

As Mr. Bell's figure represents the front view of the animal, and as no coloured representation of it of which I am aware has yet appeared, the dorsal aspect has been chosen for the present figure, Plate X.\*, which shows the bat of half the natural size.

By way of conclusion to this short notice I have only to observe, that the various species of bats are (in this neighbourhood at least) not sufficiently studied, and there is no doubt that by diligent research many of those species which are now considered rare would be found to be comparatively common, and to have been mistaken for those well-known species to which the greater part of them are closely allied.

Great Yarmouth, June, 1838.

XXII.—*New British Insects indicated in Mr. Curtis's Guide.*

By A. H. HALIDAY.

[Continued from p. 121.]

DIPTERA.

*Culex detritus*, C. 1137. 9<sup>b</sup>.—Ent. Mag. i. 151.

This seems to be the original *C. pipiens* of Linnæus. The insect described by Meigen under that name is a very different species and not uncommon.

*Bibio nigriventris*, C. 1179. 4<sup>b</sup>.—Ent. Mag. i. 157.

I have now ascertained that this is the other sex of *B. albipennis*.

*Cordyla fulveola*, C. 1174. 2.

This is the other sex of *C. fasciata*. The sexes in this genus differ both in the form of their antennæ and the number of joints, which also varies according to the species. There are two minute ocelli in all that I have examined, but they are easily distinguished from the *Mycetophila* by the enlarged basal joint of the palpi, on account of which Macquart has called the genus *Platypalpus* †.

\* It being our intention, as will be seen in the notice on our wrapper, to give a supplement of plates at the end of our volume, we must reserve the present one for that opportunity.—EDIT.

† The genus *Platypalpus* is separated from *Tachidromia* by Macquart, 'Diptères du Nord de la France.' *Platyp. Dolichop.* &c. p. 92.—E. NEWMAN.

*Leia nasuta* (*Mycetophila id.*, C. 1173. 17<sup>b</sup>).

*L. fusca* abdomine albido-piloso; antennis basi pedibusque flavis; trochanteribus nigris, *m. f.* Long.  $2\frac{1}{3}$ —3 lin.

Not uncommon about rivulets at Holywood.

*Add.* Wings as in *Mycetophila*, fig. 21. (Meig. 1. pl. ix.)

The face of the male is usually armed with a deflected horn or spine. There are three ocelli nearly in a line on the vertex, which determines its place in the genus *Leia*. *Mycetophila flavipes* of Macquart (S. a B. i. 130) seems nearly allied.

*Limnobia Aegle*, C. 1157. 37<sup>c</sup>.

This is identical with *Idioptera pulchella* (*Limnobia id.* Meig. vi. 275. *Idioptera maculata*, Macq. S. a B. i. 94).

*Spania Fallenii*, C. 1203<sup>b</sup>. 2.—Ent. Mag. i. 162.

Notwithstanding the different form of the antennæ I am led to consider this as the female of *Sp. nigra*, which occurs more frequently in the same marshes in the month of June. The proboscis is longer in the females and the palpi not exactly linear. I have no longer any doubt as to the place of this genus among the *Leptidæ*.

*Medeterus ruficornis*, C. 1256. 5. App. 279.

*M. obscure æneus*, fronte thoraceque olivaceis; antennis brevissimis rufis margine apicis fusco; palpis pedibusque pallidis, tarsis fuscis; nervo transverso ordinario ab alæ margine remoto, *m. f.*; hypopygio recondito, *m.* Long.  $1\frac{3}{4}$  lin.

Tarbert, July.

*Dolichopus sabinus*, C. 1258. 9<sup>b</sup>. App. 279.

*D. ciliis* genarum albidis; viridi-æneus antennis basi subtus rufis; pedibus pallidis, tarsis nigris basi pallidis; alarum costa exteriori infuscata, *m. f.*; tibiis posticis basi variolosis, femoribus imberbibus, lamellis albidis, *m.* Long. 2 lin.

Killarney and Tarbert.

*Dolichopus signifer*, C. 1258. 9<sup>c</sup> App. 279.

*D. ciliis* genarum albis; viridi-æneus femoribus apice tibiisque pallidis posticis apice nigris; alarum apice nigricante; *m. f.* femoribus posticis subtus fusco-ciliatis, lamellis albidis, *m.* Long. 2 lin.

On a sandy islet in Roundstone Bay.

*Platypeza infumata*, C. 1248. 14.

*P. cæsia* halteribus pedibusque fuscis, tarsis basi pallidis; thoracis macula tridentata atra; abdominis fasciis atris, duabus anterioribus confluentibus, *f.* Long.  $\frac{3}{4}$  lin.

Holywood. I saw but lost a second specimen at Roe Park, county Derry.

*Add.* Wings pure hyaline, 5th nerve scarcely abbreviate, cross nerve near the margin. Hind tarsi much dilated at the base. The one I possess wants the head, and is otherwise injured, having probably been the prey of a spider.

*Musca Morellia importuna*, C. 1286. 21<sup>b</sup>. }  
 ——— *hortorum*, C. 1286. 21. }

Having been enabled by the kindness of Mr. F. Walker to consult Fallen's original description, I would rectify the distinction of these species. 1°. *M. hortorum*. To this belong Fallen's description, and my description of *M. importuna* (Ent. Mag. iv. 149), and probably all the *Morellia* described by Desvoidy. 2°. *M. importuna*. This is *M. hortorum* of Meigen and of my description in the Entomological Magazine.

*Anthomyia monilis*, C. 1287. 100<sup>b</sup> App. 279.

*A. Homalomyia atra* abdomine glauco-micante linea dorsali et incisuris atris; calyptris fumigatis; tibiis anticis basi pallidis, apice fasciculatis; tarsorum anticorum articulo ultimo orbiculato, *m.* Long. 2—2½ lin.

Very like *A. manicata*, but only half the size, and of a deeper black. Wings darker, calyptra smoky brown. Middle tibiae scarcely incrassate at the tip; thighs of the same pair bearded throughout on the under side, and scarcely contracted before the tip. The tarsi are shorter, and the terminal joint in the fore pair round.

Not common at Holywood.

*Anthomyia cilipes* (*A. 12-punctata*, C. 1287. 139<sup>b</sup>. App. 279).

*A. Azelia nigra* oculis fulgidis, thorace postice cinereo, abdomine cinereo linea dorsali interrupta et punctis 2 in singulo segmento atris; alis fuliginosis; tibiis posticis extus longe villosis, *m.*; cinerea alis hyalinis, abdominis punctis paribus nigris, *f.* Long. 2½ lin.

Twice the size of *A. triquetra*, and very like it; but distinguishable by the darker wings, and still more by the hairy hind tibiae of the male.

Very common about putrescent fungi.

Gen. SCATOPHAGA. Subg. HALITHEA, C. App. 279.

Arista subnuda. Alae unguiculatae. Tarsi graciliores. Femora postica maris basi tuberculo villosa.

1. *Scatophaga fucorum*, C. 1293. 11.—*Fallen Scatom.* 5. 5.

*S. H.* obscure cinerea thorace lineato, antennis palpisque nigris.

2. *Scatophaga maritima*, C. 1293. 11<sup>b</sup>. App.—*Sc. fucorum*, var. *Fallen*, *ibid.*

*S. H.* obscure cinerea thorace lineato; margine frontis palporum basi tibiisque testaceis.

Both species are found on the sea coast, but not usually associated. The first is more rare or local.

#### Gen. CÆLOPA, C. 1320.

This group will admit of subdivision, and the nomenclature of the species has been somewhat confused.

\* Arista glabra. Facies et tibiæ densissime villosæ. *Cælopa*.

1<sup>o</sup>. *C. pilipes*. *C. frigida*, Meig. vi. 8,—*id.* Macq. S. a B. ii. 502.

\*\* Arista glabra. Facies et tibiæ setis aspersæ. *Fucomyza*, C. App. 280.

2<sup>o</sup>. *C. frigida*. *Musca id.* F. S. Antl. 307. 116. *Copromyza id.*, *Fallen. Heterom.* 6. 1. *Cælopa gravis*, Ent. Mag. i. 167.

3<sup>o</sup>. *C. simplex*, Ent. Mag. *ibid.* 4<sup>o</sup>. *C. parvula*, Ent. Mag. *ibid.*

\*\*\* Arista villosa. Epistoma acute porrecta. *Malacomyza*, C. App. 280.

4<sup>o</sup>. *C. sciomyzina*, Ent. Mag. *ibid.*

*Saltella sellata*, C. 1297. 19.

*S. nigra* scutello aterrimo, antennis fuscis, coxis pallidis, *f.* Long. 1½ lin.

Holywood.

Perhaps a variety of *S. scutellaris*, fem.

*Sepsis duplicata*, C. 1297. 4<sup>d</sup>. App. 280.

*S. nigra* antennis pedibusque fusco-ferrugineis, alarum macula apicali obsolete, nervis 2<sup>o</sup> et 3<sup>o</sup> nervulo transverso connexis.

Long. ¾ lin.

Kent.

The extraordinary cross nerve is in a line with the ordinary one closing the discoidal cell.

*Tephritis spoliata*, C. 1300. 15<sup>c</sup>. App. 280.

*T. Urophora nigella* thoracis dorso cinereo, linea ante alas scutelloque flavis; capite genibus tarsorum basi ferrugineis; alis hyalinis puncto stigmaticali fusco, *m.* Long. 1½ lin.

Isle of Wight, June; F. Walker.

Remarkable for the absence of the bands general in the wings of this subgenus.

*Tephritis Asteris*, C. 1300. 35<sup>b</sup>.

Resembles *T. sonchi*, and may prove a variety of that spe-

cies, with the sides of the thorax and the scutel yellow, the stigma of the wings lutescent, the costal margin without dusky streaks. Bred from puparia found among the seeds of *Aster Tripolium*.

*Tephritis pini*, C. 1300. 25<sup>b</sup>.

*T. Acinia cinerea* capite pedibus et segmentorum anteriorum marginibus ferrugineis; alis fusco-reticulatis, maculis 2 costalibus saturatoribus. Long. 2 lin.

I find this upon pines, but have no knowledge of the larva. It may be a variety of *T. flavicauda*.

*Oscinis capreolus*, C. 1345. 41<sup>b</sup>. App. 282.

*O. nigra nitida*, fronte opaca triangulo nitido; alis fuliginosis; halteribus fuscis; arista crassa dense plumata.

Resembles *O. lævigata*, but the arista as in *O. cornuta*.  
England; F. Walker.

*Oscinis rapta*, C. 1345. 41<sup>d</sup>. App. 282.

Resembles *O. pallidiventris*, but the discoidal cell of the wings is open by the absence of the ordinary cross nerve.

England; F. Walker.

Gen. HELOMYZA. Subg. ÆCOTHEA, C. App. 280.

Antennæ articulo tertio orbiculato, arista gracillima longa nuda. Tibiæ mediæ spinosæ. Alæ costa distincte serrata, areola mediastina minuta.

*H. fenestralis* is the only British species.

*Helomyza arenaria*, C. 1328. 34, is the same as *Opomyza maculata*, Macq.

*Sciomyza virgata*, C. 1321. 1. bis. App. 280.

*S. Melina* thorace cinerascente; fronte antennisque ferrugineis; pedibus pallidis, anticis apice fuscis, *m. f.*; abdomine pallido vitta dorsali interrupta cinerea, *m*; abdomine fusco incisuris pallidis, *f.* Long. 2—2½ lin.

*Obs.* The naked arista of this species should be particularly observed.

South of Ireland, July.

Gen. SCIOMYZA. Subg. ANTICHETA, C. App. 280.

Arista plumata. Tibiæ cilio præapicali gemino.

The type of this group is *Tetanocera vittata*, Ent. Mag. i. 168.

*Ochthiphila flavipalpis*, C. 1336. 6. App. 281.

*O. elongata cana* antennis subtus palpis tibiis tarsisque flavis, *m. f.*; metatarso postico subincrassato, *f.* Long. 1¼—1¾ lin.

On sandhills along the east coast of Ireland, among the stems of the sea reed; May—August.

*Ochthiphila geniculata*, C. No. 5. *ibid.*

*O. cana* antennis palpis pedibus nigris, genubus flavis, *m. f.*; abdomine quadrifariam nigro-punctato, *f.*; bifariam obsolete punctato, *m.* Long.  $1\frac{1}{2}$  lin.

On grassy slopes of the Sugar-loaf mountain, county Wicklow, May.

Gen. HETERONEURA. Subj. CLUSIA (Cleora, C. App. 282.)

Tibiæ cilio præapicali nullo. Alarum nervi transversi subremoti. Sp. 1. *H. flava* *Heteromyza flava*, Meig. vi. 46. *Heteroneura spurca*, Ent. Mag. i. 171.

Gen. OPOMYZA. Subj. TETHINA, C. App. 281.

Facies impressa, epistomate prominulo nudo. Peristoma elongatum. Labium cylindricum bigeniculatum. Antennæ brevissimæ articulo 3<sup>o</sup> suborbiculato arista gracili subnuda. Alæ apice rotundatæ: nervus transversus ordinarius ab alæ margine distans.

*Opomyza illota*, C. 1338. 27. App. 281.

*O. Tethina* canescens fronte antennisque ferrugineis, facie palpis tarsis halteribus albidis, alis albis, *m. f.* Long.  $\frac{3}{4}$ —1 lin.

Somewhat like *Oscinis* (*Siphonella*) *albipalpis*.

In the flowers of *Cakile maritima* and *Convolvulus soldanella*; Killybeg Bay, county Dublin; June.

Gen. DIASTATA. Subj. CAMILLA, C. 1337<sup>b</sup>. App. 281.

Tibiæ cilio præapicali nullo. Antennæ decumbentes facie breviores, articulo 3<sup>o</sup> oblongo, arista pectinata. Labium incrassatum.

*D. glabra*. *Drosophila id.* Fall., Geom. 8. 12. *Diastata ærata*, C. App. 281.

Blarney, in July; also in England; F. Walker.

*Obs.* This species, though arranged under *Drosophila* by Fallen and Meigen, wants the most prominent characteristics of that genus, viz. the hirsute eyes and serrate caudal plates. I have therefore referred it to *Diastata*.

*Sphærocera scabricula*, C. 1350. 3<sup>b</sup>. Ent. Mag. iii. 320.

Having lately met with this species in abundance, I find that the specimens from which my description was drawn were pale-coloured from immaturity; but the form of the head and hind tarsi, the wings and the white arista will characterize the species beyond mistake.

*Limosina arcuata*, Macq. C. 1350, 23<sup>c</sup>.

Previously described by Fallen under the name *fontinalis*, Suppl. 16.

The new species of the *Hydromyzidæ* indicated in the Guide will be noticed in a more general memoir on that tribe.

#### HEMIPTERA.

##### ATHEROIDES, C. 1046<sup>b</sup>.

Corpus apterum lineare deplanatum, abdominis segmentis intermediis connatis, spiraculis penultimi simplicibus. Antennæ dimidio corpore breviores, 6-articulatæ, articulo ultimo capillaceo attenuato. Promuscis thorace brevior, mesosterni sulco incumbens. Femina vivipara.

*Atheroides serrulatus*, C. 1046<sup>b</sup>. 1.

*A. rugulosus* subglaber, capitis et segmenti ultimi marginibus denticulatis setosis, *m. f.* Long. 1 lin.

On grasses; common in autumn on the sea-coast at Holywood.

*Atheroides hirtellus*, C. 1046<sup>b</sup>. 2.

*A. nitidus* dorso undique hispidus, antennis pedibusque vage pilosis, *f.* Long. 1 lin.

On *Juncus articulatus*, Holywood.

*Eriosoma pallida*, C. App. 279.

This species, like *E. ulmi-gallarum*, inhabits the leaves of the mountain elm; its follicles are more solid and imbedded in the leaves near the base of the midrib, not elevated on a foot-stalk. The apterous female is white. The follicles burst about the beginning of August. The society is then very numerous, and the farinose secretion more abundant than in the former species. The winged insects are glossy bluish black, with the legs rather paler: collar dirty yellow, with a dusky transverse line: a row of lateral dots on the abdomen and its underside are greenish yellow, as also the promuscis. The nervures of the upper wings nearly as in *E. ulmi-gallarum*, but the lower have two nervures (in place of one) springing from the subcostal. The joints of the antennæ are of different proportions, the sixth being rather longer than the fifth.

*Obs.* The genus *Eriosoma* of Leach was made up of very different forms. Several groups have been already distinguished, viz. 1<sup>o</sup>. *Phylloxera*, Fonsc. If the minute species with incumbent wings which occurs on the oak (noticed by Walker, Ent. Mag. iii. 407) be the *Phylloxera roboris*, the de-

scription and figures of that species in the Annals of the Ent. Soc. Paris, are very inaccurate. 2°. *Myzoxyle*, Blot. 3°. *Adelges*, Vallot. Of this we have two species, *A. Laricis*, Vallot, and *A. gallarum abietis*, DeG. ; at least I have found no cause for generic distinction in the structure, notwithstanding the difference of their habitation. If *Eriosoma Fagi* be assumed as the type of this genus, it will be necessary to separate those species which inhabit closed follicles on the leaves and shoots of plants. In that case I would propose the generic name *Byrsocrypta* for these last.

XXIII.—*On the Formation of the Fibre-formed Cells (Fibrous Cells) or Tubes of the Liber in Plants.* By Dr. J. MEYEN\*.

WHILE engaged last winter with Prof. Mitscherlich in making a series of observations on the chemical composition of various vegetable substances, the following curious fact attracted our notice: that the purified fibres of flax, and also old linen, when boiled in muriatic acid, decomposed more or less suddenly into very minute shining particles, which soon settled at the bottom of the fluid. On examining them with the microscope, these particles appeared to be nearly of the same length, and to be formed by a regular decomposition of the flax fibres, so that each particle consisted of a small portion of the cylindrical or prismatical tubes of the flax fibre. Some portions were at times considerably longer; but then it was more or less evident that these also were composed of several small ones, which were similar in length to the former. At times, however, even the various layers of the thick membrane of which flax fibre is composed were separated from each other by the action of the boiling muriatic acid.

The examination of a thin unsized linen paper, which had been reduced, by continual boiling in water, to a pulpy mass, exhibited in like manner a manifold division of the single flax fibres into smaller particles, and of their walls into distinct layers: but this subdivision, on which the fabrication of paper evidently depends, was far from being comparable with the

\* Translated from Wiegmann's Archiv, Part IV., 1838.