigris, antennis fulvis arista plumosa,

abdomine longi-conico, tarsis albis apice nigris, alis albis nigro trifasciatis, fascia 2^a punctum album includente, 3^a apud costam excurrente, halteribus piceis.

Female. Blue, shining. Head deep black above, piceous in front, silvery white about the eyes. Proboscis and palpi black. Antennæ tawny, very short; 3rd joint conical, a little longer than the 2nd; arista plumose. Abdomen elongate-conical, longer than the thorax; oviduct black, long, lanceolate. Legs black; tarsi white, with black tips. Wings white, with three black bands; 1st band very near the base; 2nd broad, including a white costal point; 3rd traversing the discal transverse vein, continued along the costa to the tip of the wing; veins black; discal transverse vein straight, upright, parted by less than half its length from the border, and by more than its length from the præbrachial transverse vein; halteres piceous. Length of the body 2½ lines; of the wings 4 lines.

95*. *ORTALIS OBLIQUA*, n.s. *Fæm.* Cyanea, nitens, capite piceo antice fulvo, palpis pedibusque nigris, antennis fulvis, arista nuda, thorace vitta cinerea, abdomine subfusiformi subcompresso basi testaceo, femoribus anticis fulvis, alis albidis nigro trifasciatis, fascia 1^a obliqua, 2^a 3^aque connexis, 3^a apicali, halteribus albidis.

Female. Blue, shining. Head piceous above, tawny in front, shining white about the eyes; peristoma large, produced. Proboscis and palpi black. Antennæ tawny, nearly reaching the epistoma; 3rd joint linear, rounded at the tip; arista simple, slender. Thorax with a cinereous stripe; pectus with cinereous tomentum. Abdomen subfusiform, keeled above, slightly compressed, testaceous at the base, longer than the thorax; oviduct black, long, lanceolate. Legs black, pubescent; fore coxæ and fore femora tawny. Wings whitish, with three black bands which are abbreviated hindward; 1st band oblique, proceeding from the base of the costa to the disk; 2nd attenuated hindward, connected on the costa with the 3rd, which is apical; veins black; discal transverse vein straight, upright, parted by one-fourth of its length from the border, and by more than its length from the præbrachial transverse vein; halteres whitish. Length of the body 2½ lines; of the wings 4 lines.

Subfam. SEPSIDES, *Walk.*

Gen. *ANGITULA*, *Walk.*

96. *ANGITULA LONGICOLLIS*, *Walk.* (see Vol. III. p. 123), var. *Fæm.*

Cyanea, nitens, viridi purpureoque varia, capite antennisque pallide luteis, articulo 3^o apice nigro, abdomine fusiformi subtus luteo, pedibus nigris, femoribus basi coxisque anticis albis, alis fusciscenti-cinereis apice nigricantibus, costa basali halteribusque nigris.

Female. Blue, shining, varied with green and with purple. Head pale

luteous, narrower than the thorax; vertex and front reddish. Antennæ pale luteous, shorter than the face; 3rd joint linear, black towards the tip, which is rounded; arista pubescent. Thorax much produced and attenuated in front; scutellum truncated on the hind border. Abdomen fusiform, narrower and a little longer than the thorax, luteous beneath. Legs long, black, rather stout; femora towards the base, and fore coxæ, white. Wings brownish cinereous, black along the basal part of the costa, blackish at the tips; veins black; discal transverse vein hardly curved, parted by less than half its length from the border, and by very much more than its length from the præbrachial transverse vein; halteres black. Length of the body 6 lines; of the wings 10 lines.

Gen. CALOBATA, *Fabr.*

97. CALOBATA STABILIS, n. s. *Fam.* Cyanea, fronte atra, facie picea, proboscide palpisque pallide flavis, antennis luteis, pedibus pallide flavis, femoribus anticis apices versus tibiis anticis tibiis tarsisque posterioribus piceis, femoribus posterioribus piceo trifasciatis, tarsis anticis albis, alis subcinereis fascia apicibusque pallide fuscis.

Female. Blue. Head silvery white about the eyes; front deep black; face piceous. Proboscis and palpi pale yellow, darker at the tips. Antennæ luteous; 3rd joint conical. Thorax with slight cinereous tomentum; pectus more silvery. Abdomen slender, compressed, a little longer than the thorax, and less than half its breadth. Legs pale yellow; fore femora piceous for half the length from the tips; posterior femora with three piceous bands; posterior tibiæ and tarsi and fore tibiæ piceous; fore tarsi white, piceous towards the base. Wings slightly cinereous, pale brown towards the tips, and with a pale brown band beyond the middle; veins black; cubital and præbrachial veins converging towards each other, nearly contiguous at the tips of the wings; discal transverse vein straight, parted by half its length from the border, and by full four times its length from the præbrachial transverse vein; halteres black. Length of the body 5 lines; of the wings 8 lines.

98. CALOBATA COARCTATA, n. s. *Fam.* Cinereo-nigra, gracilis, capite nigricanti-cyaneo, palpis antennisque nigris, arista nuda, pedibus piceis, femoribus posterioribus fascia subapicali pallide flava, tarsis albidis apice nigris, alis subcinereis nigricante trifasciatis, halteribus albis apice nigris.

Female. Cinereous black, slender. Head blackish-blue, whitish about the eyes. Proboscis, palpi, and antennæ black; 3rd joint of the latter conical; arista simple, slender. Abdomen compressed, narrower and very much longer than the thorax. Legs piceous, long, slender; posterior femora with a pale-yellow subapical band; tarsi whitish, with black tips. Wings narrow, slightly cinereous, blackish at their

tips, and with two blackish bands; 2nd band very broad; veins black; cubital and præbrachial veins slightly converging towards their tips; discal transverse vein parted by one-fourth of its length from the border, and by about four times its length from the præbrachial transverse vein; halteres white, with black knobs. Length of the body 4 lines; of the wings 6 lines.

Subfam. PSILIDES, *Walk.*

Gen. MICROPEZA, *Meig.*

99. *Micropeza fragilis*, *Walk.* See Vol. I. p. 37.

100. *MICROPEZA PROLIXA*, n. s. *Mas?* Piceo-nigra, gracillima, capite antico palpisque fulvis, fronte atro guttata, antennis pedibusque pallide luteis, his longissimis gracillimis, femoribus anticis, tarsis posterioribus tibiisque piceis, tarsis anticis albis, alis nigricantibus, halteribus piceis.

Male? Piceous black, very slender. Head in front, proboscis, and palpi tawny; a deep black dot on the front. Antennæ pale luteous; 3rd joint conical. Thorax fusiform. Abdomen linear, longer and narrower than the thorax. Legs pale luteous, very long and slender; fore femora, tibiæ, and posterior tarsi piceous; fore tarsi white. Wings blackish, very narrow, darkest along the costa; veins black; cubital and præbrachial veins slightly converging towards the tips; discal transverse vein straight, parted by less than its length from the border, and by more than six times its length from the præbrachial transverse vein; halteres piceous. Length of the body 4 lines; of the wings 6 lines.

Gen. NERIUS, *Wied.*

101. *Nerius duplicatus*, *Wied.* See Vol. III. p. 125.

Subfam. OSCINIDES, *Haliday.*

Genus CEPHALOCONUS, n. g.

Fœm. Corpus breviusculum, subconvexum. Caput thorace vix brevius; facies elongata, porrecta, conica; peristoma minimum. Proboscis et palpi brevissima. Antennæ brevissimæ, articulo 3º conico, arista nuda. Scutellum productum. Abdomen longiconicum, thorace paulo brevius. Pedes breviusculi, tibiis tarsisque gracilibus. Alæ mediocres.

Female. Body rather short, slightly convex. Head nearly as long as the thorax; the face elongated, porrect, and conical; peristoma very small. Proboscis and palpi very short. Antennæ very short; 3rd joint conical; arista simple, slender, about four times the length of the 3rd joint. Scutellum prominent. Abdomen elongate-conical,

shorter and a little narrower than the thorax. Legs rather short; tibiæ and tarsi slender. Wings of moderate size; veins straight; præbrachial vein beyond the discal transverse vein slightly converging towards the cubital vein.

102. *CEPHALOCONUS TENEBROSUS*, n. s. *Fam.* Cinereo-niger, obscurus, capite nitente lineis quinque flavis, antennis luteis, metathorace testaceo, tibiis, tarsis halteribusque pallide flavis, alis nigris postice cinereis.

Female. Cinereous black, dull. Head shining black, with five yellow lines—two above, one on each side, and one beneath; front piceous, slightly interlined with yellow. Antennæ luteous. Metathorax testaceous. Tibiæ and tarsi pale yellow. Wings black, cinereous along the hind border; veins black; discal transverse vein straight, nearly upright, parted by half its length from the border, and by a little more than twice its length from the præbrachial transverse vein; halteres pale yellow. Length of the body 2 lines; of the wings $3\frac{1}{4}$ lines.

Fam. HIPPOBOSCIDÆ, *Leach.*

Gen. ORNITHOMYIA, *Olfers.*

103. *ORNITHOMYIA BATCHIANICA*, n. s. Viridis, nigro-setosa, thorace abdomineque fuscis, guttis duabus humeralibus nigris, pedibus robustis, tibiis nigro vittatis, tarsis nigris, alis subcinereis.

Green, thickly beset with black bristles. Thorax brown; humeral calli large, green, each with a black dot. Abdomen brown. Legs robust; tibiæ striped with black; tarsi black. Wings slightly cinereous; veins black. Length of the body 4 lines; of the wings 8 lines.

Fam. NYCTERIBIDÆ, *Leach.*

Gen. NYCTERIBIA, *Latr.*

104. *Nycteribia parilis*, n. s. Pallide lutea. Pale luteous. Length of the body $\frac{1}{2}$ line.

(*Kaisaa.*)

Fam. STRATIOMIDÆ, *Haliday.*

Gen. OBRAPA, *Walk.*

1. *Obrapa perilampoides*, *Walk.* See Vol. III. p. 82.

Fam. LEPTIDÆ, *Westw.*

Gen. LEPTIS, *Fabr.*

2. *Leptis ferruginosa*, *Wied.* See Vol. I. p. 118.

Fam. BOMBYLIDÆ, *Leach*.Gen. ANTHRAX, *Fabr*.

3. *Anthrax semiscita*, *Walk*. See Vol. I. p. 118.

Fam. MUSCIDÆ, *Latr*.Subfam. DEXIDES, *Walk*.Gen. RUTILIA, *Desv*.

4. *Rutilia complicata*, *Walk*. See *antè*, p. 288.

Subfam. ORTALIDES, *Haliday*.Gen. STRUMETA, *Walk*.

5. *Strumeta repleta*, *Walk*. See p. 296.

Subfam. PSILIDES, *Walk*.Gen. MICROPEZA, *Meig*.

6. *Micropeza prolixa*, *Walk*. See p. 299.

(*Makian*.)

Fam. BOMBYLIDÆ, *Leach*.Gen. ANTHRAX, *Fabr*.

1. *ANTHRAX PELOPS*, *Walk*. (see Vol. III. p. 90), var. *Fem*. *Nigra*, capite antico fulvescente, thorace pilis ochraceis marginato, scutello apicem versus obscure rufo, abdomine fasciis duabus pallidis, maculis quatuor lateralibus subapicalibus niveis, lateribus basi ochraceo pilosis, alis nigricantibus apice et apud marginem posticum cinereis.

Female. Black, nearly allied to *A. Tantalus*. Head with some tawny down in front. Third joint of the antennæ lanceolate, much longer than the arista. Thorax and pectus thickly clothed with ochraceous hairs in front and along each side; scutellum dark red towards the tip. Abdomen thickly clothed with ochraceous hairs on each side of the base, with a slender basal band of paler hairs, with a middle yellowish-white band, and with two subapical snow-white dots on each side; disk beneath with short yellowish-white bands. Wings blackish, cinereous at the tips and along the hind border. Length of the body 6 lines; of the wings 12 lines.

Fam. MUSCIDÆ, *Latr.*Subfam. MUSCIDES, *Walk.*Gen. MUSCA, *Linn.*

2. MUSCA (Gen. *Chrysomyia*, *Desv.*) NITESCENS, n. s. *Fam.* Cyanescenti-viridis, capite argenteo, frontalibus atris, palpis antennis pedibusque nigris, abdominis segmentis nigro fasciatis, alis cinereis, basi costa alulisque nigricantibus.

Female. Bluish-green, with black bristles. Head silvery white; frontalia deep black, linear. Palpi, antennæ, and legs black. Antennæ nearly reaching the epistoma. Abdomen with a black band on the hind border of each segment. Wings cinereous, blackish about the base and along most of the costa; veins black; præbrachial vein forming a rounded right angle at its flexure, beyond which it is slightly curved inward; discal transverse vein straight, parted by half its length from the border, and by much less than its length from the flexure of the præbrachial; alulæ blackish. Length of the body 5 lines; of the wings 8 lines.

(*Tidon.*)

Fam. ASILIDÆ, *Leach.*Subfam. DASYPOGONITES, *Walk.*Gen. DASYPOGON, *Fabr.*

1. DASYPOGON CONGRESSUS, n. s. *Mas.* Niger, capite antico argenteo, mystace albo, antennis lanceolatis, abdomine lineari segmentis albido marginatis, alis cinereis, halteribus albis.

Male. Black, with whitish tomentum. Head silvery white in front; mystax composed of several white bristles. Antennæ lanceolate, not longer than half the breadth of the head. Abdomen linear, narrower and very much longer than the thorax; hind borders of the segments whitish. Legs stout, bristly. Wings cinereous; veins black; subanal and anal veins united on the hind border; halteres white. Length of the body $3\frac{1}{4}$ lines; of the wings 7 lines.

Fam. BOMBYLIDÆ, *Leach.*Gen. ANTHRAX, *Fabr.*

2. Anthrax Pelops, *Walk.* See Vol. III. p. 90.

Fam. SYRPHIDÆ, *Leach.*Gen. ERISTALIS, *Latr.*

3. *ERISTALIS INFICITUS*, n. s. *Mas.* Luteus, capitis vitta chalybeo-fulva, antennarum arista nuda, thorace maculis duabus lateralibus trigonis nigris, fasciis duabus albidis, abdomine basi albido-tomentoso apicem versus subæneo fasciis duabus nigris interruptis, alis limpidis, halteribus flavescentibus.

Male. Luteous. Head with yellowish-white tomentum, excepting the shining tawny stripe, which has a chalybeous tinge hindward. Eyes red. Antennæ luteous; arista simple. Thorax with a large triangular black spot on each side of the disk, with a whitish band, and with another hindward adjoining the scutellum; metathorax black; pectus with a whitish oblique streak on each side; its disk black. Abdomen with whitish tomentum at the base, and with an æneous tinge towards the tip; hind borders of the 1st and 2nd segments black on each side. Wings limpid; veins black, tawny towards the base; halteres yellowish. Length of the body 4 lines; of the wings 8 lines.

Fam. MUSCIDÆ, *Latr.*Subfam. TACHINIDES, *Walk.*Gen. ECHINOMYIA, *Duméril.*

4. *ECHINOMYIA SARCOPHAGOIDES*, n. s. *Fem.* Nigra, cinereo tomentosa, capite albo, frontibus rufis antice dilatatis, antennis rufis articulo 3 supra nigricante, thorace quadrivittato, scutelli margine postico rufescente, abdomine tessellato, alis cinereis, venis transversis fusco nebulosis, alulis albis, halteribus fulvis.

Female. Black with cinereous tomentum and with black bristles and spines. Head white; frontalia red, widening much in front, with bristles along each side; facialia without bristles; epistoma prominent. Antennæ red; 3rd joint blackish and gibbous above, shorter than the 2nd, which has some black bristles above; arista stout, longer than the 3rd joint. Thorax with four slight stripes; scutellum reddish about the hind border. Abdomen tessellated, a little broader and longer than the thorax. Legs very robust. Wings cinereous; veins black, tawny along the costa and towards the base; transverse veins clouded with brown; præbrachial vein forming a right angle at its flexure, near which it is curved inward, and is thence straight to its tip; discal transverse vein hardly undulating, parted by its length from the border, and by much less than its length from the flexure of the præbrachial; alulæ white; halteres tawny. Length of the body 6 lines; of the wings 10 lines.