

possession of their nests, or whether they had merely sought shelter in their deserted habitations, I am not prepared to say. As the millepedes are considered to feed on vegetables, it is possible that they had taken possession of these abodes to feed at leisure on their structure. I am the more inclined to this opinion from the worm-eaten appearance of some of the deserted nests.

Descriptions of New Species of the Dipterous Insects of New Guinea. By FRANCIS WALKER, F.L.S.

[Read March 3, 1864.]

Fam. MYCETOPHILIDÆ, *Haliday*.

Gen. SCIARA, *Meigen*.

1. SCIARA VARIPES. *Fem.* Testacea, antennis nigricantibus basi testaceis, pedibus longiusculis, tarsis nigris, alis cinereis.

Female. Testaceous. Antennæ blackish, testaceous towards the base, not longer than the thorax. Abdomen a little longer than the thorax. Legs slender, rather long; tarsi black. Wings cinereous; veins black; radial vein extending a little beyond the fork of the subapical vein. Length of the body 2 lines; of the wings 6 lines.

2. SCIARA? FILIPES. *Mas.* Testacea, gracilis, abdomine attenuato apicem versus nigro, pedibus longissimis, tibiis apice tarsisque fusciscentibus, alis cinereis.

Male. Testaceous, slender. Abdomen attenuated, black towards the tip, more than twice as long as the thorax. Legs slender, extremely long; tarsi and tips of the tibiæ brownish. Wings cinereous; veins brownish; radial vein ending a little before the fork of the subapical vein; cubital vein very near the costa. Length of the body 3 lines; of the wings 7 lines.

The specimen here described is mutilated, and therefore can hardly be characterized as a new genus.

Fam. CULICIDÆ, *Haliday*.

Gen. MEGARHINA, *Desv.*

3. MEGARHINA INORNATA. *Mas.* Fusca, palpis purpureis argenteo bifasciatis, antennis nigris, pectore femoribusque argenteis, abdomine lurido apicem versus nigro, pedibus non fasciatis, alis fusciscenti-cinereis.

Male. Brown. Palpi purple, with two silvery bands, longer than the thorax. Rostrum black, bent, nearly as long as the abdomen. Antennæ black. Pectus silvery cinereous. Abdomen lurid, black towards the tip, where it is furnished with diverging lateral black hairs. Legs setulose, without bands; femora silvery cinereous, except towards the tips. Wings brownish cinereous; veins brown. Length of the body 6 lines; of the wings 10 lines.

Gen. CULEX, *Linn.*

4. CULEX VENTRALIS. *Fæm.* Nigricans, pectore argenteo, abdomine subtus fasciis sex argenteo-albis, femoribus argenteo-albidis apice nigricantibus, alis cinereis.

Female. Blackish. Rostrum and palpi black, the former slightly bent downward, a little longer than the thorax. Pectus silvery cinereous. Abdomen beneath with six silvery-white bands. Legs long, slender; femora silvery whitish, except towards the tips; tibiæ and tarsi setulose. Wings cinereous; veins blackish, fringed; fork of the subapical vein rather short. Length of the body 4 lines; of the wings 6 lines.

Fam. CHIRONOMIDÆ, *Haliday.*

Gen. CHIRONOMUS, *Meigen.*

5. CHIRONOMUS INSTABILIS. *Mas.* Pallide fuscus, nitens, thorace antice producto vittis duabus nigricantibus, pedibus albidis subpubescentibus, alis lacteis.

Male. Pale brown, shining. Eyes deep black. Thorax very prominent in front, with two slender blackish stripes. Legs whitish, long, slender, very minutely pubescent; fore metatarsus almost twice the length of the fore tibia. Wings milk-white; veins white. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

Fam. TIPULIDÆ, *Haliday.*

Gen. LIMNOBIA, *Meigen.*

6. LIMNOBIA PLENIPENNIS. *Mas.* Badia, capite nigro, thorace antice attenuato, abdomine brevi subochraceo apicem versus nigro, femoribus testaceis apice fuscis, alis cinereis luteo variis, vittis tribus deviis nigricantibus, maculis guttisque albis.

Male. Chestnut colour, shining. Head, palpi, and antennæ black. Thorax attenuated in front; pectus testaceous in front. Abdomen short, dull ochraceous, black towards the tip, very little longer than the thorax. Legs brown, long, slender; coxæ and femora testaceous, the latter with brown tips. Wings cinereous; basal and subapical parts pale luteous; three irregular blackish stripes; first stripe costal,

terminated by a white transversely elongated blackish-bordered spot ; second including two elongated white spots and two white points, beyond which there are two white blackish-bordered dots ; third paler and diffuse, including one elongated white spot ; a discal areolet ; radial vein not forked ; first externo-medial vein not forked ; no second externo-medial vein ; third externo-medial vein forked ; one veinlet between the third externo-medial vein and the subanal vein, nearer than the discal areolet to the base of the wing ; halteres testaceous, with white knobs. Length of the body 5 lines ; of the wings 14 lines.

7. *LIMNOBIA LATIFASCIA*. *Fem.* Atræ, abdomine fascia latissima lutea, femoribus basi luteis, alis nigris fascia latissima lutea, gutta costali alba.

Female. Deep black. Abdomen with a very broad pale luteous band, which extends from near the base to much beyond the middle. Femora pale luteous towards the base ; this hue is most prevalent in the fore femora. Wings black, with a very broad pale luteous middle band ; a white costal dot adjoining the exterior black part, and bordered with black on the inner side ; veins like the wings in colour ; halteres black. Length of the body 6 lines ; of the wings 14 lines.

In structure like *L. euchroma*, Journ. Linn. Soc. vol. vi. p. 4.

8. *LIMNOBIA INFIXA*. *Mas.* Testacea, capite nigro, thorace antice attenuato, abdomine longo fasciis nigricantibus, alis cinereis guttis tribus costalibus fusciscentibus.

Male. Testaceous. Head, palpi, and antennæ black. Antennæ moniliform, tapering, shorter than half the length of the thorax. Thorax attenuated in front. Abdomen long, with a blackish band along the fore border of each segment, about thrice the length of the thorax. Wings cinereous ; three brownish dots along the costa, the first at the base of the radial vein ; veins black, testaceous at the base ; a discal areolet ; radial vein forked, the forks slightly curved downward ; first externo-medial vein not forked ; one veinlet between the third externo-medial vein and the subanal vein, opposite the base of the discal areolet. Length of the body $6\frac{1}{2}$ lines ; of the wings 14 lines.

9. *LIMNOBIA CONTINGENS*. *Mas.* Pallide lutea, capite nigro, thorace strigis duabus obliquis vittaque nigris, abdomine segmentorum marginibus apiceque nigris, alis pallide fuscis.

Male. Pale luteous, slender. Head black, shining. Thorax in front with a black stripe and two oblique black streaks. Abdomen thrice the length of the thorax, shining towards the base, black and shining towards the tip ; hind borders of the segments black. Wings pale brown ; veins black ; a discal areolet ; radial vein forked ; first externo-medial vein forked, with a petiole between its forks and the discal areolet ; one veinlet between the third externo-medial vein and the

subanal vein, joining the discal areolet near the base of the latter ; halteres with black knobs. Length of the body 6 lines ; of the wings 12 lines.

10. *LIMNOBIA EXCLUSA*. *Fem.* Lutea, capite nigro, thorace litura trifurcata guttisque duabus posterioribus nigris, abdomine apice nigro, pedibus nigris femoribus basi luteis, alis limpidis fascia diffusa fuscescente antice nigra postice obsoleta.

Female. Luteous, shining. Head, palpi, and antennæ black. Head small, attached to the thorax by a very slender petiole. Palpi elongated. Antennæ moniliform, setaceous, minutely setulose, a little more than half the length of the thorax. Thorax with a trifurcate black mark and with two hinder black dots. Abdomen rather short, with a black tip. Legs black, stout ; femora towards the base and coxæ pale luteous. Wings limpid ; veins black ; costa pubescent, black and incrassated from somewhat before the middle to the tip of the cubital vein ; discal areolet long ; radial vein and first externo-medial vein not forked ; one veinlet between the third externo-medial vein and the subanal vein, joining the discal areolet near the base of the latter ; axillary vein undulating ; a brownish diffuse band across the base of the discal areolet, obsolete hindward, black towards the costa. Length of the body 4 lines ; of the wings 8 lines.

11. *LIMNOBIA TRISIGNATA*. *Fem.* Flava, capite nigricante, palpis apice nigris, abdomine fascia postica atra, pedibus nigris femoribus basi flavis, alis nigricantibus basi fascia media maculaque discali albis.

Female. Pale yellow. Head blackish. Palpi with black tips. Abdomen with a deep black band towards the tip, which is attenuated. Legs black, stout ; femora at the base and coxæ pale yellow. Wings blackish, white towards the base, with a white middle band, and with a white discal spot towards the tip ; veins black, pale yellow towards the base ; discal areolet pentagonal ; radial vein and first externo-medial vein not forked ; second externo-medial vein much nearer to the first than to the third externo-medial vein ; one veinlet between the third externo-medial vein and the subanal vein, joining the discal areolet at somewhat before the middle of the latter ; axillary vein slightly undulating ; halteres with brown knobs. Length of the body 6 lines ; of the wings 12 lines.

Gen. *TIPULA*, *Linn.*

12. *TIPULA PALLIDA*. *Mas.* Pallide testacea, capite postico cinereo, thorace vitta cinerea interlineata postice albido-testaceo, abdomine lutescente basi pallido apice fusco, pedibus longissimis, alis subcinereis venis luteis albo binotatis.

Male. Pale testaceous ; in structure like *T. infundens*. Head pale cinereous hindward. Antennæ not longer than the palpi. Thorax with an indistinct cinereous interlined stripe ; hind part whitish testaceous.

Abdomen dull luteous, pale at the base, brown at the tip. Legs very long. Wings long, slightly cinereous; veins luteous, with two white marks, one on the veinlets near the base, the other on the veinlets in front of the discal areolet; stigma testaceous; halteres with brownish knobs. Length of the body 12 lines; of the wings 32 lines.

Gen. PACHYRHINA, *Macq.*

13. PACHYRHINA TENUIS. *Mas.* Flava, capitis vitta palpis apice antennæ thoracis disco abdomineque nigris, abdomine fasciis quatuor angustis flavis fasciæque subapicali lata flavescente, pedibus fulvescentibus tarsis nigris, alis subcinereis.

Male. Pale yellow, slender. Head with a black discal stripe. Palpi black towards the tips. Antennæ black, except at the base. Disk of the thorax black, with the exception of a short oblique yellow streak on each side in front. Metathorax black. Abdomen black, with four narrow pale yellow bands; a broad yellowish subapical band. Legs slender, dull pale tawny; tibiæ darker than the femora; tarsi black. Wings slightly cinereous; veins black; stigma brown; halteres with blackish knobs. Length of the body 7 lines; of the wings 14 lines.

Fam. STRATIOMIDÆ, *Haliday.*

Gen. CLITILLARIA, *Meigen.*

14. CLITILLARIA RESPONSALIS. *Fem.* Nigra, antennæ articulo 3^o intus albo, thorace cinereo tomentoso vitta dorsali maculisque quatuor nudis, abdomine vitta postica maculisque quatuor trigonis argenteis, femoribus lividis apice nigris, tibiis tarsisque posterioribus albidis, apice nigris, alis cinereis, halteribus albidis.

Female. Black. Head with silvery cinereous tomentum in front and about the eyes. Antennæ nearly as long as the breadth of the head; third joint white on the inner side. Thorax covered with cinereous tomentum, excepting a dorsal stripe and two spots on each side. Abdomen with a short hindward silvery stripe, and with two triangular silvery spots on each side. Femora livid, except towards the tips; posterior tibiæ and tarsi whitish, with black tips. Wings cinereous; veins black; halteres whitish. Length of the body 5 lines; of the wings 8 lines.

This species is closely allied to *C. bivittata*, from which it may be distinguished by its smaller size, its broader antennæ, the narrower stripe and smaller spots of the thorax, and the wings without any blackish tinge.

Gen. STRATIOMYS, *Geoffr.*

15. STRATIOMYS ATRARIA. *Mas et Fem.* Atra, antennæ basi fulvis,

scutello spinis piceis, abdominis lateribus rufescentibus, tibiis tarsisque fulvis apice nigris, alis cinereis basi luridis striga costali nigra, halteribus testaceis.

Male and Female. Deep black, dull. Antennæ tawny towards the base, much shorter than the breadth of the head. Scutellum with two piceous spines. Abdomen reddish along each side. Tibiæ and tarsi tawny, the latter with black tips. Wings cinereous, with a lurid tinge towards the base; a black streak along the middle part of the costa; veins black; halteres testaceous. *Female.* Head shining. Length of the body 4 lines; of the wings 7 lines.

16. *STRATIOMYS PARALLELA.* *Mas.* Nigra, antennis basi rufescentibus, thorace vittis quatuor, scutelli margine postico pectorisque maculis quatuor albidis, abdomine fulvo vitta dorsali lata nigra basi dilatata, genibus tarsisque fulvis, alis limpidis, halteribus albidis.

Male. Black. Head reddish on each side of the mouth. Antennæ with the first and second joints reddish; scape lanceolate, a little longer than the first and second joints together. Thorax with four whitish slender stripes; hind border of the scutellum whitish, with two whitish spines; pectus with two whitish spots on each side. Abdomen tawny, with a broad black dorsal stripe, which is dilated at the base on each side. Tarsi, except towards the tips and knees, tawny. Wings limp; veins pale tawny; halteres whitish. Length of the body 6 lines; of the wings 9 lines.

Gen. *SARGUS*, *Fabr.*

17. *SARGUS FORTIS.* *Mas.* Niger, antennis testaceis, scutelli margine postico spinisque quatuor albis, pedibus albidis, tibiis tarsisque anticis nigricantibus, femoribus tibiisque posterioribus piceis, alis cinereis apice nigricantibus, halteribus albidis apice nigris.

Male. Black, shining; closely allied to *S. tenuis*. Antennæ pale testaceous; third joint round; arista black, very slender, about twice the length of the antennæ. Thorax a little narrower in front; scutellum prominent, with a white hind border and with four white spines. Abdomen rather longer than the thorax. Legs whitish; fore tibiæ and fore tarsi blackish; posterior femora and tibiæ piceous, except towards the base; posterior tarsi with black tips. Wings cinereous, blackish towards the tips, this hue darkest and most extensive along the costa; veins black, whitish at the base; halteres whitish, with black tips. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

Gen. *RUBA*, *Walk.*

18. *RUBA OPPONENS.* *Mas.* Testacea, antennis nigris basi testaceis, abdomine nigro, tarsis anterioribus piceis, tarsis posticis nigris, alis nigricantibus postice fuscis, halteribus testaceis.

Male. Testaceous, with pale pubescence. Antennæ shorter than the

breadth of the head; scape black. Abdomen black, with whitish pubescence, rather longer and much broader than the thorax. Anterior tarsi piceous, except towards the tips; hind tarsi black. Wings blackish, brown hindward; veins black; halteres testaceous. Length of the body 3 lines; of the wings 6 lines.

Fam. TABANIDÆ, *Leach.*

Gen. PANGONIA, *Latr.*

19. PANGONIA CALIGINOSA. *Fam.* Piceo-nigra, capite subtus pectoreque albido pilosis, probosce thoracis longitudine, antennis rufescentibus apice nigricantibus, alis nigricantibus maculis duabus discalibus cinereis.

Female. Piceous black. Head beneath and pectus thickly clothed with whitish hairs. Proboscis as long as the thorax. Palpi piceous. Antennæ reddish, lanceolate, curved upward, piceous at the base, blackish at the tips. Thorax with a line of black hairs along each side. Abdomen oval, longer and broader than the thorax; hind borders of the segments piceous. Wings blackish, cinereous towards the hind border, with two elongated paler cinereous discal spots; veins black; fore branch of the cubital vein slightly curved, forming a slightly obtuse angle at its flexure, from whence it emits a short branch. Length of the body 6 lines; of the wings 16 lines.

Gen. TABANUS, *Linn.*

20. TABANUS COHÆRENS. *Fam.* Piceus, antennis ochraceis apice nigris, abdomine fulvo apice nigricante segmentorum marginibus posticis vittaque testaceis, pedibus fulvis, tarsis posterioribus femoribusque anticis piceis, tibiis anticis apice tarsisque anticis nigricantibus, alis cinereis apud costam fusciscentibus.

Female. Piceous; closely allied to *T. serus*. Head, thorax, and pectus with hoary tomentum. Head with a slender piceous callus which is dilated in front. Antennæ ochraceous, piceous at the base, black towards the tips; third joint with a very small horn. Abdomen tawny, blackish towards the tip; hind borders of the segments testaceous, this hue most apparent on the hinder segments; a dorsal testaceous stripe, which is slightly dilated hindward, and is obsolete at the base and at the tip. Legs tawny; coxæ hoary; posterior tarsi, except at the base, and fore femora piceous; fore tibiæ towards the tips and fore tarsi blackish. Wings cinereous, brownish along the costa; veins black, tawny at the base; fore branch of the cubital vein almost straight, forming an obtuse and rounded angle at its flexure; halteres testaceous. Length of the body 7 lines; of the wings 14 lines.

21. TABANUS PAPOINUS. *Mas.* Piceus, antennis rufescentibus apice nigris, thorace cinereo tomentoso, abdomine fusco basi fulvo segmen-

torum marginibus posticis cinereis, pedibus fulvis, tarsis piceis, alis cinereis striga costali fusca.

Male. Piceous. Head beneath and pectus with whitish tomentum. Eyes rather broader than the thorax, divided, as in many other species, into large and small facets, the former reddish, the latter blackish. Antennæ reddish, piceous at the base, black towards the tips; third joint with an extremely small horn. Thorax with cinereous tomentum. Abdomen brown, conical, tawny towards the base; hind borders of the segments pale cinereous. Legs tawny; coxæ hoary; posterior tarsi piceous, tawny towards the base; fore tibiæ towards the tips and fore tarsi piceous. Wings cinereous, with a brown streak along the costa beyond the middle; veins black, piceous at the base; fore fork of the cubital vein almost straight, forming a fork at its flexure; halteres piceous. Length of the body 5 lines; of the wings 12 lines.

22. *TABANUS BREVIUSCULUS.* *Mas.* Fulvus, capite subtus pectoreque cinereo tomentosus, thorace antico vittis tribus cinereis, abdomine apice pedibus anticis tarsisque piceis, alis cinereis striga costali lurida.

Male. Tawny; in structure like the preceding species. Head beneath and pectus with cinereous tomentum. Eyes without the black line of minute facets along the hind border which distinguishes the preceding species. Proboscis black. Antennæ tawny. Fore part of the thorax with three cinereous stripes. Abdomen piceous towards the tip. Tarsi and fore legs piceous. Wings cinereous, with a lurid streak along the costa beyond the middle; veins black, tawny towards the base; fore branch of the cubital vein straight, slightly curved towards its base and towards its tip. Length of the body $4\frac{1}{2}$ lines; of the wings $11\frac{1}{2}$ lines.



Fam. ASILIDÆ, *Leach.*

Subfam. DASYPOGONITES, *Walk.*

Gen. DASYPOGON, *Fabr.*

23. *DASYPOGON INDECORUS.* *Mas.* Nigro-piceus, capite apud oculos subaurato, mystace albo minimo, thorace suturis subauratis maculis duabus lateralibus rufescentibus, abdomine petiolato segmentorum 2ⁱ et 3ⁱ marginibus posticis rufescentibus, femoribus tibiisque piceo-rufescentibus, alis cinereis apice nigricantibus.

Male. Piceous black. Head with white tomentum behind, slightly gilded in front along the eyes; front flat; mystax composed of very few slender white bristles. Proboscis and palpi black. Antennæ slender, linear, nearly as long as the breadth of the head. Thorax with the sutures slightly gilded; a reddish spot on each side at the base of the fore wing. Pectus with a silvery band on each side. Abdomen petiolated; hind borders of the second and third segments reddish. Legs reddish, smooth, shining, partly tinged with piceous; tarsi

blackish. Wings cinereous, blackish towards the tips; veins black; halteres dingy testaceous. Length of the body 6 lines; of the wings 12 lines.

Subfam. LAPHRITES, *Walk.*

Gen. LAPHRIA, *Fabr.*

24. LAPHRIA TIBIALATA. *Mas et Fœm.* Nigra, capite argenteo articulo subaurato, antennarum articulo 3^o fusiformi, thoracis maculis lateralibus subaurato-albidis, abdomine purpurascente maculis lateralibus transversis argenteis, tibiis anticis et posticis subtus argenteo pilosis, alis cinereis apud venas fuscescentibus.

Male and Female. Black. Head silvery white, slightly gilded in front; mystax composed of a few black and white bristles; beard white, shining. Third joint of the antennæ fusiform, a little longer than the first and second. Thorax on each side with several whitish shining spots which are more or less gilded in some aspects. Abdomen purplish blue or purple; each segment with a transverse silvery spot accompanied by a bristle on each side. Legs greenish black, stout, bristly; coxæ silvery; fore tibiæ and hind tibiæ with silvery hairs beneath, except towards the base; pulvilli ochraceous. Wings cinereous, diffusely brownish about most of the veins; veins black; halteres pale tawny. Length of the body 9–10 lines; of the wings 19–20 lines.

25. LAPHRIA PLACENS. *Mas et Fœm.* Cyanea, capite albido, antennis nigris, abdomine fasciis lateralibus albis, alis cinereis fasciis tribus nigris apud costam connexis, halteribus albis.

Male and Female. Dark blue. Head with shining whitish tomentum; mystax composed of a few white bristles; beard very small. Antennæ black; third joint slightly tapering, much longer than the first and second together. Pectus with cinereous tomentum. Abdomen linear, partly tinged with purple; each segment with a small tuft of white hairs on each side. Legs hardly stout, slightly bristly. Wings cinereous, with three black bands which are connected on the costa; third band apical, connected with the second on the hind border; veins black; halteres white. Length of the body 5 lines; of the wings 9 lines.

26. LAPHRIA PIPUNCULOIDES. *Mas.* Cyanea, facie alba, antennis abdomineque nigris, pedibus rufescentibus, tibiis tarsisque posticis nigris, alis cinereis, halteribus albidis.

Male. Blue, shining, not bristly. Head broader than the thorax, with shining white tomentum on the face, which is very narrow. Eyes flat in front. Proboscis black, very short. Antennæ black. Abdomen black, slightly broader hindward, about twice the length of the thorax. Legs reddish, slightly bristly; hind tibiæ and hind tarsi black. Wings cinereous; veins black, piceous at the base; halteres dingy whitish. Length of the body 4 lines; of the wings 7 lines.

Fam. BOMBYLIDÆ.

Subfam. THEREVITES, *Walk.*Gen. THEREVA, *Latr.*

27. *THEREVA*?? *FUNEBRIS*. *Fem.* Nigra, non pilosa, capite luteo nitente, pectore halteribusque piceis, tarsis flavescens, alis nigricantibus.

Female. Black, dull. Head luteous, smooth, shining. Antennæ and palpi black. Pectus piceous, shining. Abdomen of equal breadth for more than half the length, tapering from thence to the tip. Tarsi pale dull yellowish, blackish towards the tips. Wings blackish, darkest along the costa; veins black; halteres piceous. Length of the body 5 lines; of the wings 10 lines.

This species hardly belongs to *Thereva*, but I have deferred separating it into a new genus.

Subfam. BOMBYLITES, *Walk.*Gen. ANTHRAX, *Fabr.*

28. *ANTHRAX APICIFERA*. *Mas.* Atra, antennis brevissimis articulo 3^o rotundo, abdomine apice albo, alis nigris spatio apicali obliquo inciso cinereo guttas duas nigras includente.

Male. Deep black; like *A. emittens* in structure. Head conical; eyes elongated. Antennæ very short; third joint round. Abdomen white at the tip. Legs very slender. Wings black, elongated, hyaline towards the tips; the outline of the black part oblique, forming some semidetached dots; two subapical black dots; veins and halteres black. Length of the body 3 lines; of the wings 8 lines.

Fam. EMPIDÆ, *Leach.*Gen. HYBOS, *Fabr.*

29. *HYBOS STIGMA*. *Mas.* Niger, tarsis fulvis, femoribus intermediis basi flavis, tibiis posticis setosis, alis cinereis apice fuscis, halteribus flavescens.

Male. Black, shining. Third joint of the antennæ elliptical, a little longer than the second joint; arista a little shorter than the third joint. Legs slender; tarsi tawny; middle femora pale yellow towards the base; hind tibiae setose. Wings cinereous, brownish towards the tips, this hue darkest towards the stigma, which is large and black; veins black; halteres pale yellowish. Length of the body 2 lines; of the wings 4 lines.

Fam. DOLICHOPIDÆ, *Leach.*Gen. PSILOPUS, *Meigen.*

30. *PSILOPUS EXTENDENS*. *Fem.* Purpureo-cyaneus, proboscide pal-

pisque fulvis, antennis ferrugineis arista thorace longiore, thorace vittis tribus cupreis viridi marginatis, abdomine fasciis quatuor atris, pedibus nigris, femoribus luteis apice nigris, tibiis basi piceis, alis vitta costali lata fasciisque duabus subabbreviatis nigricantibus.

Female. Bright purplish blue; nearly allied to *P. varipennis*. Head in front and pectus with silvery tomentum. Proboscis and palpi tawny. Antennæ ferruginous; arista black, rather longer than the thorax. Thorax with three cupreous green-bordered stripes. Abdomen with four deep-black bands. Legs black; femora luteous, black towards the tips; tibiæ piceous towards the base; fore femora and fore tibiæ with long bristles; posterior tibiæ with short bristles. Wings limpid, with a broad blackish costal stripe which emits two irregular bands nearly to the hind border; veins and halteres black; fore branch of the præbrachial vein forming a curve near its base, hardly undulating from thence to its tip; discal transverse vein most deeply undulating. Length of the body $4\frac{1}{2}$ lines; of the wings 10 lines.

Gen. DOLICHOPUS, Latr.

31. *DOLICHOPUS VICARIUS.* *Fæm.* Læte viridis, capite cyaneo, antennis fulvis, abdomine æneo-viridi suturis nigris plagis lateralibus argenteis, pedibus lutescentibus, femoribus posticis tibiisque posterioribus apice tarsisque posterioribus nigris, alis cinereis, halteribus lutescentibus.

Female. Bright green. Head bright blue; face silvery. Antennæ tawny; third joint short, conical; arista short. Thorax very setose. Abdomen æneous green, with silvery cinereous patches on each side; sutures black. Legs lutescent; hind femora and posterior tibiæ with black tips, the latter very setose; posterior tarsi black. Wings cinereous; veins black; præbrachial vein slightly bent exteriorly towards the cubital vein; halteres lutescent. Length of the body $1\frac{3}{4}$ line; of the wings $3\frac{1}{2}$ lines.

Fam. SYRPHIDÆ, Leach.

Gen. PARAGUS, Latr.

32. *PARAGUS VENOSUS.* *Fæm.* Nigro-cyaneus, capitis vitta chalybæa, antennis nigris, abdomine plagis quatuor lateralibus albidis segmento 1^o livido, tibiis basi albis, metatarsis subtus rufescentibus, alis cinereis, halteribus albis.

Female. Blackish blue. Head with a chalybeous stripe between the eyes. Antennæ black; third joint oval, as long as the second; arista not longer than the third joint. First abdominal segment livid; second and third segments with a whitish patch on each side hindward. Tibiæ white towards the base; metatarsi reddish beneath. Wings cinereous; veins black, clouded with blackish; halteres white. Length of the body $3\frac{1}{2}$ lines; of the wings 8 lines.

33. *PARAGUS LUCTIFERUS*. *Fœm.* Niger, scutello pectoreque ferrugineis, abdomine cyaneo strigis quatuor lateralibus transversis punctisque duobus apicalibus albidis, tarsi halteribusque fulvis, alis cinereis.

Female. Black, dull. Head shining. Scutellum and pectus dull ferruginous. Abdomen dark blue, elongate oval, slightly shining, with two transverse whitish streaks on each side and with two apical whitish points. Tarsi tawny. Wings cinereous; veins black; halteres tawny. Length of the body 5 lines; of the wings 10 lines.

34. *PARAGUS INCISURALIS*. *Fœm.* Cyaneus, capite thoraceque nigro pubescentibus, antennis pedibusque nigris, segmentorum abdominalium marginibus posticis utrinque canis, tibiis basi subtus fulvis, alis nigris gutta subapicali maculisque tribus marginalibus cinereis, halteribus albis.

Female. Dark blue, shining. Head and thorax with black pubescence.

Head pilose in front; hairs black. Antennæ and legs black. Abdomen elliptical, much broader than the thorax; hind borders of the segments with hoary pubescence on each side. Tibiæ tawny at the base beneath. Wings black, with an elongated cinereous subapical dot, and with three triangular cinereous spots on the hind border; veins black; halteres white. Length of the body 5 lines; of the wings 11 lines.

Gen. AZPEYTIA, n. g.

Mas. Corpus latum, crassum. Caput antice subproductum. Oculi pubescentes. Antennæ breves; articulus 3^{us} longiconicus; arista nuda. Scutellum latissimum, margine subretuso. Pedes robusti. Alæ longæ.

Male. Body broad, thick. Head forming a frontal protuberance on which the antennæ are seated; epistoma slightly prominent. Eyes pubescent, connected on the vertex. Proboscis short. Antennæ short; third joint elongate conical, full twice the length of the second; arista bare, full twice the length of the third joint. Scutellum very broad, with a slightly retuse border. Abdomen longer than the thorax. Legs robust. Wings long; radial and cubital veins ending separately on the border; cubital vein much curved hindward opposite the middle of the subapical areolet; transverse præbrachial vein oblique, placed beyond the middle of the discal areolet; subapical areolet closed by a slightly undulating transverse vein, which is abruptly curved when it approaches the cubital vein.

35. *AZPEYTIA SCUTELLARIS*. *Fœm.* Nigra, subnitens, thorace plagis duabus lateralibus aurato pilosis, scutello halteribusque piceis, abdomine fasciis duabus interruptis albis, tibiis basi flavescentibus, alis fusciscenti-cinereis spatio costali interiore fusco.

Female. Black, slightly shining. Head clothed with short black hairs. Proboscis piceous. Thorax with a small patch of gilded hairs on each side in front of the wing; scutellum piceous, paler towards its border, which is fringed with short pale hairs. Abdomen with two

white interrupted bands. Tibiæ pale yellowish towards the base, this hue extending to nearly half the length of the hind tibiæ. Wings brownish cinereous, dark brown along the costa from the base to beyond the middle; veins black; halteres piceous. Length of the body 7 lines; of the wings 14 lines.

Fam. MUSCIDÆ, *Latr.*

Subfam. TACHINIDES, *Walk.*

Gen. SARALBA, n. g.

Mas. Corpus angustum, subcylindricum. Caput thorace paulo latius Oculi nudi. Proboscis acuta. Palpi graciles, subclavati. Antennæ breves, subgraciles; articulus 3^{us} fusiformis, 2^o duplo longior. Abdomen basi subcompressum, thorace fere duplo longius. Pedes robusti. Alæ angustæ.

Allied to *Ocyptera*. *Male.* Body narrow, nearly cylindrical. Head a little broader than the thorax; frontalia linear; epistoma slightly prominent. Eyes bare. Proboscis acute. Palpi slender, subclavate. Antennæ rather slender, about half the length of the face; third joint fusiform, twice the length of the second; arista slender, more than twice the length of the third joint. Abdomen with many short bristles, slightly compressed towards the base, nearly twice the length of the thorax. Legs stout, setose. Wings narrow; præbrachial vein forming a curve at its flexure, joining the cubital vein at the tip of the wing; discal transverse vein slightly undulating, parted by less than half its length from the border, and by much less than its length from the flexure of the præbrachial vein.

36. SARALBA OCYPTEROIDES. *Mas.* Nigra, capite pectoreque argenteis, frontalibus atris linearibus antice aurato marginatis, palpis testaceis, thorace fasciis duabus cinereis subauratis, abdomine nigricanti-cinereo spatio basali et segmentorum marginibus pallide cinereis vitta dorsali nigra interrupta, femoribus posterioribus basi flavescens, alis cinereis dimidio basali nigricante.

Male. Black. Head silvery white; frontalia deep black, linear, with gilded borders in front where the eyes diverge from them; facialia without bristles. Palpi pale testaceous. Thorax with two cinereous slightly gilded bands; second band abbreviated; sides slightly bristly. Pectus silvery. Abdomen semihyaline, blackish cinereous; borders of the segments and the whole of the basal part pale cinereous; a black dorsal line, interrupted on the fore border of each segment. Posterior femora yellowish towards the base, this hue most extended on the hind femora. Wings cinereous, blackish on half the breadth from the costa; veins and halteres black; alulæ lurid, with blackish borders. Length of the body 4½ lines; of the wings 8 lines.

Subfam. DEXIDES, *Walk.*

Gen. RUTILIA, *Desv.*

37. RUTILIA PECTORALIS. *Fem.* Cærulea, viridi-aurato nitens, capite

argenteo, frontibus atris, palpis antennisque fulvis, thorace vittis quatuor interruptis nigris, pectore ferrugineo, abdomine atro basi subtus ferrugineo fasciis tribus interruptis cæruleis postice excavatis, tibiis subtus femoribusque ferrugineis, alis cinereis venis ferrugineo marginatis.

Closely allied to *R. glorificans*. *Female*. Cerulean blue, with golden-green reflexions. Head silvery white about the facialia and about the epistoma; frontalia deep black, widening in front. Palpi and antennæ tawny. Thorax with four slender interrupted black stripes; inner pair much abbreviated hindward; outer pair abbreviated in front and hindward. Pectus ferruginous, excepting two patches of the ground hue on each side. Abdomen deep black, ferruginous at the base beneath, with three interrupted bands of the ground hue, which are excavated and tinged with cupreous along their hind borders. Legs black; tibiæ beneath, femora and coxæ ferruginous. Wings cinereous, tinged with ferruginous along the costa and about the veins; veins black; halteres ferruginous. Length of the body 9 lines; of the wings 18 lines.

Subfam. SARCOPHAGIDES, *Walk.*

Gen. SARCOPHAGA, *Meigen.*

38. SARCOPHAGA PERPUSILLA. *Mas et Fœm.* Nigra, capite argenteo, frontibus atris, thorace vittis quatuor albidis parallelis bene determinatis, abdomine cinereo tessellato, alis cinereis, halteribus albidis.

Male and Female. Black. Head silvery white; frontalia deep black, linear. Thorax with four well-defined parallel whitish stripes; the outer pair connected on the hind border of the scutellum. Pectus cinereous. Abdomen tessellated with cinereous. Wings cinereous; veins black; halteres whitish. Length of the body $2\frac{1}{2}$ –3 lines; of the wings 5–6 lines.

Subfam. MUSCIDES, *Walk.*

Gen. PYRELLIA, *Desv.*

39. PYRELLIA FUMIPENNIS. *Mas.* Læte purpurea, cyaneo varia, capite palpis pedibus halteribusque nigris, antennis fulvis, alis nigricanti-cinereis.

Male. Bright purple, with deep-blue reflexions. Head, proboscis, palpi, and legs black. Antennæ tawny; arista black. Wings blackish cinereous; veins and halteres black; præbrachial vein forming a curve at its flexure, slightly bent inward near its tip; discal transverse vein hardly bent inward, parted by little more than half its length from the border, and by nearly its length from the flexure of the præbrachial vein; alulæ dingy cinereous. Length of the body 4 lines; of the wings 7 lines.

Subfam. HELOMYZIDES, *Fallén*.Gen. HELOMYZA, *Fallén*.

40. *HELOMYZA OPTATURA*. *Fæm.* Lutescens, capite albedo, abdomine maculis duabus laterâlibus subapicalibus apiceque nigris, alis *limpidis vitta costali exteriori maculam albam includente fasciaque nigris*.

Female. Pale luteous, smooth, shining. Head and thorax with stout black bristles. Head whitish, excepting the vertex. Antennæ less than half the length of the face; third joint elongate conical, about twice the length of the second; arista black, plumose. Abdomen elliptical, shorter and narrower than the thorax; hairs short, black; a black spot on each side near the tip, which is black. Wings limpid, with a black stripe which begins at a little beyond one-third of the length, extends to the tip, occupies more than half the breadth from the costa, emits a broad band nearly to the hind border, and includes a quadrate white costal spot; veins black, pale luteous towards the base; discal transverse vein straight, parted by half its length from the border, and by about its length from the præbrachial transverse vein. Length of the body 5 lines; of the wings 12 lines.

41. *HELOMYZA ORTALIOIDES*. *Mas.* Nigra, capite albo, frontalibus piceis, antennis fulvis, thorace vittis quinque scutello halteribusque albis, abdominis segmentis albedo marginatis, femoribus tibisque anticis tarsisque albidis, alis albis fasciis quatuor deviis nigris.

Male. Black, smooth, shining. Head and thorax with stout black bristles. Head white; frontalia piceous, slightly tapering in front; face transversely and slightly rugulose towards the epistoma. Proboscis pale yellowish. Palpi tawny. Antennæ tawny, nearly half the length of the face; third joint slightly tapering, full twice the length of the second; arista black, plumose. Thorax with five white stripes, one dorsal and four lateral; scutellum white. Abdomen elliptical, shorter and narrower than the thorax; hairs short, black; hind borders of the segments whitish. Tarsi, fore tibiæ and fore femora whitish, the latter blackish-shaded. Wings white, with four irregular black bands; first band narrow near the base; second broad, connected in the middle with the third, which emits a costal streak to the tip; fourth abbreviated in front, dilated, and connected with the third hindward, emitting an exterior streak to the border; veins black, white at the base; discal transverse vein nearly straight, parted by less than one-third of its length from the border, and by much less than its length from the præbrachial transverse vein; ~~costal~~ and præbrachial veins slightly undulating; halteres white. Length of the body $4\frac{1}{2}$ lines; of the wings 10 lines.

This species appears to connect *Helomyza* with *Poticara*.

42. *HELOMYZA STELLIPLENA*. *Mas.* Nigra, capite anticeo palpisque albidis, antennis piceis, thorace vittis quatuor cinereis, abdomine piceo segmentis albido marginatis, tarsis albidis, alis nigris punctis guttisque plurimis strigisque quatuor transversis albis, halteribus albis.

Male. Black, dull. Head whitish and shining in front. Palpi whitish. Antennæ piceous, a little shorter than the face; third joint linear, whitish at the base, more than twice the length of the second; arista plumose. Thorax with four cinereous stripes. Abdomen piceous, elongate oval, a little narrower but hardly longer than the thorax; hind borders of the segments whitish; tarsi whitish. Wings black, blackish hindward, with numerous white points and dots; two transverse white costal streaks, one beyond the middle, the other subapical; two short irregular white transverse lines between the discal transverse vein and the border; veins black; discal transverse vein straight, parted by half its length from the border, and by very much more than its length from the præbrachial transverse vein; alulæ cinereous; halteres white. Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Gen. SERACA, *Walk.*

43. *SERACA ABBREVIATA*. *Fœm.* Testacea, thorace vittis tribus scutellique apice pectoreque vittis quatuor nigris, abdominis dimidio postico nigro apice testaceo, femoribus posticis piceis, alis nigris spatio postico maculaque subapicali cinereis.

Female. Testaceous. Head with black bristles. Antennæ much less than half the length of the face; third joint longer than the second; arista bare. Thorax with three black stripes; scutellum with a black tip. Pectus with two black stripes on each side. Abdomen fusiform, a little longer and narrower than the thorax; apical half black; tip testaceous, acuminate. Hind femora piceous. Wings black, cinereous on a little more than half the length from the base, and on a little more than half the breadth from the hind border; a cinereous spot on the hind border towards the tip; veins black; discal transverse vein straight, parted by half its length from the border, and by more than its length from the præbrachial transverse vein; halteres pale testaceous. Length of the body 5 lines; of the wings 10 lines.

Gen. TENDEBA, n. g.

Mas. *Corpus* robustum, non setosum. *Frons* plana; facies subimpressa. *Palpi* parvi. *Antennæ* brevissimæ; articulus 3^{us} rotundus, minimus; arista subpubescens. *Scutellum* conicum, productum. *Abdomen* longi-ovatum, thorace brevius et angustius. *Pedes* robusti, nudi. *Alæ* latiusculæ.

Male. Body robust, without hairs and bristles. Head as broad as the thorax; front flat; face slightly impressed; mouth very small. Palpi small. Antennæ extremely short; third joint round, extremely small; arista minutely pubescent. Thorax with a prominent conical scu-

tellum. Abdomen elongate oval, shorter and much narrower than the thorax. Legs stout, bare. Wings rather broad; subcostal vein ending at somewhat before half the length of the costa; radial vein ending at some distance from the tip of the wing; cubital vein ending at the tip; præbrachial vein hardly bent forward; hinder veins obsolete; discal transverse vein straight, parted by nearly twice its length from the border, and by more than twice its length from the præbrachial transverse vein.

This genus is allied to *Orygma* and to *Cœlopa*, and its structure indicates that it also has burrowing habits and that its flight is weak.

44. *TENDEBA TESTACEA*. *Mas.* Pallide lutea, pubescens, alis limpidis costa exteriore apiceque fusciscentibus.

Male. Pale luteous, minutely pubescent. Head a little paler than the thorax. Wings limpid, tinged with brown along the exterior part of the costa and about the tips; veins black, pale luteous at the base. Length of the body $2\frac{1}{2}$ lines; of the wings 6 lines.

Subfam. ORTALIDES, *Haliday*.

Gen. LAMPROGASTER, *Macq.*

45. *LAMPROGASTER BISPINOSA*. *Mas.* Testacea, frontalibus et facialibus nigro-piceis, scutello bispinoso, abdomine purpureo basi testaceo, alis cinereis apud costam fulvescentibus, vena transversa nigricante nebulosa.

Male. Testaceous, with black pubescence. Head whitish about the eyes; frontalia and facialia blackish piceous; face with a deep cavity on each side for the antenna. Antennæ less than half the length of the face; third joint fusiform, more than twice the length of the second; arista bare. Thorax with a few black bristles on each side; scutellum with two stout spines. Abdomen purple, short oval, testaceous towards the base, shorter and broader than the thorax. Wings cinereous, with a tawny tinge along the costa; veins tawny; discal transverse vein oblique, slightly bent inward towards the hind end, parted by hardly one-fourth of its length from the border, and by very much more than its length from the præbrachial transverse vein, which is blackish and clouded. Length of the body 7 lines; of the wings 14 lines.

46. *LAMPROGASTER OCHROMYOIDES*. *Mas.* Ochracea, capite argenteo frontalibus nigris, abdominis dimidio apicali piceo, tibiis tarsisque nigris, alis cinereis venis fusco marginatis.

Male. Dull ochraceous, not pubescent. Head silvery white; frontalia black, linear. Eyes bare. Proboscis very short. Palpi long, subclavate. Antennæ nearly as long as the face; third joint linear, rounded at the tip, thrice the length of the second; arista black, bare. Thorax with a few black bristles on each side. Abdomen oval, a little

longer than the thorax; apical half piceous. Legs very robust; femora with minute black spines beneath; tibiæ and tarsi black. Wings cinereous; veins black, bordered with brown, ochraceous towards the base; præbrachial vein abruptly curved towards the cubital vein, which it joins at some distance from the tip of the latter; discal transverse vein straight, parted by one-fourth of its length from the border, and by more than its length from the præbrachial transverse vein; alulæ very large, dingy whitish, ochraceous-bordered. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

This species may form a new genus. It differs from *Lamprogaster* in the structure of the mouth and of the wing-veins. The latter character indicates that its flight is powerful. The transverse suture of the thorax is as complete as that of the *Tachinides*, and it resembles that subfamily in the large size of the alulæ.

Gen. *ACHIAS*, *Fabr.*

47. *ACHIAS BRACHYOPHTHALMA*. *Fam.* Testacea, vertice ochraceo fascia atomaria nigra antice excavata, facie albida piceo marginata strigis duabus lateralibus nigris, antennis fulvis, thorace vittis quatuor abbreviatis piceis, scutello nigro, abdomine segmentorum marginibus posticis styloque apicali piceis, tibiis tarsisque nigris, alis cinereis vitta costali fusca lurido varia.

Female. Testaceous, broad, thick. Head a little broader than the thorax; vertex ochraceous, with a black speckled band which is excavated in front; face whitish, bordered with piceous; facialia very broad; two black exterior lanceolate streaks. Eyes very prominent. Antennæ tawny; third joint linear, more than twice the length of the second; arista plumose. Thorax with cinereous tomentum and with four piceous stripes, of which the inner pair are most abbreviated; scutellum black. Abdomen oval, hardly longer than the thorax, with a slender apical piceous style; hind borders of the segments piceous. Tibiæ and tarsi black. Wings cinereous, with a brown partly lurid costal stripe; veins black; discal transverse vein almost straight, parted by one-fourth of its length from the border, and by much more than its length from the oblique black-clouded præbrachial transverse vein. Length of the body 6 lines; of the wings 12 lines.

This species exhibits the transition between *Achias* and *Lamprogaster*, if it does not obliterate the distinction between the two genera.

48. *ACHIAS VENUSTULA*. *Mas.* Fulva, capite testaceo macula rotunda nigra, oculis extantibus, abdomine viridi cupreo purpureoque micante basi subtusque testaceo, tarsis nigris, alis limpidis vena transversa discali fusco nebulosa.

Male. Tawny. Head pale testaceous, a little broader than the thorax, with a round black spot between the eyes; face deeply impressed on

each side for the reception of the antennæ; epistoma prominent. Eyes very prominent. Antennæ nearly as long as the face; third joint lanceolate, four times the length of the second; arista plumose. Pectus pale testaceous. Abdomen green, tinged with cupreous and with purple, pale testaceous beneath and at the base, a little broader and longer than the thorax. Legs pale yellow; tarsi black. Wings limpid; veins black, pale testaceous towards the base; discal transverse vein straight, clouded with brown, parted by less than one-sixth of its length from the border, and by much more than its length from the oblique clouded præbrachial transverse vein; halteres pale testaceous. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

Gen. PLATYSTOMA, *Latr.*

49. PLATYSTOMA BREVIS. *Mas.* Nigra, brevis, crassa, capite apud oculos lineis duabus transversis guttisque duabus albidis, thorace callis humeralibus albidis vittis tribus cinereis postice obsolete, abdominis segmentis albedo marginatis, tarsis albis, tibiis anticis subdilatatis, alis albidis maculis plurimis transversis fascisque duabus nigricantibus.

Male. Black, broad, short, stout. Head whitish about the eyes; hind border of the vertex and fore border of the front and two dots between the eyes whitish; face shining; epistoma slightly retuse, whitish-bordered. Antennæ much shorter than the face; third joint nearly linear, about twice the length of the second, which is piceous; arista slightly plumose. Thorax with two whitish humeral calli and with three slender cinereous stripes, which are obsolete hindward. Abdomen oval, a little shorter and narrower than the thorax; hind borders of the segments whitish. Legs short, stout; tarsi white; fore tibiæ slightly dilated and fringed, with a whitish protuberance on the inner side. Wings whitish, with numerous blackish transverse spots which form incomplete bands; subapical band and apical band entire, the former including the discal transverse vein; veins black; discal transverse vein straight, parted by one-third of its length from the border, and by twice its length from the præbrachial transverse vein; halteres whitish. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

50. PLATYSTOMA INSCRIPTA. *Mas.* Nigricans, capite guttis laterali- bus cinereis fascia nigra, antennis rufis arista alba, thorace vittis quatuor angulosis cinereis, pectore vittis sex cinereis, abdominis segmentis cano marginatis apice rufescente, pedibus flavis tibiis nigro bimarginatis, alis albidis guttis plurimis nigricantibus, halteribus albidis.

Male. Blackish. Head with cinereous dots along each side between the eyes, whitish behind; a black shining band between the antennæ; face short, with cinereous dots; epistoma prominent. Antennæ red, shorter than the face; third joint round, longer than the second, black above in front; arista white, stout, full thrice the length of the

third joint. Thorax with four cinereous zigzag partly connected stripes. Pectus with six incomplete cinereous stripes. Abdomen a little shorter than the thorax, with a hoary band on each segment; tip reddish, shining. Legs yellow; tibiæ with two black bands; tarsi black towards the tips. Wings whitish, with very numerous blackish dots, some of which form three incomplete exterior bands; veins black, pale yellow at the base; discal transverse vein straight, very oblique, parted by less than one-fourth of its length from the border, and by much more than its length from the præbrachial transverse vein; halteres whitish. Length of the body 4 lines; of the wings 8 lines.

51. *PLATYSTOMA DEVOCATA*. *Mas.* Nigra, capite albido macula furcata gutta maculisque duabus anterioribus nigris, palpis albis, antennis albidis basi supra nigris, thorace vittis quinque cinereis, scutello abdominisque segmentis albido marginatis, tarsis albis, alis nigricantibus apice cinereis fasciis guttularibus albis, halteribus albidis.

Male. Black, dull. Head whitish; a black spot on the vertex, forked in front, and a black dot above the base of the antennæ; face with a black spot on each side. Palpi white. Antennæ whitish, black above towards the base, much shorter than the face; third joint conical; arista plumose. Thorax with five cinereous stripes, and with a whitish callus on each side; scutellum with a whitish border. Abdomen oval, shining, a little shorter and narrower than the thorax; hind borders of the segments whitish. Femora with whitish tips; tarsi white, with black tips. Wings blackish, cinereous towards the tips, with many white dots which form three incomplete bands; one complete exterior white band; 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. Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

52. *PLATYSTOMA DIMINUTIVA*. *Fem.* Nigro-cinerea, capite antennisque rufescentibus, abdomine stylo tenui apicali, tibiis pallide flavis, tarsis basi albis, alis nigricantibus fasciis guttularibus albidis.

Female. Cinereous black. Head reddish, a little broader than the thorax; face short; epistoma flat. Proboscis retracted. Antennæ reddish, shorter than the face; third joint linear; arista bare, very slender, a little longer than the third joint. Abdomen narrower and a little longer than the thorax, with a slender apical style. Legs blackish; tibiæ pale yellow, with black tips; tarsi white towards the base. Wings blackish, with numerous minute whitish dots which form incomplete bands; veins black; discal transverse vein curved outward, parted by less than one-third of its length from the border, and by nearly twice its length from the præbrachial transverse vein. Length of the body 2 lines; of the wings 3 lines.

Gen. DACUS, *Fabr.*

53. **DACUS SPECULIFER.** *Mas.* Niger, capite luteo guttis quatuor nigris, thorace vittis duabus approximatis cinereis, callis vittis duabus lateralibus scutelloque flavis, abdomine fascia flavescente, pedibus luteis, alis limpidis strigis duabus basalibus plagaque maxima quadriguttata nigricantibus, halteribus albidis.

Male. Black. Head pale luteous, with two black dots on each side between the eyes; face short, with a black dot on each side. Antennæ piceous, much longer than the face; third joint linear, much longer than the second; arista slender, bare. Thorax with two nearly contiguous cinereous stripes; humeral calli, two hindward lateral stripes, four pectoral calli, and scutellum yellow. Abdomen short oval, shorter and a little broader than the thorax, with a yellowish band before the middle. Legs pale luteous. Wings limpid, with two blackish basal streaks, of which the hind one extends to the hind border, and the fore one is connected with a very large blackish patch; this occupies more than two-thirds of the costa, is dilated twice to the hind border, and contains two limpid dots and two exterior limpid points; veins black; discal transverse vein oblique, parted by one-fourth of its length from the border, and by rather less than its length from the oppositely oblique præbrachial transverse vein; halteres whitish. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

54. **DACUS BIARCUATUS.** *Mas.* Niger, capite fulvo guttis quatuor nigris, thorace callis strigis duabus scutelloque flavis, pedibus piceis tarsis flavis, alis albidis strigis duabus basalibus plagaque maxima strigam emittente fuscis, halteribus flavescensibus.

Male. Black. Head tawny, shining, with a black dot on each side of the vertex, and a larger black dot on each side of the face. Antennæ slender, piceous, much longer than the face; third joint linear, as long as the first and second together; arista very slender. Thorax with four yellow calli; two humeral; one near the base of each wing, extending to the pectus; a yellow streak on each side hindward; scutellum yellow, with two minute protuberances on the hind border. Abdomen elongate oval, not shorter and hardly narrower than the thorax. Legs piceous; tarsi yellow, darker towards the tips; anterior tibiæ partly yellow. Wings whitish, lurid along the basal part of the costa; two brown basal streaks, one proceeding to the hind border, the other contiguous to a very large brown patch, which is excavated at the base, joins the hind border, extends along the costa to the tip of the wing, and emits a streak to the border behind the tip; veins black; discal transverse vein undulating, parted by one-fourth of its length from the border, and by a little less than its length from the oblique præbrachial transverse vein; halteres yellowish. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

55. *DACUS LATERALIS*. *Mas.* Niger, capite thorace vittis quatuor pectoreque vittis duabus flavis, abdominis spatio medio testaceo vitta nigra, pedibus halteribusque flavis, femoribus posterioribus nigricanti fasciatis, alis nigris basi cinereis.

Male. Black. Head pale yellow. Antennæ black. Thorax with four yellow stripes; inner pair much shortened in front. Pectus with two yellow stripes. Abdomen oval, compressed towards the tip, a little broader but not longer than the thorax; middle part dingy testaceous, with a black stripe. Legs yellow; posterior femora with a broad blackish band. Wings black, cinereous towards the base, the latter hue prevailing most along the hind border; veins black; discal transverse vein straight, parted by much less than its length from the border, and by twice its length from the præbrachial transverse vein; halteres pale yellow. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

56. *DACUS VARIALIS*. *Fem.* Nigro-cyaneus, capite nigro facie flava, antennis fulvis, abdomine fasciis duabus albidis, pedibus piceis tarsis posterioribus albidis, alis cinereis gutta subcostali apiceque nigricantibus vena discali transversa nigricanti nebulosa, halteribus albis.

Female. Blackish blue. Head black, with whitish tomentum behind and about the eyes; face yellow; epistoma piceous. Proboscis piceous. Palpi yellow. Antennæ tawny, a little longer than the face; third joint slightly tapering, four times longer than the second; arista bare, slender. Pectus with whitish tomentum. Abdomen fusiform, much longer than the thorax, with two whitish bands, tapering towards the tip; oviduct exerted. Legs piceous, white at the base beneath; femora paler towards the tips; posterior tarsi whitish, piceous towards the tips. Wings cinereous, blackish towards the tips; a blackish spot at the end of the subcostal vein; veins black; discal transverse vein blackish-clouded, slightly curved inward, parted by half its length from the border, and by somewhat less than twice its length from the præbrachial transverse vein; halteres white. Length of the body 5 lines; of the wings 9 lines.

Gen. ORTALIS, *Fallén.*

57. *ORTALIS CONTIGUA*. *Fem.* Nigra, palpis albis, antennis piceis subtus albidis, thorace cyaneo, tarsis albis, alis albis plaga basali fasciisque tribus nigris, fascia 1^a strigam albam costalem includente, 3^a excavata, halteribus albis.

Female. Black, shining. Head dull, whitish about the eyes. Palpi white. Antennæ piceous, whitish beneath, nearly as long as the face; third joint linear, twice the length of the second; arista plumose. Thorax dark blue. Abdomen conical, shorter and narrower than the thorax. Tarsi white, with black tips. Wings white, with a basal black patch and with three black bands; first band very broad, containing a white

costal streak; second of equal breadth; third irregular, apical, excavated, paler than the others; veins black; discal transverse vein straight, parted by more than half its length from the border, and by much more than its length from the præbrachial transverse vein; halteres white. Length of the body 2 lines; of the wings 4 lines.

58. *ORTALIS SEMIVITTA*. *Fœm.* Nigra, capite rufo, antennis rufescentibus, pedibus piceis tarsis fulvis, alis albis vitta costali extus dilatata guttam albam includente fasciaque exteriore strigam costalem emittente nigris, halteribus albidis.

Female. Black, shining. Head red, whitish about the eyes. Antennæ reddish, as long as the face; third joint lanceolate, four times the length of the second; arista very minute, pubescent. Abdomen elongate oval, acuminate, a little longer than the thorax. Legs piceous; tarsi tawny. Wings white, with a black costal stripe, which widens from the base to half the length, where it concisely terminates; a white costal dot near the end of the stripe; an exterior black band, parallel to the end of the stripe, emitting a costal streak to the tip; veins black; discal transverse vein straight, parted by less than one-fourth of its length from the border, and by a little more than its length from the præbrachial transverse vein; halteres white. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

Gen. *TRYPETA*, *Meigen*.

59. *TRYPETA DIVERSATA*. *Fœm.* Pallide testacea, abdomine ovato brevi, alis nigris longis vitta postica nigricanti subnebulosa lituraque costali cinereis.

Female. Pale testaceous. Head as broad as the thorax; vertex with some black bristles; epistoma slightly prominent. Antennæ much shorter than the face; third joint linear, about twice the length of the second; arista bare. Thorax with black bristles on each side. Abdomen oval, much shorter and a little broader than the thorax. Fore tibiæ with black bristles. Wings black, long; a cinereous stripe along the hind border, partly and slightly clouded with blackish; a minute cinereous costal mark at a little beyond the middle; veins black; discal transverse vein straight, parted by hardly half its length from the border, and by much less than its length from the præbrachial transverse vein. Length of the body $2\frac{1}{2}$ lines; of the wings 7 lines.

60. *TRYPETA BREVIVITTA*. *Fœm.* Cinereo-testacea, thorace vittis duabus fuscis, abdomine piceo lanceolato vitta abbreviata albida, pedibus albido-testaceis, alis nigris postice cinereis, halteribus albidis.

Female. Pale cinereous testaceous; whitish testaceous beneath. Head a little narrower than the thorax, with some black bristles. Antennæ much shorter than the face; third joint linear, much longer than the second; arista plumose, with short hairs. Thorax with two slender brown stripes, which are remote from each other; some black bristles

along each side. Abdomen piceous, lanceolate, longer than the thorax, with a whitish stripe, which does not extend to the tip. Legs whitish testaceous. Wings black, mostly cinereous along the hind border; veins black; discal transverse vein straight, parted by one-fourth of its length from the border, and by a little more than its length from the præbrachial transverse vein; halteres whitish. Length of the body 3 lines; of the wings 6 lines.

Subfam. LEPSIDES, *Walk.*

Gen. CALOBATA, *Fabr.*

61. CALOBATA TIPULOIDES. *Mas.* Nigra, gracillima, abdomine fusco subcompresso segmentis cinereo marginatis 1° et 2° postice nigro marginatis, femoribus posterioribus piceis albido marginatis, tibiis tarsisque anticis albis, alis nigricantibus basi fascisque tribus cinereis.

Male. Black, very slender. Head full as broad as the thorax; face silvery white; epistoma very prominent. Antennæ a little longer than the face; third joint linear, twice the length of the second; arista slender, very little longer than the third joint. Abdomen brown, very slender, slightly compressed, much narrower than the thorax, and nearly twice its length; hind borders of the first and second segments black; fore borders of the segments cinereous; apical appendages attenuated. Legs slender; posterior femora piceous, with a whitish band beyond the middle; fore tibiæ and fore tarsi white. Wings blackish, cinereous at the base, and with three cinereous bands; third band subapical, broader than the others; veins black; discal transverse vein straight, parted by much more than its length from the border, and by more than twice its length from the præbrachial transverse vein. Length of the body 6 lines; of the wings 8 lines.

Subfam. PSILIDES, *Walk.*

Gen. PSILA, *Meigen.*

62. PSILA? CALOBATOIDES. *Mas et Fæm.* Testacea, capite postico attenuato, antennis basi nigro notatis, thorace vitta nigricante abbreviata, pedibus longiusculis, alis limpidis apice nigricantibus. *Mas.* Abdomine clavato. *Fæm.* Abdomine fusiformi.

Male and Female. Testaceous, very slender. Head as broad as the thorax, elongated hindward. Antennæ pale testaceous, not more than half the length of the face, with a black protuberance above at the base; third joint linear, twice the length of the second; arista black, plumose. Thorax with a blackish stripe, which does not extend to the scutellum, the latter with two long black bristles. Abdomen longer than the thorax. Legs slender, rather long. Wings limpid, blackish towards the tips; veins black; discal transverse vein straight, parted by less than one-fourth of its length from the border, and by much more than its length from the præbrachial transverse vein;

halteres pale testaceous. *Male*. Abdomen clavate. *Female*. Abdomen fusiform, keeled and attenuated at the tip. Length of the body $4\frac{1}{2}$ –5 lines; of the wings 8–9 lines.

63. *PSILA? CRUCIATA*. *Mas*. Pallide lutea, capite lituris quatuor nigris, thoracis disco antico nigro strigas duas emittente, abdomine longo cylindrico, pedibus longiusculis, tibiis tarsisque nigris, alis limpidis fusco bifasciatis apice fusciscentibus.

Male. Pale luteous, slender. Head black between the eyes, and with a black spot above the base of the antennæ; face with two black dots near the epistoma. Antennæ nearly as long as the face; third joint linear, four times as long as the second; arista slender, very minutely pubescent. Fore disk of the thorax black excepting the humeral calli, emitting two black streaks hindward. Abdomen cylindrical, much more slender than the thorax, and nearly twice its length. Legs rather long; tibiæ and tarsi black. Wings limpid, brownish towards the tips, with two brown bands; first band including the præbrachial transverse vein, abbreviated hindward; second including the discal transverse vein, abbreviated in front, bordering the apical brownish part; veins black, pale luteous towards the base, parted by one-fourth of its length from the border, and by its length from the præbrachial transverse vein; halteres pale. Length of the body $5\frac{1}{2}$ lines; of the wings 10 lines.

64. *PSILA? BASALIS*. *Mas et Fæm*. Testacea, verticis disco thoracis vittis duabus abbreviatis tibiisque basi piceis, abdomine piceo basi testaceo, alis cinereis striga costali transversa fasciaque subapicali puncta dua includente fuscis latis, macula costali maculaque apicali albis.

Male and Female. Testaceous, slender. Head with a few black bristles; disk of the vertex piceous. Antennæ almost as long as the face; third joint linear, four times the length of the second; arista plumose. Thorax with two piceous stripes, which are abbreviated hindward; some long black bristles on each side. Abdomen piceous, testaceous towards the base, longer and narrower than the thorax, linear in the male, fusiform in the female. Legs pale testaceous; tibiæ piceous towards the base. Wings cinereous, with a broad brown streak proceeding from the costa to the disk, and with a broad brown subapical band which contains two cinereous costal points, a white costal spot dividing the streak from the band and a white apical spot; veins black, testaceous towards the base; discal transverse vein straight, parted by hardly one-fourth of its length from the border, and by nearly twice its length from the discal transverse vein; halteres pale testaceous. Length of the body $3\frac{1}{2}$ –4 lines; of the wings 7 lines.

65. *PSILA? VITTIFFERA*. *Mas*. Picea, capite testaceo, thorace vittis quatuor piceis, pedibus halteribusque albido-testaceis, alis nigris basi cinereis.

Male. Piceous, slender. Head testaceous, with some black bristles. Antennæ pale testaceous, shorter than the face; second joint black above; third elongate conical, longer than the second. Thorax with some black bristles; sides and pectus pale testaceous, each of the former with two piceous stripes. Abdomen linear, with a few short black apical hairs, a little longer and narrower than the thorax. Legs whitish testaceous; fore femora with some black bristles. Wings black, cinereous towards the base, this hue extending most along the hind border; veins black; discal transverse vein straight, parted by half its length from the border, and by almost twice its length from the præbrachial transverse vein; halteres whitish testaceous. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

Gen. STYMBARA, n. g.

Mas. *Corpus* gracile. *Antennæ* epistoma fere attingentes; articulus 3^{us} linearis, 2^o quadruplo longior; arista brevissime pilosa. *Thorax* elongatus. *Abdomen* lineare, thorace paulo brevius et angustius. *Alæ* longissimæ, venis subcostali et mediastinali conjunctis, vena radialis valde undulata, vena cubitali subundulata.

Male. Body slender. Head and thorax with a few bristles. Head full as broad as the thorax; face vertical. Proboscis short. Palpi moderately long. Antennæ nearly as long as the face; third joint linear, about four times the length of the second; arista with very short hairs. Thorax elongate; scutellum rather large. Abdomen linear, a little shorter and narrower than the thorax. Wings very long; subcostal and mediastinal veins united; subcostal vein ending at rather beyond one-third of the length of the wing; mediastinal vein ending at somewhat beyond the middle; radial vein forming three curves, abruptly bent to the costa at a little beyond three-fourths of the length; cubital vein very slightly undulating exteriorly; discal transverse vein straight, oblique, parted by less than half its length from the border, and by less than its length from the præbrachial transverse vein.

66. STYMBARA VAGARIA. *Mas.* Pallide testacea, abdomine basi pedibus halteribusque albidis, alis cinereis guttis marginalibus indistinctis pallidioribus.

Male. Pale testaceous, whitish beneath. Abdomen towards the base and legs whitish. Wings cinereous, with indistinct paler dots along the costa and along the hind border; veins black; halteres whitish. Length of the body $2\frac{1}{2}$ lines; of the wings 7 lines.

The specimen here described is injured, and its colour and markings are somewhat indefinite.

Gen. PIOPHILA, *Fallén.*

67. PIOPHILA? DISJUNCTA. *Fæm.* Nigra, capite maculis duabus chalybæis subtus flavescente, antennis piceis, pedibus flavis, tibiis

tarsisque anticis nigris, alis sublimpidis venis halteribusque flavescensibus.

Female. Black, shining. Head and thorax with some black bristles. Head yellowish beneath; disk of the vertex and of the face chalybeous. Antennæ piceous, nearly reaching the epistoma; third joint linear, elongate. Abdomen elongate oval, hardly longer than thorax. Legs yellow; fore tibiæ and fore tarsi black. Wings nearly limp; veins and halteres yellowish; discal transverse vein straight, parted by less than its length from the border, and by much more than its length from the præbrachial transverse vein. Length of the body $1\frac{1}{2}$ line; of the wings $2\frac{1}{2}$ lines.

Subfam. OSCINIDES, *Fallén.*

Gen. CHLOROPS, *Meigen.*

68. CHLOROPS? CONCLUSATA. *Mas.* Nigro-fusca, capite ferrugineo, antennis fulvis, thorace pectoreque cinereo tomentosis, abdominis segmentis albido marginatis, pedibus cinerascentibus, alis cinereis, halteribus albidis.

Male. Blackish brown. Head ferruginous, with a few black bristles. Antennæ dull tawny; arista long, slender. Thorax and pectus with cinereous tomentum. Abdomen a little shorter than the thorax; hind borders of the segments whitish. Legs dingy cinereous. Wings cinereous; veins black; discal transverse vein straight, parted by nearly its length from the border, and by more than its length from the præbrachial transverse vein; halteres whitish. Length of the body $1\frac{1}{2}$ line; of the wings 3 lines.

Subfam. GEOMYZIDES, *Fallén.*

Gen. DROSOPHILA, *Fallén.*

69. DROSOPHILA PINGUIS. *Mas et Fæm.* Testacea, segmentorum abdominalium marginibus pedibusque pallidioribus, alis cinereis. *Mas.* Abdomine guttis sex nigris. *Fæm.* Abdomine guttis quatuor nigris.

Male and Female. Testaceous. Head and thorax beset with long stout bristles. Antennæ much shorter than the face; third joint elliptical, about twice the length of the second. Abdomen elliptical, not longer than the thorax; hind borders of the segments pale testaceous. Legs pale testaceous, with black bristles. Wings cinereous; veins black, testaceous towards the base; discal transverse vein straight, parted by less than its length from the border, and by much more than its length from the præbrachial transverse vein. *Male.* Third, fourth, and fifth abdominal segments with a black dot on each side. *Female.* Fourth and fifth abdominal segments with a black dot on each side. Length of the body 2 lines; of the wings 3 lines.

70. DROSOPHILA DORSALIS. Pallide testacea, thoracis vitta abbre-

viata scutellique guttis duabus nigris, alis limpidis venis albidis vena costali nigra.

Pale testaceous. Head and thorax with black bristles. Antennæ much shorter than the face; third joint conical; arista plumose. Thorax with a black stripe, which is abbreviated hindward; scutellum with a black dot on each side of the tip. Wings limpid; veins whitish; costal vein black; discal transverse vein straight, parted by much less than its length from the border, and by very much more than its length from the præbrachial transverse vein. Length of the body $2\frac{1}{2}$ lines; of the wings $4\frac{1}{2}$ lines.

Gen. MILICHIA, *Meigen*.

71. MILICHIA MINUTA. *Mas.* Nigra, abdomine argenteo subtus piceo thorace valde latiori, alis cinereis.

Male. Black. Head with short black bristles. Eyes large. Antennæ black, much shorter than the face; third joint round; arista simple, short. Abdomen bright silvery above, piceous beneath, much broader and a little longer than the thorax. Wings cinereous; veins and halteres black; discal transverse vein straight, parted by nearly its length from the border, and by twice its length from the præbrachial transverse vein. Length of the body $1\frac{1}{4}$ line; of the wings 2 lines.

Subfam. HYDROMYZIDES, *Fallén*.

Gen. NOTIPHILA, *Fallén*.

72. NOTIPHILA UNILINEATA. *Fœm.* Fusca, capite apud oculos albedo, thorace vittis quinque cinereis, abdomine fasciis late interruptis vittaque cinereis, tibiis et tarsorum articulis apice genibusque cinereis, alis cinereis apud costam apicalem obscurioribus, halteribus testaceis.

Female. Brown. Head and thorax with black bristles. Head whitish about the eyes. Antennæ brown, much shorter than the face; third joint linear, about half the length of the second; arista plumose. Thorax with five cinereous stripes. Pectus cinereous. Abdomen with a cinereous stripe, and with widely interrupted cinereous bands on the hind borders of the segments. Knees, and tips of the tibiæ and of the joints of the tarsi cinereous. Wings dingy cinereous, darker along the apical part of the costa; veins black; discal transverse vein parted by half its length from the border, and by more than twice its length from the præbrachial transverse vein; halteres testaceous. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

73. NOTIPHILA CARBONARIA. *Mas.* Cinereo-nigra, antennis rufis apice nigris, tibiis piceis, alis nigris postice nigricanti-cinereis.

Male. Cinereous black, with black bristles. Antennæ red, black towards the tips; third joint conical; arista plumose. Abdomen elongate oval, a little longer than the thorax. Tibiæ piceous. Wings

black, irregularly blackish cinereous towards the hind border; veins and halteres black; discal transverse vein straight, parted by nearly its length from the border, and by very much more than its length from the præbrachial transverse vein. Length of the body 2 lines; of the wings 3 lines.

Gen. DISCOMYZA, *Meigen*.

74. DISCOMYZA TENEBROSA. *Mas.* Nigricanti-picea, capite piceo gutta testacea, antennis nigris basi testaceis, pectore pedibusque albis, femoribus tibiisque nigro fasciatis, alis nigricantibus apud costam nigris costa valde convexa.

Male. Blackish piceous, shining. Head piceous, with a testaceous dot in front; underside and pectus white. Antennæ black, shorter than the face, testaceous at the base; third joint conical; arista plumose. Abdomen not longer than the thorax. Legs white; femora and tibiæ with black bands. Wings blackish, black along the costa, which is very convex; veins black; discal transverse vein straight, parted by more than its length from the border, and by nearly twice its length from the præbrachial transverse vein. Length of the body $1\frac{1}{2}$ line; of the wings $2\frac{1}{2}$ lines.

Descriptions of some New Species of Dipterous Insects from the Island of Salwatty, near New Guinea. By FRANCIS WALKER.

[Read March 3, 1864.]

Fam. MYCETOPHILIDÆ, *Haliday*.

Gen. MYCETOPHILA, *Meig.*

1. MYCETOPHILA OBSCURATA. Nigra, nitens, ore coxisque albidis, antennis basi flavescens, thorace subcompresso, alis cinereis apud costam nigricantibus.

Black, shining; mouth whitish; antennæ filiform, yellowish towards the base; thorax slightly compressed; legs rather long; coxæ whitish; hind tibiæ with short slender spines; hind tarsi very minutely setulose. Wings dark cinereous, blackish along the costa; veins black; radial vein ending at two-thirds of the length of the wing; cubital ending at a little in front of the tip; subapical forked before the middle; subanal and anal veins distinct, the former not forked. Length of the body 2? lines; of the wings 4 lines.

The specimen here described is mutilated; it may form a new genus.