

SYNOPSIS
OF THE
GENERAL OF BRITISH INSECTS.*

CLASS. HEXAPOD METAMORPHOTIC INSECTS.

Subclass I. Mouth with Jaws.

ORDER I. COLEOPTERA Aristotle. (ELEUTHERATA Fabr., ELYTROPTERA Clairv.)

Sect. I. PENTAMERA Latreille.

Tribe 1. Chilopodomorpha MacLeay.

Subtribe 1. Adephaga Clairv.

Stirps 1. Geodephaga MacLeay.

Family 1. CICINDELIDÆ Kirby. (Cicindela Linn.)

CICINDELA Linn. &c. BUFRÉSTIS p. Geoffroy. 6 sp. Cic. campestris Linn.

Anterior tarsi ♂ with the three basal joints elongated and dilated; elytra oblong, ovate, depressed; thorax subquadrate. Curt. Brit. Entomol. pl. 1.

Family 2. CARABIDÆ Leach. (Carabus Linn.)

Subfamily 1. Brachinides Westw. (Brachinidæ MacLeay,
Truncatipennes Latr.)

DRYPTA Fabr. CARABUS p. Marsh. 1 sp. D. emarginata Fabr. Curt. 454.

Basal joint of antennæ very long; thorax long, cylindric; penultimate joint of tarsi bilobed; palpi with the last joint securiform.

POLYSTICHUS Bonelli. GALETTA p. Fabr. 1 sp. P. vittatus Brullé. Curt. 223.

Depressed; head triangular; thorax subcordate; palpi long; tarsi simple; mentum-tooth triangular.

ODACANTHA Payk. ATTELABUS p. Linn. 1 sp. Attel. melanurus Linn. Curt. 227.

Thorax long, cylindric; tarsi simple; basal joint of antennæ short; head broader than the thorax.

DEMETRIAS Bonelli. RHYSPHILUS Leach. 4 sp. Carab. atricapillus Linn.

Depressed; thorax cordate; penultimate joint of tarsi bilobed; second joint of antennæ short; claws simple. Curt. 110.

DROMIUS Bonelli. DEMETRIAS p. Panz. 19 sp. Carab. 4-maculatus Linn.

Depressed; thorax subcordate; tarsi simple; second joint of antennæ as long as third; last joint of max. palpi truncate. Curt. 291.

* Throughout this Synopsis, the first line of each genus comprises the following particulars:—1. Name of the genus; 2. name of its founder; 3. synonyme of the genus; 4. author of the synonymous genus; 5. number of British species; 6. typical species; 7. reference to the best figure; this last item being occasionally, for want of space, placed after the description of the genus.

GENERIC SYNOPSIS.

LEBIA Latreille. *CARABUS* p. Linn. 3 sp. *C. crux minor* Linn. Curt. 87.
Depressed, broad; thorax transverse, lobed behind; penultimate joint of tarsi bilobed.

LAMPRIAS Bonelli. *LEBIA* p. Latr. 4 sp. *C. cyanocephalus* Linn. Curt. 282.
Depressed, broad; thorax transverse, cordate, lobed behind; labrum quadrate; fourth tarsal joint bilobed.

TARUS Clairville. *CYMINDIS* Latr. 7 sp. *C. humeralis* Marsh. Curt. 285.
Depressed; thorax cordate, truncate; claws denticulated; tarsi simple; labial palpi ♂ with the basal joint securiform.

BRACHINUS Weber. *CARABUS* p. Linn. 5 sp. *C. crepitans* Linn. Curt. 554.
Oval, convex; thorax narrow; labrum transverse; tarsi simple; palpi filiform; claws simple.

Subfamily 2. *Scaritides* Westw. (*Scaritides* MacL. Bipartiti Latr.)

SCARITES Fabr. *TENEBRO* p. Linn. 1 sp. *C. Beckwithii* Steph.
Oblong, subdepressed; antennæ elbowed; mandibles with strong teeth. Steph. Ill. Brit. Ent. vol. i. pl. 3.

(**OXYGNATHUS** Dej. *ARPEPHORUS* Hope MSS. 1 sp. *O. anglicanus* Steph.
Oblong depressed; antennæ elbowed; mandibles not toothed. Steph. Ill. 1. pl. 3.)

CLIVINA Latr. *TENEBRO* p. Linn. 2 sp. *T. Fosor* Linn. Curt. 175.
Thorax quadrate; mandibles denticulated; anterior tibiae palmated.

DYSCHIRIUS Panz. *CLIVINA* p. Gyll. 14 sp. *Scarites gibbus* Fabr.

Thorax globose; mandibles denticulated; anterior tibiae palmated. Curt. 354.

DISTOMUS Leach. *DRITOMUS* p. Dej. 1 sp. *Dis. Leachii* Steph.

Anterior tibiae not palmated; head unarmed. Steph. Ill. 1. pl. 3.

Subfamily 3. *Harpalides* Westw. (*Harpalides* MacL. Thoracici Latr.)

Division 1. *Feronidea* Westw. (*Feroniens* Dej. Simplificanii Latr.)

POGONUS Zeigl. *RAPTOR* Megerle. 5 sp. *P. Burrellii* Haw. Curt. 47.
Anterior tarsi ♂ with two dilated joints; thorax subquadrate; labrum emarginate.

PATROBUS Megerle. *BLITHISA* p. Pz. 2 sp. *Car. rufipes*. Curt. 192.

Anterior tarsi ♂ with two dilated joints; thorax subcordate; labrum straight.

Obs. All the remaining genera have the three basal joints of the male tarsi dilated.

CALATHUS Bonelli. *CARABUS* p. Linn. 11 sp. *C. melanocephalus* Linn.
Tarsal claws toothed; thorax subquadrate; palpi simple. Curt. 184.

ODONTONYX Steph. *CARABUS* p. Marsh. 1 sp. *C. rotundicollis* M.

Tarsal claws toothed; thorax rounded; wings 0.

SYNUCHUS Gyll. *TAPHRIA* Bon. 1 sp. *Car. nivalis** Pz. Pz. F. I. G. 37. 19.
Tarsal claws toothed; labial palpi with the last joint securiform; thorax rounded; wings 2.

PRISTONYCHUS Dej. *LEMOSTHENES* Bon. 1 sp. *Car. Terricola*, Pk.
Tarsal claws toothed; thorax subcordate; last joint of labial palpi simple; wings 0. Pz. F. I. G., 30 f. 3.

* This has generally been written *vivalis*, but improperly. Vid. Pz. F. I. G. and Ind. Meth. p. 53. and Aud. and Brullé, Hist. des Insectes, vol. iv. p. 307.

Obs. The following genera have the tarsal claws simple : —

SPHODRUS *Cle.* **CARABUS** p. *Linn.* 1 sp. *Car. leucopthalmus* Linn.
Antennæ with the third joint as long as the two following united. Pz. F. I. G. 9. f. 4.

PLATYNUS *Bon.* **ANCHOMENUS** p. *Sturm.* 2 sp. *Car. angusticollis* F.
Mentum-tooth entire; thorax cordate; posterior angles acute; elytra depressed; head narrower than the thorax. Pz. F. I. G. 73. f. 9.

ANCHOMENUS *Bon.* **CARABUS** p. *Fabr.* 4 sp. *Car. prasinus* F. Pz. 16. f. 6.
Mentum-tooth entire; thorax cordate; posterior angles acute; elytra oblong, sub-convex; head as broad as the thorax.

AGONUM *Bon.* **CARABUS** p. *Linn.* 30 sp. *C. 6-punctatus* Linn. Curt. 183.
Anterior tarsi of males with the joints elongated; mentum-tooth simple; thorax rounded.

OLISTHOPUS *Dej.* **CARABUS** p. *Puyk.* 1 sp. *C. rotundatus* Pk.
Thorax rounded; mentum-tooth obsolete; basal joints of tarsi elongated. Steph. Ill. 1. pl. 6.

PLATYDERUS *Steph.* **ARGUTOR** p. *Dej.* 1 sp. *Car. ruficollis* M.
Thorax broad, subquadrate, depressed; body flat; palpi with the terminal joint ovate, cylindric; truncate at tip.

ARGUTOR *Megerle.* **PLATYSMA** p. *Sturm.* 10 sp. *Car. vernalis* F.
Thorax subcordate, truncate; body depressed, narrow; palpi with the last joint fusiform. Curt. 666.

PICEILLUS *Bon.* **CARABUS** p. *Linn.* 7 sp. *C. capreus* Linn. Curt. 107.
Thorax subquadrate; elytra subconvex; palpi cylindric; mentum-tooth broad, obtuse; colours metallic.

SOGINES *Leach.* **PACILLUS** p. *Dej.* 1 sp. *Car. punctulatus* Ill. Pz. 30. f. 10.
Thorax with an elevated lateral line on each side; head large; body depressed; palpi robust; terminal joint obtusely truncated.

OMASEUS *Zeigl.* **PTEROSTICHUS** p. *Sturm.* 13 sp. *Car. aterrimus* F.
Thorax subquadrate; elytra entire, subdepressed; palpi cylindric; antennæ with the second joint nearly as long as the third. Curt. 15.

STEROPUS *Megerle.* **MOLORA** p. *Sturm.* 4 sp. *Car. madidus* F. Curt. 171.
Thorax suborbicular; elytra entire; oval subconvex; wings 0; mentum-tooth broad, bifid.

BROSCUS *Pz.* **CEPHALOTES** *Bon.* 1 sp. *Car. cephalotes* Linn. Donov. 484.
Thorax very much attenuated behind; body elongate; mentum-tooth obtuse; head large.

MISCODERA *Esch.* { **LEIOCHITON** Curt. 1 sp. *Dysch.*
 ONCODERUS and **SPHAERODERUS** *Steph.* } *arcticus* Pk.
Thorax globose; elytra ovate, convex; head small; mentum-tooth obtuse, entire, small. Curt. 346.

STOMIS *Cle.* **CARABUS** p. *Marsh.* 1 sp. *Car. pumicatus* Ill. Clv. 2. pl. 6. f. A.
Body elongate, narrow, subconvex; thorax cordate; mandibles very long and protracted.

PTEROSTICHUS *Bon.* **COPHOSUS** p. *Dej.* 6 sp. *Car. fasciato-punctatus* F.
Body depressed; thorax subcordate, truncate; palpi robust; mentum-tooth short, bifid. Pz. 67. f. 9.

COPHOSUS *Zeigl.* **PTEROSTICHUS** p. *Curt.* 1 sp. *Coph. elongatus* Dej.
Body long, cylindric, parallel; antennæ short; palpi stout; wings 0. Curt. 196.

- ADELOSIA** Steph. *PTEROSTICHUS* p. Steph. 1 sp. *Car. maejer* Marsh.
Body very depressed; thorax much narrowed behind; antennæ rather short; palpi very slender. Steph. 1. pl. 7. f. 5.
- PLATYSMA** Bon. *SIMOTHELUS* Meg. 1 sp. *Car. niger* Fabr. Oliv. 3. 48 pl. 1. Thorax subquadrate, narrower than the elytra; elytra subovate, subdepressed; palpi slender; mentum-tooth robust, bifid.
- ABAX** Bon. *PTEROSTICHUS* p. Sturm. 1 sp. *Car. striola* Fabr. Pz. 91. f. 6. Body depressed; thorax square, as broad as the elytra, which are soldered together, with an elevated humeral carina; colours black.
- CHEPORUS** Latr. *ABAX* p. Steph. 1 sp. *Car. metallicus* Fabr. Pz. 11. f. 7. Body subdepressed; thorax nearly as broad as the elytra, which are separate, ovate, and subconvex; joints of antennæ short, submoniliform.
- OODES** Bon. *CARABUS* p. Fabr. 1 sp. *Car. helopioides* Fabr. Pz. 30. f. 11. Body subconvex, elongate, ovate; thorax as broad as the elytra; mentum-tooth entire.
- AMARA** Bon. *CARABUS* p. Linn. 27 sp. *Car. vulgaris* Linn. Pz. 40. 1. Oblong, ovate, broad, subdepressed; thorax as broad as the elytra; wings, two; mentum-tooth bifid; last joint of the palpi ovate.
- (**ACRODON** Zimm. *AMARA* p. Steph. 5 sp. *Harp. brunnens* Gyll. Sturm. D. F., 146.)
- (**CELIA** Zimm. *AMARA* p. Steph. 2 sp. *Harp. bifrons* Gyll.)
- BRADYTUS** Steph. *AMARA* p. Sturm. 6 sp. *Car. ferrugineus* Linn. Pz. 39. 9. Body subconvex; mentum-lobe entire; thorax nearly as broad as the elytra, rather narrowed behind, subcordate.
- CURTONOTUS** Steph. *LEIRUS* Meg. 2 sp. *Car. converiusculus* M. Body elongate, ovate, subconvex; mentum lobe bifid, intermediate tibiae ♂ tubercled and spined; third joint of max. palpi long, clavate. Steph. pl. 8. f. 1.
- ZABRUS** Clv. *CARABUS* Fabr. 2 sp. *Car. gibbus* Fabr. Curt. 188. Body gibbous; elytra very convex; mentum-tooth obtuse.
- Division 2. *Harpalidea Westw.* (*Harpaliens Dej.*)
Quadriflani Latr.
- HARPALUS** Latr. *CARABUS* p. Fabr. 56 sp. *Car. ruficornis* Fabr. Curt. 458. Elongate, ovate, subconvex; thorax as broad as the elytra; mentum-tooth obtuse, simple; antennæ with the two basal joints naked.
- ANISODACTYLUS** Dej. *HARPALUS* p. Steph. 4 sp. *Car. binotatus* Fabr. First tarsal joint ♂ small; the fourth joint largest; mentum tooth obsolete; thorax subquadrate or trapezoid. Pz. 92. f. 3.
- PANGUS** Zeigl. *HARPALUS* p. Steph. 1 sp. *Harp. scaritides* Sturm. Palpi with the terminal joint subcylindric; thorax narrowed behind; angles rounded; antennæ rather short. Stm. D. F., 91. c.
- ACTEPHILUS** Steph. *CARABUS* p. Duft. 2 sp. *Car. vernalis* Duft. Thorax transverse; posterior angles rounded; anterior legs stout; antennæ short; palpi with the terminal joint longest. Stm. D. F. 90. a.
- OPHONUS** Zeigl. *HARPALUS* p. Dej. 13 sp. *Harp. obscurus* Fabr. Curt. 191. Body pubescent; thorax punctured, subquadrate; max. palpi with the last joint ovate; mentum transverse, short; mentum-tooth scarcely visible, not bifid.
- DIACHROMUS** Erickson. *OPHONUS* p. Steph. 1 sp. *Car. germanus* Linn. Thorax punctured; mentum-tooth short, rather obtuse; anterior tarsi ♂ dilated, beneath equally cushioned; the penultimate joint transverse, cordate. Curt. 191.

STENOLOPHUS *Zeigl.* *TRECHUS* p. *Stm.* 3 sp. *Car. vaporariorum* Linn.
Mentum tooth obsolete; palpi truncate at the tips; thorax suborbicular; body destitute of pubescence. Steph. Ill. M. 1. pl. 9. f. 2.

MASOREUS *Zeigl.* *BADISTER* p. *Creutz.* 1 sp. *M. luratus* Dej. Curt. 287.
Thorax transverse; posterior margin, with a transverse lobe; elytra oblong, depressed; palpi truncate at the tip; antennal joints equal.

TRECHUS *Cle.* *ACUPALPUS* *Dej.* 18 sp. *Car. meridianus* Linn. Pz. 75. 9.
Body ovate, subconvex; palpi with the last joint conic, acute; posterior angles of thorax obtuse.

(**BRADYCELLUS** *Ericson.* *TRECHUS* p. Steph. M. 5. 384. *Harp. placidus* Gyll.)
BLEMUS *Zeigl.* *TRECHUS* *Dej.* 5 sp. *Car. discus* Fabr. Curt. 310.

Elongate, depressed; palpi with the last joint as long as the third, conic; thorax narrowed behind; angles acute.

EPAPHIUS *Leach.* *TRECHUS* p. *Dej.* 1 sp. *Car. secalis* Pz.
Thorax orbicular, cordate; elytra oval, broad, convex; wings 0; anterior tarsi ♂ with two dilated joints. Stm. D. F. 6. 152. d.

ÆPUS *Lea.* *TRECHUS* p. *Dej.* 1 sp. *Æp. fulvescens* Lea. Curt. 208.
Head large; elytra flattened; mandibles prorected, multidentate; terminal joints of palpi attenuated.

Division 3. CHLÆNIDEA Westw. (CHLÆNIENS Dej.
Patellimani Latr.)

LORICERA *Latr.* *CARABUS* *Fabr.* 1 sp. *Car. pilicornis* Fabr. Donov. 367.
Antennæ with the third and three following joints emitting long bristles; thorax suborbicular.

PANAGÆUS *Latr.* *CARABUS* p. *Linn.* 2 sp. *Car. crux major* Linn.
Thorax orbicular, convex; palpi with the last joint securiform; mentum tooth bifid. Steph. Ill. 1. pl. 4. f. 6.

BADISTER *Cle.* *AMBLYCHUS* *Gyll.* 5 sp. *Car. bipustulatus* Fabr. Curt. 139.
Body subdepressed; palpi with the last joint elongate, ovate; labrum deeply notched; mentum tooth obsolete.

TRIMORPHUS *Steph.* *BADISTER* p. *Sturm.* 2 sp. *T. scapularis* Steph.
Mandibles obtuse; labial palpi with the last joint oval; max. palpi with the last joint longer than the third; thorax cordate. Steph. Ill. 1. pl. 9. f. 5.

LICINUS *Latr.* *CARABUS* p. *Fabr.* 3 sp. *Car. cassideus*, Fabr. Curt. 75.
Mandibles very obtuse; mentum tooth obsolete; palpi with the last joint large, securiform.

(**DIPLOCHEILUS** *Brullé.* *REMUS* Steph. 1 sp. *Car. impressus* Fabr.
Palpi with the last joint subovate; thorax subcordate; elytra elongate; tarsi ♂ with three dilated joints.)

EPOMIS *Bon.* *CHLÆNIUS* p. *Sturm.* 1 sp. *E. circumscriptus* Dej.
Palpi with the last joint elongate, securiform; mentum-tooth distinct, bifid; thorax truncate, cordate. Steph. 1. pl. 5. f. 3.

CHLÆNIUS *Bon.* *CARABUS* p. *Linn.* 7 sp. *Car. marginatus* Linn. Curt. 83.
Palpi with the last joint ovate, truncate; mentum-tooth bifid; thorax truncate, subcordate, or broadest behind.

CALLISTUS *Bon.* *CARABUS* p. *Fabr.* 1 sp. *Car. lunatus* F. Curt. 180.
Outer lobe of maxillæ exarticulate; mentum-tooth obtuse; thorax cordate, truncate, convex.

GENERIC SYNOPSIS.

Subfamily 4. *Carabides* Westw. (*Carabidae MacLeay.*)

Grandipalpi, Abdominales Latr.)

Division 1. *Carabidea* Westw. (*Carabidae Steph.*)

CYCHRUS Fabr. *TENEBRIO* p. Linn. 1 sp. *T. rostratus* Linn. Curt. 426.
Head long, narrow; palpi with the last joint large and spoon-shaped; mandibles long; tridentate at the tip; wings 0.

PROCRUSTES Bon. *CARABUS* p. Linn. 1 sp. *C. coriacus* Linn.

Labrum trilobed; mentum-tooth bifid; thorax subquadrate. Stm. D. F. 3. pl. 54.
CARABUS Linn. *TACHYPUS* Weber. 17 sp. *C. violaceus* Linn. Curt. 446.

Labrum bilobed; mentum-tooth entire; thorax subcordate; wings 0 or rudimental; palpi with the last joint securiform.

CALOSOMA Weber. *CARABUS* p. Linn. 2 sp. *Car. sycophanta* L. Curt. 330.
Labrum bilobed; thorax suborbicular; abdomen subquadrate; wings large; palpi with the last joint ovate, truncate.

LEISTUS Frolich. *POGONOPHORUS* Latr. 8 sp. *Car. spinibarbis* Fabr.

Maxillæ with the base externally armed with long spines; mandibles dilated at the base, externally; palpi elongated. Curt. 176.

Division 2. *Elaphridæ* Westw. (*Elaphridæ Steph.*)

NEBRIA Latr. *CARABUS* p. Linn. 3 sp. *Car. complanatus* L. Curt. pl. 6.
Depressed; labrum subquadrate, slightly emarginate; palpi with the last joint slightly dilated, obliquely truncate; wings two.

HELOBIA Leach. *NEBRIA* p. Latr. 6 sp. *Car. brevicollis* Fabr. Curt. 103.
Depressed; thorax transverse, cordate; wings two; labrum transverse.

ALPHÆUS Bon. *NEBRIA* p. Dej. 1 sp. *A. castaneus* Bon.
Subdepressed; thorax cordate; wings 0; palpi with the last joints rounded.

PELOPHILA Mann. *BLETHISA* p. Bon. 1 sp. *Car. borealis* Pk. Curt. 302.
Antennæ short; labrum transverse, subemarginate; thorax cordate, truncate.

BLETHISA Bon. *CARABUS* p. Linn. 1 sp. *Car. multipunctatus* L. Curt. 326.
Antennæ short; labrum subtrilobate; thorax quadrate; palpi rather short.

ELAPHRUS Fabr. *CICINDELA* p. Linn. 5 sp. *Cic. riparia* Linn. Curt. 179.
Antennæ short; eyes very prominent; thorax convex; labrum slightly trilobed; palpi slender.

NOTIOPHILUS Dum. *ELAPHRUS* p. Fabr. 18 sp. *Cic. aquatica* Linn.
Head as broad as the thorax; eyes large; thorax quadrate, flattened; labrum large, rounded; palpi robust. Curt. 190.

Subfamily 5. *Bembidiæ* Westw. (*Subulipalpi Latr.*)

LYMNÆUM Steph. *CARABUS* p. Marsh. 1 sp. *Car. nigropiceus* M.

Linear, depressed; third and fourth joints of the antennæ equal; fourth tarsal joint with a spine. Steph. 2. pl. 10. f. 1.

CILLENUM Leach. *BLEMUS* p. Dej. 1 sp. *Cill. laterale* Lea. Curt. 200.

Linear, depressed; third antennal joint longer than the fourth; fourth tarsal joint simple; labrum subemarginate.

TACHYS Zeigl. *BEMBDIUM* Sturm. 8 sp. *B. obtusum* Stm. Stm. D. F. pl. 161. f. C.
Ovate, subconvex; thorax transverse; hinder angles rounded, entire.

PHILOCTHUS Steph. *LEIA* Meg. 6 sp. *Bemb. 2-guttatum* Stm. Stm. 161. B.
Ovate, subconvex; thorax transverse; hinder angles rounded and deeply notched.

OCCYS K. *CARABUS* p. Pz. *Car. tempestivus* Pz. Steph. Ill. 2. pl. 10. f. 2.

Ovate, subconvex; thorax transverse; hinder angles prominent, acute.

PERYPHUS *Meg.* **ELAPHRUS** p. *Dufts.* 21 sp. *Car. littoralis* Oliv. Pz. 35. 6.
Thorax truncate, cordate; hinder angles very acute; fifth antennal joint shorter than the third and fourth.

NOTAPHUS *Meyerle.* **BEMBIDIUM** p. *Stm.* 9 sp. *Car. ustulatus* Linn. Pz. 40. 7.
Thorax truncate, cordate; hinder angles acute; third and fourth antennal joints shorter than the fifth.

LOPHA *Meg.* **CICINDELA** p. *Linn.* 14 sp. *Cic. 4-maculata* L. Pz. 38. f. 8.
Thorax truncate, cordate, gibbose; hinder angles deflexed; eyes moderate.

TACHYPUS *Meg.* **LEIA** p. *Dej.* 9 sp. *Car. Andreæ* Fabr. Steph. Ill. pl. 10. f. 6.
Thorax truncate, cordate, depressed, sessile; hinder angles deflexed, eyes moderate.
BEMBIDIUM *Illig.* **CICINDELA** p. *Linn.* 4 sp. *Cic. flavipes* Linn. Pz. 30. f. 2.
Thorax truncate, cordate; eyes extremely prominent; elytra tubercled.

Stirps 2. *Hydradephaga MacL.* (Hydrocanthari Latr.)

Family 1. **DYTICIDÆ** Leach. (*Dytiscus* *Linn.* *Dyticus* *Geoff.*)
Subfamily 1. *Haliplides* Westw.

Antennæ 10-jointed; posterior coxae dilated into a large shield covering the base of the legs.

HALIPLUS *Clairv.* **CNEMIDOTUS** *Ill.* 11 sp. *Dyt. elevatus* Fabr.

Max. palpi with the last joint very minute and subulate. Pz. F. I. G. 14. f. 9.

CNEMIDOTUS *Erichson.* **HALIPLUS** p. *Steph.* 1 sp. *Dyt. casus** Duftsch.
Maxillary palpi with the last joint larger than the preceding, conical.

Subfamily 2. *Dyticides.*

Antennæ 11-jointed; palpi filiform, or but slightly thickened; base of posterior legs not covered by the coxae.

NOTERUS *Clairv.* **HALIPLUS** p. *Sch.* 2 sp. *Dyt. crassicornis* Fabr. Curt. 236.
Antennæ fusiform; scutellum inconspicuous; posterior tarsal claws equal.

LACCOPHILUS *Leach.* **DYTISCUS** p. *Linn.* 2 sp. *Dyt. minutus* Linn.

Antennæ setaceous; scutellum inconspicuous; posterior tarsal claws unequal.
Pz. F. I. G. 26. f. 3.

HYDROPORUS *Clairv.* **HYPHIDRUS** p. *Illig.* 50 sp. *Dyt. 12-pustulatus* Fab.
Body depressed; anterior tarsi 4-jointed; posterior tarsi slender with equal moveable claws. Curt. 343.

HYGROTUS *Steph.* **HYDROPHORUS** p. *Clairv.* 11 sp. *Hyp. decoratus* Gyll.
Body subglobose; anterior tarsi 4-jointed; posterior tarsi didactyle. Curt. 531.
HYPHIDRUS *Illig.* **HYDRACHNA** p. *Fabr.* 2 sp. *Dyt. ovatus* Linn.
Body globose; anterior tarsi 4-jointed; posterior tarsi compressed, with one moveable claw. Donov. 2. pl. 68.

PÆLOBIUS *Schönh.* **HYGROBIA** *Clairv.* 1 sp. *Dyt. Hermanni* Fabr.

Body subglobose; scutellum distinct; legs gressorial; claws didactyle. Donov. 14. 501.

COLYMBETES† *Clairv.* **DYTISCUS** p. *Linn.* &c. 40 sp. *Dyt. fuscus* Linn.
Scutellum distinct; legs natatorial; labial palpi with the second joint longer than the third; anterior male tarsi slightly dilated; claws of tarsi unequal. Curt. 207.

* Stephens gives this as synonymous with the *impressus* *Fabr.*, but the two are considered by Erichson as belonging to different genera.

† This genus has been subdivided into numerous subgeneric groups by Eschscholtz.

GENERIC SYNOPSIS.

ILYBIUS *Erichs.* **COLYMBETES** p. *Steph.* 6 sp. *Dyt. fenestratus* Fab.

Labial palpi with the second and third joints subequal; claws subequal; scutellum distinct; anterior male tarsi slightly dilated. *Panz. F. I. G.* 38. 16.

AGABUS *Leach.* **AGABUS** p. *Erich.* 1 sp. *Dyt. serricornis* Payk.

Antennæ ♂ with the terminal joints dilated; maxillary palpi with the last joint subulate; anterior male tarsi slightly dilated. *Ahrens, F. 5. f. 3.*

HYDATICUS *Leach.* **DYTICUS** p. *Fab.* 4 sp. *Dyt. Hybneri* Fab. *Curt. 95.*

Antennæ setaceous; anterior ♂ tarsi patellated; female with smooth elytra.

Obs. *Hydaticus cinereus* *Fab.* is the type of Eschscholtz's subgenus *Graphoderus*.

ACILIUS *Leach.* **DYTICUS** p. *Linn.* 2 sp. *Dyt. sulcatus* Linn. *Curt. 63.*

Anterior ♂ tarsi patellated; claws didactyle; female with furrowed elytra; max. palpi with the second and third joints unequal.

CYBISTER *Curtis.* **TROGUS** *Leach.* 1 sp. *Dyt. virens* Mull. (*Roeselii* *Fab.*)

Anterior ♂ tarsi patellated; posterior tibiae very short; posterior unguis monodactyle. *Curt. 151.*

DYTICUS *Geoff.* **DYTISCUS** p. *Linn.* 8 sp. *Dyt. marginalis* Linn. *Curt. 99.*

Anterior ♂ tarsi patellated; claws didactyle; maxillary palpi with the second and third joints equal.

Family 2. **GYRINIDÆ** *Leach.* (*Gyrinus* *Linn.*)

GYRINUS *Geoff.* **DYTISCUS** *Linn. olim.* 8 sp. *Gyr. natator* Linn. *Curt. 79.*

Body depressed; elytra glabrous; maxillary internal palpi distinct.

ORECTOCHEILUS *Esch.* **POTAMOBius** *Leach,* *MSS.* 1 sp. *Gyr. villosus* Ill.

Body subconvex; elytra pubescent; maxillary internal palpi obsolete.

Subtribe 2. **Rypophaga** *Stephens.*

Stirps 1. **Philydrida** *MacLeay.* (*Palpicornes* and *Clavicornes* p. *Latr.*)

Family 1. **HETEROCERIDÆ** *MacL.* (*Acanthopoda* *Latr.*)

HETEROCERUS *Bosc.* **DERMESTES** p. *Thunb.* 7 sp. *Het. marginatus* Fab.

Body oval, subdepressed; tibiae spinose; antennæ with the seven terminal joints forming a serrated club. *Curt. 224.*

Family 2. **PARNIDÆ** *MacL.* (*Macroductyla* *Latr.*)

Subfamily 1. **Parnides** *Westw.* (*Parnide* *Steph.*)

PARNUS *Fabr.* **DRYOPS** *Oliv.* 5 sp. *P. prolifericornis* Fab. *Curt. 80.*

Thorax with longitudinal fossæ; legs rather short; antennæ 9-jointed*, with the second joint produced on the inside into a very large lobe, forming a lateral shield, defending the terminal joints.

DRYOPS *Oliv.* _____ 1 sp. *D. Dumerilii* *Latr.* *Aud. and Br.* 5. pl. 14.

Thorax without impressed lines; legs elongate; antennæ with the clava pectinate, the teeth being acute.

(in Dejean's *Catal.* 2d edit.), without any characters having been published by the former author. Mr. Stephens (*Illustr.* vol. v. Suppl.) has, however, supplied this deficiency. I have only adopted the two following subgenera described by Erichson and Leach. Eschscholtz's groups are — *Cymatopterus* (*C. fuscus*, &c.), *Rantus* (*C. agilis*, *adspersus*), *Leiopterus* (*C. oblongus*).

* M. Dufour states that the antennæ are in reality 10-jointed, the two terminal ones not being distinguished by the serrated appearance of the preceding. I have observed the distinction between these two terminal joints very clearly on macerating and slightly compressing the antennæ.

Subfamily 2. *Elmides* Westw. (Limniidæ Steph.).

ELMIS Latreille. *LIMNIUS* Illiger. 11 sp. *Elm. Maugetii* Latr. Curt. 294.

Antennæ 11-jointed, as long as the thorax, slightly thickened at the tip; body ovate.

STENELMIS Dufour. *LIMNIUS* p. Steph. 1 sp. *Elm. parallelopipedus* Illiger.

Antennæ slender; body narrow; last ventral segment subemarginate. Dufour, Ann. Sci. Nat.

GEORYSSUS Latr. *CATHAMMISTES* Illig. vol. vi. 1 sp. *Pimelia pygmaea* F.

Subglobose; antennæ 9-jointed, very short; club large, 3-jointed. Steph. Ill. 2. pl. 13.

Family 3. *HELOPHORIDÆ* MacL. (Helophoridae Leach.)

HELOPHORUS Leach. *ELOPHORUS* Fabr. 9 sp. *Silph. aquatica* Linn.

Thorax transverse; fore legs moderate; last joint of max. palpi ovate; antennæ 9-jointed; last joint short; eyes sessile. Curt. 466.

HYDROCHUS Germar. *ELOPHORUS* p. Fabr. 3 sp. *El. elongatus* Fabr.

Thorax quadrate; fore legs long; eyes very prominent; body narrow; last joint of max. palpi robust; last joint of antennæ long. Curt. 359.

ENICOCERUS Steph. *HYDRÆNA*? Ahr. 3 sp. *En. viridianus* St.

Max. palpi much shorter than the head, with the 5 terminal joints large; labrum large, notched; elytra broad, oval. Curt. 291.

OCHTHEBIUS Leach. *HYDRÆNA* p. Latr. 12 sp. *El. pygmaeus* Fabr.

Max. palpi not longer than the head, with the last joint short, slender, and pointed; legs short; thorax entire. Curt. 250.

AMPHIBOLUS Waterh. — 1 sp. *A. atricapillus* Waterh.

Max. palpi shorter than the thorax; terminal joint short; elytra larger than the abdomen.

HYDRÆNA Kugell. *ELOPHORUS* p. Gyll. 13 sp. *H. riparia* Kug.

Max. palpi longer than the head and thorax; last joint long, fusiform; labrum notched. Curt. 307.

SPERCHEUS Fabr. *HYDROPHILUS* p. Marsh. 1 sp. *Sp. emarginatus* Fab.

Body broad and very convex; antennæ 6-jointed, ovate; max. lobe very long and slender; tarsi 5-jointed, the last joint very long. Curt. 394.

Family 4. *HYDROPHILIDÆ* MacLeay.

LIMNEBIUS Leach. *HYDROPHILUS* p. Fab. 9 sp. *Hydr. truncatellus* F.

Subdepressed; apex of elytra truncate; eyes not prominent; sternum simple; max. palpi much longer than the antennæ. Steph. Ill. 2. pl. 14. f. 4.

HYDROPHILUS Geoffr. * *HYDROUS* Linn. MSS. Leach. 1 sp. *Dyt. piceus* L.

Sternum very elevated and pointed; labrum entire; elytra narrowed behind; last joint of anterior male tarsi dilated; mandibles very much toothed. Curt. 239.

HYDROCHARIS Latr. { *HYDROPHILUS* Leach. } 1 sp. *Hydr. caraboides* Linn. { *HYDROUS* Brullé. }

Metasternum keeled, not extending beyond the posterior trochanters; labrum emarginate; mandibles bifid at the apex, ciliated internally; ♂ tarsi simple. Curt. 159.

* Geoffroy's typical species of this genus was the *Dyt. piceus* Linn., which ought surely to have been retained as the type, instead of assigning it to a MS. genus of Linnaeus, and giving another species as the type of Geoffroy's genus. I have, therefore, followed Latreille in giving a new generic name of the Caraboides rather than adopt Brullé's plan of reversing Leach's application of these names.

BEROSUS Leach. **HYDROPHILUS** Fab. 4 sp. *Dyt. luridus* Linn. Curt. 240.
Sternum simple; labrum entire; antennæ 8-jointed; the club 3-jointed, obtuse; eyes rather prominent; elytra very gibbous, much broader than the thorax.

HYDROBIUS Leach. **HYDROPHILUS** Fab. 4 sp. *Dyt. fuscipes* Linn.
Sternum simple; labrum slightly emarginate; antennæ 9-jointed; body more or less elongate; elytra striated. Curt. 243.

PHILYDRUS Solier. **HYDROBIUS** A. b. Steph. 7 sp. *Hydr. melanocephalus* F.
Maxillary palpi much longer than the antennæ, with the last joint evidently shorter than the preceding; body oblong; elytra not striated. Herbst. 7. pl. 114. 4 D.

LACCOBIUS Erichson. **LIMNEBIUS** Brullé. 10 sp. *Hydr. bipunctatus* Fab.
Antennæ 8-jointed; terminal joints of max. palpi but slightly elongate, subequal; body subglobose; elytra punctate; posterior tibiae not ciliated; tarsi slender, ciliated. Pz. 67. 14.

CHÄTARTHRIA Waterh. **CYLLIDIUM** Erichson. 1 sp. *Hydr. seminulum* Plk.
Palpi short; third joint short; fourth joint large; clava of antennæ 3-jointed; penultimate joint large; body very gibbous, not punctate; sternum simple. Herbst. 7. pl. 114. L.

Family 5. *SPHÆRIDIIDÆ* Leach.

SPHÆRIDIUM Fabr. **DERMESTES** Linn. 7 sp. *D. scarabæoides* Fab.
Mentum flat; palpi slender; club of antennæ slightly imbricated. Curt. 518.

CERCYON Leach. **SPHÆRIDIUM** Fabr. 61 sp. *Scarab. quisquilius* Linn.
Mentum broad, flat; palpi slender; club of antennæ large. Herbst. Col. 4pl. 37. L.

CYCLONOTUM Erich. { **CÆLOSTOMA** Brullé.* } **HYDROBIUS** Steph. } 1 sp. *Hydr. orbicularis* Fab.
Mentum impressed in the centre; palpi thick; club of antennæ slightly imbricated; antennæ 9-jointed; lobes of maxillæ coriaceous. Pz. 76. 13.

Family 6. *AGATHIDIIDÆ* Westw. (*Anisotomidae* Steph.).

PHALACRUS Payk. **ANISOTOMA** p. Illig. 28 sp. *Ph. corruscus* Plk.
Broadly ovate, very convex; palpi short, filiform; third tarsal joint bilobed; antennæ remote; clava 3-jointed. Sturm. D. F. 11. pl. 30.

EPHISTEMUS Westw. **DERMESTES** p. Marsh. 4 sp. *Der. Gyrinoides* Marsh.
Elongate, ovate, narrowed at each end; antennæ approximated at the base; club 3-jointed; head exposed. Steph. I. M. 2. pl. 15.

ALEXIA Steph. **TAXITOMA** p. Germar. 3 sp. *Trit. pilifera* Germ.
Very convex; terminal joint of palpi thick, obtuse; club of antennæ 3-jointed; head large, deflexed; thorax short, emarginate.

LEIODES Latr. **ANISOTOMA** Illig. 33 sp. *Te. cinnamomea* Plk. Curt. 251.
Ovate, head exposed, moderate; legs spined; antennæ remote; club 5-jointed, its second joint minute.

AGATHIDIUM Illig. **VOLVOXIS** p. Kug. 15 sp. *Silpha seminulum* L.
Body globose, hemispheric; contractile into a ball; head very broad; club of antennæ 3-jointed. Sturm. D. F. 2pl. 26.

CLAMBUS Fisch. **PTILIUM** Schüpp. 5 sp. **DERMEST.** *armadillo* D. G.
Body broadly ovate, depressed behind; contractile into a ball; head very broad; club of antennæ apparently 2-jointed; tarsi 4 or 5-jointed. De Geer 4. pl. 8. 21.

* I should have adopted Brullé's name for this Genus, having the priority, but it has been long previously used by MacLeay, in the *Anomoea Javanica*.

CORYLOPHUS Leach. **CLYPEASTER** Andersch. 1 sp. *Derm. cassidoides* Marsh. Ovate, subdepressed; head small, hidden beneath the semioval pronotum; elytra rounded at the tips; club of antennæ 3-jointed.

ORTHOOPERUS Steph. **DERMESTES** p. Marsh. 6 sp. *Derm. punctum* M. Subovate, subconvex; club of antennæ 2-jointed; head small; elytra subtruncate at the tip.

SERICODERUS Steph. **SCAPHIDIUM** p. Marsh. 1 sp. *Scaph. dubium* M. Subconvex, sericeous; club of antennæ 3-jointed; head small, concealed; elytra distinctly truncate behind.

Stirps 2. *Necrophaga* Latr. MacL. (Silpha and Dermestes Linn.)

Family 1. **SCAPHIDIIDÆ** MacL. (Scaphidiles Latr.)

SCAPHIDIUM Olivier, &c. 1 sp. *Scaph. 4-maculatum* Oliv. Curt. 379.

Elytra truncate; scutellum distinct; club of antennæ with the second joint larger than the first.

SCAPHISOMA Leach. **SILPHA** p. Linn. 2 sp. *Silph. agaricina* Linn.

Elytra truncate; scutellum indistinct; second joint of club of antennæ smaller than the rest. Panz. 12. 16.

MYLÆCHUS Latr. **CATORS** p. Payk. 1 sp. *Myl. brunneus* Latr.

Elytra oval; posterior angles of thorax acute; club of antennæ with the second joint not smaller than the preceding. Latr. Gen. pl. 8. f. 11.

PTOMAPHAGUS Illig. **CHOLEVA** p. Spence. 7 sp. *Pt. truncatus* Ill.

Elytra oval; posterior angles of thorax acute; eighth joint of antennæ small; elytra not striated. Pz. 73. 10. ?

CATOPS Payk. **CHOLEVA** p. Spence. 17 sp. *Helops chrysomeloides* Pr.

Elytra oval; posterior angles of thorax acute; elytra striated; eighth joint of antennæ small. Curt. 566.

CHOLEVA Latr. **PTOMAPHAGUS** p. Ill. 3 sp. *Pt. agilis* Ill. Panz. 18. f. 1.

Elytra oval; posterior angles of thorax obtuse; elytra striated; antennæ moderately long.

Family 2. **SILPHIDÆ** Leach. (Silphales Latr.)

SPHÆRITES Dufesch. **SARAPUS** Fisch. 1 sp. *Hister glabratu*s Fab.

Body quadrate; club of antennæ solid, 4-jointed; elytra truncate; mandibles bidentate; maxillæ with an internal horny tooth. Sturm. D. F. 1. pl. 20.

NECROPHORUS Fab. **NECROPHAGUS** Leach. Oliv. 7 sp. *Silpha Vespillo* L.

Body oblong; elytra truncate; club of antennæ large, round, 4-jointed, perfoliate; maxillæ unarmed. Curt. 71.

NECRODES Wilkin. **SILPHA** p. Linn. 1 sp. *Silph. littoralis* Linn. Curt. 334.

Body oblong; elytra truncate; club of antennæ gradually thickened; maxillæ with a claw.

OICEOPTOMA Leach. **PELTIS** p. Geoff. 3 sp. *Silpha thoracica* Linn.

Body oval, depressed; club of antennæ abrupt, 4-articulate; elytra ♀ rounded. Donov. 3. pl. 63.

THANATOPHILUS Leach. **OICEOPTOMA** p. Steph. 2 sp. *Silpha sinuata* Linn.

Oval, depressed; club of antennæ abrupt, 4-jointed; elytra ♀ notched near the tip. Donov. 15. 539.

SILPHA Linn. &c. ————— 8 sp. *Silpha 4-punctata* Linn. Donov. 2. pl. 86.

Oval, slightly convex; antennæ gradually thickened; club 4-jointed; thorax often anteriorly truncate.

PHOSPHUGA Leach. *Peltis* p. Mill. 2 sp. *Silph. atrata* Linn.

Broadly ovate, margined; antennæ gradually thickened; club 3-jointed; thorax entire in front. Steph. 3. pl. 16. f. 3.

Family 3. *NITIDULIDÆ* MacL. (Nitidulariæ Latr.)

THYMALUS Latr. *Peltis* p. Payk. 1 sp. *Cass. limbata* Fsb. Curt. 39.

Body nearly hemispheric; elytra entire; thorax margined; maxillæ with a corneous hook; mandibles bifid at the tip; tarsal third joint simple.

NITIDULA Fab. *SILPHA* p. Linn. 28 sp. *Silph. grisea* Linn. Curt. 675.

Body oval, subdepressed; thorax margined; tibiae compressed; tarsal fourth joint bilobed; third joint of antennæ longer than the fourth.

STRONGYLUS Herbst. *Nitidula* p. Latr. 4 sp. *Nitid. strigata* Fabr.

Body oval, subconvex; sides of thorax not depressed; terminal joint of antennæ mamillate; third joint of antennæ longer than the fourth. Curt. 339.

CAMPTA Kirby. *CYCRAMUS* p. Kugell. 1 sp. *Strong. luteus* Hbst.

Body nearly hemispherical, not margined, tomentose; third joint of antennæ not larger than the fourth; club large; tibiae dilated. Hbst. 4. pl. 43. f. 3.

MELIGETHES Kirby. *LARIA* Scopoli. 15 sp. *Nitid. viridescens* Fab.

Body subquadrate, metallic coloured; elytra entire; third joint of antennæ as long as fourth and fifth united; tibiae spinulose. Pz. 83. 7.

PRIA Kirby. *SILPHA* p. Marsh. 1 sp. *Silph. trunatella* Marsh.

Subdepressed; elytra convex, subtruncate; club of antennæ 4-jointed, serrated, sixth and seventh joints with an external process.

CARPOPHILUS Leach. *DERMESTES* p. Linn. 2 sp. *Derm. hemipterus* Linn.

Oblong, ovate, subdepressed; elytra scarcely covering more than half the abdomen; antennæ with the third joint short. Hbst. 5. 34. E.

CATERETES Herbst. *Cracus* Latr. 12 sp. *Dermest. bipustulatus* Payk.

Ovate, subconvex; elytra truncate; antennæ rather long; club slender. Panz. 7. 5.

ANISOCERUS Howitt. — 1 sp. *Anis. Spirea* How. Steph.

Ovate, subconvex; elytra truncate; two basal joints of antennæ very large, especially in the males.

BYTURUS Latr. *DERMESTES* p. Fabr. 1 sp. *Derm. tomentosus* Fab.

Oblong, ovate, subconvex; tarsal third joint bilobed; antennæ gradually thickened; Curt. 618.

MICROPEPLUS Latr. *OMALIUM* p. Gyll. 4 sp. *Micr. poroculus* Payk.

Broad, oblong, depressed; elytra truncate, ribbed; club of antennæ solid. Curt. 204.

Family 4. *ENGIDÆ* MacLeay.

Subfamily 1. *Trogositidæ* Westw. (Trogositidæ and Engidæ Steph.).

IPS Herbst. *SILPHA* p. Linn. 6. sp. *Silph. 4-pustulata* Linn. Curt. 306.

Tarsi 5-jointed; maxillæ produced into a broad lobe; body oblong, subdepressed; legs short; tibiae broad, serrated.

NEMOSOMA Latr. *DERMESTES* p. Linn. 1 sp. *Derm. elongatus* Linn.

Body very long, slender, cylindric; head as large as thorax; tarsi 4-jointed; maxillæ produced into a single pilose lobe. Curt. 327.

TROGOSITA Fabr. *TENEBRIO* p. Linn. 1 sp. *Tenebr. mauritanicus* Linn.

Body oblong, ovate, depressed; tarsi 5-jointed; basal joint minute; maxillæ produced into a single slender lobe. Sturm. D. F. and my fig. 11. 14—21.

- RHYZOPHAGUS** Herbst. *Lycrus* p. Fab. 11 sp. *Lyc. bipustulatus* Fab.
 Body narrow, subdepressed; head large; tarsi heteromerous; outer lobe of maxillæ slender, articulated at the top. Curt. 579.
- CERYLON** Latr. *Lycrus* p. Fabr. 4 sp. *Lyc. histeroides* Pz. Pz. 5. 16.
 Body oblong, ovate, depressed; head broad; maxillary palpi filiform; the last joint rather attenuated and truncate.
- ANOMMATUS** Westm. *Cerylon* p. Steph. 1 sp. { *Lyc. obsoletus* Spence.
An. terricola Westm.
- Sides of thorax somewhat dilated; eyes entirely obsolete.
- COLYDIUM** Herbst. *Irs* p. Oliv. 1 sp. *Col. elongatum* Fab. Panz. 3. f. 12.
 Body linear, subconvex; legs very short; club of antennæ 3-jointed; tars 4-jointed; outer lobe of maxillæ large; inner lobe slender.
- ENGIS** Latr. *Irs* p. Herbst. 3 sp. *Ips rufifrons* Fab. Panz. 36. f. 19.
 Oblong, ovate, subconvex; tarsi 5-jointed, fourth joint short; maxillæ bilobed; club of antennæ short, broad, flattened, and 3-jointed.
- BITOMA** Herbst. *Ditroma* Latr. 1 sp. *Bit. crenata* Herbst. Curt. 283.
 Oblong, depressed; tarsi 4-jointed; club of antennæ 2-jointed; thorax carinated.
- MONOTOMA** Herbst. *Cerylon* p. Gyll. 3 sp. *Mon. picipes* Hbst.
 Oblong, ovate, depressed; thorax narrower than the elytra, crenulated; femora thickened; antennæ with the club large, 1-jointed, with a terminal appendage. Hbst. V. pl. 46. 2.
- CICONES** Curtis. *Synchita* p. Hellw. 1 sp. *Syn. variegata* Hellw. (Carpini C.)
 Oblong, ovate, subconvex; tarsi 4-jointed; club of antennæ 1-jointed, large, orbicular; maxillæ with two equal lobes. Curt. 149.
- LYCTUS** Fab. *Irs* p. Oliv. 1 sp. *Lyc. canaliculatus* Fab. Hbst. C. 5 pl. 46.
 Elongate, subdepressed; thorax subquadrate, channelled, margins crenulated; club of antennæ 2-jointed; terminal joint acute.
- (**KYLLOTROGUS** St. *Lyctus* p. Chevr. 1 sp. *Xyl. brunneus* St. St. 3. pl. 18. 4.)
- LISSODEMA** Curtis. ————— 1 sp. *Liss. Heyana* Curt.
 Body elliptic, convex; elytra very long; club of antennæ 3-jointed; thorax with the margins denticulated; tarsi heteromerous.
- CRYPTOPHAGUS** Herbst. *Irs* p. Oliv. 15 sp. *Derm. cellaris* Fab.
 Body ovate, subconvex; lateral margins of thorax denticulated; tarsi in one sex heteromerous; club of antennæ 3-jointed; mandibles bifid at the tips. Curt. 160.
- ANTHEROPHAGUS** Megerle. **CRYPTOPHAGUS** Gyll. 4 sp. *Tenebr. pallens* Linn.
 Oblong, ovate; club of antennæ 3-jointed; margins of thorax entire; tarsi in one sex heteromerous; tibiae dilated at the tips. Curt. 546.

Subfamily 2. *Cucujides* Westw. (*Cucujipes* Latr.).

- CUCUJUS** Fabr. *Colydium* p. Herbst. 9 sp. *Cucujus dermestoides* Fab.
 Antennæ short, moniliform or clavate; the basal joint short. Curt. 510.
- ULEIOTA** Latreille. *Brontes* p. Fabr. 2 sp. *Br. flavipes* Fabr. Panz. 95. 4.
 Antennæ as long as the body, filiform; basal joint longer than the head; the male of the last named insect is remarkable for the large and curious bent hook with which the mandibles are furnished.

Family 5. PAUSSIDÆ Westw.

There is no British species of this family.

- Family 6. *MYCETOPHAGIDÆ* Westw. (Engidæ p. Steph.)
- MYCETOPHAGUS** Fab. *BOLETARIA* Marsh. 6 sp. *Chrysom. 4-pustulata* Linn.
Body ovate, subconvex; antennæ with a slender 5-jointed club; tarsi composed of four simple joints, except the anterior pair in ♂ which are 3-jointed. Curt. 156. and my fig. 13. 1—9.
- TETRATOMA** Herbst. *BOLETARIA* p. Marsh. 4 sp. *Tetra. fungorum* Herbst.
Body oblong, convex; tarsi heteromerous; club of antennæ 4-jointed; mandibles bifid at tip. Curt. 123.
- BIPHYLLUS** Dej. *BITOMA* p. Gyll. 1 sp. *Derm. lunatus* Fab.
Body ovate, subconvex; club of antennæ 2-jointed; thorax with an elevated lateral line on each side. Steph. Ill. M. v. S. pl. 17. 3.
- TRIPHYLLUS** Meg. *MYCETOPHAGUS* p. Gyll. 2 sp. *Ips punctata* Fab.
Body oblong, ovate, subconvex; club of antennæ 3-jointed; basal joint thickened; tarsi 5-jointed. Steph. S. pl. 17. 2.
- PHLOIOPHILUS** Waterh. — 3 sp. *Phl. Edwardsii* Waterh.
Body oblong, ovate, very convex; two basal joints of antennæ thickened, globose; club 3-jointed; last joint of max. palpi thick, conical. Steph. S. pl. 18. f. 1.
- PSAMMÆCHIUS** Boudier. *CYPTA* Kirby. 1 sp. *Anthicus bipunctatus* Fab.
Basal joints of tarsi bilobed; palpi large, last joint securiform; margins of thorax anteriorly notched. This difficult genus seems incorrectly located. Panz. 26. 9.
- TYPHÆA** Kirby. *PENTAPHYLLOPS* p. Dej. 4 sp. *Mycet. testaceus* Fab.
Oblong, ovate, depressed; palpi short, subfiliform; antennæ with the basal joint large; club 3-jointed; tarsi pentamerous; heteromerous in one sex.
- MYCETÆA** Kirby. *DERMESTES* p. L. 1 sp. *Derm. funatus* L. (*M. hirta* Curt.)
Ovate convex, hirsute; max. palpi slender; labial short, thickened; club of antennæ 3-jointed; tarsi 4-jointed; third joint minute. Steph. S. pl. 17. fig. 1.
- PARAMECOSOMA** Curt. — 1 sp. *Par. bicolor* Curt. Curt. 606.
Elongate, ovate, slightly depressed; club of antennæ 3-jointed; thorax transverse, quadrate; tarsi pentamerous.
- ATOMARIA** Kirby. *CORTICARIA* p. Marsh. 20 sp. *Derm. nigripennis* Pk.
Elongate, ovate, subdepressed; antennæ remote at the base; basal joint of antennæ large; second small; club 3-jointed; margins of thorax entire. Pz. 99. 13.
- ANISARTHRIA** Waterh. *DERMESTES* p. Marsh. 9 sp. *Derm. Melas* M.
Broad, subovate, subconvex; club of antennæ 3-jointed; tenth joint minute.
- TRICHOPTERYX** Kirby. *PTILIUM* Schiapp. 7 sp. *Dermestes atomarius* De G.
Oblong, quadrate; wings very narrow, margined with very long hairs. De G. 4. pl. 8.
- HOLOPARAMECUS** Curt. — 1 sp. *Hol. depressus* Curt.
Oblong, depressed; antennæ 10-jointed*; club 2-jointed; thorax obovate; tarsi 3-jointed. Curt. 614.
- SILVANUS** Latr. *COLYDIUM* p. Payk. 1 sp. *Derm. Surinamensis* Linn.
Elongate, narrow, depressed; antennæ 11-jointed; club 3-jointed; tarsi 4-jointed. Pz. 14. 11.
- LATRIDIUS** Herbst. *CORTICARIA* p. Marsh. 11 sp. *Tenebr. kardarius* Dej.
Elongate, depressed; elytra subovate; thorax narrow, margined; antennæ 11-jointed; club 3-jointed; tarsi 4-jointed. Curt. 311.

* Curtis incorrectly described the antennæ of this genus as 9-jointed. It is evidently an imported species. I have it from Sierra Leone.

CORTICARIA Marsh. *Latridius* p. *Herbet.* 11 sp. *Latr. pubescens* Illig.
Oblong, subconvex; thorax subordate, immarginate; tarsi 4-jointed. *Hbst.* 4.
pl. 20. B.

EUTHEIA Waterh. ——— 1 sp. *Euth. Scydmaenoides* Steph.
Oblong, ovate; elytra plicate at base, truncate at tips; antennæ thick; club
3-jointed; tarsi 5-jointed. *Steph.* 9. pl. 18. f. 2.

Family 7. *DERMESTIDÆ* Leach. (*Dermestes Linn.*)

DERMESTES Linn. &c. ——— 4 sp. *Derm. lardarius* Linn.
Oblong, ovate; max. palpi shorter than the maxillæ; antennæ short; club large,
3-jointed. *Curt.* 682.

TIRESIAS Steph. *Cresias* Steph. olim. 1 sp. *Derm. Serra* Fab.
Ovate, subdepressed; club of antennæ internally serrated, 3-jointed; thorax lobed
behind. *Curt.* 244.

MEGATOMA Herbet. *Attagenus* p. *Latr.* 1 sp. *Derm. undatus* Linn.
Elongate, ovate, elytra parallel; club of antennæ perfoliate; last joint of palpi
ovate, truncate. *Panz.* 75. 13.

ATTAGENUS *Latr.* **MEGATOMA** p. *Herbet.* 2 sp. *Derm. Peltio* Linn. *Curt.* 247.
Ovate; terminal joint of antennæ very long in ♂, last joint of palpi, elongate; basal
joint of posterior tarsi minute.

ANTHRENUS Geoff. *Byrrhus* p. *Linn.* 5 sp. *Byrr. Museorum* Linn.
Broad, subconvex, squamose; club of antennæ solid, 3-jointed; thorax lobed
behind, with lateral grooves beneath for the reception of the antennæ. *Sturm.*
D. F. 2. pl. 36.

Stirps 3. *Brachelytra* Latr. (Microptera Grav.) Comprising the
single

Family. *STAPHYLINIDÆ*. (*Staphylinus Linn.*)

Subfamily 1. *Staphylinides* Mannerh. (*Staphylinidæ MacL.*)

VELLEIUS Leach. *STAPHYLINUS* p. *Payk.* 1 sp. *St. dilatatus* Pk.
Antennæ serrated after the third joint; thorax suborbicular. *Steph.* 5. pl. 26. f. 6.

CREOPHILUS Kirby. *STAPHYLINUS* p. *Linn.* 2 sp. *St. macillorus* Linn.
Antennæ short, subclavate; head and thorax glabrous; thorax semiorbicular.
Donov. 9. pl. 96.

EMUS Leach. *CREOPHILUS* p. *Kirby.* 1 sp. *Staph. hirtus* Linn. *Curt.* 534.
Antennæ short, with the 6-terminal joints subtransverse; head and thorax
pilose; thorax semiorbicular.

TRICHODERMA Steph. *STAPHYLINUS* p. *St. olim.* 3 sp. *Staph. murinus* Linn.
Body entirely pilose; antennæ with the last joint obliquely excised, the fourth
and tenth joints nearly equal; thorax subquadrate; posterior angles rounded.
Panz. 66. 16.

STAPHYLINUS Linn. &c. ——— 8 sp. *St. erythopterus* Linn.
Body nearly glabrous; antennæ subfiliform, with the fourth and tenth joints sub-
equal; thorax subquadrate. *Donov.* 9. pl. 308.

GOERIUS Leach. *Ocyrus* p. *Kirby.* 8 sp. *Staph. olens* Linn.
Antennæ rather long, filiform; terminal joint oblique at the tip; head large;
mandibles dissimilarly toothed. *K. and S. Intr.* 1. pl. 1. f. 2.

OCYPUS Kirby. *STAPHYLINUS* p. *Oliv.* 4 sp. *St. similis* Oliv.
Mandibles long, slender, without teeth; lateral palpi subclavate. *Oliv.* 9. pl. 5.
f. 42.

- TASGIUS** Leach. *ASTRAEUS* p. *Latr.* 2 sp. *Astr. rufipes* *Latr.* *Curt.* 438.
Antennæ filiform; maxillary palpi short, last joint small, truncate; labial palpi securiform in one sex; thorax punctured.
- ASTRAPÆUS** p. *Grav.* *STAPHYLINUS* *Oliv.* 1 sp. *St. simi* *Oliv.* *Oliv.* 3. pl. 4. f. 37.
All the palpi with the last joint securiform.
- OXYPORUS** Fabr. *STAPHYLINUS* *Linn.* 2 sp. *St. rufus* *Linn.* *Curt.* 418.
Max. palpi filiform; last joint of labial palpi lunate; mandibles prorected entire.
- QUEDIUS** Leach. *STAPHYLINUS* *Auct.* 37 sp. *Staph. impressus* *Grav.*
Narrow; palpi long, slender; mandibles short, irregularly subdenteate; head rather small, subovate; anterior tarsi greatly dilated; antennæ short, slender.
Panz. 36. f. 21.
- MICROSAURUS** *Dej.* *QUEDIUS* p. *Steph.* and *Curt.* 1 sp. *Staph. lateralis* *Grav.*
Broad; antennæ very short, stout; terminal joints increasing in size; palpi long and slender; mandibles long, very curved. *Curt.* 638.
- PHILONOTHUS** Leach. *STAPHYLINUS* *Auct.* 50 sp. *Staph. politus* *Linn.*
Palpi short, filiform; mandibles with a strong central tooth; thorax quadrate; anterior tarsi moderately dilated; antennæ filiform. *Curt.* 610.
- RAPHIRUS** Leach. *STAPHYLINUS* *Auct.* 18 sp. *St. attenuatus* Gr.
Body attenuated at each end; eyes very large; abdomen conic; antennæ slender; anterior tarsi moderately dilated.
- BISNIUS** Leach. *STAPHYLINUS* *Auct.* 6 sp. *St. cephalotes* *Grav.*
Depressed; eyes moderate; head rather large; last joint of antennæ abruptly acute; abdomen broad.
- CAFIUS** Leach. *STAPHYLINUS* *Auct.* 2 sp. *Staph. Xantholoma* *Grav.* *Curt.* 522.
Depressed; eyes small; head larger than the thorax; abdomen oblong, broader than the thorax; terminal joint of antennæ entire, ovate; anterior tarsi dilated.
- GABRIUS** Leach. *STAPHYLINUS* p. *Auct.* 13 sp. *St. aterrimus* Gr.
Anterior tarsi simple; abdomen rather slender; last joint of max. palpi subulate.
- REMUS** Holme. ————— 1 sp. *R. Sericeus* Holme. *Ent. Tr.* 2. p. 1.
Thorax closely punctate; antennæ not geniculate; body depressed; tibiae simple.
- OTHIUS** Leach. *XANTHOLINUS* p. *Dahl.* 11 sp. *Staph. fulgidus* Payk.
Linear, very long; antennæ filiform, not elbowed; terminal joint of palpi conic.
Panz. 27. 29.
- HETEROTHOPS** Kirby. *STAPHYLINUS* p. *Grav.* 3 sp. *St. binotatus* *Grav.*
Anterior tarsi simple; antennæ straight; terminal joint of palpi very minute; head small, suborbicular.
- GYROHYPNUS** Kirby. *XANTHOLINUS* p. *Dahl.* 21 sp. *Staph. tricolor* Pk.
Tarsi simple; antennæ inserted between the eyes, geniculated; terminal joint of palpi oblong, ovate. *Oliv.* 3. pl. 5. f. 50.
- ACHENIUM** Leach. *LATHROBIUM* p. *Grav.* 1 sp. *Lath. depressum* *Grav.*
Body depressed; antennæ long, filiform, straight; last joint of palpi very small; tarsi dilated. *Curt.* 115.
- LATHROBIUM** *Grav.* *PÆDERUS* Fabr. 15 sp. *Staph. elongatus* *Linn.*
Very long, narrow, subconvex; anterior tarsi dilated; antennæ short, straight; terminal joint of palpi minute. *Curt.* 650.
- CRYPTOBIUM** Mann. *OCTHEPHILUM* *Steph. olim.* 1 sp. *Pæd. fracticornis* Fab.
Long, narrow, subconvex; antennæ elbowed; last joint of max. palpi very minute; first joint of tarsi longer than the following. *Step.* 5. pl. 27.

Subfamily 2. *Stenides* Mann. (*Longipalpi* Latr., *Stenides* MacLeay).

SUNIUS Leach. *Pæderus* p. *Fabr.* 4 sp. *Pæd. melanocephalus* Fab.

Thorax subquadrate, depressed, as large as the head; eyes small; tarsi simple; tibiae entire. Oliv. 3. pl. 1. f. 4.

ASTENUS Dej. *Sunius* p. *Leach.* 5 sp. *St. angustatus* Fab. Don. 16. 573.

Thorax suborbicular; head large; fourth tarsal joint bilobed;

RUGILUS Leach. *Strilicus* Latr. 4 sp. *Pæd. orbiculatus* Fab. Curt. 168.

Head large, orbicular; thorax small, narrowed in front; tarsi entire; labrum notched.

MEDON Steph. — 1 sp. *Med. Ruddii* Steph. Steph. 5. pl. 27. f. 2.

Head large, subquadrate; thorax subquadrate, as large as the head; labrum notched in the middle; mandibles internally 4-dentate; tarsi entire.

PÆDERUS *Fabr.* *STAPHYLINUS* p. *Linn.* 5 sp. *St. riparius* Linn. Curt. 108.

Head large; thorax obovate, convex, larger than the head; eyes small; fourth tarsal joint bilobed.

STENUS Latr. *Pæderus* p. *Oliv.* 66 sp. *Staph. bipustulatus* Linn. Curt. 164.

Head and eyes very large; thorax elongate-ovate; labium elongate, retractile; abdomen simple.

DIANOUS Leach. *Stenus* p. *Latr.* 1 sp. *S. cærulescens* Gyll. Curt. 107.

Eyes moderate; anal setæ long; labium not elongated.

Subfamily 3. *Oxytelidæ*. (*Stenides* p. *Steph.*, *Denticura* Latr.)

SIAGONIUM Kirby. *PROGNATHUS* Latr. 1 sp. *Siag. 4-corne* K. Curt. 29.

Depressed; tarsi distinctly 5-jointed; labium deeply notched; antennæ not elbowed; head ♂ cornuted.

BLEDIUS Leach. *OXYTELUS* p. *Grav.* 3 sp. *Staph. tricornis* Pk. Curt. 143.

Narrow, convex; anterior tibiae toothed; antennæ elbowed; head and thorax ♂ cornuted.

HESPEROPHILUS Steph. *OXYTELUS* p. *Grav.* 5 sp. *Oxyt. fracticornis* Gr.

Narrow, subconvex; antennæ elbowed; head and thorax ♂ unarmed; terminal joint of palpi slender.

PLATYSTETHUS Mann. *OXYTELUS* p. *Grav.* 9 sp. *Staph. morsitans* Pk.

Short, broad in front; head lobed; all the tibiae denticulate-pectinate; thorax convex, channelled. Oliv. 3. pl. 5. 48.

OXYTELUS Grav. *STAPHYLINUS* p. *Linn.* 19 sp. *Staph. piceus* Linn.

Elongate, sublinear; head unarmed; two posterior tibiae simple; thorax depressed, channelled. Panz. 27. 14.

APLODERUS Steph. *STAPHYLINUS* p. *Marsh.* 1 sp. *St. brachypterus* M.

Thorax subdepressed, not channelled; abdomen broadest behind; head small, orbicular; terminal joint of palpi minute; elytra short.

TROGOPHLÆUS Mann. *OXYTELUS* p. *Grav.* 1 sp. *Oxyt. corticinus* Grav.

Linear, depressed; tibiae unarmed, ciliated; antennæ elbowed; last joint of palpi minute.

CARPALIMUS Kirby. *OXYTELUS* p. *Gyll.* 9 sp. *Ca. bilineatus* K.

Antennæ straight; thorax cordate-truncate, sculptured; tibiae simple; tarsi indistinctly 3-jointed. Steph. 5. 27. f. 4.

TÆNOSOMA Mann. *ALKOCHARA* p. *Gyll.* 1 sp. *Al. pusilla* Grav.

Linear, narrow; tarsi 5-jointed, last joint long; last joint of maxillary palpi small, subulate.

- PHLOEOCHARTIS** Mann. — 1 sp. *P. subtilissima* Mann.
Sublinear; basal joints of 4 ant. tarsi dilated; last joint of max. palpi acicular.
(Ent. Mag. 24. 408.)
- COPROPHILUS** Latr. *ELONIUM* Leach. 1 sp. *Staph. striatulus* Fab.
Linear, narrow, depressed; tibiae spinulose; tarsi 5-jointed; last joint of maxillary
palpi largest, conic, truncate.
- Subfamily 4. *Omalides.* (Applatis Latr., Omalidae MacL.)
- EVÆSTHETUS** Gravenh. *ERISTHETUS* Lam. 1 sp. *Ev. scaber* Gr.
Linear, subcylindric; antennæ clavate; max. palpi long, 3-jointed; thorax fove-
ated. Ahrens, 7. 13.
- SYNTOMIUM** Curt. *EVÆSTHETUS* p. Kirby. 1 sp. *Synt. nigroornatum* K.
Broad, depressed; antennæ clavate; labrum deeply notched; margins of thorax
crenulated. Curt. 228.
- PSEUDOPSIS** Newman. — 1 sp. *Pseud. sulcatus* Newm.
Head narrow; antennæ filiform, thickened at the tips; terminal joint of max.
palpi slender, acute, the preceding dilated; thorax nearly circular, sulcated;
elytra wider than the thorax.
- MEGARTHrus** Kirby. *STAPHYLINUS* p. Oliv. 9 sp. *St. depressus* Pk.
Broad, subdepressed; antennæ subclavate; labrum transverse; two basal joints of
antennæ robust. Steph. 5. 27. 5.
- PROTEINUS** Latr. *CATERETES* p. Sch. 3 sp. *Derm. brachypterus* Pk.
Oval; antennæ clavate; club 3-jointed; palpi subulate; elytra more than half
the length of abdomen. Pz. 4. 10.
- ANTHOBIUM** Leach. *SILPHA* p. Marsh. 24 sp. *Silph. torquata* Marsh.
Oval, subdepressed; elytra nearly covering the abdomen; thorax short, transverse.
Panz. 24. 6.
- CORYPHIUM** Kirby. — 1 sp. *Cor. angusticollis* K.
Depressed oblong; head broader than the thorax; terminal joint of palpi in-
crassated.
- MICRALYMMMA** Westw. — 1 sp. *M. Johnstonei*.
Oblong, depressed; elytra very minute; thorax obovate; abdomen long, much
broader than the thorax, margined; labrum transverse, 3-lobed; tarsi with very
long hairs. Mag. Zool. and Bot. vol. ii.
- OMALIUM** Grav. *STAPHYLINUS* Pk. 33 sp. *St. planus* Pk. Oliv. 3. pl. 3. 27.
Oblong-ovate, depressed; thorax short, transverse, or obovate; antennæ short;
terminal joint of palpi acute.
- ACIDOTA** Kirby. *STAPHYLINUS* p. Fabr. 2 sp. *St. crenatus* F.
Oblong-ovate, subconvex; antennæ long, subfiliform; labrum and mandibles
entire; thorax ovate, broadest behind. Steph. 5. 27. f. 6.
- LESTEVA** Latr. *STAPHYLINUS* p. Linn. 14 sp. *St. caraboides* Linn.
Thorax obovate; abdomen broad, depressed; antennæ filiform; elytra long;
last joint of max. palpi subacuminate. Curt. 303.

Subfamily 5. *Tachyporides.* (Tachyporides Steph.)

Division 1. *Tachinidea* Westw. (Tachinides Mann.)

- MEGACRONUS** Steph. *TACHINUS* p. Grav. 8 sp. *St. analis* Oliv.
Elongate, narrow; thorax transverse, with rounded angles; last joint of antennæ
long; palpi filiform; last joint as long as the preceding. Steph. 5. 26. 5. b.

- MYCETOPORUS** *Mann.* *ISCHNOSOMA* *Steph.* 12 sp. *Tach. splendidus* Gr.
Slender, posteriorly attenuated; thorax broadest behind; last joint of max. palpi minute. *Steph.* 5. 26. 5. a.
- BOLITOBIUS** *Leach.* *TACHINUS* p. *Grav.* 18 sp. *Staph. lunulatus* Linn.
Elongate-ovate, attenuated behind; head long; palpi slender; antennæ rather long. *Dom.* 15. 532.
- TACHYPORUS** *Grav.* *OXYPORUS* p. *Fabr.* 38 sp. *Staph. chrysomelinus* Linn.
Broad, posteriorly attenuated; palpi subulate; abdominal segments entire; head small. *Panz.* 9. 14.
- TRICHOPHYA** *Mann.* *TACHYPORUS* B. b. *Steph.* 1 sp. *Tach. nodicornis* K.
Short, rather broad; antennæ nodose, verticillate; terminal joint of max. palpi stout.
- HYPOCYPHTUS** *Schüpp.* *CYRHA* *Kirby.* 5 sp. *Tach. granulum* Gr.
Globose, posteriorly attenuated; abdomen almost retracted beneath the elytra; club of antennæ distinct, 3-jointed.
- CONURUS** *Steph.* *TACHYPORUS* p. *Grav.* 12 sp. *Tach. bipustulatus* Fab.
Thorax transverse, broad behind; abdomen conical; last joint of max. palpi minute. *Pz.* 16. 21.
- TACHINUS** *Grav.* *STAPHYLINUS* p. *Linn.* 26 sp. *St. silphoides* Linn.
Broad, posteriorly attenuated; palpi filiform; abdominal segments emarginate. *Panz.* 18. 20.

Division 2. *Aleocharidea* Westw. (*Aleochari* des *Mann.*)

- ISCHNOPODA** *Steph.* *ALEOCHARA* A. *Steph. Cat.* 7 sp. *Aleoch. aterrima* *Grav.*
Thorax longer than broad; tarsi long, especially in the hind legs.
- POLYSTOMA** *Steph.* *ALKOCHARA* p. *Steph. Cat.* 3 sp. *Al. crassicornis* K.
Densely pubescent; abdomen linear, obtuse; thorax broader than long; antennæ thick in the middle; mouth prominent.
- DEINOPSIS** *Matthews.* — 1 sp. *D. fuscatus* M. *Ent. Mag.* 22. 193.
Mandibles with two acute teeth, and broad internal denticulated lobe; maxillary internal lobe denticulated at the tip; labial palpi obsolete; tarsi 3-jointed; abdomen conical.
- CENTROGLOSSA** *Matthews.* — 6 sp. *C. conviroidea* M.
Mandibles simple, with an internal serrated lobe; maxillary internal lobe long, sabre-shaped; labial palpi obsolete; labium with two long terminal processes. *Ent. Mag.* 22. 194.
- GYMNUSA** *Karsten.* *MYLLÆNA* p. *Erichson.** 1 sp. *Al. dubia* Gr.
Antennæ filiform, straight; mouth rostrate; palpi short, last joint subulate.
- DIGLOSSA** *Haliday.* — 1 sp. *D. meresa* Hal. *Ent. Mag.* 4. p. 253.
Antennæ with the second joint very long; maxilla with two very long lobes; labium with two long setaceous laciniae in the place of palpi.
- ZYRAS** *Steph.* *ALEOCHARA* p. *Kirby.* 1 sp. *Al. Haworthii* K.
Elytra very short; antennæ rather long, subgeniculated; last joint of palpi long, slender. *Steph.* 5. 26. f. 3.
- (**PHLOEOPORA** *Erichs.* *ALEOCHARA* p. *Steph.* 1 sp. *Al. corticalis* *Grav.*)

* Dr. Erichson gives *Al. dubia* as the type of his genus *Myllæna*, and the *Aleochara brevicollis* *Pk.* (*carnivora* *Grav.* *Steph.* 5. 433.) as the type of *Gymnusa*.

- BOLETOCHARA** *Mann.* *ALEOCHARA* *Gyll.* 100 sp. *Aleochar. collaris* *Grav.*
Subdepressed posteriorly, sublinear; thorax broader than the head; antennæ geniculated; thickened to the tip; basal joint of tarsi longest. *Steph.* 5. 26. 2.
- OLIGOTA** *Mann.* *ALEOCHARA* C. b. 2. *Steph. Cat.* 6 sp. *Al. pusillima* *Gr.*
Subdepressed, not attenuated; tarsi slender, with equal joints; five terminal joints of antennæ dilated; legs pubescent.
- OXYPODA** *Mann.* *ALEOCHARA* D. *Steph. Cat.* 17 sp. *Aleochar. ruficornis* *Gr.*
Posteriorly attenuated; antennæ rather long, subincrassate at the tip; basal joint of tarsi rather longer than the second; legs pubescent.
- GYROPHÆNA** *Mann.* *Aleochara* E. *Steph. Cat.* 8 sp. *St. natus* *Pk.*
Short, depressed; thorax scarcely longer than the head, the latter rhomboid; elytra transverse; tarsal joints equal.
- ALEOCHARA** *Grav.* *ALEOCHARA* F. *Steph. Cat.* 34 sp. *St. bipunctata* *Gr.*
Elongate, robust; thorax convex, broad; elytra transverse; antennæ thick, joints of equal length. *Oliv.* 3. pl. 5. 44.
- PELLA** *Steph.* { *ALEOCHARA* G. *Steph. Cat.*.
MYRMEDONIA p. *Ericson.* } 5 sp. *Staph. limbatus* *Pk.*
Thorax broad, posteriorly subangulated on each side; antennæ thickened.
- HOMALOTA** *Mann.* *ALEOCHARA* p. *Gyll.* 1 sp. *Al. plana* *Gyll.*
Linear, flat; thorax breadth of head; antennæ moniliform; last joint of tarsi long.
- HYGRONOMA** *Erich.* *HOMALOTA* *Curt.* 1 sp. *H. dimidiata*. *Curt.* 514.
Linear, flat; tarsi 4-jointed; joints subequal.
- ENCEPHALUS** *Kirby.* *GYROPHENA* p.. *Er.* 1 sp. *Enc. complicans* *K.*
Very broad; abdomen strongly margined; antennæ short, thick at tip; head small. *Steph.* 5. 26. f. 4.
- CALLICERUS** *Grav.* *HOMALOTA* p. *Erich.* 2 sp. *Cal. Spencii* *K.* *Curt.* 443.
Oblong, depressed; last joint of antennæ very long; third joint of max. palpi swollen; fourth very minute.
- (? *PLACUSA* *Erich.* ? *ALEOCHARA* p. *Steph.* 1 sp. *Al. punilio* *Grav.* ?)
ASTILBUS *Dillw.* *DRASSILLA* *Leach.* 1 sp. *St. canaliculatus* *Fab.* *Pz.* 27. 13.
Narrow, depressed; abdomen broader than the thorax; palpi filiform; thorax oblong.
- DINARDA** *Leach.* *LOMECHUSA* p. *Grav.* 1 sp. *Lom. dentata* *Gr.* *Curt.* 410.
Broad; posterior angles of thorax acutely produced; terminal joint of antennæ elongate, conic; penultimate joint of abdomen simple.
- ATEMELES** *Dillw.* *GOXIODES* *Kirby.* 2 sp. *Lom. paradoxia* *Gyll.*
Broad; penultimate joint of abdomen emarginate, with lateral processes; second and third joints of antenna small. *Guérin Ic.* 10. f. 6.
- LOMECHUSA** *Grav.* *STAPHYLINUS* *Fab.* 1 sp. *St. emarginatus* *F.*
Broad; penultimate joint of abdomen emarginate and styliferous; antennæ fusiform. *Oliv.* 3. pl. 2. 12.
- CALODERA** *Mann.* *ALEOCHARA* p. *Grav.* 1 sp. *Calo. nigrita* *Mann.*
Head exserted, broader than the base of thorax; thorax of equal breadth throughout; elytra entire at the base; tarsal joints equal.
- FALAGRIA** *Leach.* *ALEOCHARA* p. *Grav.* 11 sp. *St. sulcatus* *Pk.* *Curt.* 429.
Head large, exserted; thorax broad at the apex; base of elytra not plicate; basal tarsal joint long.
- AUTALIA** *Leach.* *ALEOCHARA* p. *Grav.* 6 sp. *Al. impressa* *Grav.*
Head exserted, large; thorax narrow at base; base of elytra plicate; tarsal joints equal. *Oliv.* 3. pl. 5. 41.

Subfamily 6. *Pselaphides* Westw. (*Pselaphidæ Steph.*)

EUPLECTUS Kirby. *Pselaphus* p. Reich. 9 sp. *Ps. signatus* Reich.

Elongate, narrow, depressed; last joint of palpi ovate, conic; ditto of antennæ large. Denny, pl. 1.

TRIMIUM Aubé. *Euplectus* p. Denny. 1 sp. *Psel. brevicornis* Reich.

Elongate, subcylindric; last joint of palpi securiform; thorax ovate; last joint of antennæ very large. Denny, pl. 2. f. 4.

BYTHINUS Leach. *Pselaphus* p. Reich. 4 sp. *Ps. securiger* Reich.

Short, very convex; last joint of palpi large, securiform; thorax cordate; second joint of antennæ very large. Denny, pl. 3.

ARCOPAGUS Leach. *Pselaphus* p. Reich. 4 sp. *Ps. bulbifer* Reich. Curt. 422.

Short, very convex; thorax widest in front; second joint of antennæ moderate.

TYCHUS Leach. *Pselaphus* p. Payk. 1 sp. *Ps. niger* Pk. Denny, pl. 6.

Body short, convex; terminal joint of palpi internally greatly dilated, securiform; fifth joint of antennæ ♂ dilated; thorax not impressed.

TYRUS * Aubé. *Bryaxis* p. Leach? 1 sp. *Psel. mucronatus* Pz. Curt. 315. 1—5.

Tarsi didactyle; intermediate trochanters spinose; thorax nearly spherical.

BRYAXIS Knob. REICHENBACHIA Leach. Z. J. 7 sp. *Staph. impressus* Pz.

Short, subconvex; last joint of palpi conical, externally somewhat dilated; thorax cordate, 3-foveated. Curt. 315.

BATRISUS Aubé. *Bataxis* p. Steph. 1 sp. *Br. nigritarsis* Denny.

Subelongate, subconvex; antennæ inserted in a lateral fossula; thorax with three longitudinal sulci. Denny, pl. 7. f. 1.

PSELAPHUS Herbst. *Anthicus* p. Pz. 4 sp. *Ps. Herbstii* Reich.

Body somewhat elongate; elytra and abdomen depressed; terminal joint of palpi long, clavate. Denny, pl. 9.

Tribe 2. *Chilognathomorpha* MacLeay..Subtribe 1. *Cordylocerata* Westw.Stirps 1. *Clavicornes* Stephens.Family 1. *BYRRHIDÆ* Leach. (*Byrrhus Linn.*)

BYRRHUS Linn. *Cistema* p. Marsh. 10 sp. *B. pilula* Linn. Curt. 135.

Ovate-globose, convex, sericeous; club of antennæ 5-jointed, gradually thickened to the tip.

NOSODENDRON Latr. *Byrrhus* p. Panz. 1 sp. *Sphar. fasciculare* F.

Hemispheric, ovate; antennæ with the third joint very long; club large, 3-jointed; elytra fasciculated. Curt. 246.

SYNCALYPTA Dillw. *Chaetophora* K. 3 sp. *By. arenaria* St.

Hemispheric, ovate; antennæ with third joint small; club 3-jointed; elytra rigidly setose. Sturm, D. F. 2. pl. 35. e.

TRINODES Meg. *Anthrenus* p. Fab. 1 sp. *Anthr. hirtus* Fab. Pz. 11. 16.

Ovate, subconvex, densely pilose; legs slender; club of antennæ 3-jointed.

ASPIDIPHORUS Zeigl. *Nitidula* p. Gyll. 1 sp. *N. orbicularis* G. Curt. 450.†

Suborbiculate; elytra rounded at tip; antennæ 10-jointed; club long, 3-jointed.

* The type of this genus is the *Pselaphus mucronatus* of Panzor, which Stephens gives as synonymous with *Bryaxis sanguineus*, and Curtis figures the trochanters of this species with spines; I have therefore introduced Aubé's genus.

† Mr. Curtis's figure giving this insect the habit of a *Hister*, with posteriorly truncate elytra, is incorrect.

- SIMPLOCARIA** *Marsh.* *BYRRHUS* *Ill.* 2 sp. *B. semistriatus* Ill. *Curt. 335.*
Ovate, convex; club of antennæ 5-jointed; last joint of palpi acuminate.
- OOMORPHUS** *Curt.* *BYRRHUS* *p. Sturm.* 1 sp. *B. coeruleo* *St. Curt. 347.*
• Broadly ovate; third tarsal joint bilobed; club of antennæ 5-jointed, eighth joint small.
- LIMNICHUS** *Zeigl.* *BYRRHUS* *Dufitsch.* 1 sp. *Limn. sericeus* *Duf.*
Ovate, convex; antennæ rather long; two basal joints short, thicker than the following; club 4-jointed.

Family 2. *HISTERIDÆ* *Leach.* (*Hister Linn.*)

- PLATYSOMA** *Leach.* *HOLOLEPTA* *p. Dej.* 2 sp. *Hist. depressus* *Fab.*
Flat; four posterior tibiae with a row of small teeth. *Panz. 80.* 6.
- HISTER** *Linn.* *HISTER* *p. Steph.* 21 sp. *H. unicolor* *Linn.* *Curt. 470.*
Subdepressed; four posterior tibiae with two rows of spines; prosternum anteriorly lobed; outer striae of elytra entire.
- DENDROPHILUS** *Leach.* *HISTER* *p. Auct.* 1 sp. *Hist. punctatus* *Pk.*
Oval, or subglobose subconvex; four posterior tibiae broad, externally angulated, with one row of spines. *Pk. 7.* f. 5.
- PAROMALUS** *Erich.* *DENDROPHILUS* *p. Leach.* 7 sp. *Hist. flaviguttis* *Hbst.*
Oval, subdepressed; tibiae narrow, subincurred; prosternum lobed in front. *Pk. t. 8.* f. 6.
- SAPRINUS** *Erich.* *HISTER* *p. Steph.* 12 sp. *Hist. nitidulus* *Fab.* *Pk. pl. 5.* f. 3.
Short, subdepressed; prosternum anteriorly produced, but not lobed; outer striae of elytra abbreviated.
- ORTHOPHILUS** *Leach.* *HISTER* *p. Auct.* 2 sp. *H. sulcatus* *Fab.* *Curt. 228.*
Elytra deeply sulcate.
- ABRÆUS** *Leach.* *HISTER* *p. Auct.* 2 sp. *H. globosus* *Fab.* *Pk. t. 8.* f. 2.
Subglobose; elytra smooth; tibiae slender, entire; prosternum short.

Stirps 2. *Lamellicornes* *Latr.*

Race 1. *Priocera* *Dumeril.* comprising the single

Family *LUCANIDÆ* *Leach.* (*Lucanus Linn.*)

- LUCANUS** *Scop.* *PLATYCERUS* *Geoff.* 1 sp. *L. cervus.* *Curt. 490.*
Depressed; mandibles ♂ very large; club of antennæ 4-jointed; pectinated.
- DORCUS** *MacL.* *PLATYCERUS* *Latr.* 1 sp. *L. parallelipipedus* *L.*
Depressed; mandibles ♂ moderate; club of antennæ 4-jointed, subperfoliated; anterior tibiae narrow, serrated. *Donov. 8.* 264.
- PLATYCERUS** *MacL.* *LUCANUS* *p. Latr.* 1 sp. *L. caraboides* *Linn.*
Depressed; mandibles ♂ moderate; club of antennæ 4-lamellate; anterior tibiae serrulate. *Curt. 274.*
- SINODENDRON** *MacL.* *SYNODENDRON** *Fab.* 1 sp. *Scar. cylindricus* *Linn.*
Cylindrical; head and thorax ♂ cornuted; club of antennæ 3-jointed. *Curt. 478.*

Race 2. *Petalocera* *Dumeril.* (*Scarabeus Linn.* *Scarsabides Lat.*)
Subrace 1. *Saprophaga* *MacL.*

Family 1. *GEOTRUPIDÆ* *MacLeay.*

- GEOTRUPES** *Latr.* *SCARABÆUS* *Fab.* 10 sp. *Scar. stercoreus* *Linn.*
Ovate-orbicular; third joint of antennæ longer than second; thorax and head ♂ unarmed. *Curt. 266.*

* This must evidently have been a misprint, the name being evidently derived from Σινός (noceo), and Δένδρος (arbor), and not Σύν (cum), and the latter word, as suggested by Dumeril.

TYPHÆUS Leach. *CERATOPHYUS* Fisch. 1 sp. *Scar. typhaeus* Linn.
Ovate-orbicular; third joint of antennæ longer than second; thorax ♂ cornutus.
Sam. pl. 1. f. 1.

BOLBOCERUS Kirby. *ODONTEUS* Koppe. 3 sp. *Scar. mobilicornis* Fab.
Suborbicular; third joint of antennæ short; head and thorax ♂ cornutus.
Curt. 259.

Family 2. *SCARABÆIDÆ* MacLeay.

COPRIS Geoff. *SCARABEUS* Linn. 1 sp. *Sc. lunaris* Linn. Curt. 414.
Ovate, convex; last joint of labial palpi minute.

ONTOPHAGUS Latr. *COPRIS* p. Illig. 10 sp. *S. vacca* Linn. Curt.
Broadly ovate, depressed; last joint of labial palpi evanescent.

Family 3. *APHODIIDÆ* MacLeay.

APHODIUS Illig. *SCARABEUS* Linn. 58 sp. *Sc. fassor* Linn. Curt. 27.
Oblong; palpi with the last joint slender; maxillæ with a fleshy lobe.

PSAMMODIUS Gyll. *APHODIUS* p. Illig. 2 sp. *Aph. sulcicollis* Illig. Curt. 258.
Palpi with the last joint ovate; maxillæ with a horny lobe; thorax sulateated.

OXYOMUS Esch. *APHODIUS* p. Curt. 4 sp. *Aph. porcatus* Fab. Pz. 38. 13.
Clypeus emarginate, smooth; elytra deeply sulateated; thorax smooth.

Family 4. *TROGIDÆ* MacLeay.

ÆGIALIA Latr. *APHODIUS* Illig. 1 sp. *Scar. globosus* Panz. Donov. 14. 470.
Antennæ 9-jointed; body short, ovate, very gibbose; thorax smooth.

TROX Fabr. *SCARABEUS* Linn. 4 sp. *Scar. subulorus* Linn. Curt. 574.
Antennæ 10-jointed; body subovate, convex; thorax rugose.

Family 5. *DYNASTIDÆ* MacLeay.

ORYCTES Illig. *GEOTRUPES* p. Fab. 1 sp. *Sc. nasicornis* Linn.
Maxillæ unarmed. Sturm, D. F. 1. pl. 4. 5.

DYNastes MacLeay. *GEOTRUPES* p. Fab. 2 sp. *Sc. inermis* Martyn.
Maxillæ toothed. Martyn, pl. 4. f. 35.

Subrace 2. *Thalerophaga* MacLeay.

Family 1. (or 6.) *RUTELIDÆ* MacLeay.

Family 2. (or 7.) *ANOPLOGNATHIDÆ* MacLeay.

(There are no British species of either of these Families.)

Family 3. (or 8.) *MELOLONTIDÆ* MacLeay.

SERICA MacLeay. *TENUICRUSTA* Voet. 1 sp. *Scar. brunneus* Linn.
Short, ovate; antennæ 10-jointed; claws bifid; last joint of palpi subacute. Pz.
95. 7.

OMALOPLIA Küppé. *MELOLONTHA* p. Fabr. 1 sp. *Mel. raricola* Fab.
Short, convex; antennæ 10-jointed; claws bifid; last joint of maxillary palpi
truncate. Donov. 11. 378.

RHISOTROGUS Latr. *ZANTHEUMIA* Leach. 2 sp. *Scar. solstitialis* Linn.
Antennæ 9-jointed; club 3-jointed; claws equal, simple. Mart. 2. 17.

MELOLONTHA Fabr. *SCARABEUS* p. Linn. 3 sp. *Mel. vulgaris* Fab.
Antennæ 10-jointed; club 6-7-jointed; claws equal, with a basal tooth. Curt. 406.
PHYLLOPERTHA Kirby. *AXOMALA* p. Küppé. 3 sp. *Scar. horticola* Linn.
Antennæ 9-jointed; claws unequal; clypeus not produced; thorax narrow behind.
Curt. 526.

- ANOMALA** Kuppe. **MELOLONTHA** p. Fabr. 3 sp. *Mel. Frischii* Fab.
Antennæ 9-jointed; claws unequal; clypeus not produced; thorax broad behind.
Don. 11. 390.
- ANISOPLIA** Meg. **SCARABAEUS** p. Linn. 1 sp. *Mel. austriaca** Herbst.
Antennæ 9-jointed; claws unequal; clypeus advanced, reflexed. Steph. 3.
pl. 19. 1.
- HOPLIA** Illig. **MELOLONTHA** p. Oliv. 1 sp. *Mel. argentea* Oliv.
Antennæ 10-jointed; claws simple, but unequal. Oliv. 1. pl. 3. f. 22 a.
- Family 4. (or 9.) **GLAPHYRIDÆ** MacLeay. (*Anthobii Latr.*)
(There is no British species of this Family.)
- Family 5. (or 10.) **CETONIIDÆ** MacLeay. (*Melitophili Latr.*)
- TRICHIUS** Fabr. **MELOLONTHA** p. Herbst. 1 sp. *Scar. fasciatu*s Linn.
Tomentose; metasternum not produced; anterior tibiae 2-dentate; anus entire.
Donov. 4. 140.
- ALEUROSTICTUS** K. Zl. J. **GNORIMUS** St. Farg. & S. 2 sp. *Sc. variabilis* L.
Glabrous; metasternum not produced; anterior tibiae 2-dentate; anus notched.
Curt. 286.
- VALGUS** Scriba. **ACANTHURUS** Kirby. 1 sp. *Scar. hemipterus* Linn.
Thorax with two longitudinal elevations; anterior tibiae 5-dentate; abdomen ♀
terminating in a slender point. Hbst. 3. pl. 27. 13.
- CETONIA** Fabr. **SCARABAEUS** p. Linn. 2 sp. *Scar. auratus* Linn. Curt. 374.
Metasternum porrected; epimera very large; elytra sinuated at the sides.
- Subtribe 2. *Priocerata* Westw. (*Serricornes Latr.*)
- Stirps 1. *Macrosterni* Westw. (*Sternoxi Latr.*)
- Family 1. **BUPRESTIDÆ** Leach. (*Buprestis Linn.*)
- CHRYSOBOTRIS** Esch. **BUPRESTIS** A. a. Steph. 2 sp. *B. chrysostigma* Linn.
Scutel distinct, subtriangular; middle legs inserted close together; prosternum
depressed; fore thighs thick and toothed; third joint of antennæ as long as
fourth. Pz. 68. 18.
- PECILONOTA** Esch. **LATIPALPIS** p. Solier. 11 sp. *B. rutilans* Fab.
Scutel distinct, transverse; labrum rectangular; third joint of antennæ short;
tarsi not dilated, with the fourth joint scarcely smaller than third. Pz. 22. 8.
- DICERÆA** Esch. **LATIPALPIS** p. Sol. 1 sp. *B. aenea* Linn. Herbst. 150. 9.
Scutel distinct, not transverse; last segment of abdomen 3-dentate in one sex,
bidentate in the other; tarsi not dilated, fourth joint as large as third.
- ANCYLOCHIRIA** Esch. **BUPRESTIS** p. Sol. 3 sp. *B. rustica* Linn.
Scutel distinct; mentum transverse, truncate in front; last joint of max. palpi
as long as the preceding, slightly dilated at the tip; tarsi slender; anterior
tibiae ♂ bent and hooked. Pz. 68. 19.
- MELANOPHILA** Esch. **BUPRESTIS** p. Sol. 11 sp. *B. tarda* Fab.
Scutel distinct, triangular; thorax sinuated at the base; mentum transverse;
anterior tibiae ♂ simple; tarsi slender. Pz. 68. 21.
- ANTHAXIA** Esch. **BUPRESTIS** B. b. Steph. 4 sp. *B. nitidula* Linn.
Scutel distinct, triangular; thorax and elytra truncate at the base; antennæ
scarcely dilated; posterior femora straight; middle legs close together.
Curt. pl. 31.

* This insect is incorrectly named *Agricola* by English Entomologists.

PTOSIMA Serville. *AGRILUS* p. *Esch.* 2 sp. *Bupr. 9-maculata* Linn.

Scutel distinct, rounded; thorax truncate at the base; mentum with a long central tooth. Pz. 68. 17.

AGRILUS Megerle. *AGRILUS* A. *Steph.* 4 sp. *Bupr. viridis* Linn. Curt. pl. 67.

Scutel distinct, triangular; thorax sinuated at base; tarsi with pulvilli beneath the four basal joints; tarsal claws toothed.

APHANISTICUS Latr. *BUPRESTIS* p. *Fab.* 1 sp. *Aph. pusillus* Gyll.

Middle legs wide apart; body linear; head notched; antennæ with the four terminal joints dilated. Curt. 262.

TRACHYS Fab. *BUPRESTIS* Don. 3 sp. *Bupr. minuta* Linn. Donov. 8. 256.

Short, broad; antennæ free, serrated towards the tips; scutel wanting; thorax posteriorly trilobed.

Family 2. *EUCNEMIDÆ* Westw.

Subfamily 1. *Eucnemides* Latreille.

MELASIS Oliv. *ELATER* p. *Linn.* 1 sp. *El. buprestoides* Linn. Curt. 55.

Antennæ distant at base, flabellate in the ♂; body cylindric; legs flattened.

MICRORHAGUS Esch. *EUCNEMIS* *Steph.* 1 sp. *Euc. pygmaeus* Mann.

Body narrow, depressed; antennæ quite close together at the base; antennæ ♂ ramos; legs slender. Mann. Euc. pl. 2. f. 4, 5, 6.

Subfamily 2. *Cerophytides* Latreille.

CEROPHYTUM Latr. *CERATOPHYTUM* *Lea.* 1 sp. *Cer. elateroides* Latr.

Body ovoid; antennæ ♂ strongly pectinated; tarsal fourth joint bilobed. Guérin, Icon. Ins. pl. 12. f. 6.

THROSCUS Latr. *TRIXAGUS* *Gyll.* 2 sp. *Elat. dermestoides* Linn. Curt. 163.

Elliptic, depressed; antennæ terminated by a 3-jointed perfoliated club; palpi clavate; fourth tarsal joint triangular.

Family 3. *ELATERIDÆ* Leach. (*Elater* *Linn.*)

ADRASTUS Esch. *CATAPHAGUS* A. p. *Steph.* 2 sp. *El. limbatus* *Fab.*

Plates at the base of the hind legs gradually dilated within; the sides of the thorax acutely marginata in the middle; body nearly linear; ungues denticulated. Herbet. Col. pl. 165. f. 11.

DALOPIUS Esch. *CATAPHAGUS* A. p. *Steph.* 1 sp. *El. marginatus* Linn.

Basal plates abruptly dilated within; sides of thorax acutely margined in the middle; antennæ serrate; body more robust. Oliv. 31. pl. 8. f. 83.

AGRIOTES Esch. *CATAPHAGUS* A. *Steph.* 4 sp. *El. sputator* Linn.

Antennæ submoniliform, second joint long; sides of thorax not acutely margined in the middle; forehead and thorax very convex; body oblong. Pz. 93. 13.

SERICOSOMUS Serv. *SERICUS* *Esch.* 4 sp. *El. brunneus* Linn.

Antennæ short, serrate, second and third joints short; basal plates broad, equal; body more or less cylindric; thorax short, convex. Herbet. 112. 27. b.

ECTINUS Esch. *ELATER* A. a. p. *Steph.* 1 sp. *El. aterrimus** Linn.

Antennæ elongate; basal plates rather broader within; body very convex; fourth

* Eschscholtz gives the *Elater aterrimus* *Fab.* as the type of his *Ectinus*, but Dejean and Latreille place the *Aterrimus* *Linn.* in this genus, giving the former insect, which is distinct, and is the *Niger* of *Linn.*, in the genus *Athous*. Mr. Stephens has also adopted this arrangement.

- antennal joint longer than the fifth, the eleventh short and broad. Herbst. pl. 161. f. 11.
- LIMONIUS** Esch. ELATER A. b. c. Steph. 7 sp. *El. Bructeri* Fab. Pz. 34. 13. Frontal carina distinct; basal joint of tarsus rather shorter than second; second and third antennal joints very minute; body oblong, subcylindric; thorax elongate, convex.
- ELATER** Linn., Esch., Latr., Steph. (p.) 9 sp. *El. sanguineus* Linn. Basal plates suddenly dilated within, and toothed in the middle; tarsi setose, the joints gradually smaller; frontal carina distinct; body depressed; sides of thorax not dilated. Don. pl. 508. f. 2.
- PROSTERNON** Latr. ELATER B. 2.* Steph. 1 sp. *El. holosericeus* Fab. Body suboval, subdepressed, very pubescent; thorax dilated at the sides; antennæ with the second and third joints not dilated, and smaller than the fourth; claws simple. Herbst. Col. 161. f. 9.
- AGRYPNUS** Esch. ELATER B. 2.** Steph. 3 sp. *El. murinus* Linn. Body suboval, subdepressed, very pubescent; thorax dilated at the sides; antennæ with the second joint dilated, the first large; tarsi without soles; posterior margin of thorax with a central tubercle. Herbst. 161. f. 8.
- HYPNOIDUS** Dillw. St. { *HYPOLITHUS* Esch. } *CRYPTOHYPNUS* Esch. } 6 sp. *El. riparius* Fab. Frontal carina distinct; palpi broad, securiform; scutellum broad; antennæ thick, subperfoliate, with the second and third joints almost as large as the others. Pz. 34. 12.
- DRASTERIUS** Esch. SELATOSOMUS p. Steph. 1 sp. *El. 2-maculatus* Fab. Palpi acuminate; tibiae externally, with long cilia; posterior trochanters suddenly dilated within; frontal carina distinct. Pz. 76. 9.
- MELANOTUS** Esch. PRIMECUS St. 1 sp. *El. fulvipes* Hbst. Hbst. 46. 162. 2. Antennæ serrated, with the second and third joints short, the eleventh long, slender; body attenuated behind; posterior thoracic angles large; tarsi slender, simple; claws serrated.
- LUDIUS** Latr. STEATODERUS Esch. 1 sp. *El. ferrugineus* Linn. Don. 356. 1. Antennæ strongly serrated; the second and third joints very small, eleventh abruptly attenuated at the tip; posterior trochanters spined within.
- CTENICERUS** Latr. CORYMBITES Latr. (Ans.) 7 sp. *El. pectinicornis* Linn. Antennæ ♂ often strongly pectinated, with the second joint minute; labrum transverse; posterior trochanters narrow, lanceolate; frontal carina wanting. Donov. 356. 2.
- SELATOSOMUS** Steph. DIACANTHUS Latr. (Ans.) 2 sp. *El. oxacus* Linn. Body broad, glabrous; antennæ short, serrated, with oboconic joints, the third as large as the following; tarsi simple, without soles; thorax gibbous. Donov. 535. f. 1. 2.
- CARDIOPHORUS** Esch. CALODERUS Steph. 3 sp. *El. thoracicus* Fab. Scutellum cordate; posterior femora thicker than the others; tarsi slender, simple; thorax immarginate, very gibbous; third joint of antennæ as large as the fourth. Pz. 6. 12.
- ATHOUS** Esch. ANATHROTUS Steph. 10 sp. *El. vittatus* Fab. Don. 518. 2. Frontal carina distinct; basal joint of tarsi as long as the two following, united, the third joint triangularly dilated, spongy; labrum narrow, transverse; palpi short, slender.

CTENONYCHUS Steph. *Dej.* **MELANOTUS** p. ? Esch. 1 sp. *Ct. hirsutus* Steph.
Claws toothed; third tarsal joint bilobed, spongy beneath, the two basal joints dilated; antennæ not compressed, second joint small; elytra with long hairs.

APLITARSUS Steph. **CARDIOPHORUS** p. ? Esch. 4 sp. *El. rufipes* Fab.

Claws simple; palpi filiform; thorax elongate, subconvex; tarsi simple, fourth joint not minute; antennæ subserrated, second joint very minute, third joint as large as fourth. *Panz.* 93. 14.

CAMPYLYS Fisch. **EXOPTHALMUS** Latr. olim. 1 sp. *El. linearis* Linn.

Eyes very large, prominent; head exserted; body linear; antennæ long; tarsi simple; claws simple; prosternum not advanced over the mouth. *Pz.* 8. 11.

Stirps 2. *Aprosterni* Westw. (*Malacodermi Latr.*)

Family 1. **CEBRIONIDÆ** Leach.

ATOPA Payk. **DASCULLUS** Latr. 1 sp. *Chrysom. cervina* Linn. *Curt. pl. 272.*
Body oval; antennæ simple; basal tarsal joints cordate; pulvilli wanting.

Family 2. **CYPHONIDÆ** Stephens.

SCIRTES Illiger. **ALTICA** p. *Panz.* 2 sp. *Chrys. hemispherica* Linn.

Body hemispheric; posterior femora thickened, formed for leaping. *Pz.* 96. 7.

CYPHON Payk. **ELODIA** Latr. 16 sp. *Cyph. pallidus* Fab. *Curt. 602.*

Body oval; fourth tarsal joint bilobed; hind legs simple.

EUBRIA Zeigl. **CYPHON** p. *Germ.* 1 sp. *C. palustris* *Germ.* *My f.* 25. 18.

Body hemispheric; hind legs simple; tarsi filiform.

Family 3. **LAMPYRIDÆ** Leach. (*Lampyris Linn.*)

LAMPYRIS Linn. and all authore. 1 sp. *L. noctiluca* Sam. *Comp. pl. 3. f. 1, 2.*
Head not rostrated, covered by thorax; females apterous; mandibles entire.

DRILUS Oliv. **COCHLEOCTONUM** Meilz. ♀ 1 sp. *Dr. flavescentia* Ol.

Head not rostrated, exserted; females apterous; mandibles bidentate. Oliv. 2. 4.
pl. 1. f. 1.

DICTYOPTERA Latr. **LYCUS** Steph. 1 sp. *L. minutus* Fab. *Curt. 263.*

Head short; females winged; mandibles entire.

Family 4. **TELEPHORIDÆ** Leach. (*Cantharis p. Linn.*)

TELEPHORUS De Geer. **CANTHARIS** p. *Linn.* 34 sp. *Canth. fusca* Linn.
Elytra covering the abdomen; thorax entire. *Curt. 215.*

SILIS Megerle. **TELEPHORUS** p. Steph. 1 sp. *Canth. ruficollis* Fab.

Elytra covering the abdomen; thorax with the posterior margins notched, the sides straight. Charpent. *Hora Ent.*

PODABRUS Fisch. **TELEPHORUS** p. Steph. 1 sp. *Canth. alpinus.*

Elytra covering the abdomen; thorax entire, rounded at the sides, emarginate in front; claws notched.

(**RAGONYCHA** Esch. (Bull. Mosc.) 2 sp. (claws notched). *Canth. melanurus*, &c.)

MALTHINUS Latr. **NECTDALIS** p. Geoff. 19 sp. *Canth. biguttata* Linn.

Elytra shorter than the abdomen. Oliv. 2. pl. 1. f. 6.

Family 5. **MELYRIDÆ** Leach.

MALACHIUS Fab. **CANTHARIS** p. *Linn.* 17 sp. *Canth. bipustulata* Linn.

Palpi filiform, narrowed at tip; thorax and abdomen with vesicles. *Curt. 167.*

- DASYTES** Payk. *DERMESTES* p. Linn. 6 sp. *D. carvalhoi* Fab.
Body narrow; antennæ as long as the head and thorax; palpi thickened at the tips. Panz. F. I. G. 96. 10.
- ENICOPUS** Steph. *DASYTES* p. Auct. 1 sp. *Dermestes hirtus* Linn.
Anterior and posterior tarsi with a long curved basal horn; posterior tibiae curved. Oliv. 2. 9. pl. 2.
- DOLICHOSOMA** Steph. *DASYTES* p. Auct. 1 sp. *Tillus filiformis* Fab.
Body very slender and elongate; elytra acute, squamose. Steph. 8. pl. 19. f. 5.
- APLOCNEMUS** Steph.* *EUCORIS* Besser. 2 sp. *Hirpa 4-pustulata* Fab.
Antennæ short, internally serrated; body obtuse, oblong; legs short. Oliv. 2. 10. pl. 1.

Family 6. *CLERIDÆ* Westw. (*Tillidae Leach.*)

- TILLUS** Oliv. *CHRYSONEMA* p. Linn. 2 sp. *Chrys. elongata* Linn.
Antennæ subfiliform, serrated; thorax cylindric. Oliv. 11. 4. pl. 1. f. 1.
- TILLOIDEA** Laporte. *TILLUS* p. Steph. 1 sp. *Till. unifasciatus* Oliv.
Antennæ subfiliform, serrated; thorax obcordate; elytra convex. Curt. pl. 267.
- OPILUS** Latr. { *EUROCUS* Ill. } 2 sp. *Attel. mollius* Linn. Curt. pl. 270.
All the palpi terminated by a hatchet-shaped joint; antennæ clavate.
- THANASIMUS** Latr. *CLERUS* Dej. 1 sp. *Attel. formicarius* Linn.
Antennæ gradually clavate; maxillary palpi small; labial palpi terminated by a large hatchet-shaped joint; basal tarsal joint small. Curt. pl. 598.
- CLERUS** Geoff. *TRICHODES* Fab. 2 sp. *Attel. apiarius* Hbst. Curt. 44.
Tarsi with the basal joint scarcely visible; labial palpi terminated by a large hatchet-shaped joint; terminal joint of antennæ produced acutely within. Steph. Mand. vol. iii. pl. 19. f. 5.
- NECROBIA** Oliv. *CORYNETES* p. Dej. 4 sp. *Cor. ruficollis* Fab.
Antennæ with the last joint the largest, square, internally obtuse; palpi subcylindric; ungues entire. Curt. pl. 350.
- CORYNETES** Payk. *DERMESTES* p. Linn. 1 sp. *Derm. violaceus* Linn.
Antennæ with the last three joints equal, the last internally acuminate; palpi with the last joint thickened, obconic; tarsal claws with a small basal tooth. Curt. pl. 351.

Family 7. *PTINIDÆ* Leach. (*Ptinus Linn.*)

Subfamily 1. *Ptinides* Westw.

Antennæ moderately long; three terminal joints similar to the preceding.

- PTINUS** Linn. and all authors. 8 sp. *Pt. fur.* Linn. Curt. 646.
Antennæ long, slender, and simple, inserted close together; eyes rather prominent; elytra separated; body oblong.
- MEZIUM** Leach. *PTINUS* p. Marsh. 1 sp. *Ptinus sulcatus* Fab. Curt. 232.
Antennæ subcompressed; elytra subglobose, polished; wings 0; thorax with longitudinal furrows.
- GIBBIUM** Kugell. *SCOTIAS* Cremsp. 1 sp. *Ptinus Scotias* Fab. Curt. 342.
Antennæ subcompressed; elytra subglobose, polished; wings 0; thorax smooth.

* Mr. Stephens has introduced into this genus a third species under the name of (*Aploc?*) *floralis* Oliv.? upon the authority of an insect captured by me near Petworth, which, however, I have ascertained to be *Dasytes niger* Linn.

PTILINUS Fab. *Anobium* p. *Illiger*. 2 sp. *Ptin. pectinicornis* Linn.

Body cylindric; antennæ ♂ strongly pectinated. Don. pl. 320.

XYLETINUS Latr. *Serracerasus* Kug. 2 sp. *Ptin. pectinatus* Fab.

Body broadly ovate; antennæ in both sexes strongly serrated; elytra striated; palpi with the last joint securiform. Curt. 375.

OCHINA Zeigl. *Cariocerus* p. *Marsh.* 1 sp. *Crioc. Ptinooides* Marsh.

Antennæ slightly serrated; elytra soft, smooth, subovate; palpi simple.

LASIODERMA Steph. Ill. 5. 417. 1 sp. *Las. testaceum* Steph.

Antennæ with the basal joint large, robust, the third to the tenth serrated; head broad; thorax broad, semicircular; elytra soft, smooth, broad, oblong.

Subfamily 2. *Anobiides* Westw.

Antennæ with the last three joints distinctly larger than the preceding.

DORCATOMA Herbst. *Serracerasus* p. *Kug.* 3 sp. *D. Dresdensis* Hbst.

Antennæ with the last three joints triangular and flattened; body short, but globose; palpi securiform. Hbst. pl. 39. f. 8.

ANOBIUM Fab. *Prinus* p. *Linn.* 11 sp. *Pt. pertinax* Linn. Curt. 387.

Body oblong-ovate; antennæ with the ninth and tenth joints subconical, and much thicker than the preceding; terminal joint ovate; palpi simple.

DRYOPHILUS Chevrolat. Steph. Ill. 5. 418. 1 sp. *Dr. anobioides* Chevr.

Body subcylindric; antennæ ♂ with the three terminal joints very long and slender; eyes prominent. Guér. Mag. Zool. Ins. pl. 3.

Family 8. *LYMEXYLONIDÆ* Steph. (*Xylotrogi* Latr.)

LYMEXYLON Fab. *Pterophorus* Herbst. 1 sp. *Cantharis navalis* Linn.

Body long, linear, depressed; head vertical; elytra nearly covering the abdomen; antennæ simple. Curt. pl. 382.

HYLECETUS Latr. *Cantharis* p. *Linn.* 1 sp. *Canth. dermestoides* L.

Antennæ compressed, serrated; thorax square; body subconvex; elytra covering the abdomen. Curt. 654.

Family 9. *BOSTRICHIDÆ* Westw.

BOSTRICHUS Geoff. nec *Erichs.* **APATE** Fab. 1 sp. *Derm. capucinus* Linn.

Elytra entire, rounded at the apex; antennæ with the second joint short, sub-clavate; terminal joints not laminate nor transverse. Curt. 271.

APATE Fab. *Bostrichus* p. *Oliv.* 1 sp. *Ap. sinuata* Fab.

Elytra posteriorly retuse; antennæ with the second joint elongate, cylindric; terminal joints forming a perfoliated club. Steph. Ill. 3. pl. 19. f. 6.

(**SINOXYLON** Duf. *Bostrichus* p. *Oliv.* 1 sp. *B. bispinosa* Oliv.

Elytra posteriorly retuse and spinose; antennæ with the terminal joints sub-laminated; tibiae simple. Oliv. 4. pl. 4. f. 1.)

DINODERUS Steph. **APATE** p. *Payk.* 1 sp. *Ap. substriata* Pk. ?

Elytra posteriorly retuse; antennæ with the second joint subglobose; the terminal joints perfoliated; tibiae denticulated.

RHYZOPERTHA Steph. *Prinus* p. *Marsh.* 2 sp. *Pt. piceus* M.

Elytra elongate, posteriorly rounded; antennæ with the terminal joints sub-laminated; tibiae serrated.

CIS Latr. *Prinus* p. *Marsh.* 13 sp. *Anobium Boleti* Fab. Curt. 402.

Cylindric, ovate; thorax rounded at the sides, dilated in front; tarsi 4-jointed; three basal joints very short; antennæ 10-jointed, with the last three joints

forming a club; head in the males often tubercular; mandibles bidentate; maxillary palpi with the last joint large and oval.

Family 10. *SCYDMÆNIDÆ* Steph.

SCYDMÆNUS Latr. *ANTHICUS* p. Fab. 16 sp. *Sc. Hellwigii* Latr.

Elytra separated; antennæ thickened at the tips; the basal joints but little thicker and longer than the rest. Denny, Mong. pl. 11.

Sect. II. *HETEROMERA* Latreille.

Tribe 1. *Trachelia* Westw.

Family 1. *NOTOXIDÆ* Steph.

NOTOXUS Ill. *MELUS* p. Linn. 2 sp. *Not. monoceros* Linn.

Thorax produced over the head into a horn; neck distinct. Steph. pl. 25. f. 5.

ANTHICUS Fab. *MELUS* p. Linn. 8 sp. *A. antherinus* Linn. Panz. 11. 14.

Thorax not cornuted in front; neck distinct.

Family 2. *PYROCHROIDÆ* Leach.

PYROCHROA Fab. *CANTHARIS* p. Linn. 2 sp. *Ca. coccinea* Linn. Curt. 590.

Antennæ rather longer than the head and thorax, pectinated in ♂; eyes ♂ distant.

Family 3. *LAGRIIDÆ* Westw. (*Lagriariae* Latr.)

LAGRIA Fab. *CHRYSOMELA* p. Linn. 1 sp. *Ch. hirta* Linn. Curt. 598.

Thorax cylindric, much narrower than the elytra; ♂ antennæ with the last joint long.

Family 4. *HORIIDÆ* Westw. (*Horiales* Latr.)

There is no British species of this family.

Family 5. *MORDELLIDÆ* Leach. (*Mordella* Linn.).

MORDELLA Linn. —— 9 sp. *M. aculeata* Linn. Curt. 483.

Abdomen styliferous; scutellum distinct; tarsi simple.

ANASPIS Geoff. *MORDELLA* p. Linn. 18 sp. *M. frontalis* Linn. Pz. 19. 13.

Abdomen not styliferous; scutellum distinct; penultimate joint of anterior tarsi bilobed.

RIPIPHORUS Fab. *MORDELLA* p. Linn. 1 sp. *M. paradoxus* Linn.

Scutellum hidden; antennæ ♂ pectinated. Curt. 19.

Family 6. *CANTHARIDÆ* Leach. (*Meloe* Linn.)

CANTHARIS Geoff. *LYTTA* Fab. 1 sp. *Mel. vesicatoria* Linn. Curt. 658.

Narrow; wings two; elytra elongate; last joint of max. palpi subovate.

SYBARIS Steph. —— 1 sp. *Syb. immunis* Steph. Steph. 5. pl. 25. f. 4.

Narrow; elytra elongate; thorax broadest behind; last joint of max. palpi securiform.

SITARIS Latr. *NECYDALIS* p. Fab. 1 sp. *Nec. humeralis* Fab. Curt. 340.

Elytra attenuated, not lapping over each other; wings two; antennæ simple.

MELOE Linn. &c. *PROSCARABÆUS* Steph. 9 sp. *Mel. proscarabæus* Linn.

Wings 0; elytra short, lapping over each other within; antennæ various.

Curt. 279.

Family 7. *SALPINGIDÆ* Leach.

SALPINGUS Ill. *RHINOSMUS* Latr. 4 sp. *Car. ruficollis* Linn. Pz. 24. 19.

Oblong-ovate, depressed; rostrum elongate; club of antennæ 5-jointed; head depressed.

SPHÆRIESTES Kirby. *SALPINGUS* p. *Gyll.* 7 sp. *Salp. ater* Gyll. Curt. 662.
Oblong-ovate; glabrous; rostrum short; club of antennæ 5-jointed; head sub-convex.

MYCTERUS Clairv. *RHINOMACRA* p. *Fabr.* 1 sp. *Myct. griseus* Clv.
Ovate, sericeous; rostrum elongate; antennæ filiform. Steph. 4. pl. 21. f. 4.

Family 8. *ŒDEMERIDÆ* Leach.

ŒDEMERA Oliv. *NECYDALIS* p. Linn. 2 sp. *Nec. carulea* Linn. Don. 558.
Elytra subulate; posterior femora ♂ incrassated.

ONCOMERA Steph. *ŒDEMERA* p. *Auct.* ? 1 sp. *Nec. podagraria* Linn.
Elytra not subulate; posterior femora ♂ incrassated; thorax oblong. Oliv. 3.
10. pl. 1.

ISCHNOMERA Steph. *ŒDEMERA* p. *Auct.* 5 sp. *Nec. carulea* Linn.
Elongate; elytra not subulate; posterior femora simple. Curt. fig. 390.

NOTHUS Zeigl. *OSPHYA* Illig. 2 sp. *N. clavipes* Illig. Curt. 538.
Thorax orbiculate, depressed, margined; hind femora ♂ incrassated.

CONOPALPUS *Gyll.* *ZONITIS* Curt. 2 sp. *Mel. testacea* Oliv. Curt. 112.
Antennæ 10-jointed; thorax transverse, orbicular; last joint of palpi large, securiform.

ENGLENES Westw. *XYLOPHILUS* p. Bon. 1 sp. *Anth. oculatus* Pk.
Antennæ ♂ very long; eyes ♂ very large; palpi securiform; penult. tarsal joint minute. Curt. pl. 299.

ADERUS Westw. *XYLOPHILUS* p. Bon. 1 sp. *Lytta Boleti* Marsh. *
Ovate; antennæ 11-jointed, moderately long, second and third joints minute;
eyes moderate, entire. Steph. pl. 25. 6.

Family 9. *MELANDRYIDÆ* Leach.

MELANDRYA Fab. *SERRPALPUS* p. Illig. 2 sp. *Chrys. caraboides* Linn.
Elongate-ovate, subdepressed, narrowed in front; max. palpi large, 4-jointed,
serrated, last joint large, ovate, fleshy on the inner margin. Curt. 155.

PHLOIOTRYA Steph. *XYLITA* p. MacL. 1 sp. *Serr. rufipes* Gyll.
Oblong, convex, orbicular in front, sinuated behind; maxillæ elongate, deflexed.
Steph. pl. 24. f. 4.

DIRCÆA Fab. *SERRPALPUS* p. Latr. 1 sp. *D. variegata* Fab.
Oblong, convex; antennæ slightly thickened at the tips; last joint of max. palpi
securiform. Act. N. H. Par. 1. pl. 10.

HYPULUS Payk. *SERRPALPUS* p. Illig. 1 sp. *H. quercinus* Pk.
Elongate, subconvex; antennæ subfiliform; thorax elongate, narrowed behind.
Steph. pl. 24. f. 5.

ABDERA Steph. *HYPULUS* p. Curt. 3 sp. *Mord. bifasciata* Marsh.
Elongate, ovate; antennæ rather thicker at the tips; thorax broadest behind.
Curt. fig. 255.

SCRAPTIA Latr. *DIACMA* p. Sch. 2 sp. *Sc. fusca* Latr. Steph. pl. 24. f. 9.
Thorax suborbicular; labial palpi with the last joint obtigonate; antennæ
filiform.

* The *Xylophilus populneus* of Curtis is certainly identical with this insect. The *pygmæus* of Degeer is also identical with the *oculatus*.

HALLOMENUS *Hebw.* **DICMEA** *Fab.* 3 sp. *H. flexuosus* Pk. Curt. 474.
Oblong-ovate, subdepressed; thorax broad behind; last joint of labial palpi minute; tarsi entire.

ORCHESIA *Latr.* **HALLOMENUS** p. *Pk.* 3 sp. *Orch. micans* Latr. Curt. 197.
Elongate-ovate, convex; posterior tibiae with two long spurs; antennae clavate.

Tribe 2. *Atrachelia* Westw.

Subtribe. 1. *Varicolores* Westw.

Family 1. *CISTELIDÆ* Leach. (*Xystropides Solier.*)

ERYX *Steph.* **PRIONYCHUS** *Solier.* 1 sp. *Pyrochr. nigra* De Geer. Pz. 50. 3.
Broadly ovate; mandibles bifid; max. palpi obliquely truncate; tarsi pulvillate.

MYCETOCHARUS *Latr.* **MYCETOPHILA** *Gyll.* 1 sp. *M. scapularis* Gyll.
Narrow, linear, elongate; tarsi not pulvillate; mandibles bifid; max. palpi strongly securiform. Pz. 25. 14.

CISTELA *Fab.* **CHRYSOMELA** p. *Linn.* 6 sp. *Ch. ceramboides* Linn.
Ovate; thorax semicircular; mandibles bifid; max. palpi subsecuriform. Curt. 594.

OMOPHLUS *Meg.* **CISTELA** *Fab.* 1 sp. *Om. Armeria* Curt. Curt. 622.
Thorax broadest in front; mandibles acute at the tips; max. palpi clavate, scarcely securiform; elytra elliptical.

MEGISCHIA *Solier.* **CISTELA** p. *Steph.* 1 sp. *Cist. curvipes* Dej.
Palpi filiform, terminal joint scarcely enlarged; mandibles entire.

CTENIOPUS *Solier.* **ALLEGULA** *Steph.* 1 sp. *Chr. sulphurea* Linn. Pz. 106. 8.
Thorax subquadrate, narrowed slightly behind; mandibles entire; eyes prominent.

Family 2. *HELOPIDÆ* Stephens.

HELOPS *Fab.* **TENERIO** p. *Linn.* 4 sp. *H. caraboides* Pz. Curt. 298.
Oblong-ovate; antennæ subfiliform; thorax subquadrate, or subcordate.

Family 3. *DIAPERIDÆ* Stephens.

DIAPERIS *Geoff.* **CHRYSOMELA** p. *Linn.* 1 sp. *Chr. Boleti* Linn. Curt. 558.
Subrotundate, convex; antennæ with the fourth and following joints lenticular; palpi filiform.

PLATYDEMA *Lap. and Br.* **DIAPERIS** p. *Steph.* 4 sp. *D. violacea* *Fab.*
Ovate, subconvex; fourth and following joints of antennæ conical; max. palpi with the last joint enlarged. Panz. 94. 9.

PHALERIA *Latr.* **TENERIO** p. *Fab.* 1 sp. *Ten. cadaverina* *Fab.*
Ovate; antennæ perfoliated; tibiae triangular, spinose; max. palpi with the last joint obtuse. Sturm. D. F. 2. 47. A.

ALPHITOPHAGUS *Steph.* **PHYLITHUS** *Megerle?* 1 sp. *Alph. 4-pustulatus* St.
Oval, convex; antennæ slightly clavate; tibiae simple; last joint of palpi subincassated. Steph. 24. f. 1.

BOLITOPHAGUS *Fab.* **ELEDONA** *Latr.* 1 sp. *Bol. agricola* F., Curt. 586.
Obtuse, ovate, convex; thorax crenated; antennæ clubbed and serrated.

HYPOPHLÆUS *Fab.* **Irs** p. *Oliv.* 3 sp. *H. bicolor* *Fab.* Curt. 430.
Elongate, subdepressed; elytra linear; antennæ short, gradually thickened and serrated.

TRACHYSCELIS *Latr.* ——— 1 sp. *Tr. aphodioides* *Latr.*
Broadly ovate; tibiae dilated, spinose, the anterior serrated; club of antennæ 6-jointed. Guérin. Icon. R. An.

Subtribe 2. *Melasomata* Latreille.Family 4 (or 1.). *TENEBRIONIDÆ* Leach. (*Tenebrio Linn.*)*TENEBRIÖ* Linn., &c. — 4 sp. *T. molitor* Linn. Curt. 331.

Narrow, elongate; thorax quadrate; antennæ filiform.

ULOMA Meg. *ULOSA* Meg. 2 sp. *Trogos. cornuta* Fab. Latr. Gen. pl. 10.

Oblong-ovate, depressed; antennæ clavate, third joint as large as the fourth; mandibles ♂ large.

ALPHITOBIUS Steph. *ULOMA* p. Curt. 2 sp. *Ten. Fagi* Panz. Curt. 363.

Oblong-ovate; antennæ clavate, third joint much longer than fourth.

STENE Kirby. *TENEBRIÖ* p. Oliv. 1 sp. *Ten. ferrugineus* Ol.

Elongate, depressed; antennæ clavate, third joint short. Oliv. 3. 18. pl. 2.

SARROTRIUM Illig. *OATHOCRUX* Latr. 1 sp. *Hisp. mutica* Linn. Curt. 314.

Elongate, subconvex; antennæ thick and very pilose.

OPATRUM Fab. *SILPHA* Linn. 2 sp. *Silpha sabulosa* Linn. Curt. 319.

Oblong-ovate, subconvex; antennæ thickened at the tips; wings two.

HELIOPHILUS Dej. *TENEBRIÖ* p. Marsh. 2 sp. *Ten. obsoletus* Marsh.

Ovate, subconvex; antennæ thickened at the tips; elytra connate; wings 0. Steph. pl. 24.

PEDINUS Latr. *BLAPS* p. Fab. 1 sp. *Bl. femoralis* Fab. Panz. 39. 5. 6.

Ovate; antennæ filiform, terminal joints longer than broad; wings 0.

PHYLAN Meg. *TENEBRIÖ* p. Marsh. 1 sp. *Opatr. gibbum* Fab.

Ovate; antennæ filiform; terminal joints broader than long; wings 0. Herbst. 7. 112. 8.

CRYPTICUS Latr. *BLAPS* p. Fab. 1 sp. *Bl. glaber* Fab. Panz. 36. 1.

Ovate; antennæ filiform; elytra not connate; wings two.

Family 5 (or 2.). *BLAPSIDÆ* Stephens.*BLAPS* Fab. *TENEBRIÖ* p. Linn. 3 sp. *T. mortisaga* Linn. Curt. 148.

Oblong-ovate, flat above; margins of elytra inflexed; wings 0.

Family 6 (or 3.). *PIMELIIDÆ*.

(There is no British species of this family.)

Sect. III. *PSEUDOTETRAMERA* Westw. (Tetramera Latr.)Stirps 1. *Rhyncophora* Latr.Family 1. *BRUCHIDÆ* Leach. (*Bruchus Linn.*)Subfamily 1. *Bruchides* Westw.*BRUCHUS* Linn. *MYLABRIS* Geoffr. 7 sp. *Br. granaria* L. Pz. 66. 11.

Antennæ filiform, or slightly and gradually thickened to the tips, often serrated; elytra oblong-quadrata.

Subfamily 2. *Anthribides* Westw.*BRACHYTARSUS* Sch. *PAROPS* Meg. 2 sp. *Anth. scabrosus* F.

Short, ovate; eyes entire; antennæ abruptly clavate. Pz. 15. f. 15.

PHLOEOBIUS Sch. *ANTHRIBUS* p. Fab. 1 sp. *An. griseus* Fab.

Ovate; eyes emarginate; antennæ slender, elongated. Steph. pl. 21. f. 2.

TROPIDERES Sch. *MACROCEPHALUS* p. Oliv. 2 sp. *An. albirostris* F.

Oblong; eyes entire; two basal joints of antennæ elongated. Pz. 15. 19.

PLATYRHINUS Clv. **MACROCEPHALUS** p. Oliv. 1 sp. *Circ. latirostris* Bons.
Oblong; eyes entire; two basal joints of antennæ short; club abrupt. Don.
348. 1.

ANTHRIBUS Fab. **MACROCEPHALUS** p. Oliv. 1 sp. *Circ. albivittis* Linn.
Oblong; eyes emarginate; antennæ ♂ elongated; club narrow. Don. 348. 3.

RHINOMACER Fab. **ANTHRIBUS** p. Oliv. 1 sp. *Rh. attelaboides* F.
Rostrum elongate, dilated at the tip; club of antennæ slender. Steph. 21. f. 3.

CHORAGUS Kirby. **ANTHRIBUS** Robert. 2 sp. *Ch. Sheppardi* K.
Saltatorial, short, ovate; antennæ long; club 3-jointed; head scarcely rostrated.
Kirby, L. T. 12. 22. 14.

Family 2. *ATTELABIDÆ* Westw.

Subfamily 1. *Brenthides* Westw.

(There is no British species of this subfamily.)

Subfamily 2. *Attelabides* Westw. (*Attelabus* p. Linn.)

APODERUS Oliv. **ATTELABUS** p. Fab. 1 sp. *Att. avellanae* Linn.

Antennæ 12-jointed; head narrowed behind into a neck; thorax narrowed in front. Clv. 1. pl. 15.

ATTELABUS Linn. **CHYRUS** Thunb. 1 sp. *Att. curculionoides* Linn.

Broad; elytra subquadrate; antennæ 11-jointed; head not narrowed behind the eyes. Curtis 710.

RHYNCHITES Herbst. **RHINOMACER** p. Geoff. 21 sp. *Circ. Bacchus* Linn.
Antennæ 11-jointed; head with a thick neck; rostrum dilated at the tip; thorax conic-cylindric. Curtis 642.

DEPORATUS Leach. **RYNCHITES** p. Sch. 1 sp. *Att. Betulae* Linn.

Rostrum short, dilated at the tip; basal joints of antennæ short, robust; posterior femora ♂ thickened. Panz. 20. 15.

RAMPHUS Clv. **RYNCHENUS** p. Gyll. 1 sp. *Rh. flavigornis* Clv.

Rostrum elongate, filiform and incurved; antennæ short; hind legs formed for leaping. Clv. 1. pl. 12.

OXYSTOMA Don. **APION** p. Kirby. 3 sp. *Ap. ulicis* K.

Oblong, convex, very pubescent; rostrum elongated, deflexed; antennæ basal. Linn. Tr. 9. pl. 1. f. 1.

APION Herbst. **ARTUS** Billb. 93 sp. *Circ. fragmentarius* L. Curt. 211.

Pear-shaped; rostrum porrect; antennæ basal or medial.

Family 3. *CURCULIONIDÆ** Leach. (Curculio Linn.
Gonatoceri Schonh.)

Legion 1. *Brachyrhynchi* Sch.

Division 4. *Brachyderides* Sch.

STROPHOSOMUS Billberg. **Bryssus** Meg. 16 sp. *Circ. Coryli* Fab.

Apterous; rostrum short, thick; eyes very prominent; third joint of antennæ longer than the second. Panz. 19. 12.

* Obs. — In the Synopsis of the genera of this family I have adopted the distribution of Schonherr's great work, omitting those divisions (Brachyceridae, Entimidae, &c.) of which there are no British representatives, but retaining the numbers of Schonherr's divisions.

CNEORHINUS Sch. *PHILOPEDON Sch. ol.* 4 sp. *Curc. exaratus* Marsh.

Rostrum very short, thick; elytra very convex, rounded; tibiae unarmed; third joint of antennæ short. Donov. 414. 2.

SCIAPHILUS Sch. *THYLCITES p. Germ.* 3 sp. *Curc. muricatus* Fab.

Short, ovate, winged; eyes moderate; femora dentate; tibiae unarmed at the tip. Hbst. 6. 87. 9.

(BRACHYDERES Sch. *NAUPACTUS Meg.* 1 sp. *Curc. incanus* Linn.

Rostrum very short, stout; elytra subovate; femora unarmed; antennæ 12-jointed.)

(RHYTIRHINUS Sch. *BROTHEUS Steph.* 1 sp. *Curc. porcatus* Marsh.

Antennæ scarcely elbowed; basal joint slightly elongate; elytra abruptly retuse.)

(CHLOROPHANUS Dahn. *CHLORIMA Dej.* 1 sp. *Curc. viridis* Linn.

Elytra large, ovate; legs elongate; rostrum short; antennæ not geniculated basal joint elongate. Panz. 107. 3.)

TANYMECUS Germ. *CURCULIO p. Fab.* 2 sp. *Curc. palliatus* Fab.

Elongate, ovate; elytra acuminate; fourth to eighth joints of antennæ sub-turbinate. Panz. 19. 5.

SITONA Germ. *CURCULIO Linn.* 24 sp. *Curc. lineatus* L. Donov. 389. 2.

Oblong, winged; rostrum short; antennæ with the third joint shorter than the second.

POLYDRUSUS Germ. *NEMOICUS Dillw.* 12 sp. *Curc. micans* Fab.

Oblong, squamose; antennæ with the second and third joints subequal; rostrum short. Curt. 278.

NEMOICUS Dillw. *CURCULIO p. Linn.* 1 sp. *Curc. oblongus* Linn.

Elongate, pilose; antennæ with the second and third joints subequal; wings two. Panz. 19. 15.

Division 5. *Cleonides* Sch.

CLEONUS Sch. *Lixus p. Illig.* 4 sp. *Curc. sulcirostris* Linn. Don. 509. 1.

Elongate, convex; rostrum short, thick; antennæ apical; second joint of antennæ longer than the third.

BOTHYNODERES Sch. *Lixus p. Oliv.* 1 sp. *Curc. albidus* Fab. Panz. 19. 7.

Elongate; rostrum longer than the head, carinated; second and third joints of antennæ nearly equal.

GRONOPS Sch. *BAGous p. Germ.* 1 sp. *Curc. lunatus* Fab.

Elytra rostrated; thorax deeply emarginate in front; tibiae straight. Steph. Ill. 21. f. 1.

LIOPHELEUS Germ. *GASTRODUS Meg.* 2 sp. *Curc. nubilus* Fab.

Apterous, ovate, pubescent; rostrum as long as the head; elytra not emarginate in front. Panz. 106. 5.

MERIONUS Meg. *BARYNOTUS p. Sch.* 2 sp. *Curc. obscurus* Fab.

Oblong; rostrum and thorax canaliculate; elytra emarginate in front. Hbst. 7. 100. 3.

BARYNOTUS Germ. *CURCULIO p. Fab.* 1 sp. *Curc. mercurialis* Fab.

Ovate, apterous; rostrum and thorax carinate; elytra emarginate in front. Hbst. 6. 77. 3.

ALOPHUS Sch. *LEPYRUS Germ.* 3 sp. *Curo. triguttatus* Fab.

Oblong; rostrum twice as long as the head, thick; tibiae not hooked. Donov. 414. 1.

Division 6. *Molytides* Sch.

TANYSPHYRUS Germ. *Rhynchænus* Fab. 1 sp. *Rh. Lemmae* Fab.

Oblong-ovate, winged; second joint of antennæ short, thick; tibiae with a strong apical hook. Panz. 17. 10.

HYLOBIUS Germ. *Cuculio* p. Linn. 2 sp. *Cuc. abietis* Linn. Donov. 529.

Oblong-ovate, winged; rostrum much longer than the head; second antennal joint elongate.

MOLYTES Sch. *Liparus* Oliv. 2 sp. *Cuc. anglicanus* Mart. Don. 34. 2.

Broad, ovate, glabrous; tibiae with a strong apical hook; scutellum minute, wingless.

LEIOSOMA Kirby. *Molytes* p. Sch. 1 sp. *Cuc. punctatus* Marsh.

Broad, ovate, apterous; elytra punctate, striate; scutellum minute; tibiae hooked.

PLINTHUS Germ. *Lixus* p. Fabr. 1 sp. *Cuc. caliginosus* Fab. Don. 570.

Elongate, apterous; scutellum none; tibiae hooked; rostrum subcylindric.

HYPERA Germ. *Phytonomus* Sch. 29 sp. *Rhynch. fasciculosa* Gyll.

Oblong or ovate, squamose; tibiae not hooked; rostrum deflexed, subcylindric. Curt. 116.

PROCAS Steph. *Cuculio* p. Marsh. 2 sp. *Cuc. picipes* M.

Oblong, not squamose; rostrum long, subelavate; legs and antennæ slender.

Division 8. *Phyllobides* Sch.

PHYLLOBIUS Sch. *Cuculio* p. Linn. 12 sp. *Cuc. Pyri* Linn.

Oblong-ovate, squamose; tibiae rounded; rostrum short; second and third joints of antennæ elongate. Panz. 107. 4.

Division 9. *Cyclomides* Sch.

TRACHYPHLÆUS Germ. *Cuculio* p. Linn. 7 sp. *C. scabriculus* Linn.

Short, ovate, setose or hispid; femora unarmed; tibiae hooked; rostrum as long as the head, deflexed. Hbst. 6. 87. 10.

BRACHYSOMUS Sch. *Cuculio* p. Fab. 1 sp. *Cuc. hirsutulus* Fab.

Ovate, wingless; elytra subglobose; rostrum very short; antennæ 12-jointed. Pz. 7. 7.

Division 10. *Otiorrhynchides* Sch.

OTIORHYNCHUS Germ. *Pachygaster* Germ. ol. 22 sp. *Cuc. sulcatus* Fab.

Apterous, ovate, glabrous; rostrum laterally dilated beneath the insertion of the antennæ. Hbst. 6. 87. 5.

Legion 2. *Mecorhynchini* Sch.Division 1. *Erirhinides* Sch.

LIXUS Fab. *Leptosoma* Leach. 5 sp. *Cuc. paraplecticus* Linn. Curt. 542.

Oblong, narrow, subcylindric; rostrum elongate, nearly straight; tibiae hooked.

LARINUS Sch. *Cuculio* p. Hbst. 1 sp. *Cuc. sturnus* Hbst.

Elytra broad, ovate; rostrum robust, shorter than the thorax; antennæ sub-basal. Hbst. 6. 68. 5.

RHINOBATUS Meg. *Larinus* p. Germ. 1 sp. *Cuc. planus* Fab.

Ovate, subconvex; rostrum longer than the thorax, slender; femora unarmed; tibiae minutely hooked. Don. 509. 2.

RHINOCYLLUS Germ. *Rhinomaces* Leach. 1 sp. *Cuc. thommatophorus* Ross.

Antennæ scarcely geniculated; rostrum short, thickened; antennæ subapical. Don. 512.

PISODES Germ. *Pisocles* *Dej.* 3 sp. *Circ. pini* Linn. *Pz.* 42. 1.

Oblong-ovate; rostrum as long as the thorax; antennæ central, geniculated; femora unarmed; tibiæ hooked.

MAGDALIS Germ. *Thamnophilus* *Sch.* 4 sp. *Circ. carbonarius* Linn.

Rostrum twice as long as the head, curved; antennæ 12-jointed, slightly geniculated; femora dentate. *Curt.* 212.

RHINODES Dej. *MAGDALIS* p. *Germ.* 2 sp. *Circ. pruni* Linn.

Rostrum as long as the head, nearly straight; femora simple; club of antennæ small; elytra subcylindric. *Hbst.* 6. 64. 6.

PANUS Sch. *Rhina* p. *Latr.* 1 sp. *Rh. barbicornis* *Latr.*

Rostrum as long as the head; club of antennæ very large; femora not toothed.

NOTARIS Germ. *Eriphinus* p. *Sch.* 4 sp. *Circ. acridulus* Linn. *Pz.* 42. 10.

Short, ovate; elytra oblong-ovate; femora not toothed; rostrum long, curved; antennæ sub-apical.

DORYTOMUS Germ. *Eriphinus* p. *Sch.* 12 sp. *Circ. vorax* *Hbst.*

Anterior legs long; femora dentate; tibiæ slightly hooked; elytra elongate. *Panz.* 18. 13.

ERIRHINUS Sch. p. *NOTARIS* p. *Germ.* 4 sp. *Circ. festuca* *Hbst.*

Oblong; elytra not tubercled; second and third joints of antennæ longish; tibiæ curved. *Curt.* 634.

GRYPIDIUS Sch. *Grypus* *Germ.* 1 sp. *Rh. equiseti* *Fab.* *Panz.* 42. 4.

Subovate; elytra gibbose, tubercled, deflexed behind; scutellum small.

HYDRONOMUS Sch. *Bagous* p. *Germ.* 1 sp. *Circ. alismatis* *Marsh.*

Oblong, posteriorly attenuated; rostrum rather short; tibiæ curved, hooked; femora unarmed.

ELLESCUS Meg. *Phytonomus* p. *Sch. ol.* 1 sp. *Circ. bipunctatus* Linn.

Elytra oblong-ovate; femora and tibiæ unarmed, the latter straight; rostrum rather longer than the head. *Panz.* 42. 7.

ANTHONOMUS Germ. *Pallens* *Meg.* 10 sp. *Circ. pomorum* Linn.

Oblong-ovate, convex; tibiæ dilated in the middle; femora dentate. *Curt.* 562.

BALANINUS Germ. *Curculio* p. *Linn.* 11. sp. *Circ. nucum* Linn.

Rostrum nearly as long as the body, which is subtriangular; anterior tibiæ minutely hooked; antennæ inserted behind the middle of the rostrum. *Steph.* *Ill. pl.* 20. 4.

AMALUS Sch. *Curculio* p. *Hbst.* 1 sp. *Circ. scorbillum* *Hbst.*

Elytra subovate, convex; antennæ 11-jointed; rostrum long, slender, not received in a pectoral groove; femora and tibiæ simple. *Hbst.* 6. 92. 13.

ANOPLUS Sch. *Rhynchosenus* p. *Gyll.* 1 sp. *Rh. planaris* *Gyll.*

Ungues wanting; rostrum not received in a pectoral groove.

TYCHIUS Germ. *Curculio* p. *Linn.* 11 sp. *Circ. 5-punctatus* Linn.

Ovate, suboconvex, squamose; rostrum elongated; thorax globose; pectoral groove wanting. *Steph. pl.* 20. 3.

SIBYNES Sch. *Sibinia* *Germ.* 3 sp. *Circ. primitus* *Hbst.* *Hbst.* 6. 66. 8.

Pubescent; elytra short, broad, depressed; thorax posteriorly produced; femora unarmed; antennæ 11-jointed; funiculus 6-jointed.

ORCHESTES Illig. *Salius* *Germ.* 19 sp. *Circ. quercus* Linn. *Curt.* 678.

Hind femora incrassated; saltatorial; antennæ 11-jointed.

TACHYERGES Sch. *Orchestes* p. *Illig.* 7 sp. *Circ. salicis* Linn.

Hind legs saltatorial; antennæ 12-jointed. *Donov.* 121. 5—7.

ORTHOCHÆTES Mull. *STYPHLUS?* Sch. ol. 1 sp. *O. setiger* Germ.
Elytra oblong-ovate, connate, setose; wings 0; antennæ 12-jointed; femora and tibiæ unarmed.

Division 3. *Cryptorhynchides* Sch.

CRYPTORHYNCHUS Illig. *CURCULIO* p. Linn. *C. Lapathi* Linn.
Elytra tubercled; tibiæ bent at base; rostrum received in a pectoral groove; second, third, and fourth joints of antennæ elongate. Donov. 205. 1.

LYPRUS Sch. *Lixus* p. Ahr. 1 sp. *Rhynch. cylindrus* Gyll.
Elongate, subcylindric, compressed; a pectoral groove; antennæ 11-jointed; femora unarmed. Ahr. Act. Hal. 2. pl. 1. 9.

PACHYRHINUS Kirby. *HYDATICUS* Sch. 6 sp. *Cure. comari* Hbst.
Elytra short, ovate; rostrum very short and thick; antennæ 11-jointed; pectoral groove wanting. Curt. 558.

BAGOUS Germ. *RHYNCHANUS* p. Gyll. 5 sp. *Cure. binodus* Hbst.
Elytra oblong-ovate; antennæ short, slender; tibiæ long and bent; femora unarmed. Hbst. 6. 77. 15.

RUTIDOSOMA Steph. *ACALLES* p. Curt. 1 sp. *Cure. globulus* Hbst.
Elytra globose, moveable; thorax short; femora dentate; tibiæ hooked; antennæ 12-jointed. Hbst. 6. 91. 7.

ACALLES Sch. *CURCULIO* p. Marsh. 2 sp. *C. ptinoides* M. Curt. 550.
Elytra connate, subgibbose; thorax rather long; tibiæ hooked.

NEDYUS Sch. olim. *FALCIGER* Meg. 40 sp. *Cure. sisymbrii* Hbst.
Subrhomboidal, squamous; rostrum elongated; pectoral groove short; tibiæ unarmed. Steph. Ill. M. pl. 20. f. 2.

CEUTORHYNCHUS Sch. *RHYNCHANUS* p. Gyll. *Cure. asperifoliarum* Gyll.
Subrhomboidal, scabrous; rostrum elongate; tibiæ unarmed; pectoral channel not extending beyond anterior coxae.

CÆLIODES Sch. *CRUTORHYNCHUS* p. Curt. *Cure. geranii* Payk. Curt. 670.
Antennæ 12-jointed; rostrum long; pectoral channel extending to intermediate coxae; tibiæ with a tooth outside.

POOPHAGUS Sch. *MIRABUS* p. Steph. *Cure. nasturtii* Spence.
Antennæ 12-jointed; body somewhat elongated and depressed; femora with a tooth beneath. Steph. Ill. 20. f. 1.

MONONYCHUS Sch. *RHYNCHANUS* p. Fab. 1 sp. *Rh. pseudacori* Fab.
Tarsi with a single terminal claw. Curt. 292.

RHINONCUS Sch. olim. *CRUTORHYNCHUS* p. Sch. 13 sp. *Cure. pericarpiae* L.
Subrhomboidal; rostrum short, thick; tibiæ unarmed. Hbst. 6. 91. 12.

OROBITES Sch. *OROBATIS* Germ. 1 sp. *Cure. cyanus* Linn. Pl. 57. 10.
Elytra nearly globose, polished; pectoral groove short; tibiæ unarmed.

Division 4. *Cionides* Sch.

CIONUS Clv. *CURCULIO* p. Linn. 5 sp. *Cure. scrophulariae* Linn.
Subglobose, squamose; antennæ 10-jointed; third joint long, clavate. Donov. 2. pl. 60.

CLEOPUS Meg. *CIONUS* p. Sch. 1 sp. *Cure. pulchellus* Hbst.
Subelongate, ovate; antennæ 10-jointed; third joint moderate; rostrum bent. Hbst. 6. pl. 88. f. 1.

GYMNAETRON Sch. *CIONUS* p. Germ. 1 sp. *Cure. beccabunga*.
Ovate, convex, squamose; pygidium naked; antennæ 10-jointed. Curt. 627.

- RHINUSA** Kirby. *GYMNAETRON* p. Sch. 3 sp. *Cerc. antirrhini* Pz.
Elytra depressed, subquadrate; anterior tibiae minutely hooked; tip of rostrum slender. Panz. 26. 18.
- MIARUS** Sch. olim. *GYMNAETRON* p. Sch. 4 sp. *Cerc. campanula* Linn.
Elytra abbreviated, subquadrate, subdepressed; antennæ 10-jointed; rostrum filiform. Hbst. 6. 70. f. 15.
- MECINUS** Germ. *CURCULIO* p. Marsh. 3 sp. *Cerc. semicylindricus* M.
Elongate, subcylindric; pygidium covered; rostrum rather short, robust. Hbst. 6. 78. 6.
- SPHÆRULA** Meg. *NANODES* Sch. 1 sp. *Cerc. Lythri* Pk. Pz. 17. 8.
Convex, attenuated behind; antennæ 9-jointed; elytra gibbous.

Division 5. *Rhyncophorides* Sch.

- CALANDRA** Clv. *RHYNCOPHORUS* Hbst. 2 sp. *Cerc. granarius* Linn.
Antennæ 9-jointed; funiculus 6-jointed. Clv. 1. pl. 2.

Division 7. *Cossonides* Sch.

- COSSONUS** Clairv. *CURCULIO* p. Pz. 2 sp. *Cerc. linearis* Fabr. Curt. 59.
Depressed; antennæ 9-jointed; funiculus 7-jointed; rostrum elongate, dilated at the tip.
- RHYNCOLUS** Sch. *Cossonus* p. Gyll. 4 sp. *Cerc. ater* Linn. Pz. 19. 14.
Antennæ 9-jointed; rostrum very short, broad, and depressed.
- BARIS** Steph. *STENOSOMA* Kirby MSS. 5 sp. *Cerc. atriplicis* Pk.
Antennæ 9-jointed; rostrum linear, cylindric, longer than the head. Hbst. 6. pl. 71. 3.

Family 4. *SCOLYTIDÆ* Westw. (*Scolytidae* p. Steph.)

- HYLASTES** Erickson. *HYLURGUS* p. Steph. 10 sp. *Hyles. ater* Fabr.
Funiculus 7-jointed; club 4-jointed, orbicular, compressed; tibiae externally denticulate. Hbst. 5. pl. 48. 4.
- DENDROCTONUS** Erichs. *HYLURGUS* p. Curt. 1 sp. *Dermest. pinstiperda* L.
Funiculus 5-jointed; club 4-jointed, suborbicular, compressed; tibiae denticulate. Curt. 104.
- SCOLYTUS** Geoff. *ECCOPTOGASTER* Hbst. 3 sp. *Scol. destructor* Oliv.
Funiculus 6-jointed; club solid, compressed, subovate; tibiae compressed, entire, hooked. Curt. 43.
- HYLESINUS** Fabr. *Irs* p. Marsh. 8 sp. *Hyles. crenatus* Fabr. Curt. 522.
Funiculus 7-jointed; club 4-jointed, oblong, acuminate; tibiae compressed at the tip, externally denticulate.
- TRYPODENDRON** Steph. $\left\{ \begin{array}{l} \text{XYLOTERUS Erichs.} \\ \text{APATE Kirby.} \end{array} \right\}$ 2 sp. *Derm. domesticus* L.
Funiculus 4-jointed; club solid; labium parallel; tibiae serrated. Panz. 43. 19.
- POLYGRAPHUS** Erichs. *HYLESINUS* p. Fabr. 1 sp. *Hyl. pubescens* Fab.
Funiculus 4-jointed; club solid, suboval, acuminate; tibiae denticulate. Panz. 15. 5.
- TOMICUS** Latr. *BOSTRICHUS* Erichs. 9 sp. *Derm. typographus* Linn.
Funiculus 5-jointed; club 4-jointed, tuncate; labium triangular. Panz. 15. 2.

PLATYPUS Herbst. *CYLINDRA* Dufts. 2 sp. *Pl. cylindrus* Herbst.

Funiculus 4-jointed; club nearly round; tarsi very long and slender; tibiae striated. Curt. 51.

Stirps 2. *Eucerata* Westw. (Longicornes Latr., Cerambycidae K. Linn. Trans. vol. xii.)

Family 1. **PRIONIDÆ** Leach. (Cerambyx p. Linn.)

PRIONUS Geoff. *CERAMBYX* p. Linn. 1 sp. *Cer. coriarius* Linn. Don. 491.

Thorax dentate.

SPONDYLIS Fabr. *ATTELABUS* p. Linn. 1 sp. *Att. buprestoides* Linn.

Thorax entire, subglobose; tibiae subserrate. Panz. 44. 19.

ASEMUM Esch. *CALLIDIUM* p. Curt. 1 sp. *Cer. striatum* Linn. Curt. 295.

Thorax entire, subdepressed; tibiae simple.

Family 2. **CERAMBYCIDÆ** Leach. (Cerambyx and Necydalis Linn.)

Subfamily 1. *Cerambycides*.

NECYDALIS Linn. *MOLORCHUS* Fabr. 2 sp. *Nec. minor* Linn. Curt. 11.

Elytra very short, square.

(**STENOPTERUS** Illig. *NECTDALIS* p. Linn. 1 sp. *Nec. rufa* Linn.

Elytra not covering the wings, attenuated. Oliv. 4. pl. 1. 6.)

AROMIA Serv. *CALICHROMA* p. Latr. 1 sp. *Cer. moschatus* Linn. Don. 94.

Depressed, elytra covering the wings, of equal breadth throughout; femora not clavate; antennæ glabrous; thorax tubercled.

CERAMBYX Serv. *HAMATICHERUS* Meg. 1 sp. *Cer. Heros* Fabr.

Subconvex; antennæ not spined; middle tibiae simple; thorax transversely rugose. Panz. 82. 1.

CALLIDIUM Fab. *CERAMBYX* p. Linn. 12 sp. *Cer. bajulus* Linn. Curt. 295. Broad, depressed; last joint of palpi obtrigonate; thorax depressed; sides unarmed; antennæ short.

(**CYLINDERA** Newman. ——— 1 sp. *Cyl. pallida* Newm.

Thorax elongate, subcylindric; elytra parallel; head as broad as the thorax.)

ARHOPALUS Serv. *CALLIDIUM* p. Steph. 1 sp. *Cer. rusticus* Linn. Pz. 70. 8.

Thorax subdepressed; femora short, clubbed, compressed; last joint of palpi triangular.

GRACILIA Serv. *OBRIUM* p. Curt. 1 sp. *Saperda minuta* Fab. Don. 553.

Narrow; thorax unarmed, depressed; maxillary palpi longer than the labial; antennæ 11-jointed; head inclined downwards.

CLYTUS Fab. *LEPTURA* p. Linn. 5 sp. *Lept. arietis* Linn. Curt. 199.

Thorax globose, unarmed; antennæ setaceous; elytra entire at the tip.

OBRIUM Meg. *SAPERDA* p. Fab. 1 sp. *Ce. Cantharinus* Linn. Curt. 91.

Slender; thorax obtusely tubercled at the sides; antennæ pubescent; tibiae scarcely compressed.

(**TRITOMACRUS** Neom. ——— 1 sp. *Tritom. testaceus* Newm.

Slender; thorax long, depressed, broader than the head; antennæ longer than the body.)

Subfamily 2. *Lamiides*.

ÆDILIS Serv. *ACANTHOCINUS* Meg. 1 sp. *Æd. montana* Serv. Donov. 72.

Broad, flattened; thorax transversely tubercled; antennæ very long in ♂.

AGAPHANTIA Serv. **SAPERDA** Leach. 1 sp. *Sap. Cardui* Fabr. Don. 209.
Narrow, subcylindric; antennæ distinctly 12-jointed.

MESOSA Serv. **AFHELOCNEMIA** Steph. 1 sp. *Cer. nubilus* Oliv. Curt. 172.
Broad, subdepressed; thorax transverse, unarmed; antennæ slender, pilose within;
intermediate tibiae simple.

TETROPS K. **SAPERDA** p. Fab. 1 sp. *Lept. præusta* Linn. Martyn 28. 12.
Narrow, subcylindric; eyes four; antennæ 11-jointed.

SAPERDA Fab. **LAMIA** p. Leach. 8 sp. *Cer. carcharias* Linn. Curt. 275.
Linear; thorax cylindric, unarmed; antennæ 11-jointed; tibiae simple.

POGONOCHERUS Serv. **LAMIA** p. Leach. 3 sp. *Cer. hispidus* Linn.

Short, subconvex; antennæ pilose beneath; disc of thorax tubercled; elytra spined
at the tip. Donov. 64.

LEIOPUS Serv. **POGONOCERUS** p. Steph. 1 sp. *Cer. nebulosus* Linn.

Short, subconvex; antennæ glabrous; femora clavate; elytra entire. Donov.
394.

MONOCHAMUS Meg. **LAMIA** p. Fab. 2 sp. *Cer. sutor* Linn. Curt. 519.
Elytra somewhat parallel; antennæ glabrous; anterior male tarsi hairy; fore legs
long; thorax laterally spined.

LAMIA Serv. **CERAMBYX** p. Linn. 1 sp. *Cer. textor* Linn. Panz. 19. 1.

Thorax cylindric, subquadrate, spined at the sides; antennæ naked; legs robust,
equal in both sexes.

Family 3. *LEPTURIDÆ* Leach. (*Leptura* Linn.)

RHAGIUM Fab. **HARGIUM** Leach. 3 sp. *Lept. inquisitor* Linn. Pz. 82. 4.
Broad, depressed; thorax spined on each side; antennæ short.

TOXOTUS Meg. **LEPTURA** p. Linn. 2 sp. *Cer. meridianus* Linn. Don. 435.
Elongate; thorax tubercled at the sides; antennæ long.

STRANGALIA Serv. **LEPTURA** p. Auct. 2 sp. *Lept. elongata* De G. Don. 84.
Thorax unarmed, narrowed in front, nearly flat above; body very narrow, nearly
pointed behind; eyes globular; front of head produced.

LEPTURA Linn. Serv. — 11 sp. *Lept. 4-fasciata* Linn. Curt. 362.
Thorax unarmed, subconvex; eyes moderate; elytra attenuated.

GRAMMOPTERA Serv. **LEPTURA** B. Steph. Cat. 7 sp. *Lept. præusta* Fab.
Thorax unarmed, subconvex; elytra not attenuated; body linear. Panz. 34. 17.

PACHYTA Meg. **LEPTURA** p. Curt. 4 sp. *Lept. 8-maculata* Fab. Don. 353.
Robust; thorax subconical, with a slight obtuse tubercle on each side; elytra
short, nearly parallel; humeral angles not prominent.

Stirps 3. *Phytophaga* Kirby.

Race 1. *Parameca* Westw. comprising the single

Family *CRIOCERIDÆ* Leach.

DONACIA Fab. **LEPTURA** p. Linn. 21 sp. *Don. crassipes* Fab. Curt. 494.
Antennæ with the fourth and following joints elongated; elytra entire at the
tips.

MACROPLEA Hoff. **HAEMONIA** Latr. 2 sp. *Don. Zosteræ* Fab.
Antennæ with the fourth and following joints elongated; elytra mucronated.
Curt. 318.

ORSODACNA Latr. **CRIOCERIS** p. Fab. 3 sp. *Ors. chlorotica* Latr.
Palpi thickened at the tips; thorax not tubercled; joints of antennæ short.
Guer. Ic. R. A. 47.

- CRIOCERIS** *Geoff.* *LEMA* p. *Fab.* 7 sp. *Chr. merdigera* Linn. *Curt. 323.*
Palpi filiform; joints of antennæ short; elytra broad.
ZEUGOPHORA *Kraatz.* *LEMA* p. *Gyll.* 2 sp. *L. subspinosa* *Pz.* *Pz. 88. 10.*
Palpi thickened; joints of antennæ short; thorax tubercled.

Race 2. *Cyclica* Latr.

Family 1. *CASSIDIDÆ*. (Cassida and Hispa *Linn.* Cassidæ *Leach.*)

- CASSIDA** *Linn.* &c. ——— 19 sp. *Cass. murrea* Linn. *Curt. 127.*
Suborbicular, flat beneath; mouth concealed by the prosternum; thorax covering
the head.
HISPA *Linn.* *CAIOCERIS* p. *Geoff.* 1 sp. *H. atra* Linn. *Steph. Ill. pl. 23 f. 5.*
Elongate-ovate, spinose; mouth exposed; head exserted.

Family 2. *GALERUCIDÆ* Steph.

Subfamily 1. *Galerucides* (Ambulatorii.)

- AUCHENIA** *Steph.* *CAIOCERIS* p. *Panz.* 1 sp. *Chrys. 4-maculata* Linn.
Antennæ shorter than the body, with elongate joints, the second much shorter
than the third. *Curt. 366.*

- ADIMONIA** *Schrantz.* *CHYSOMELA* p. *Linn.* 2 sp. *Ch. halensis* Linn.
Antennæ with the second and third joints equal, short; labrum emarginate.
Panz. 91. 9.

- GALERUCA** *Geoff.* *CAIOCERIS* p. *Marsh.* 13 sp. *Chrys. Tanaceti* Linn.
Antennæ shorter than the body, with short joints, the second much shorter than
the third. *Curt. 371.*

- CALOMICRUS** *Dillw.* *LUPERUS* p. *Curt.* 1 sp. *Cr. circumfusa* *Marsh.*
Antennæ long with the second and third joints equal, short; labrum entire.
Panz. 21. 18.

- LUPERUS** *Geoff.* *CAIOCERIS* p. *Fab.* 2 sp. *Chrys. flavipes* Linn.
Antennæ very long; the second and third joints short, equal. *Curt. 370*, details.

Subfamily 2. *Halticides*. (Saltatorii.)

- HALTICA** *Illig.* *CHYSOMELA* p. *Linn.* 44 sp. *Chrys. nemorum* Linn.
Oblong-ovate; thorax narrower than the elytra; posterior tarsi short, apical.
Curt. 630.

- THYAMIS** *Steph.* *LONGITARSUS* *Latr.* 38 sp. *Halt. 4-pustulata* *Ill.* *Pz. 88. 2.*
Posterior tarsi elongate, apical; posterior tibiae not dentate.

- MANTURA** *Steph.* *HALTICA* p. *Illig.* 6 sp. *Chrys. rustica* Linn.
Oblong-ovate; thorax as broad as the elytra; posterior tarsi short, apical.

- CARDIAPUS** *Curtis.* ——— 1 sp. *C. Matthewsii* *Curt.* *Curt. 435.*
Subcylindrical; thorax as broad as the elytra; posterior tarsi short, apical.

- MACROCNEMA** *Steph.* *PSYLLIODES* *Latr.* 18 sp. *Chrys. hyoscyami* Linn.
Posterior tarsi elongate, inserted before the apex of the tibiae which are not
toothed. *Curt. 486.*

- SPHÆRODERMA** *Steph.* *HALTICA* p. *Illig.* 6 sp. *Halt. globosa* *Pz.*
Hemispherical; antennæ with simple joints; posterior tarsi short, apical. *Panz.*
25. 13.

- CHÆTOCNEMA** *Steph.* *HALTICA* p. *Auct.* 6 sp. *H. concinna* *Marsh.*
Posterior tibiae externally dentate; head porrected. *Ent. Hef. 3. f. 1.*

DIBOLIA *Latr.* **HALTICA** p. *Auct.* 2 sp. *H. Cynoglossi* Ent. H.
Posterior tibiae externally spined, with a long bifid spur; head retracted. Ent.
H. 1. f. 2.

MNIOPHILA *Steph.* **HALTICA** p. *Auct.* 1 sp. *H. macroram* Ent. H.
Hemispherical; eighth joint of antennæ very small; posterior tarsi short, apical.
Ent. H. 2. f. 12.

Family 3. **CHRYSOMELIDÆ** Leach. (*Chrysomela* p. *Linn.*)
EUMOLPUS *Fabr.* **CHRYSOMELA** p. *Linn.* 4 sp. *Chrys. obscura* Linn.

Head vertical; antennæ as long as the body, thickened at the tips. Steph.
pl. 23. f. s.

CRYPTOCEPHALUS *Geoff.* **CHRYSOMELA** p. *Linn.* 22 sp. *Ch. sericea* Linn.
Head vertical; antennæ as long as the body, filiform. Curt. 35.

CLYTHRA *Laicharting.* **CHRYSOMELA** p. *Linn.* 5? sp. *Chr. 4-punctata* Linn.
Head vertical; antennæ short, serrated. Curt. 582.

HELODES *Payk.* **PRASOCURIS** *Latr.* 2 sp. *Chr. Phellandrii* Linn. Curt. 506.
Oblong; thorax quadrate; head exerted; wings two.

MELASOMA *Dilke.* **LINA** *Meg.* 5 sp. *Chrys. populi* Linn. Albin. pl. 63.
Head exerted; palpi filiform, truncate; thorax transverse; wings two.

TIMARCHA *Meg.* **TENEBRIO** p. *Linn.* 2 sp. *Ten. levigatus* Linn. Don. 276.
Apterous; head exerted; elytra soldered together.

CHRYSOMELA *Linn.* &c. ——— 27 sp. *Chr. pallida* Linn. Curt. 111.
Winged; palpi subsecundiform; thorax transverse; head exerted.

PHÆDON *Meg.* **CHRYSOMELA** p. *Linn.* 14 sp. *Chrys. armoraciae* Linn.
Winged; head exerted; thorax transverse; palpi filiform, obtuse, or acute, not
truncate. Pz. 44. 15.

Sect. III. PSEUDOTRIMERA Westw. (Trimera *Latr.*)

Family 1. **EROTYLIDÆ** (Clavipalpi *Latr.*)

TRITOMA *Fab.* **DEAMESTES** p. *Marsh.* 1 sp. *Tr. bipustulatum* Fab.
Body nearly hemispherical. Curt. 498.

TRIPLAX *Payk.* **SILPHA** p. *Linn.* 6 sp. *Silph. russica* Linn. Curt. 706.
Body oblong. Steph. M. pl. 17. fig. 4—6.

Family 2. **ENDOMYCHIDÆ** Leach. (Fungicolæ *Latr.*)

ENDOMYCHUS *Payk.* **CHRYSOMELA** p. *Linn.* 1 sp. *Chrys. coccinea* Linn.
Thorax broadest behind; club of antennæ distinct, 3-jointed. Curt. 570.

LYCOPERDINA *Latr.* **ENDOMYCHUS** p. *Fabr.* 1 sp. *End. Bovista* Pk.
Thorax subcordate, truncate; club of antennæ indistinct. Curt. 355.

Family 3. **COCCINELLIDÆ** Leach. (*Coccinella* *Linn.* *Aphidiphagi* *Latr.*)

CHILOCORUS *Leach.* **COCCINELLA** *Auct.* 4 sp. *Cocc. bipustulata* Linn.
Elytra with a dilated margin; thorax lunate, hinder margins rounded. Martyn,
18. f. 21.

COCCINELLA *Linn.* ——— 34 sp. *Cocc. 7-punctata* Linn. Curt. 208.
Body glabrous, hemispherical; posterior angles of thorax acute.

SPHÆROSOMA *Leach.* ——— *Sph. quercus* Leach.
Spherical, pilose; antennæ with an abrupt club.

SCYMNUS *Herbst.* **NITIDULA** p. *Fabr.* 16 sp. *Scym. nigrinus* Hbst.
Hemispherical, pubescent; antennæ short, abruptly clavate. Panz. 24. 12.

- RHYZOBIA Steph.** *NITIDULA* p. *Fabr.* 1 sp. *Nit. Litura* *Fab.* Pz. 35. 5.
Elytra convex, pubescent; antennæ moderate, subclavate.
- CACICULA Meg.** *CACIDULA* *Dej.* 2 sp. *Chrys. scutellata* *Fab.* *Curt.* 144.
Elytra oval, subconvex, punctate-striate; antennæ moderate.
-

ORDER II. EUPLEXOPTERA Westw. (*DERMAPTERA Leach*, nec *Retzius*, *De Geer*), containing the single

Family *FORFICULIDÆ* Stephens.

- FORFICULA Linn.** *FORFICULA* a. *Gén.* 4 sp. *F. auricularia* *Curt.* 560.
Antennæ 14-jointed; tegmina and wings perfect.
- APTERYGIDA *** *Westw.* *CHELIDURA Steph.* nec *Latr.* 1 sp. *F. pedestris* *Bon.*
Antennæ 12-jointed; tegmina perfect; wings wanting.
- LABIA Leach.** *FORFICULA* p. *Latr.* 1 sp. *F. minor* *Linn.* Sam. pl. 4. 16.
Antennæ 10—12-jointed; tegmina and wings perfect.
- FORFICESILA † Latr.** *LABIDURA Leach.* 1 sp. *F. gigantea* *Fab.*
Antennæ with about 25 joints; tegmina and wings perfect. K. & S. pl. 1. f. 7.
-

ORDER III. ORTHOPTERA Olivier. (*HEMIPTERA Retzius*, nec *De Geer*,
HEMIPTERA p. *Linn.*)

Sect. I. *CURSORIA*, containing the single

Family 1. *BLATTIDÆ* Stephens. (Order *Dictyoptera Leach.*)

- ECTOBIA Westw.** *BLATTA* *Serv.* 8 sp. *Bl. lapponica* *Fabr.* *Curt.* 556.
Tarsi with the three basal joints gradually diminishing in length; the basal joint
no so long as the four others united; fourth sub-bilobed; anal styles not prominent.
- (*BLATTA Linn.* { *KAKERBLAC Latr.*
 STELEOPYGA Fisch. } 3 sp. *Bl. orientalis* *Linn.* Pz. 90. 12.)

Sect. II. *RAPTORIA* (Fam. 2. *Mantidae*).

Sect. III. *AMBULATORIA* (Fam. 3. *Phasmidae*).

(There are no British species of these two sections.)

Sect. IV. *SALTATORIA*.

Family 4. *ACHETIDÆ* Leach. (*Gryllides Latreille.*)

- GRYLLOTALPA Ray.** *GRYLLOPSIS* (*ACHETA*) p. *Linn.* 1 sp. *G. vulgaris* *Latr.*
Forelegs palmate; ovipositor not exserted. *Curt.* 456.
- ACHETA Fabr.** *GRYLLOPSIS* (*ACHETA*) *Linn.* 3 sp. *A. domestica*. *Curt.* 293.
Forelegs simple; ovipositor long, exserted.
-

* If the genera *Chelidura* and *Labia* be retained, it will be equally correct to form the species discovered by me at Ashford, Kent, and described by Stephens, under the name of *Chelidura albipennis*, into a separate genus.

† I have employed Latreille's name, that of *Labidoures* having been given to the entire group by Dumeril and L. Dufour.

Family 5. *GRYLLIDÆ* Leach. (*Locustariae Latr.*)*EPHIPPIGER* *Latr.* *BARBITISTES* *Charp.* 1 sp. *E. virescens* Steph.

Tegmina very short, ocellated in ♂; very minute, rugose in ♀; wings 0; vertex subacuminate; ovipositor broad, short, incurved.

MICROPTERYX *Steph.* *ANISOPTERA* *Serv.* 3 sp. *G. brachyptera* Linn.

Tegmina nearly as long as abdomen, ocellated in ♂; front broad, obtuse, rounded; wings none, or rudimental. De Geer, S. pl. 22. f. 2, 3.

XIPHIDION *Latr.* *LOCUSTA* p. *Fab.* 2 sp. *L. fusca* *Fab.* *Panz.* 33. f. 2.

Tegmina more or less elongated, ocellated in ♂; wings unfit for flight; head acuminate in front; eyes exserted.

MECONEEMA *Serv.* *LOCUSTA* p. *Latr.* 1 sp. *L. varia* *Fab.* *Donov.* 3. pl. 79.

Slender; tegmina long, not ocellated in ♂; wings ample; front acuminate; abdomen ♂ terminated by two long incurved processes.

PHASGONURA *Westw.* *LOCUSTA* *Serv.* 1 sp. *G. viridissimus* Linn.Tegmina and wings long, ocellated in ♂; front acuminate; apex of abdomen with four short styles; ovipositor long, straight. *Donov.* 4. pl. 190.*DECATICUS* *Serv.* *ACRIDA* p. *Curt.* 3 sp. *Gr. verrucivorus* Linn. *Curt.* 82.

Tegmina and wings long, ocellated in ♂; front obtuse; eyes sessile; ovipositor long, more or less incurved.

Family 6. *LOCUSTIDÆ* Leach. (*Acriidii Latr.*)*LOCUSTA* *Leach.* *ŒDIPODA* *Latr.** 22 sp. *G. flavipes* Gmel. *Curt.* 608.

Prothorax not scutelliform; antennæ simple; wings and tegmina ample.

PODISMA *Latr.* *GYLLUS* p. *Linn.* 1 sp. *G. pedestris* Linn. *Panz.* 30. 8.

Tegmina and wings very short, unfit for flight; antennæ simple.

GOMPHOCERUS *Leach.* *GOMPHOCEROS* *Thunb.* 8 sp. *G. rufus* Linn.Antennæ clavate. *Steph.* 6. pl. 28. f. 6.*TETRIX* *Latr.* *ACRIDIUM* *Fab.* 3 sp. *G. subulatus* Linn. *Curt.* 439.

Prothorax produced behind over the abdomen; tegmina very minute; wings ample.

ORDER IV. THYSANOPTERA *Haliday.*

Note.—The following is an abstract of the arrangement of these insects given by Mr. Haliday in the 15th Number of the *Entomological Magazine*.

Stirps and Family 1. *TUBULIFERA*. Antennæ 8-jointed; no borer in the female.Gen. 1. *Phlaethriops.*Sect. A. Ocelli and wings 0. 1 sp. *P. pedicularia.*

Sect. AA. Ocelli 3; wings complete or abbreviated.

Subs. a. Sides of head parallel. 5 sp. *P. aculeata* *Fab.*Subs. aa. Sides of head converging in front. 2 sp. *P. coriacea.*

* Latreille gives the name of *Œdipoda* to those locusts which are destitute of a prosternal point, calling the larger species which have a strong point *Acridium*. As the migratory locust belongs to the former group, it is proper that it should retain the name of *Locusta*, whilst the rejection of the name of *Acridium*, for the reasons given in the body of my work, has rendered the adoption of another name necessary for the larger species, and which I have elsewhere named *Rutidoderes*.

Stirps 2. TEREBRANTIA. Antennæ typically 9-jointed; females with a 4-valved borer.

Fam. 2. STENELYTRA. Borer curved downwards; elytra narrow, with longitudinal nerves alone.

Gen. 2. *Heliothrips*. Body reticulated; wings nearly capillary. 1 sp.
H. adonidum.

Gen. 3. *Sericothrips*. Body smooth; abdomen tomentose; wings abbreviated. 1 sp. *S. Staphylinus*.

Gen. 4. *Thrips*. Body smooth, glabrous.

Subg. 1. *Chirothrips*. Ocelli 3; prothorax produced in front, narrowed. 1 sp. *Th. manicata*.

Subg. 2. *Limothrips*. Ocelli 3; prothorax of equal breadth; last segment armed with two dorsal spines in ♀. 2 sp. *Th. Ceratium*.

Subg. 3. *Aptinothrips*. Ocelli and wings 0; prothorax of equal breadth. 2 sp. *Th. rufa* Gmel.

Subg. 4. *Thrips* proper. Last segment unarmed; style shorter than sixth joint of antennæ. 23 sp. *T. physapus*.

Subg. 5. *Belothrips*. Last segment unarmed; style of antennæ longer than sixth joint. 1 sp. *Th. acuminata*.

Fam. 3. COLEOPTERATA. Borer recurved; elytra broad, with longitudinal and transverse nerves.

Gen. 5. *Melanothrips*. Antennæ distinctly 9-jointed; fore-wings with three transverse nerves. 1 sp. *Mel. obesa*.

Gen. 6. *Ecothrips*. Antennæ apparently 5-jointed; the four terminal joints very minute and soldered into a compact mass.

Subg. 1. *Coleothrips*. Subdepressed; fore-wings with four transverse nerves. 2 sp. *Thrips fasciata* Linn.

Subg. 2. *Ecothrips* proper. Cylindrical; wings rudimental. 1 sp. *E. albicincta*.

ORDER V. NEUROPTERA Linn.

Sect. I. BIOMORPHOTICA Westw.

Family 1. TERMITIDÆ Leach.

(There is no British species of this family.)

Family 2. PSOCIDÆ Leach. (*Psoquillii Latreille*)

PSOCUS Latr. **HEMEROBIUS** p. Linn. 43 sp. *H. bipunctatus* Linn. Pl. 94. 21.
Head broad; posterior margin of fore-wings with four cells.

CÆCILIUS Curt. ————— 4 sp. *C. fenestratus* Curt. Curtis 648.
Tarsi 2-jointed; posterior margin of fore-wings with three cells.

ATROPOS Leach. **TERMES** p. Linn. 1 sp. *T. pulsatorium* Linn. Wood, pl. 75.
Apterous; tarsi 3-jointed; posterior femora thickened; abdomen oblong-ovate, depressed; head oblong.

LACHESILLA Westw. *Atracoros* p. Leach. 1 sp. *T. fatidicum* Linn.
Head transverse; tarsi 2-jointed; wings 0 in ♀, 2 short in ♂; legs slender.
My fig. 59. 16.

Family 3. *PERLIDÆ* Leach. (Perlariae p. Latr.)

PERLA Geoff. *Semibasis* p. Fabr. 4 sp. *Phryg. bicaudata* Linn. Curt. 190.
Abdomen robust; bisetigerous; wings ♂ abbreviated.

ISOGENUS Newm. ——— 1 sp. *I. subdecula* Newm. Steph. 6. pl. 31. f. 2.
Abdomen robust, bisetigerous; wings alike in both sexes.

CHLOROPERLA Newm. *PERLA* p. Latr. 6 sp. *P. lidea* Latr.

Abdomen slender; wings alike in both sexes; nerves fewer than in Isogenus.
NEMOURA Latr. *Semibasis* p. Fabr. 14 sp. *P. nebulosa* Linn.

Abdomen not setigerous; antennæ slender, setaceous. Steph. 6. pl. 31. f. 3.

LEUCTRA Steph. NEMOURA p. Steph. 3 sp. *L. geniculata* St. St. 6. pl. 31. f. 4.
Abdomen not setigerous; antennæ more robust, submoniliform; wings elongated,
acuminated.

Family 4. *EPHEMERIDÆ* Leach. (Ephemerinae Latr.)

EPHEMERA Linn. EPHEMERA A. Steph. 6 sp. *E. vulgata* Linn. Curt. 708.
Wings four; three anal filaments; head of larva cornuted.

LEPTOPHLEBIA Westw. EPHEMERA B. Steph. 10 sp. *E. vespertina* De G.
Wings four; three anal filaments; head of larva unarmed. (2. pl. 17. f. 15.)

BAETIS Leach. EPHEMERA p. Linn. 23 sp. *Eph. bioculata* Linn.

Wings four; abdomen with two terminal filaments. St. 6. pl. 29. f. 2.

BRACHYCERCUS Curt. EPHEMERA p. Fabr. 5 sp. *Eph. brevicauda* Fab.
Wings two; abdomen with three filaments scarcely longer than the body. Har-
ris, Exp. pl. 6. f. 3.

CENIS Steph. ——— 2 sp. *C. macrura*. St. 6. pl. 29. f. 1.

Wings two; abdomen with three filaments several times longer than the body.

CLOEON Leach. EPHEMERA p. Linn. 10 sp. *Eph. diptera* Linn.

Wings two; posterior pair obsolete; abdomen with two setæ. St. 6. pl. 29. f. 3.

Family 5. *LIBELLULIDÆ* Westw. (Libellulina MacL.)

Subfamily 1. *Libellulides* Westw. (Libellulidae Leach.)

ANAX Leach. LIBELLULA p. V. L. 1 sp. *An. formosa* V. L.

Ocelli in a row; eyes contiguous; wings acuminated; anal angle of posterior pair
rounded.

ÆSHNA Fabr. LIBELLULA p. Linn. 7 sp. *L. grandis* Linn. Donov. 337. f. 2.
Ocelli in a row; eyes contiguous; wings obtuse; anal angles of posterior pair
more or less angulated in ♂.

CORDULEGASTER Leach. LIBELLULA p. Linn. 1 sp. *H. annulata* Latr.
Ocelli in a row; abdomen clavate; anal angle of posterior wings strongly angu-
lated. Donov. 4. 30.

GOMPHUS Leach. LIBELLULA p. Linn. 2 sp. *L. vulgarissima* Linn. Donov. 429.
Ocelli in a line; eyes remote in both sexes; abdomen clavate.

CORDULIA Leach. LIBELLULA p. Linn. 3 sp. *L. aenea* Linn. Curt. 616.
Ocelli in a triangle, metallic-coloured; anal angle of posterior wings angulated
in ♂.

LIBELLULA Linn. — 15 sp. *L. depressa* Linn. Curt. 712.
Ocelli in a triangle, generally broad and depressed; anal angle of posterior wings rounded in both sexes.
[*Platetrum Newm.*, *L. depressa*. *Leptetrum Newm.*, *L. 4-maculata*. *Orthetrum Newm.*, *L. cancellata*. *Sympetrum Newm.*, *L. scotica*.]

Subfamily 2. *Agrionides* Westw. (*Agrionidae* Leach.)

AGRION Fab. **LIBELLULA** p. Linn. 13 sp. *L. puella* Linn. Steph. 6. pl. 29. f. 4.
Wings membranous; stigma rhomboidal; areolets mostly quadrangular.

LESTES Leach. **AGRION** p. Fab. 3 sp. *L. viridis* V. L.

Wings membranous; stigma large, oblong-quadrata; areolets mostly pentagonal.
CALEPTERYX Linn. **AGRION** p. Fab. 4 sp. *L. virgo* Linn. Donov. 36. f. 1.
Wings coriaceous-membranous; stigma obsolete; areolets extremely numerous.

Sect. II. SUBNECROMORPHOTICA Westw.

Family 6. *MYRMELIONIDÆ* Leach.

(There is no British species of this family.)

Family 7. *HEMEROBIIDÆ* Westw. (*Hemerobidae* Leach.)

OSMYLUS Latr. **HEMEROBUS** p. Fabr. 1 sp. *O. maculatus* Fab. Sam. pl. 7. f. 4.
Ocelli three; placed in a triangle on the forehead.

DREPANEPTERYX Leach. **HEMEROBUS** p. Linn. 1 sp. *H. phalænoidea* Linn.
Ocelli 0; anterior wings very broad; posterior margin subfalcate.

CHRYSOPA Leach. **HEMEROBUS** p. Linn. 13 sp. *H. perlæ* Linn. Curt. 520.
Ocelli 0; wings entire; antennæ cylindrical; labrum notched.

HEMEROBUS Linn. p. — 32 sp. *H. hirtus* Linn. Curt. 202.
Ocelli 0; wings entire; antennæ submoniliform; labrum entire.

CONIOPTERYX Curt. { **CONIOTERYX** Westw.
 { **MALACOMYZA** Westw. } 3 sp. *H. parvulus* Vill.

Tarsi 5-jointed; wings covered with white powder; with few nerves, the nerves disposed nearly alike in all the wings; labial palpi terminated by a large ovate joint. Curt. 528.

Family 8. *SIALIDÆ* Leach.

SIALIS Leach. **SEMBLIS** p. Fab. 1 sp. *Hem. lutaris* Linn. Pictet, Ann. Sc. Nat., Ocelli 0; wings deflexed; tarsi 5-jointed, fourth joint bifid. (N. S. 5. pl. 3.)

Family 9. *PANORPIDÆ* Leach. (*Panorpatae* Latr.)

PANORPA Linn. — 5 sp. *P. communis* Linn. Curt. 696.
Wings four, large; mandibles bidentate; abdomen ♂ long, recurved, armed with a forceps.

BOREUS Latr. **PANORPA** p. Linn. 1 sp. *P. hyemalis* Linn. Curt. 118.
Wings in ♂ rudimentary, in ♀ obsolete; mandibles multidentate; abdomen ♂ short, unarmed.

Family 10. *RAPHIDIIDÆ* Leach. (*Raphidini* Latr.)

RAPHIDIA Linn. — 5 sp. *R. ophiopsis* Linn. Curt. 37.
Prothorax long; ovipositor ♀ long and exserted.

Family 11. *MANTISPIDÆ* Westw.

(There is no British species of this family.)

ORDER VI. TRICHOPTERA Kirby.

Family PHRYGANEIDÆ Westw.

Subfamily 1. *Phryganeides* Westw. (Phryganidae Stephens.)**AGRYPNIA** Curtis. — 1 sp. *A. Pagetana* Curt. Curt. 540.Tibiae spinulose; head and body very broad, depressed; nerves of wings as in *Anabolia*.**LIMNEPHILUS** Leach. PHRYGANEIDA p. Oliv. 50 sp. *P. grisea* Linn. Curt. 488.

Body not depressed; wings narrow, obliquely truncated at tip; max. palpi with the last point short; 5-jointed in both sexes.

GLYPHOTÆLIUS Steph. LIMNEPHILUS p. Curt. 1 sp. *Ph. pellucida* Oliv.

Anterior wings with the hinder margin cut out.

HALESUS Steph. PHRYGANEIDA p. Schr. 7 sp. *P. digitata* Schr. Pictet, pl. 6. f. 1, 2.?

Anterior wings broad, dilated at the tip, and rounded; max. palpi with the last joint short, subelliptic.

ANABOLIA Steph. LIMNEPHILUS p. Lea. 2 sp. *A. nervosus* Lea.

Wings narrow, rounded at the tip; body subcompressed; last joint of max. palpi short, subelliptic. Samo. pl. 7. f. 3.

DRUSUS Steph. PHRYGANEIDA p. Gmel. 5 sp. *Ph. testacea* Gm. St. 6. pl. 34. f. 3.

Anterior wings rather broad, short, somewhat dilated in the inner margin, not setose; palpi long, pilose.

CHÆTOPTERYX St. PHRYGANEIDA p. Pict. 2 sp. *P. villosa* Fab. Pict. 7. f. 4

Body not depressed; wings very broad, granulated; with erect rigid setæ.

PHRYGANEA Linn. &c. — 5 sp. *P. grandis* Linn. Curt. 592.

Tibiae spinulose; wings pilose; palpi ♂ 4-jointed, 5-jointed in ♀; last joint of max. palpi short, subelliptic.

NEURONIA Lea. PHRYGANEIDA p. Linn. ? 1 sp. *P. fusca* L. ? Steph. 6. 34. f. 2.

Tibiae not spinulose; wings transparent; antennæ short, stout.

Subfamily 2. *Hydropsychides* W. (Hydropsychidae Steph.)**PHIOPOTAMUS** Leach. — 3 sp. *P. scopulorum* Lea.

Anterior tibiae 2-spurred; antennæ longer than the wings; posterior wings small, unfolded; anterior with a transverse oblique nerve about the middle of the costa. Donov. pl. 548. f. 1.

PLECTROCNEMIA Steph. HYDROPSYCHE p. Pict. 3 sp. *P. conspersus* Curt.

Anterior tibiae 3-spurred; wings shorter than the antennæ, with but few transverse nerves. Pictet, pl. 19. f. 1.

CYRNUS Steph. HYDROPSYCHE p. Pictet. 4 sp. *C. urbanus*. Pictet, pl. 19. f. 13.

Anterior wing with various transverse nerves, with a transparent discoidal spot; anterior tibiae 3-spurred; antennæ shorter than the wings.

POLYCENTROPUS Curtis. AMATHUS Steph. G. 9 sp. *P. irroratus* C.

Antennæ shorter than the wings, the latter with but few transverse nerves; anterior tibiae 3-spurred; four posterior with four spurs. Curt. 544.

DIPLECTRONA Westw. AFHELOCHIRA Steph. 2 sp. *P. flavo-maculata* Pict.

Anterior tibiae 2-spurred; antennæ shorter than the wings, which are broad, without any transverse subcostal nerve. Steph. 6. pl. 32. f. 3.

HYDROPSYCHE Pict. PHIOPOTAMUS p. Steph. Cat. 9 sp. *H. instabilis* C.

Anterior tibiae 2-spurred; antennæ longer than the wings; posterior wings ample, folded, with a trifid central nervure. Curt. 601.

Subfamily 3. *Leptocerides* W. (Leptoceridae Leach, Steph.)

LEPTOCERUS Leach. *MYSTACIDA* Latr. 28 sp. *P. niger* Linn. Curt. 57.

Posterior tibiae 2 spurred; basal joint of max. palpi short; terminal joint sometimes very long; antennæ exceedingly long.

CERACLEA Lea. *PHRYGANEA* p. Latr. 1 sp. *P. nervosa*. Coq. tab. S. f. 1.

Posterior tibiae 2-spurred; two basal joints of max. palpi short; antennæ very long; wings transparent.

MOLANNA Curt. *AMBLYPTERYX* Steph. Cat. 2 sp. *M. angustata* Curt.

Posterior tibiae 4-spurred; antennæ robust, not denticulated in ♂; shorter than the wings, which are long and narrow. B. E. 716.

ODONTOCERUS Leach. *PHRYGANEA* p. Scopol. 2 sp. *P. albicornis* Scop.

Posterior tibiae 4-spurred; antennæ slender, denticulated in ♂; second pair of legs in larva longer than the posterior pair. Steph. 6. pl. 34. f. 1.

Subfamily 4. *Sericostomides* W. (Sericostomidae Steph.)

POTAMARIA Leach. *PHRYGANEA* p. Fab. 1 sp. *P. analis* F. Steph. 6. pl. 34. f. 4.

Anterior tibiae destitute of spurs; antennæ stout, shorter than the wings.

SERICOSTOMA Latr. *PROSOPOPIA* Lea. 1 sp. *S. Specii* K. St. 6. 33. f. 2.

Anterior and intermediate tibiae 2-spurred; maxillary palpi ♂ mask-like.

NOTIDOBIA Steph. *SERICOSTOMA* p. Pict. 1 sp. *P. atrata* F.

Anterior tibiae 2-spurred, intermediate 4-spurred; basal joint of antennæ short, incrassated, approximated; anterior wings with a subovate discoidal cell. Pictet, pl. 14. f. 5. a, c.

SILO Curtis. *PHRYGANEA* p. Fab. 1 sp. *P. pallipes* Fab.

Maxillary palpi ♂ divercating; basal joint of antennæ very long, naked; anterior tibiae 2-spurred, intermediate 4-spurred.

GOERA Hoff. *PHRYGANEA* p. Fabr. 5 sp. *P. pilosa* Fab.

Maxillary palpi ♂ short, recurved; basal joint of antennæ long, naked; anterior tibiae 2-spurred, intermediate 4-spurred; wings silky.

MORMONIA Curt. *PHRYGANEA* p. Fab. 5 sp. *N. nigro-maculata*.

Basal joint of antennæ elongate, very hirsute; anterior tibiae 2-spurred, intermediate 4-spurred; palpi short. Steph. 6. pl. 32. f. 2.

BRACHYCENTRUS Curt. *MEROE* Steph. G. 3 sp. *B. subnubilus* Curt.

Anterior tibiae 2-spurred, intermediate 4-spurred; spurs very short; antennæ remote; palpi short.

Subfamily 5. *Psychomyiides*? W. (Psychomidae? Steph.)

CHIMARRA Leach. *PHRYGANEA* p. Linn. 1 sp. *P. marginata* L. Curt. 561.

Palpi very long; second and third joints long; wings destitute of transverse nerves; anterior tibiae without spurs.

Subfamily 6. *Rhyacophilides* W. (Rhyacophilidae Steph.)

BERÆA Steph. *THYTA* Curt. 4 sp. *P. pygmæa* F. Pictet, pl. 16. 21. ? 23. ?

Anterior tibiae 2-spurred; discoidal cell wanting; basal joint of antennæ large; palpi robust, hairy.

GLOSSOSOMA Curt. — 2 sp. *G. Boltoni* Curt. Steph. 6. 32. f. 1. Anterior tibiae 2-spurred; all the wings with a discoidal cell; anterior with a callous basal spot in ♂.

TINODES Leach. *PHRYGANEA* p. Fab. 9 sp. *P. pusillus* F.

Anterior wings with two discoidal cells; posterior without a discoidal cell; anterior tibiae 2-spurred.

ANTICYRA Curt. **RHYACOPHLA** p.? *Pict.* 4 sp. *A. phœopa* Ste. *Pict.* pl. 16. 9.
Anterior tibiae 2-spurred; discoidal cell wanting; wings long, narrow; basal joint of antennæ small.

AGAPETUS Curt. **RHYACOPHLA** p. *Pict.* 6 sp. *A. fuscipes* Curt.
Wings short, rounded; basal joint of antennæ small; discoidal cell wanting; ♂ with a ventral spine. *Pictet*, pl. 16, 17. 19. &c.

RHYACOPHLA *Pict.* **PHILOPOTAMUS** p. *Curt.* 4 sp. *R. vulgata* *Pict.*
Anterior tibiae 3-spurred; max. palpi rather long, slender; larvae with external gills.

Subfamily 7. *Hydroptilides* W. (*Hydroptilidæ Steph.*)

NARYCIA Ste. ——— 1 sp. *N. elegans* Steph. Ill. 6. pl. 32. f. 4.
Antennæ pectinated; wings clothed with scale-like hairs.

AGRAYLEA Curt. ——— 2 sp. *A. 6-maculata* Curt.
Antennæ simple; intermed. tibiae 1-spurred in the middle; wings long, narrow, pubescent.

HYDROPTILA Dalm. ——— 6 sp. *H. Tineoides* Dalm. An. Ent. t. 3.
Antennæ simple; intermed. tibiae 2-spurred in the middle; fore wings narrow, very pilose.

ORDER VII. HYMENOPTERA Linn.* (PIEZATA Fab.)

Sect. I. **TEBEBRANTIA** Latr. (*H. aberrantia* Westw. *H. ditrocha* Hartig.)

Subsect. 1. *Phytiphaga* Westw. (*Sessiliventres St. Farg. Hal.*)

Tribe 1. *Serrifera* St. Farg. Hal.; consisting of the single Family **TENTHREDINIDÆ** Leach.

Subfamily 1. *Cimbicidæ* Westw.

CIMBEX Oliv. **CRANRO** Geoff. 8 sp. *T. femorata* Linn. Curt. 41.

Antennæ with five joints preceding the club, which consists of two joints soldered together; spurs obtuse; anterior tarsi ♂ spined beneath; labrum narrow.

TRICHIOSOMA Leach. **CIMBEX** p. Oliv. 9 sp. *T. Lucorum* Linn. Curt. 49.
Antennæ with five joints preceding the club, which is 3-jointed; body hairy; labrum broad; base of abdomen not membranous.

CLAVELLARIA Lam. **CIMBEX** p. Oliv. 2 sp. *T. Amerina* Linn. Curt. 93.
Antennæ with four joints preceding the exarticulate club; spurs obtuse; base of abdomen not membranous; joints of palpi short.

ZARÆA Leach. **CIMBEX** p. Oliv. 1 sp. *T. fasciata* Linn. Curt. 97.
Antennæ with four joints preceding the 2-jointed club; joints of max. palpi long and irregular; spurs obtuse.

ABIA Leach. **CIMBEX** p. Oliv. 2 sp. *T. sericea* Linn. Curt. 89.
Antennæ with four joints preceding the 3-jointed club; labrum broad; spurs obtuse; body metallic; ♂ with a dorsal silken patch.

* I regret that I did not receive Mr. Haliday's talented '*Hymenopterorum Synopsis*,' until too late to make use of it in my text; I have however added his groups in this Synopsis, as synonyms, rather than entirely omit them. His primary divisions of the order are *Sessiliventres* and *Petioliventres*, which the identical structure of the ovipositor of *Urocerus* and *Ichneumon* appears to me to oppose.

GENERIC SYNOPSIS.

AMASIS Leach. *Cimex* p. Oliv. 2 sp. *T. obscura* Fab. Pz. 84. 13.

Antennæ with four joints before the exarticulate club; spurs of four posterior tibiae acute.

Subfamily 2. *Hylotomides* Westw.

HYLOTOMA Fab. *Auge* Schr. 14 sp. *T. enodis* Linn. Curt. 65.

Antennæ elongate, subclavate, and nearly glabrous in ♀; simple and pilose in ♂; marginal cell appendiculated.

PTILIA St. Farg. *Hyloptoma* A. Steph. 1 sp. *H. pilicornis* Leach.

Antennæ short, nearly filiform and pilose ♀; third submarginal cell produced at the tip.

SCHIZOCERUS Latr. *Hyloptoma* p. Klug. 2 sp. *H. furcata* Vill. Curt. 58.

Antennæ ♂ surcate; ♀ long and simple; marginal cell not appendiculated.

Subfamily 3. *Tenthredinides* Westw.

ATHALIA Leach. *Allantus* p. Klug. 10 sp. *T. Rossa* Linn. Curt. 617.

Antennæ 9 or 10-jointed; third joint long; terminal joints subclavate; two marginal and four submarginal cells.

SCIAPTERYX Steph. *Tenthredo* p. Fab. 1 sp. *T. costalis* Fab.

Antennæ 9-jointed, short, stout; joints irregular; wings thick and broad; marginal cells divided by a curved vein.

SELANDRIA Leach.* *Hyloptoma* p. Fabr. 40 sp. *Hy. serva* Fabr.

Antennæ short, 9-jointed; terminal joints simple; body short and broad; two marginal and four submarginal cells; wings thin. Pz. 69. 17.

HEMICROA Steph. *Dineura* (*Leptoceca* Hartig). 3 sp. *T. Alai* Linn.

Antennæ 9-jointed; long, slender; two marginal, four submarginal cells, the second receiving two recurrent nerves; body as in Selandria. Steph. pl. 38. f. 2.

DINEURA Dahlb. *Tenthredo* p. Steph. 1 sp. *T. De Geeri* Kl.

Two marginal, four submarginal cells, the second receiving two recurrent nerves; antennæ 9-jointed; body as in Nematus. De G. 2. pl. 38. f. 8—10.

(? **MESONEURA** Hartig. *Selandria* p. Steph. 1 sp? *T. verna* Klug? —)

ALLANTUS Panzer. *Tenthredo* p. Klug. 47 sp. (St.) *T. Scrophulariae* Linn.

Two marginal, four submarginal cells; antennæ subclavate or setaceous; third joint longer than the fourth; abdomen elongate; hind legs long; clypeus deeply notched. Sam. pl. 8. f. 2.

Obs. Hartig restricts this group (as a subgenus) to *T. scrophulariae*, and its immediate allies (Stephens's first eight species).

* *Obs.* Hartig has divided Selandria (which he considers only a subgenus of *Tenthredo* Kl.) into four sections, named from peculiarities of the larvæ, as noticed in my Vol. II. p. 100, 101. : — 1. Blennocampa (subdivided into three named tribes: 1. Blennocampa; 2. Monophadnus; and 3. Phymatocera *Dahlb.*); 2. Hoplocampa; 3. Eriocampa; and 4. Selandria proper. The following are British types of these groups: Phymatocera not being indigenous.

1. Blennocampa. 1. Blennocampa proper. *Selandria Ephippium*. Pz. 52. 5.

T. fuliginosa Sch. T. Betuleti Kl. T. Æthiops Fab.

————— 2. Monophadnus. T. Spinola Kl. T. luteiventris Kl.

T. albipes Gmel. *Tenth. melanoccephalus* Fab., Steph.

2. Hoplocampa. T. chrysorrhœa Kl. Newn. T. ferruginea Fab. Pz. 90. 9.

T. testudinea Kl. &c.

3. Eriocampa. T. adumbrata Kl. T. cinxia Kl. T. varipes Kl. &c.

4. Selandria proper. H. serva Fab. T. Morio Fab. Pz. 69. 17.

TENTHREDO * Leach. — 28 sp. (*Steph.*) *T. nassata* Linn.

Two marginal, four submarginal cells; antennæ rather long and slender; third and fourth joints equal; abdomen rather long, depressed; legs moderate; clypeus scarcely notched. Pz. 65. 2. ♂.

MACROPHYA Dahl. *ALLANTUS* p. *Steph.* 9 sp. *T. rusticus* Linn. Pz. 64. 10.

Antennæ 9-jointed; body moderately long; posterior coxae very large; each of second and third submarginal cells receiving a recurrent nerve (*T. blanda* Fab. Pz. 65. 9. *T. punctum* F. Pz. 26. 21.; and the species above mentioned are the types of Dahlbom's three sections of the genus.)

PACHYPROTASIS Hartig. *TENTHREDO* A. *Steph.* 4 sp. *T. Rapax* Linn.

Antennæ longer than the abdomen, slenderer than in *Tenthredo*; posterior coxae very large. (Hartig makes this a section of *Macrophya*.) Schäff. Ic. 179. 1.

ASTICTA Newm. Ent. Mag. vol. iv. 261.; v. 484. 1 sp. *A. lanthe*.

Antennæ short, slender, 9-jointed; second joint twice the length of the first; third twice the length of the second; fourth scarcely shorter than the third; the remainder gradually shorter; stigma distinct, membranous; two marginal and three or four submarginal cells; the second and third receiving a recurrent nerve.

Obs. This description is drawn from Mr. Newman's typical specimen, which he has been so kind as to lend me; and of which the fore wings are unlike, the transverse nerve separating the first two submarginal cells being obliterated in one of them: thus the genus is closely allied to *Tenthredo* proper, rather than to *Fenusia*.

DOSYTHEUS Leach. *DOLERUS* p. Hartig. 14 sp. *T. Eglanteriae* F.

Antennæ 9-jointed; body moderately long; two marginal and three submarginal cells, the first very short; third joint of antennæ longer than the fourth. Panz. 82. 11.

DOLERUS Leach. *DOLERUS* p. Hartig. 9 sp. *T. nigra* Linn. Pz. 52. 11.

Differs from *Dosythus* in the third and fourth joints of antennæ being of equal length.

EMPHYTUS Leach., Hartig. 24 sp. *T. cincta* Linn. Curt. 436.

Antennæ 9-jointed; third and fourth joints of equal length; two marginal and three submarginal cells; the first as long as the second; hind wings with no middle cell.

(**ANEUGMENUS** Hartig. (Sect. of *Emphytus*.) 1 sp. *Emph. coronatus* Kl., St. Body short, oval; hind wings with two middle cells.)

(? **HARPIPHORUS** Hartig. *SELANDRIA* p. *Steph.*? 1 sp. *Sel. scapularis* St. (*lepidus* Kl.?).

* *Obs.* Hartig regards this as a subgenus of the genus *Tenthredo* (which also includes *Selandria*, *Athalia*, *Macrophya*, and *Allantus*, as subgenera), and divides it into six named sections: —

1. *Taronus* Meg., which includes the following British species: *T. agilis* Kl.; *T. nitidus* Kl.; *T. bicolor* Kl.
2. *Strongylogaster* H.: Br. sp. *T. cingulata* Fab. Curt. 692.
3. *Pæciostoma* H.: Br. sp. *T. impressa* Kl., *Steph.* (*Emphytus*).
4. *Perinewra* H.: Br. sp. *T. Rubi* Panz., *Steph.* III.
5. *Tenthredo*: Br. sp. *T. nassata* Linn.; *T. Coquebertii* Kl.; *T. dimidiata* Kl.; *T. aucupariae* Kl.; *T. mandibularis* Kl.; and many other species placed by Stephens both in *Allantus* and *Tenthredo*; and
6. *Synairema* H. (*T. delicatula* Kl., not British.)

MELICERTA Steph. — 1 sp. *M. ochroleucus* St.

Antennæ 9-jointed; third joint longer than the fourth; two marginal, three submarginal cells, the first not shorter than the second.

HETERARTHROUS Steph. *PHYLLOTOMA** Fall. 1 sp. *T. ochropoda* Kl.

Antennæ 11 to 15-jointed, third joint twice as long as the fourth; two marginal and four submarginal cells; the veins between the basal ones interrupted.

FENELLA Westw. — 1 sp. *F. nigrita* Westw.†

Antennæ 11-jointed, slender; two marginal, three equal-sized submarginal cells; first and second receiving a recurrent nerve.

FENUSA Leach. *EMPHYTUS* (*F.*) Hartig. 3 sp. *T. punica* Kl.

Antennæ 9-jointed, slightly clavate; two marginal and three equal-sized submarginal cells; the first and second receiving one recurrent nerve; body short, stout.

DRUIDA Newm. Ent. Mag. vol. iv. 261.; v. 484. 1 sp. *D. parviceps* Newm.

Antennæ filiform, 10-jointed; first and second joints minute, third long, fourth rather shorter, remainder gradually decreasing; two marginal, three submarginal cells; first and second receiving a recurrent nerve.

MESSA Leach. *FENUSA* p. Hartig. 1 sp. *T. hortulana* Kl.

Antennæ 9-jointed; first and second joints short, third elongate, remainder decreasing; one marginal, and four submarginal cells.

NEMATUS Leach. *TENTHRENO* p. Linn. 40 sp. (St.) *T. Caprea* Fab.

Antennæ 9-jointed; one marginal, four submarginal cells; the second receiving two recurrent nerves; tarsi simple. Panz. 65. 8.

CRÆSUS Leach. *NEMATUS* p. Jur. 3 sp. *T. septentrionalis* Linn. Curt. 17.

Antennæ 9-jointed; one marginal, four submarginal cells, the second receiving two recurrent nerves; basal joints of posterior tarsi greatly dilated.

EUURA Newm. *PRISTIPHORA*†† St. Farg. *Cryptocampus* Hartig (?) *P. atra* Jur. tab. 6.

Antennæ 9-jointed, simple; one marginal, three submarginal cells; first very small; second very long, receiving two recurrent nerves.

PRISTIPHORA Latr. *PAXOPHORUS* Dhb. ? 6 sp. *T. Myosotidis* Fab.

Antennæ 9-jointed, simple; one marginal, three submarginal cells; the first large, receiving two recurrent nerves; the second small. Pz. 98. 19.

TRICHIOCAMPUS Hartig. *NEMATUS* p. Steph., St. Farg. (5?) *N. grandis* St. Farg. Steph. pl. 38. f. 1.

Antennæ 9-jointed; ♂ with the base of the third joint dilated, pilose; one marginal and three submarginal cells of nearly equal size; the first and second receiving a recurrent nerve.

CLADIUS Leach. *PTERONUX* p. Jur. 1 sp. *Cl. difformis* Leach. Pz. 62. 10.

Antennæ 9-jointed, pectinated in ♂; one marginal, three nearly equal submarginal cells; first and second receiving a recurrent nerve.

Subfamily 4. *Lydides* Westw.

LOPHYRUS Latr. *PTERONUX* Jur. 3 sp. *T. Pini* Linn. Curt. 54.

* I have not adopted this name in the restricted sense in which it is used by Dahlbom and Hartig, having been employed by Fallen for all the short-bodied Tenthredinides with short antennæ; the species of Athalia being its types. (Fall. Mon. Tenthre. Swc. p. 27.) The species which Dahlbom gives were even doubtfully considered by Fallen to belong to the genus. I had generically named the only British species, Decatria, which Mr. Stephens has changed.

† Nigra, femorum apice, tibiis tarsisque obscure luteis, alis nigricantibus. (Long. 1 lin. Exp. Alar. 3 lin.)

- Antennæ multiarticulate, with two rows of pectinations in ♂; upper wings with one marginal cell.
- ? **MONOCTENUS** D'Alb. *Lophyrus* Steph. 1 sp. *T. Juniperi* Linn. Pz. 76. 11.
Antennæ multiarticulate, with one row of pectinations in ♂; upper wings with one marginal cell.
- TARPA** Fabr. *Megalodontes* Latr. 2 sp. *T. Cephalotes* Fab. Pz. 62. 7, 8.
Antennæ 15-to 18-jointed; upper wings with two marginal and four submarginal cells.
- LYDA** Fab. *Pamphilus* Latr. 22 sp. *T. syleatica* Linn. Curt. 381.
Antennæ 19-to 36-jointed, slender, setaceous; two marginal, and four submarginal cells; four hind tibiae with three spurs.

Subfamily 5. *Cephides* Westw., (*Cephidae* Hal.)

- CEPHUS** Latr. *Astatus* Kl. 11 sp. *Sirex pygmaeus* Linn. Panz. 73. 17.
Antennæ subclavate, about 21-jointed; abdomen compressed.
- JANUS** Stephens. *Cerphus* p. Curt. 2 sp. *J. connectens* St. Steph. pl. 36. f. 1.
Antennæ filiform; abdomen shorter than in Cephus, cylindric and subclavate.
- PHYLLECUS** Newm. ——— 1 sp. *P. Fauvus* Newm.
Antennæ slightly thickened beyond the middle, 27-jointed; abdomen compressed.

Subfamily 6. *Xyelides* Westw. (*Xyelidae* Hal.)

- XYELA** Dalm. *Pinicola* Latr. 1 sp. *K. pusilla* Dalm. Curt. 30:
Antennæ with the third joint greatly elongated; ovipositor exserted, nearly as long as the abdomen.

Tribe 2. *Terebellifera* St. Farg. *Urocerata* Latr., Hal.; consisting of the single

Family *UROCERIDÆ* Leach. (*Siricidae* Cuv.).

- XIPHYDRIA** Latr. *Hypnotus* Kug. 2 sp. *Sirex dromedarius* Linn.:
Prothorax elongated into a neck; two marginal, and four submarginal cells; max. palpi long, 5-jointed. My fig. 72. 4.
- UROCERUS** Geoff. *Sirex* Linn. 7 sp. *S. gigas* Linn. Curt. 253:
Prothorax not forming a neck; two marginal, and four submarginal cells; max. palpi exceedingly short; ovipositor forming a long exerted borer.

(Subfamily ? *Oryssides* Westw. *Oryssidae* Hal.)

- ORYSSUS** Latr. *Sphex* p. Scop. 1 sp. *O. coronatus* Latr. Curt. 460.
Cylindrical; antennæ ♂ 11-jointed, ♀ 10-jointed; max. palpi long, 5-jointed; ovipositor spiral, capillary. (My fig. 73. 1.)

Subsect. 2. *Entomophaga* Westw. (*Pupivora* Latr. *Terebellifera** Hal.)

Tribe 1. *Spiculifera* Westw. (*Terebellifera* & *Canalifera* St. Farg.)

Family 1. *CYNIPIDÆ* Westw. (*Diplolepididae* Leach. *Gallicolæ* Latr., Hal.)

- IBALIA** Latr. *Sagaris* Pz. 1 sp. *Ib. Catepillar* Latr. Curt. 22.
Abdomen knife-shape; antennæ ♂ 15-, ♀ 19-jointed.

* Mr. Haliday divides the petiolated terebrant Hymenoptera into five tribes: 1. *Entomotilla* (Ichneumonidæ, Stephanidæ, Evanidiæ). 2. *Oxyura* (Proctotrupidæ, Pelecinidæ, Diapriadæ, Scelionidæ, Ceraphronidæ). 3. *Gallicola* (Cyniphidæ). 4. *Halticoptera* (Leucospidæ, Chalcididæ, Mymaridæ). 5. *Tubulifera* (Chrysitidæ).

- CYNIPS** Linn. ——— 33 sp. (*Curt.*) *C. quercus folii* Linn. My fig. 73. 12.
Abdomen obovate; antennæ ♂ 15, ♀ 14-jointed; wings large, with a small distinct triangular submarginal cell enclosed by nerves of equal thickness.
- BIORHIZA** Westw. *Cynips* p. Fab. 1 sp. *C. aptera* Fab. Coqueb. tab. 1. f. 11.
Abdomen obovate; antennæ ♀ 14-jointed; wings obsolete.
- FIGITES** Latr. *EUCHARIS* p. Paxz. 12 sp. *F. scutellaris* Rossi.
Antennæ ♂ long, filiform, 14-jointed, ♀ shorter, thickened to the tips, 13-jointed; second submarginal cell triangular, with its basal nerve almost obsolete; scutellum large, with two basal excavations obtuse at the tip. Guérin, Icon R. An. t. lxvii. fig. 3.
- ONYCHIA** Hal. 1 sp. *Cynips biusta* sp. ined.
“Abdomen with the third segment very large concealing the posterior ones, petiole very short; scutellum channelled throughout; antennæ filiform, 14-joints ♂, 13 ♀; cubital areolets three, subcostal nerve not continued to join the rib.” N. B. Cynips ediogaster Pr. does not belong to this group, but probably to *Figites*. Haliday MSS.
- EUCOILA** Westw. ——— 5 sp. *E. crassicerca* Westw.
Antennæ ♂ 15-jointed, ♀ 13-jointed, short, gradually incrassated; second submarginal cell obliterated; scutellum with three excavations. Mag. N. H. vol. viii. p. 174.
- KLEIDOTOMA** Westw. ——— 3 sp. *Kl. Psiloidea*, Westw.
Antennæ ♀ 13-jointed, short, three terminal joints suddenly thick; second submarginal cell obliterated; scutellum at the base with a broad excavation, with the apex tubercular, and 1-excavated.
- ANACHARIS** Dalm. ——— 5 sp. *An Eucharoides* Dalm.
Antennæ ♂ 14-jointed, ♀ 13-jointed, long, filiform; second submarginal cell obliterated; scutellum with two rudimental excavations; abdominal peduncle long. Steph. pl. 47. f. 1.
- CEGILIPS** Hal. **ANACHARIS** B. Westw. 4 sp. *Cynips nitidula* Dalm.
“Abdomen globose-ovate; petiole short, cylindric, rugose; scutellum pyramidal, acute; antennæ filiform, 14-joints ♂, 13 ♀; cubital areolets two, indistinct, the anastomosis forming a callous dot.” Haliday MSS.
- ALLOTRIA** Westw. ——— 1 sp. *Al. victrix*, Westw.
Antennæ ♀ 13-jointed, filiform, longer than the body; abdomen subcesile; second submarginal cell obliterated; scutellum transversely depressed at the base.
- MELANIPS** Hal. ——— 2 sp. *Cynips urticae* Kirby.
“Abdomen somewhat acute in ♀, petiole very short; annular, second and third segments equal; scutellum rugose, the base bifoveolate; antennæ filiform, ♂ 14, ♀ 13-joints; cubital areolets three.” Haliday MSS.
- Family 2. *EVANIIDÆ* Westw. (*Evaniades* Leach, *Hal.*)
- EVANIA** Fab. *SPHEX* p. Linn. 1 sp. *Sp. appendigaster* Linn. My fig. 74. 1.
Abdomen minute, petiolated; fore wings with distinct discoidal cells; ovipositor not exserted.
- BRACHYGASTER** Leach. **EVANIA** p. *Curtis.* 2 sp. *E. minuta* Oliv. *Curt.* 257.
Abdomen minute, petiolated; fore wings without discoidal cells; ovipositor not exserted.
- FOENUS** Fab. *GASTERUPTIUM* Latr. olim. 2 sp. *Ichn. Jaculator* Linn. *Curt.* 423.
Abdomen long, gradually clavate; ovipositor long, exserted.

Family 3. *ICHNEUMONIDÆ* Leach. (*Hal. Entomotilla Dum.*)

Subfamily 1. *Ichneumonides* Westw. (*Ichneumones genuini Grav.*)

ICHNEUMON Linn., *Grav.* ——— 224 sp. *I. comitator* Linn.

Abdomen oblong-ovate, basal segment rough; ovipositor not exserted; scutellum flat; antennæ simple; outer cell complete; areolet distinct, 5-sided. Curtis 728.
STILPNUS *Grav.* ——— 5 sp. *S. gagates* Gr. Curtis, 388.

Outer cell incomplete; areolet distinct, 5-sided; abdomen ovate, depressed, very shining, basal segment linear; ovipositor not exserted; scutellum flat; antennæ simple.

ISCHNUS *Grav.* ——— 3 sp. *I. porrectorius* Fab.

Abdomen subcylindrical, smooth; petiole linear; antennæ simple; areolet 5-sided; ovipositor very short; scutellum flat.

BRACHYPTERUS *Gr.* ——— 1 sp. *B. means* Gr. Steph. pl. 40. f. 2.
Wings very short; areolet wanting; abdomen oblong-ovate; antennæ simple ovipositor scarcely exserted.

MICROLEPTES *Gr.* ——— 1 sp. *M. splendidulus* Gr. St. pl. 40. f. 3.

Head subglobose; areolet wanting; abdomen robust, petiolated; legs and antennæ thickened; ovipositor not exserted.

ACRODACTYLA *Hal.* **BARYFUS** *Hal. MSS.*, *Curt. Guide.*, 2d ed. 2 sp. *B. degener* *Hal.*

Abdomen attenuated at the base, intermediate segments obsoletely compressed; anus ♀ slit; ovipositor exserted, short; areolet wanting; tarsi thick at tip; unguis lobed beneath.

MESOLEPTUS *Grav.* **ICHNEUMON** p. *Fab.* 62 sp. *M. narrator* Gr. Curt., 644.
Abdomen smooth, shining, with a long petiole; ovipositor not exserted, areolet wanting or very small, legs and antennæ slender.

TRYPHON *Fallen.* **ICHNEUMON** p. *Linn.* 99 sp. *T. rutilator*, *Linn.* Curt. 399.

Posterior tarsi slender; face flat; abdomen oblong, sub sessile; ovipositor not exserted; scutellum flat; areolet subobsolete, triangular or suborbicular; antennæ slender or moderate; legs moderate.

CTENISCUS *Hal. MSS.*, *Curt. Guide*, 2d ed. ——— 3 sp. *C. Curtisi* *Hal.*

Characters of Tryphon, but with the fore tibiae one-spurred, intermediate one-spurred, and posterior without spurs.

EXOCHUS *Gr.* **HYSICERA** *Latr. R. An.* 19 sp. *E. antiquus* Gr.

Face with a frontal tubercle, abdomen sub sessile, oblong-cylindrical; areolet obsolete, or small and triangular; ovipositor not exserted; scutellum flat; legs short and thick.

PERIOPE *Hal.* ——— 1 sp. *P. auscultator* *Hal.*

Abdomen subpetiolated, compressed at tip, elongate, fusiform; ovipositor concealed; thorax and antennæ very short; face protuberant; legs short; spurs 1. 2. 1.; unguis denticulated; areolet minute, subtriangular.

SCOLOBATES *Gr.* ——— 1 sp. *S. crassitarsus* Gr.

Posterior tarsi thickened; face flat; abdomen sub sessile; basal segment gradually narrowed; ovipositor not exserted; scutellum flat; areolet wanting.

SPHECOPHAGA *Westw.* **ANOMALON** p. *Curt. sec Jur. Grav.* 1 sp. *A. vesparum*

Hind legs robust; abdomen sessile, broadly ovate; ovipositor not exserted; areolet wanting. Curt, 198.

- TROGUS** *Panzer.* ICHNEUMON *Curt.* 8 sp. *Tr. alboguttatus* Gr. Curt. 234.
Scutellum elevated; head transverse; ovipositor not exerted; areolet 3- or 5-sided; abdomen petiolated, convex.
- ALOMYA** *Panzer.* ICHNEUMON p. *Linn.* 3 sp. *A. ovator* F. Curt. 120.
Head globose; areolet triangular; abdomen long, petiolated, depressed; antennae short ♀.
- HOPLISMENUS** *Gr.* — 5 sp. *H. mastus* Gr.
Head transverse; metathorax acutely spined; legs and antennae slender and simple; areolet pentagonal; abdomen oblong, petiolated; basal segment with two elevated lines; ovipositor short; scutellum flat.
- CRYPTUS** *Fab.* ICHNEUMON *Linn.* 51 sp. *C. cicutarius* F. Curtis, 668.
Ovipositor long; metathorax unarmed; legs and antennae slender and simple; areolet 4- or 5-sided; abdomen petiolated, ovate, convex; head transverse.
- PHYGADEUON** *Gr.* ICHNEUMON p. *Schr.* 25 sp. *Ph. flavimanus* Gr.
Legs and antennae somewhat thickened and simple; areolet pentagonal, small; abdomen petiolated; ovipositor exerted, moderately long.
- MESOSTENUS** *Gr.* — 2 sp. *M. transfuga* Gr.
Areolet minute, quadrate; antennae simple; abdomen petiolated; ovipositor exerted, long, or moderate; scutellum flat.
- HEMITELES** *Gr.* — 13 sp. *H. tristator* Gr. Pl. 94. 14.
Areolet small, incomplete, pentagonal, or obsolete; antennae simple; abdomen petiolated; ovipositor exerted, long; scutellum flat.
- AGRIOTYPUS** *Walk.* — 1 sp. *A. armatus* Wlk. Curtis, 389.
Scutellum with a long acute spine; abdominal peduncle long, slender, curved; abdomen thick, oval; second and third segments coalescing; areolet wanting; ovipositor not exerted.
- PEZOMACHUS** *Gr.* GELIS *Thunb.* 21 sp. *P. aberrans* Gr. Curtis, 536.
Abdomen petiolated; ovipositor exerted, short, or moderate; wings rudimentary, not fitted for flight.
- PHYTODIETUS** *Gr.* — 3 sp. *P. astutus* Gr.
Abdomen subsessile, or subpetiolated; inferior nerve of the inner cell angulated; ovipositor exerted; scutellum flat; areolet obsolete, or triangular.
Obs. Stephens introduces Gravenhorst's Ischnocerus into his table of this family; but the British species are not yet indicated.
- MESOCHORUS** *Gr.* — 10 sp. *M. Tipularius* Gr. Curtis, 464.
Areolet large, rhomboidal; antennae simple; abdomen petiolated, oblong; ovipositor exerted, short; scutellum flat; head transverse; anus ♂ often appendiculated.
- PLECTISCUS** *Gr.* — 3 sp. *P. impurator* Gr.
Abdomen subsessile, or subpetiolated; inferior nerve of the inner cell straight; wings fitted for flight; ovipositor exerted; scutellum flat; areolet obsolete or oblique.
- HELICTES** *Hal. MSS.*, *Curt. G.* 2d ed. 5 sp. *P. erythrostroma* Gm.
Abdomen petiolated; first segment attenuated; ovipositor concealed or sub-exerted; antennae slender, convoluted; areolet wanting; legs slender, posterior pair rather long.
- GLYPTA** *Gr.* — 6 sp. *G. sculpturata* Gr.
Areolet wanting; abdomen shining; intermediate segments of abdomen with two oblique lines, deeply incised or tubercled; abdomen sessile, convex; ovipositor exerted, long.

LAMPRONOTA Curt. **Lissonota** Grav. 19 sp. *I. setornis* Fourc. Curt. 407.
Thorax smooth; abdomen shining, with smooth segments; terminal ventral segments entire ♀; scutellum triangular; areolet obsolete or triangular; ovipositor long.

Obs. Stephens (Tab. Ichneumonidæ, vol. vii. p. 126.) has indicated a genus next to Lampronota, which he names Stilbonota, having the antennæ not crenulated; whereas he characterises Lampronota by crenulate antennæ. The species of the former are not yet indicated.

POLYSPHINCTA Gr. — 4 sp. *P. tuberosa* Gr.

Abdomen shining, sessile, with transverse impressions, ♀ with the apex slit beneath; legs rather slender; areolet wanting; thorax smooth; ovipositor exerted, short, or moderate.

SCHIZOPYGA Gr. — 2 sp. *S. podagraria* Gr.

Abdomen shining, sessile, convex; segments with transverse impressions, the two terminal ventral ones slit in ♀; legs thickened; thorax smooth; areolet wanting; ovipositor exerted; very short.

CLISTOPYGA Gr. — 1 sp. *C. incitator* Fab.

Abdomen shining, sessile, convex; segments tubercled; apex entire beneath ♀; thorax smooth; areolet wanting; ovipositor exerted, moderate; legs moderate.

PIMPLA Fab. ICHNEUMON. p. Linn. 16 sp. *P. flavicans* F., Curtis, 214.

Abdomen sessile, convex, shining; segments tubercled, the intermediate transverse; areolet distinct, triangular; thorax smooth; ovipositor exerted, moderate, or long.

EPHALTES Gr. — 7 sp. *I. manifestator* Linn. Pz. 19. 21.

Abdomen sessile, convex, shining; segments tubercled, the intermediate elongated; areolet distinct, triangular; thorax smooth; ovipositor long.

RHYSSA Gr. — 1 sp. *R. persuasoria* L. Pz. 19. 19.

Abdomen long, sessile, convex, shining, terminal ventral segments slit ♀; thorax transversely rugulose; ovipositor very long; areolet triangular.

Obs. Stephens (Tab. Ichneumonidæ, vol. vii. p. 126.) introduces Gravenhorst's Trachyderma in this place; but as the British species are not yet indicated, I cannot give an example.

PELTASTES Illiger. **MIRRORUS** Gr. 3 sp. *P. dissectorius*. Pz. Curtis, 4.

Abdomen sessile, depressed, rough; scutellum transverse, quadrangular, apical angles acute; ovipositor not exerted.

BASSUS Fab. S. P. Grav. (nec Curt.) — 12 sp. *B. letatorius* Fab.

Abdomen sessile, depressed; the basal joint equilateral, flat; antennæ simple; legs rather slender; areolet obsolete or triangular; ovipositor scarcely exerted. Pz. 19. 19.

ORTHOCENTRUS Gr. — 7 sp. *O. anomalous* Gr.

Abdomen sessile, depressed; basal joint equilateral, flat; antennæ simple; legs thickened; areolet generally 5-sided; ovipositor scarcely exerted.

EUMESIUS Westw. **EUCEROS** Grav. 3 sp. *E. crassicornis* Gr. Curt. 660.

Antennæ dilated in the middle; areolet wanting; segments of abdomen constricted.

BANCHUS Fab. ICHNEUMON p. Linn. 5 sp. *B. venator* Fab. Curtis, 588.

Abdomen sessile, compressed; areolet distinct, large, square; inferior outer nerve of the inner cell subarcuate; ovipositor concealed.

EXETASTES Gr. ——— 6 sp. *E. fornicator* Fab.

Abdomen subpetiolated, compressed; areolet distinct, large, square; inferior outer nerve of the inner cell angulated or triangular; ovipositor short.

COLEOCENTRUS Gr. ——— 1 sp. *C. excitator* Pz. ? Pz. 92. 5.

Areolet distinct, small, triangular; abdomen compressed at the tip, subcesile, ♀ with a plough-shaped anal valve; ovipositor long.

AROTES Gr. ——— 1 sp. *A. albicinctus* Gr.

Areolet wanting; hind legs thick; abdomen compressed at the apex; subpetiolated; females with a plough-shaped anal valve; ovipositor long.

CAMPOPLEX Gr. ——— 1 sp. *C. difformis* Gr. Pz. 100. 15.

Areolet triangular or wanting; abdomen petiolated, subcompressed; inner cell with one recurrent nerve; radial cell narrow, sublanceolate; femora and tarsi slender; ovipositor short or moderate.

PANISCUS Schrank Grav. ——— 4 sp. *I. virgatus* Fourc. Pz., Sch. 82. 3.

Abdomen quite compressed, petiolated, basal segment conical; areolet triangular; inner cell with one recurrent nerve; radial cell narrow, sublanceolate; legs and antennæ rather slender; ovipositor short.

THERION Curt. **ANOMALON** Gr. 10 sp. *I. enecator* Ross. Pz., Sch. 225. 4.?

Posterior tarsi thickened; femora simple; abdomen compressed, petiolated; areolet wanting; ovipositor short.

OPHION Fab. **ANOMALON** Jur. 5 sp. *I. luteus* L. Curtis, 600.

Thorax smooth; inner cell with two recurrent nerves; radial cell narrow, lanceolate; tarsi and femora slender; abdomen very compressed, sickle-shaped; areolet wanting; ovipositor scarcely exerted.

Obs. Stephens (Tab. Ichneumonidae, vol. vii. p. 126.) indicates a genus next to Ophion, which he names Enicospilus, differing from Ophion in having the first submarginal cell spotted. His pl. 40. fig. 4. is evidently intended for a species of this genus, of which the species are not yet indicated.

TRACHYNOTUS Gr. ——— 1 sp. *T. foliator* F.

Thorax rough; inner cell with two recurrent nerves; radial cell narrow, lanceolate; tarsi and femora simple; abdomen petiolated, long, compressed at the tip; areolet wanting; ovipositor short.

PACHYMERUS Gr. ——— 1 sp. *P. calcitrator* G. Curtis, 634.

Hind femora thickened, not spined; abdomen compressed, petiolated; areolet wanting; ovipositor long; stigma long.

PRISTOMERUS Curt. ——— 1 sp. *P. vulnerator* Pz. Curtis, 624.

Hind femora thickened and spined; abdomen compressed, petiolated; areolet wanting; ovipositor moderate; stigma large.

CREMASTUS Gr. ——— 3 sp. *C. spectator* Gr.

Areolet wanting; abdomen very compressed and petiolated; inner cell with one recurrent nerve; radial cell narrow, sublanceolate; tarsi and femora simple; antennæ and legs slender; ovipositor moderate.

PORIZON Fall ——— 7 sp. *P. auritor* F.

Radial cell very large and triangular; femora and tarsi simple; abdomen compressed, petiolated; stigma large; areolet wanting; ovipositor curved.

TRACTODES Gr. ——— 12 sp. *A. bicolor* Gr.

Areolet pentagonal; abdomen subcompressed, petiolated; inner cell with one recurrent nerve; radial cell narrow; femora and tarsi simple; areolet 5-sided; ovipositor scarcely exerted.

ACOENITES Latr. — 1 sp. *A. dubitator* F. Pz. 78. 14.

Hind legs long and thick; scutellum flat; head transverse; abdomen sub sessile. **XYLONOMUS Grav.** *Ichneumon* p. Fab. 4 sp. *X. pilicornis* Gr. Curt. 353.

Face quadrate; areolet wanting; femora simple; head globose; abdomen sessile, depressed, rough, and lineated at the base; ovipositor moderate or long.

XORIDES Latr. — 5 sp. *X. nitens* Gr.

Face narrowed towards the mouth; areolet wanting; femora simple; head globose; abdomen sub sessile; ovipositor long.

CLEPTICUS Hal. — 4 sp.? *Cryptus pretor* Hal.

Abdomen peduncled; first segment tubercled; clypeus compressed at the base, semicircular; antennæ and legs slender; areolet wanting; ovipositor exserted.

ODONTOMERUS Gr. — 2 sp. *O. dentipes* Gr.

Hind femora very thick and toothed; areolet wanting; head globose; abdomen petiolated, clavate; ovipositor long.

ECTHRUS Gr. — 1 sp. *I. reluctator* L. Pz. 71. 13.

Areolet pentagonal or wanting; femora simple; head globose; abdomen sub petiolated; ovipositor long.

Subfamily 2. *Braconides* Westw. (*Ichneumones Adsciti* Esenb.*)

Division 1. *Polymorphi* Wesm.

OPIUS Wesm. *Bracon* p. Nees. 50 sp. *Bracon carbonarius* Nees.

Clypeus remote from the mandibles or lower wings with a disco-recurrent nerve or stigma elongate attenuate; three cubital areolets, second oblong. Wesm. t. 2. f. 5—12.

GNAMPTODON Hal. *Diraphus* Wesm. 1 sp. *Bracon pumilio* Nees.

Clypeus remote from the mandibles; borer short, inflected; three cubital areolets, second transverse.

METEORUS Hal. { *PERILITUS Wesm.*
{ *ZELA Curtis* p. } 22 sp. *Ichneumon pendulator* Latr.

Abdomen petiolate; borer exserted; three cubital areolets. Curt. BE. 415.

MICROCTONUS Wesm. *Pratulus* p. Hal. 3 sp. *Per. idaius* Hal.

Abdomen petiolate; borer exserted; antennæ straight; two cubital areolets; mesothoracic scutum levigate. Wesm. t. 1. f. 6.

PERILITUS Nees. *Microctonus* p. Wesm. 8 sp. *Per. rutilus* Nees.

Abdomen petiolate; borer exserted; antennæ straight; two cubital areolets; parapsides of mesothorax distinct. Wesm. t. 1. f. 7 8.

ROPALOPHORUS, N. G. Hal. *Microctonus* p. Wesm. 1 sp. *Micr. clavicornis* Wesm. Brac. Belg. pl. 3. f. M.

Abdomen petiolate; borer exserted; two cubital areolets; antennæ subclavate, slightly geniculate; scape cylindric, shorter than the head.

STREBLOCERA Westw. 1 sp. *Str. fulviceps* Westw.

Abdomen petiolate; borer exserted; two cubital areolets; antennæ geniculate; scape elongate, toothed below.

* The value of the Generic Synopsis of the Ichneumones Adsciti will be duly appreciated when the reader is informed that it has been kindly communicated to me by A. H. Haliday, Esq., whose memoirs upon this tribe, published in the *Entomological*, afford so good an example of descriptive entomology.

- EUPHORUS** *Nees.* **LEIOPHRON** *BE.* 11 sp. *L. pallipes* *Curt. BE. 476.*
 Abdomen petiolate; borer concealed; two cubital areolets; radial areolet very short, semilunate.
- CENTISTES** *Hal.* **LEIOPHRON** p. *Wesm.* 4 sp. *Bracon lucidator* *Nees.*
 Abdomen subsessile; borer short, inflected; two cubital areolets; mesothoracic scutum levigate. *Wesm. t. 2. f. 2.*
- LEIOPHRON** *Nees.* **ANCYLUS** *Hal.* 5 sp. *L. ater* *Nees.*
 Abdomen subsessile; borer short, incurved; two cubital areolets; sutures of parapsides distinct.
- PYGOSTOLUS** *Hal.* **BLACUS** p. *Wesm.* 2 sp. *Cryptus sticticus* F.
 Abdomen subsessile, the apex obtuse and gaping; borer deflected; two cubital areolets.
- GANYCHORUS** *Hal.* **BLACUS** p. *Wesm.* 7 sp. *Bracon ruficornis* *Nees.*
 Abdomen subpetiolate; borer exserted; head subglobose; two cubital areolets; unguis of anterior feet appendiculate. *Berl. Mag. v. tab. 1. f. 3.*
- BLACUS** *Nees.* **BRACON** p. *Nees olim.* 8 sp. *Bracon humilis* *Nees.*
 Abdomen subsessile, compressed; borer exserted; head subglobose; two cubital areolets; unguis simple. *Berl. Mag. v. tab. 1. f. 4. a, b, c.*
- EUBADIZON** *Nees.* ————— 3 sp. *Eub. pectoralis* *Nees.* *Wesm. t. 2. f. 3.*
 Abdomen subsessile, with distinct segments; borer elongate; head transverse; occiput truncated; two cubital areolets.
- CALYPTUS** *Hal.* **BRACHISTERA** *Wesm.* 4 sp. *Eubarus macrocephalus* *Nees.*
 Abdomen subsessile, with three segments only apparent; borer elongate; two cubital areolets. *Wesm. t. 2. f. 4.*
- ORGILUS** *Hal.* **ISCHIUS** *Wesm.* 1 sp. *Microdus obscurator* *Nees.*
 Abdomen subsessile; borer exserted; occiput concave; hind legs stout, with large spurs; two cubital areolets, radial narrow, cuneate. *Berl. Mag. 6. tab. 4. f. 1.*
- DIOSPILUS** *Hal.* **TAPHXUS** *Wesm.* 2 sp. *Diosp. speculator* *Hal.*
 Abdomen subsessile; borer exserted; three cubital areolets, second transverse or subquadrate, praedisoidal areolet contiguous; clypeus obtuse. *Wesm. tab. 2. f. 18.*
- ASPIGONUS** *Wesm.* **BRACON** p. *Nees.* 1 sp. *Asp. diversicornis* *Wesm.*
 Abdomen subsessile; borer exserted; three cubital areolets, second subquadrate; praedisoidal areolet contiguous; clypeus angulate. *Wesm. t. 2. f. 16. t. 3. f. 0.*
- HELCON** *Nees.* **PIMPLA** p. *F.* 1 sp. *Helcon tardator* *Nees.*
 Abdomen subsessile; borer elongate; front muconated; hind legs elongate, with incrassate thighs; three cubital areolets. *Nees, Berl. Mag. 6. tab. 4. f. 6.*
- MACROCENTRUS** *Curt.* **ROGAS** *Wesm.* 7 sp. *Cryptus abdominalis* F.
 Abdomen subsessile; borer elongate; head transversely compressed; three cubital areolets; divisions of mesothoracic scutum protuberant. *Nees, Berl. Mag. v. t. 1. f. 1.*
- PHYLAX** *Wesm.* **ZELA** p. *Curt.* 4 sp. *Zela testaceator* *Curt.*
 Abdomen subsessile, falcate; borer short; three cubital areolets, second oblong. *B.E. 415. f. 1—6. Wesm. t. 2. f. 19.*
- DYSCOLETES**, N.G. **DYSCOLUS** *Hal.* (g. Coleopt.) 1 sp. *D. lancifer*, sp. ined.
 Abdomen subsessile; borer elongate; three cubital areolets, second trapezoid, receiving the recurrent nerve.
- CENOCŒLIUS**, N.G. ————— 1 sp. *Cen. flavifrons*, sp. ined.

Abdomen subsessile; three cubital areolets; praediscoidal areolet distinct from the costa; clypeus obtusely angled.

ICHNEUTESES Nees. — 1 sp. *S. reunitor* Nees.

Abdomen subsessile, spathulate; borer concealed; three cubital areolets, second attenuate at the apex; radial triangular; radius of lower wings obliterated. Berl. Mag. vol. vii. tab. 7. f. 3.

PROTEROPS Wesm. BRACON p. Curt. 1 sp. *Pr. nigripennis* Wesm. B.E. 69. Abdomen subsessile, obovate; borer concealed; antennæ close to the vertex; three cubital areolets, second short; radial triangular, rounded.

PAXYLOOMA Bubisson { *PLANCUS* Curt. *HYBRIZON* Fallen. } 1 sp. *P. buccata* Br.

One long marginal cell, two submarginal cells, the second lanceolate, pointed at base; abdomen with a long 2-jointed peduncle; basal joint of posterior tarsi dilated. My fig. 74. 18.

Division 2. Cryptogastri Wesm.

SIGALPHUS Nees. *TRIASPIS* Hal. 6 sp. *Sig. semirugosus* Nees.

Three cubital areolets; borer exerted. Berl. Mag. vol. vii. t. 7. f. 1. 2.

CHELONUS Jur. *SIGALPHUS* p. Latr. 7 sp. *Cynips ixanita* Linn.

Three cubital areolets, first incomplete; eyes hairy; segments of abdomen completely coalite. BE. 672.

ASCOGASTER Wesm. *CHELONUS* p. Nees. 7 sp. *Sigalphus rufipes* Latr.

Three cubital areolets, second nearly triangular; eyes glabrous; segments of abdomen coalite. Nees, Berl. Mag. vol. vii. t. 7. f. 2.

PHANEROTOMA Wesm. *CHELONUS* p. Pz. 1 sp. *Ch. dentatus* Pz. 88. 141.

Abdomen subdepressed, 3-jointed, with crenulated sutures; middle tibiae sinuated; three cubital cells.

RHITIGASTER, Wesm. *SIGALPHUS* p. Latr. 1 sp. *Ichn. irradiator* F.

Three cubital areolets, second oblong; abdomen clavate; segments three, con-nate. Wesm. tab. 2. f.

Division 3. Areolarii Wesm.

AGATHIS Latr. *BRACON* p. F. 6 sp. *Ag. malvaeearum* Latr.

Eyes glabrous; maxillæ and labium elongate; three cubital areolets, second very minute. Nees, Berl. Mag. vol. vi. tab. 4.

MICRODUS Nees. *BASSUS* p. F. 5 sp. *Bassus calculator* Panz. BE. 73.

Eyes glabrous; mouth short; three cubital areolets, first incomplete; second very minute, triangular.

EARINUS, Wesm. { *MICRODUS* p. Nees. } 4 sp. *Bassus gloriatorius* Pz. 100. 17. { *BASSUS* p. Curt. }

Eyes glabrous; mouth short; three cubital areolets, first complete, second very minute, quadrangular.

MICROGASTER Latr. *VIRIO* Fall. 60 sp. *Ichneumon glomeratus* Linn.

Eyes pilose; antennæ 18-jointed; cubital area contracted in the middle; areolets two or three, the intermediate being very minute; radial triangular, faintly traced. Curt. BE. 321.

ACÆLIUS Hal. *ADELIUS* Wesm. 1 sp. *Ac. subfasciatus* Hal.

Eyes pilose; antennæ 20-jointed; three first segments of abdomen coalite; radial areolet incomplete. Wesm. tab. 3. f. 7.

MIRAX *Hal.* ————— 1 sp. *M. Spartii.*

Antennæ 14-jointed; segments of abdomen distinct; radial areolet incomplete.

Division 4. *Cyclostomi Wasm.*

BRACON *Fabr.* *VIPIO Latr.* 30 sp. *Bracon desertor* F. *Panz.* 79. 10.

Second and third abdominal segments divided by a furrow; ventral valve acuminate; three cubital areolets; brachial areolets conterminous; lower wings with pobrachial areolet very minute; front even; third joint of antennæ longer than second.

COELOIDES *Wasm.* *BRACON* p. *Nees.* 1 sp. *Brac. initiator* *Fab.*

Front excavated; second and third joints of antennæ equal; basal joint of hind tarsi shorter than the following united; three cubital areolets; ovipositor long.

ROGAS *Nees.* { *SCHIZODES* *Wasm.* } { *ALXIODES* *Wasm.* } 8 sp. *Bracon gasterator* *Jur.* *Curt.* 512.

Three anterior segments of abdomen nearly equal; second and third divided by a furrow, the rest very small; borer very short; three cubital areolets; Pobrachial areolet surpassing the anterior; lower wings with the vestige of a discorecurrent nerve.

ADEMON *Hal.* { *Rogas* p. *Nees.* } { *Orius* p. *Wasm.* S. 148. } 1 sp. *Rog. descrescens* *Nees.*

Second and third abdominal segments divided by a furrow; borer very short; three cubital areolets; radial slightly incomplete; stigma very narrow. *Berl. Mag.* vol. v. t. 2. fig. 10.

CLINOCENTRUS *Hal.* *EXOTHCUS* p. *Wasm.* 4 sp. *Cl. umbratilis* *Hal.*

Abdomen with the three anterior segments large; second and third nearly coalite, the rest very short; borer shorter than the abdomen; three cubital areolets; anal nerve posterior.

COLASTES *Hal.* *EXOTHCUS* p. *Wasm.* 9 sp. *Col. braconius* *Hal.*

Abdomen with the segments nearly equal or gradually decreasing; second and third nearly coalite; borer shorter than abdomen; three cubital areolets; anal nerve posterior.

RHYSSALUS *Hal.* *EXOTHCUS* p. *Wasm.* 2 sp. *Rh. clavator* *Hal.*

Abdomen sub-eusile; borer longer than abdomen; head transverse; three cubital areolets.

DORYCTES *Hal.* *ISCHIOGONUS* *Wasm.* 5 sp. *Bracon striatellus* *Nees.*

Abdomen subeuseile; second and third segments nearly coalite; head cubic; three cubital areolets.

HECABOLUS *BE.* *ANISOPELMA* *Wasm.* 1 sp. *H. subcatus* *BE.* *Curt.* 507.

Abdomen subeuseile; borer elongate; head cubic; two cubital areolets; lower wings of ♂ with a stigma.

HORMIUS *Nees.* Sect. 1. ————— 1 sp. *H. moniliatus* *Nees.*

Abdomen subeuseile; antennæ of more than twelve joints; cubital areolets three; 1 nerve interstitial. *Berl. Mag.* vol. v. t. 2. fig. 11.

CHREMYLUS *Hal.* { *PNECAEUS* *Wasm.* } { *Hormius* p. *Nees.* } 1 sp. *Hormius rubiginosus* *Nees.*

Abdomen subeuseile; antennæ 12-jointed; cubital areolets three; anal nerve interstitial.

SPATHIUS *Nees.* *CRYPTUS* p. *F.* 2 sp. *Cryptus clavatus* *Panz.* *Panz.* 102. 16.

Abdomen petiolate; head cubic; three cubital areolets.

Division 5. Exodontes Westm.

ALYSIA Latr. **BASSUS** Nees, olim. 60 sp. *Cryptus manducator* Panz. Curt. 141.
Three cubital areolets.

CHASMODON Hal. **ALYSIA** p. Nees. 1 sp. *Al. aptera* Nees.
No wings; thorax narrow.

GENONE Hal. **SIGALPHUS** Nees, Sect. 2. 3 sp. *Sig. mandibularis* Nees.
Two cubital areolets; abdomen ovate, rugose, with the segments connate or coalesce.

DACNUSA Hal. **ALYSIA** Nees, Sect. 5. 25 sp. *Al. petiolata* Nees.
Two cubital areolets; stigma elongate, attenuate; eyes glabrous; abdomen smooth, except at the base; head transverse. Berl. Mag. vol. v. t. 1. fig. 5.

CHOREBUS Hal. **PRILITUS** p. Nees. 4 sp. *Chor. nereidina* Hal.
Two cubital areolets; stigma elongate; eyes pilose; head transverse.

CHÆNUSA Hal. (Hym. Brit. Alya.) **PRILITUS** p. Nees. *P. conjungens* Nees.
Two cubital areolets; stigma short; eyes villose; abdomen obovate, spatulate, subglabrous. Berl. Mag. vol. v. t. 2. fig. 7.

CŒLINIUS Nees. **CHÆNON** B. E. 8 sp. *Chænon anceps* B. E. Curt. 289.
Two cubital areolets; stigma short; head cubic; abdomen elongate, compressed in ♀.

Division 6. Flexiliventres Westw. (Fam. Aphidiadæ Steph. Subfam. Aphidiadæ Haliday MSS. Polymorphi p. Westm.)

PRAON Hal. **BLACUS** p. Nees. 5 sp. *Pr. dorsalis* Hal.

Prædiscoidal areolet complete; cubital open to the exterior margin. Westm. Br. Belg. tab. 1. fig. 14.

EPHEDRUS Hal. **ELASSUS** Westm. 4 sp. *Bracon plagiator* Nees.

Prædiscoidal areolet complete; cubital three; antennæ 11-jointed. Westm. tab. 1. fig. 12.

TOXARES, N. G. **TALONTYX** Hal. (g. of Reptiles.) 1 sp. *Tr. deltiger* Hal.

Prædiscoidal areolet complete; cubital three; antennæ of more than 11 joints.

MONOCTONUS Hal. — 3 sp. *M. nervosus* Hal.

Disco-cubital areolet short, hexagonal; stigma internally prolonged, attenuate.

TRIOXYS Hal. **APHIDIUS** p. Westm. 12 sp. *Tr. aceris* Hal. Curt. 383.

Disco-cubital areolet obliterated; stigma triangular; radius arched, abbreviated; ventral valve of ♀ with two spines.

APHIDIUS Nees. **HYBRIZON** Fab. 29. sp. *Ichn. aphidum* L.

Disco-cubital areolet attenuate externally.; stigma triangular or lanceolate; ventral valve unarmed. (Rarely apterous.) Nees, Berl. Mag. vol. v. t. 2. f. 8.

Family 5. CHALCIDIDÆ Westw. (Cympsera Latr. Diploleparia Spin. Pteromalini Dalm. Halticoptera Hal.)

Subfamily 1. Chalcides Westw.

CHALCIS Fab. **SMIRRA** Spinola, Curt. 3 sp. *Sph. sispe* Linn. Curt. 472.
Abdominal peduncle and posterior coxae elongate; hind femora thickened and toothed; antennæ inserted near the middle of the face, 18-jointed, second joint small, third very minute, fourth as long as the following.

F

GENERIC SYNOPSIS.

BRACHYMERIA Westw. **CHALCIS** Curt., Spin. 1 sp. *Ch. minuta* F. Pl. 32. 6.
Short, thick; antennæ short; abdomen sub sessile, subconical, scarcely compressed; posterior coxae not elongated; antennæ inserted near the middle of the face.

HOCKERIA Laporte. **CHALCIS** p. Panz. 2 sp. *Ch. armata* Panz.
Antennæ inserted near the mouth; abdominal peduncle very short; posterior tibiae not acute at the tip; hind femora thick. Steph. pl. 44. f. 3.

HALTICHELLA Spin. **CHALCIS** p. Fab. 1 sp. *Ch. pusilla* Fab.
Antennæ inserted near the mouth, ♂ sub fusiform, ♀ sub clavate; posterior tibiae acute at the tip; abdominal peduncle very short; hind femora thickened, and toothed beneath.

EUCHARIS Latr. ——— 1 sp. *Euch. adscendens* Fab.
Antennæ thick, moniliform; first and third joints long; palpi very minute; thorax gibbous; scutellum produced; abdominal peduncle long; legs simple. Steph. Ill. pl. 44. f. 1.

Subfamily 2. *Eurytomides* Westw.

EURYTOMA Illig. ——— 11 sp. *Eur. abrotani* Panz. Steph. pl. 45. f. 3.
Collar transverse-quadratus; abdomen compressed; antennæ ♂ setaceous, verticillate-pilose, 11-jointed; ♀ clavate, 12-jointed; max. palpi 4-jointed.

DECATOMA Spin. ——— 15 sp. *Pter. biguttata* Swed. Curt. 345.
Abdomen compressed; antennæ ♂ and ♀ clavate, ♂ 11-jointed, ♀ 12-jointed, third and fourth joints minute; max. palpi 3-, labial 2-jointed.

SYSTOLE Walk. ——— 2 sp. *S. albipennis* Wlk.
Abdomen cylindric; body short, thick; antennæ ♀ acuminate at tip, 12-jointed, short, submoniliform; head large.

ISOSOMA Walk. ——— 26 sp. *Decat. longula* Dalm.
Abdomen cylindric; body elongate, slender; antennæ ♀ rounded at tip, 12-jointed, clavate; ♂ 11-jointed, pilose, filiform.

(Subfamily? *Spalangriidae*.)

CEROCEPHALA Westw. **EPIMACRUS** Walk. 2 sp. *C. cornigera* Westw.
Head large, tricornuted in front; antennæ 10-jointed, third joint longer than the second and fourth, seven terminal joints nearly equal; collar triangular; peduncle nearly as long as abdomen. Steph. pl. 45. f. 1.

THEOCOLAX Westw. **LAESTHIA** Hal. 1 sp. *Th. formiciformis* Westw.
Apterous, or with very minute rudiments of wings; head subhorizontal, quadratus, very slightly tridentate in front; antennæ 11-jointed, second joint large, third to eighth gradually thicker, three terminal joints forming a mass; collar large, triangular; ovipositor short, exserted.

SPALANGIA Latr. ——— 3 sp. *Sp. nigra* Latr. Gen. t. 12. f. 7, 8.
Head ovate, narrowed in front; antennæ inserted close to the anterior margin of the head, 10-jointed; ♂ filiform, with the third joint long; ♀ thickened, the third to ninth joints short; collar attenuated; abdomen pedunculated.

MACROGLENES Westw. **ICHNEUMON** Kirby. 1 sp. *Ich. penetrans* K.
Head broad; eyes very large; antennæ short, thick at the tip, 10-jointed in ♂, second joint moderate, third to fifth small, sixth as large as second, seventh larger, remainder forming a mass, 9-jointed in ♀; abdomen compressed; ovipositor slightly exserted; max. palpi 3-, labial 2-jointed.

PIRENE Hal. *CORYNOCERE* Nees. 5 sp. *P. varicornis* Hal.

Head ovate; mouth prominent; max. palpi 2-jointed, labial almost obsolete; eyes large; antennæ short, 10-jointed, second joint as large as the five following, which are minute, three terminal joints forming a very large club; collar transverse; abdomen subsessile, compressed.

Obs. "Notwithstanding the different palpi, this genus is too closely related to *Macroglenes* to admit of their separation in different subfamilies." — *Holiday MSS.*

ASAPHES Walk. *CHRYTOLAMPUS* p. *Esenb.* 1 sp. *As. vulgaris* Wlk.

Head transverse; mandibles 2-dentate; antennæ 12-jointed, clavate, third joint very minute, fourth and following short; collar large, subquadrate; abdomen ♂ ovate-convex; first and second joints very large, ♀ rather longer; wings narrow.

CEA Hal. — 1 sp. *C. pulicaria* Hal.

Head moderate, transverse, subquadrate; antennæ slender, filiform; third and following joints short, equal; thorax long-ovate; collar moderate; metathorax peduncle-like; abdomen long-ovate, compressed; ovipositor exserted; legs long, slender; wings 0.

Subfamily 3. *Pteromalides* Westw.

[1. *Torymidae* Wlk.]

MEGASTIGMUS Dalm. *DIPLOLEPIS* p. *Fab.* 2 sp. *Dipl. dorsalis* Fab.

Stigma thickened; legs subequal; ovipositor long, exserted; abdomen ♂ petiolated; mesoscutellum convex; prosternum elongate. Steph. Ill. 45. f. 2.

MONODONTOMERUS Westw. *TORYMUS* B. A. Dalm. 2 sp. *Dipl. stigma* Fab.

Collar large, transverse; hind femora thick, but not serrated, beneath armed with a tooth near the tip; mesoscutum with distinct sutures; antennæ with the third joint minute; club scarcely shorter than the two preceding joints.

Obs. Curtis, in his *Guide*, gives *Priomerus* Wlk. as British; it is, however, given by Walker as an inhabitant of the South of France. The posterior femora are thick and toothed, and the posterior tibiae curved. Type, *P. pachymerus* Wlk.

DIOMORUS Wlk. — 1 sp. *D. nobilis* W.

Collar narrowed in front; abdomen elongate, ovate, sessile; ovipositor exserted, long; antennæ 13-jointed, subfiliform; hind femora thickened, with a spine near the tip; mesoscutum with distinct sutures.

CALLIMOME Spin. *MISOCAMPUS* Latr. 59 sp. *Ichn. Cynipedes* Linn.

Abdomen ♂ not peduncled; antennæ more or less clavate, 13-jointed, third joint small, fourth as long as the fifth; ovipositor long, exserted; mesoscutellum convex; prosternum short; legs subequal; stigmal branch very minute; max. palpi 4, labial 3-jointed. Curtis, 552.

PERILAMPUS Latr. *DIPLOLEPIS* p. *Pz.* 6 sp. *P. italicus* Fab. Curtis, 158.

Head large; abdomen subpetiolated, short, contracted; ovipositor hidden; max. palpi 4-jointed; antennæ 13-jointed, second joint minute, third very minute, fourth large.

CRATOMUS Dalm. *CRATOMUS* Boh. 1 sp. *C. megacephalus* F. ♀. Steph. pl. 44. f. 4.

Head very large; mandibles 3- to 4-dentate; antennæ clavate, 13-jointed, second joint elongate, third small, fourth and following minute; club 3-jointed; stigmal branch long and curved.

ORMYRUS Westw. { *CYRTOSOMA* *Curt.* *ol.*
SIPHONURA *Nees.*
PERTYCYPHUS *Bohem.* } 2 sp. *O. punctiger* Westw.

Antennæ short, thick, 13-jointed, third and fourth joints annular; thorax convex; abdomen ♀ cylindric-ovate, second to fifth joints punctured, and with rows of toothed impressions.

[2. *Miscogasteridae* Wlk. Abdomen petiolated; stigmal branch straight.]

LAMPROTATUS Westw. { *CHRY SOLAMPUS* p. *Esenb.*
MISCOGASTER Wlk. } 57 sp. *L. splendens* Wes.

Body very shining; abdomen ♂ shorter than the thorax, convex-ovate, impressed at the base; antennæ long, filiform, 13-jointed, third and fourth joints annular; legs ♂ slender; collar transverse, quadrate; palpi simple; petiole short, thick.

PACHYLARTHROUS Westw. { *PHACOSTOMUS* *Nees.*
PHAGONIA *Curt.* } 3 sp. *Pt. patellanus* Dalm.

Head broad; maxillary palpi with the last joint very large, inflated; antennæ 13-jointed, third and fourth joints annular, the three last forming a small club; abdomen short, subtriangular, and depressed above in ♂; peduncle very short. *Curtis*, 427.

POLYCYSTUS Westw. ——— 2 sp. *P. Mathewsi* Westw.

Differs from Pachylarthrus in all the palpi having the terminal joint greatly inflated.

DICYCLUS Wlk. ——— 5 sp. *D. aeneus* Wlk.

Antennæ ♀ clavate, 13-jointed, third and fourth joints annular, fifth joint moderate sized; abdomen ♀ depressed above, elongate-ovate, or subrotundate; petiole short; thorax long; mandibles 4-dentate.

CYRTOGASTER Wlk. *CHRY SOLAMPUS* p. *Esenb.* 9 sp. *C. rufipes* Wlk.

Abdomen convex; antennæ ♂ fusiform, 14-jointed; ♀ clavate, 13-jointed, third and fourth joints annular, fifth joint moderate sized; intermediate tibiae not clavate; petiole short; thorax ovate; ovipositor scarcely exerted; last joint of max. palpi ♂ dilated.

PACHYNEURON Wlk. ——— 1 sp. *P. formosum* Wlk.

Space between the subcostal nerve and stigmal branch thickened; antennæ ♀ 13-jointed, fifth joint moderate sized; intermediate tibiae not clavate; peduncle short; abdomen ♂ elongate-ovate, ♀ nearly rounded.

CORUNA Wlk. ——— 1 sp. *C. clavata* Wlk.

Abdomen ♂ ♀ clavate; intermediate tibiae not clavate; peduncle short; thorax elongate; antennæ 13-jointed, ♂ filiform, ♀ thickened at the tips; third and fourth joints annular; mandibles 4-dentate.

TOXEUMA Wlk. ——— 2 sp. *T. fuscicornis* Wlk.

Abdomen ♀ elongate, compressed; intermediate tibiae not clavate; peduncle short; thorax elongate; antennæ 13-jointed, third and fourth joints minute; ovipositor short, exerted.

MERISMUS Wlk. ——— 6 sp. *M. rufipes* Wlk.

Thorax elongate-ovate; prothorax rounded in front; peduncle elongate, narrowest behind; abdomen ♂ ovate, gibbous; ♀ elongate-ovate; antennæ sub-clavate.

PROSODES Wlk. ——— 1 sp. *Pr. ater* Wlk.

Prothorax rounded in front; thorax short, rounded; peduncle long; antennæ ♂ clavate, 13-jointed, third and fourth joints annular; abdomen short; legs slender, straight.

EUPSILOCERA Westw. **PAILOCERA** Wlk. [G. Tipulidae.] 1 sp. *Ps. obscura* Wlk.
Prothorax rounded in front; thorax short; abdominal peduncle very short; antennæ ♂ moniliform, verticillate, longer than the body; abdomen ovate, depressed.

DIPARA Wlk. **SPHEGIGASTER** Spin. ? 2 sp. *D. petiolata* Wlk.

Prothorax subquadrate; antennæ ♂ filiform, longer than the body, 12-jointed, third and following joints moniliform; petiole elongate; abdomen convex; subcostal nerve coalescing with the costa.

SYNTOMOPUS Wlk. — 2 sp. *S. thoracicus* Wlk.

Prothorax subquadrate; antennæ ♂, ♀ clavate; head large; thorax elongate; petiole linear; ovipositor subexserted; wings short.

MICROMELUS Wlk. — 2 sp. *M. rufomaculatus* Wlk.

Antennæ ♂ 13-jointed, thickened at the tip, third and fourth joints minute; petiole short; thorax long; abdomen ♂ broad, nearly rounded; ♀ ovate, convex above; wings sometimes almost obsolete.

ISOCYRTUS Wlk. — 1 sp. *I. letus* Wlk.

Antennæ ♀ 12-jointed, subclavate, third and fourth joints minute; intermediate tibiae not clavate; petiole short; thorax long; abdomen elongate-ovate, depressed; legs slender.

SPANIOPUS Wlk. — 1 sp. *S. dissimilis* Wlk.

Tibiae straight; intermediate tibiae clavate; petiole short; thorax long; prothorax rounded in front; antennæ 13-jointed, third and fourth joints annular; abdomen short, ovate.

[*S. Ormoceridae* Wlk. Antennæ moniliform; abdomen sessile; stigmal branch straight.]

ORMOCERUS Wlk. — 4 sp. *O. vernalis* Wlk.

Antennæ short, clavate or subfiliform, 13-jointed, third and fourth joints minute; thorax convex above; abdomen not compressed; ovipositor not exserted.

MICRODELUS Wlk. — 8 sp. *M. rotundus* Wlk.

Antennæ 12-jointed, clavate; apex acuminate; thorax convex; abdomen not compressed, short, nearly rounded; ovipositor not exserted; stigma emitting a short nerve.

GLYPHE Wlk. — 1 sp. *G. cyathulae* Wlk.

Abdomen compressed, elongate-ovate, acuminate at tip; apex unarmed in ♀; thorax convex; antennæ 12-jointed, subclavate, with the last joint elongate-acuminate; stigma emitting a very short nerve.

GASTRANCISTRUS Westw. — 17 sp. *G. vagans* Westw.

Head broader than the thorax; antennæ 13-jointed in ♂, 12-jointed in ♀, third and fourth joints annular; fifth to ninth cup-shaped; abdomen elongate-ovate ♀; apex with two small recurved hooks; ovipositor exserted, more or less elongate; stigmal branch long and clavate; tarsi 5-jointed.

MEROMALUS Wlk. — 1 sp. *M. flavigornis* Wlk.

Antennæ submoniliform, 13-jointed ♂, not half the length of the body, with the last joint short; abdomen compressed, sublinear; thorax very convex.

RAPHITELUS Wlk. — 1 sp. *R. maculatus* Wlk.

Antennæ 12-jointed ♂, clavate, third and fourth joints minute, tenth and eleventh joints very short, last joint setiform; abdomen subcompressed, narrowed at the tip; thorax convex.

PSILONOTUS Wlk. — 1 sp. *Ps. adamas* Wlk.

Head flat in front, and rather produced; thorax flat; abdomen very compressed, longer than the thorax; antennæ 12-jointed; ♀ subclavate, submoniliform, clava ovate.

[4. Pteromalidæ Wlk. Abdomen flat, semile; antennæ filiform, fusiform, or clavate; stigmal branch straight.]

SELADERMA Wlk. — 4 sp. *Sel. latum* Wlk.

Antennæ 13-jointed, third and fourth joints minute; mesothoracic parapsides distinct; collar very minute, transverse; abdomen ovate or elongate-ovate, angulated beneath; ovipositor concealed.

SEMIOTELLUS Westw. **SEMIOTUS Wlk.** (G. Elateridæ.) 9 sp. *S. mundus* Wlk.

Antennæ 12-jointed; thorax coarsely punctured; mesothoracic parapsides distinct; collar very short, transverse; mandibles 3-toothed; abdomen ovate or elongate-ovate.

SYSTASIS Wlk. — 2 sp. *S. Encyrtoides* Wlk.

Antennæ 12-jointed, ♂ subfiliform, ♀ clavate; thorax not coarsely punctured, convex, short-ovate; collar very short, transverse; abdomen short-ovate, or rounder, flat above, ♀ angulated beneath.

EUNOTUS Wlk. — 1 sp. *E. cretaceus* Wlk.

Antennæ 11-jointed, third and fourth joints scarcely visible; metathoracic parapsides not distinct; prothorax very short, transverse; head very large; abdomen nearly quadrate ♂, basal joint covering the rest, ♀ apterous.

MERAPORUS Wlk. — 3 sp. *M. graminicola* Wlk.

Antennæ 12-jointed, clavate; club of moderate size, ovate, flat; thorax broad at the extremity; mesothoracic parapsides not distinct; abdomen ♂ very small, rounded, ♀ ovate.

METASTENUS Wlk. — 1 sp. *M. concinna* Wlk.

Short; antennæ 12-jointed, subfusiform; club moderate sized, conic, acuminata; thorax narrowed at the extremity; mesothoracic parapsides indistinct; abdomen ovate, abruptly narrowed at base.

METOPON Wlk. — 1 sp. *M. atrum* Wlk.

Antennæ 12-jointed, clavate, fifth and following joints subequal; club very thick; collar minute, scarcely visible; abdomen small, compressed, flat; sides elevated.

PLATYTERMA Wlk. — 11 sp. *Pl. noble* W.

Narrow, sublinear; antennæ 13-jointed, third joint scarcely visible, fourth and fifth minute; club short-ovate; thorax flat above, elongate-ovate; abdomen ♂ sublinear, ♀ ovate or sublinear.

AMBLYMERUS Wlk. — 27 sp. *A. amarus* Wlk.

Short, broad; antennæ 13-jointed, clavate, shorter than the thorax, second joint elongate, cup-shaped, fifth and following, to the tenth, gradually shorter and broader; thorax convex above; collar very short.

PROSOPON Wlk. — 1 sp. *Pr. montanum* Wlk.

Head moderate sized, transverse; antennæ slender, clavate, 13-jointed, third and fourth joints minute; club ovate; thorax ovate; collar very short; abdomen ovate, flat; middle tarsi broad.

PLATYMESESOPUS Westw. ——— 1 sp. *Pl. tibialis* Westw.

Maxillary palpi not furcate, second joint large, dilated, fourth very long; middle tibia broad, flattened, and internally sinuated, terminating on the outside in a fascicle; anterior tibiae slightly dilated; abdomen ovate, depressed, much smaller than the thorax.

MESOPOLOBUS Westw. ——— 1 sp. *M. fasciiventris* Westw.

Head broad; antennæ gradually thickened, 13-jointed, third joint annular, fourth larger; mandibles 3 to 4-dentate; max. palpi ♂ furcate; middle tibiae with a small hirsute lobe on the outside near the tip ♂.

ENTELUS Wlk. ——— 30 sp. *Ent. dilectus* Wlk.

Intermediate tibia simple; antennæ clavate, third and fourth joints minute; max. palpi slender, filiform; abdomen acuminate; intermediate femora often with a tooth beneath.

PTEROMALUS Swederus. ——— 254 sp. (Wlk.) *Ichn. puparum* Linn.

Femora slender, intermediate beneath setigerous near the tip; body pilose; ovipositor concealed or scarcely exerted; antennæ 13-jointed, with the third and fourth joints annular, fifth moderate sized; collar very short.

Obs. The species of this genus are arranged by Walker into about 140 sections, the majority of which are unnamed. Some, however, appear equivalent with the groups indicated in Curtis's *Guide*, under the MSS. names of *Spintherus* Wlk., *Eusela* Wlk., *Lamprotes* Wlk., and *Pterocelis* Hal. The species still, however, require a careful subgeneric revision, in order to place them on a footing with the *Micogasteridæ* and *Ormoceridæ* of Walker.

EPICOPTERUS Westw. ——— 1 sp. *E. choreiformis* Westw.

Very short, convex, contracted; antennæ short, subclavate, 12-jointed, third and fourth joints annular; fore wings with the humeral portion anteriorly dilated, and obliquely truncate at the place of union of the subcostal nerve with the costa; abdomen sessile.

METOPACHIA Westw. { *GNATHO* Curtis. } 1? sp. *C. dispar* Curtis. 166.
{ *COLAX* Curtis. }

Head ♂ much broader than the thorax; thorax ovate; collar short; abdomen ♂ elongate-spatulate; ♀ elongate-conic, flat above, angulated beneath; ovipositor not exerted; antennæ 13-jointed, slender, filiform, third and fourth joints annular, very minute.

HETROXYX Westw. *GASTRACANTHUS* Westw. ol. 3 sp. *G. pulcherrimus* Westw.

Head broad, short; abdomen three times as long as the thorax, narrow, acuminate to the tip; collar triangular; antennæ slender, 13-jointed, third and fourth joints annular; legs simple.

CHEIROPACHUS Westw. *CLEONTMUS* Curtis. 2 sp. *D. quadrum* Fab.

Head transverse; antennæ 13-jointed, third and fourth joints annular, three terminal joints coelite; collar short, transverse; anterior and posterior femora ♂ thick, anterior thickened and notched at the tip ♀. Curtis 194, and Zl. Jl. vol. iv. pl. 2. f. 2.

MEROSTENUS Wlk. ——— 1 sp. *M. Phedyma* Wlk.

Narrow, sublinear; head large, transverse; antennæ 13-jointed, third and fourth joints minute; thorax long, linear; collar large, subquadrate; abdomen sublinear, flat; apex subquadrate; legs long, simple.

TRIGONODERUS Westw. ——— 22 sp. *Tr. obscurus* Westw.

Thorax subovate; collar triangular; antennæ ♀ 13-jointed, second joint minute,

third half as long as first, fourth to eighth short, equal, five terminal joints forming a club a little larger than the eighth joint.

[5. Cleonymidae Wlk. Stigmal branch incurved.]

CLEONYMUS Latr. *DIPLOLERIS* Fab. 3 sp. *D. depressus* Fab.

Thorax elongate-ovate; collar nearly square; antennæ 11-jointed ♀ second joint longer than the fourth, which is not annular, tenth joint produced on the outside; abdomen elongate-ovate, sides nearly parallel, quite flat; peduncle very short; ovipositor concealed. Zl. Jl. vol. iv. pl. 2. f. 1.

MACRONEURA Wlk. — 1 sp. *M. maculipes* Wlk.

Sublinear; antennæ moniform, 13-jointed, third joint minute, fourth to tenth subovate, equal; mandibles 3-dentate; thorax long-ovate; collar large; legs thick, simple; anterior tibiae armed with a long curved spur; stigmal branch long, subarcuate; ovipositor not exserted.

Subfamily 4. *Escyrtides* Westw.

CALOSOTER Wlk. — 2 sp. *C. vernalis* Wlk. Curt. 596.

Narrow, sublinear; head moderate; antennæ filiform, 13-jointed, third joint small, fourth and following gradually shortening; thorax long-ovate; abdomen sub-linear, flat; middle tibiae with a long spur; tarsi dilated.

STENOCERA Curtis. — 1 sp. *St. Walkeri* Curt. Curt. 596.

Long, sublinear; head subquadrate; antennæ filiform, 11-jointed, inserted near the mouth, third joint minute, fourth and following gradually shortening; thorax fusiform; collar subquadrate, narrowed in front; abdomen fusiform; middle tibiae longer, with a strong spur; middle tarsi dilated.

PLATYNOCHEILUS Westw. *STENOCERA* p. Wlk. 2 sp. *P. Erichsonii* Westw.

Elongate, slender; collar triangular; thorax elongate-ovate; abdomen oblong, depressed; antennæ 11-to 12?-jointed, third and following joints small, coalite, five following distinct, equal; costa very much incrassated at base as far as the stigma. Ent. Mag. vol. iv. p. 437.

EUFELMUS Dalm. — 4 sp. *E. memnonius* Dalm. De Geer, 2. t. 31. f. 22.

Antennæ 13-jointed, clavate, third and fourth joints minute; club ovate; thorax long-ovate; collar moderate; thorax depressed in the middle; abdomen long-ovate; ovipositor exserted; wings with stigmal branch distant from the union of the subcostal nerve and the costa.

UROCRYPTUS Westw. *EUFELMUS* p. *Dalm.* 1 sp. *E. excavatus* Dalm.

Antennæ 13-jointed, thickened towards the tip, subapterous; collar and mesothorax greatly elevated and channelled; abdomen ovate, convex; ovipositor hidden.

CHEILONEURUS Westw. *EUFELMUS* p. *Dalm.* 1 sp. *E. elegans* Dalm.

Mandibles 3-dentate; antennæ 11-jointed; collar attenuated; scutellum fasciculated; stigmal branch very short, removed a little from the union of the subcoelial nerve with the costa; legs as in *Encyrtus*.

ECTROMA Westw. *EUFELMUS* p. *Dalm.* 1 sp. *E. rufus* Dalm.

Head large; mandibles 3-toothed; antennæ 9-jointed, long in ♂, ninth joint not larger than the eighth; thorax oblong, quadrate; collar acuminate; ovipositor hidden.

ERICYDNUS Hal. — 2 sp. *Eric. paludatus* Hal.

Antennæ ♂ 13-jointed, ♀ 12-jointed, third and following joints gradually shortening; thorax ovate, flat; collar very minute; abdomen ovate, flat ♂, ovate ♀; ovipositor concealed; legs long; middle tibiae with a strong spur; tarsi dilated.

ENCYRTUS Dalm. *MIBA* Schell. 108 sp. *E. scutellaris* Dalm. Curt. 395.
 Antennæ 11-jointed, inserted near the mouth, none of the joints annular; thorax square behind; abdomen short, broad at base; tarsi 5-jointed; middle tibiae dilated, with long spurs; tarsi dilated; stigmal branch very small, arising at the union of the subcostal nerve with the costa; ovipositor not exerted.

CHOREIUS Westw. (nec *SPHENOLEPIS* Es.) 2 sp. *Encyrtus inceptus* Dalm. (*nigro-anæa* Westw.) Mag. Nat. Hist. March 1833.

Apterous, broad, subdepressed; antennæ simple, formed as in the typical Encyrti, as are also the middle legs; thorax quite square; scutellum very large, subquadrate; first segment of abdomen very large and broad.

CERAPTEROCERUS Westw. — 1 sp. *C. mirabilis* Westw.

Differs from Encyrtus in antennæ very large, flat, like those of Cerapterus; stigmal nerve placed at some distance from the apex of the subcostal nerve.

CERCHYSIUS Westw. *Encyrtus* p. Dalm. 2 sp. *Enc. Urocerus* Dalm.

Wings and middle legs as in Encyrtus; antennæ ♀ cylindrical, 10-jointed, with the second to seventh joints nearly equal; ovipositor thick and exerted, nearly as long as the abdomen.

TETRACNEMUS Westw. — 1 sp. *T. diversicornis* Westw.

Thorax and middle legs as in Encyrtus; antennæ 8-jointed, third, fourth, and fifth joints very minute, and emitting, as well as the sixth, a long branch; last joint thick, ovate; tarsi 5-jointed; subcostal nerve running for a short distance along the costa and emitting a short branch. Mag. Nat. Hist. vol. i. n. s. p. 257.

AGONIONEURUS Westw. { *APHELINUS* Dalm. ? Wlk. } (13 sp. Wlk.) *Ag.* *MYINA* Nees. *basalis* Westw.

Short, broad, obtuse; subcostal nerve short, running but a short distance after its union with the costa, and terminating in a callous point; antennæ short, clavate, 6-jointed; second joint half as long as first; third, fourth, and fifth short, gradually increasing; sixth very large, oval; tarsi 5-jointed; spur of middle legs large.

PTEROPTRIX Westw. — (10 sp. Wlk.) *Pt. dimidiatus* Westw.

Very short and broad; eyes large, pilose; antennæ 8-jointed, second and third joints equal; fifth, sixth, and seventh much longer; eighth very minute; scutellum large; wings with long ciliæ; stigmal branch short, forming an acute angle; tarsi 4-jointed.

COCCOPHAGUS Westw. *APHELINUS* p. Wlk. 3 sp. *Ented. scutellaris* Dalm.

Antennæ 8-jointed, second joint smaller than the third, which is of equal size with the fourth and fifth, three terminal joints forming a club; tarsi 5-jointed; stigmal branch short, curved at the tip.

TRICHOGRAMMA Westw. *CALLEPTILES* Hal. 1 sp. *T. evanescens* Westw.

Head as broad as the thorax; antennæ 6-jointed, second joint short, slender, third larger than the second; fourth and fifth short; sixth very large; thorax longer than abdomen; scutellum large; wings with the pile arranged in twelve lines; tarsi 3-jointed.

Subfamily 5. *Eulophides* Westw.

STENOMESIUS Westw. — 2 sp. *St. pulchellus* Westw.

Antennæ long, slender, 9-jointed; second joint half as long as third; collar attenuated; abdomen with a short peduncle, small, spatulate in ♂, larger, ovate in ♀; intermediate tibiae very slender, clavate at tips in ♂.

EUPLECTRUS Westw. *ELACHESTRUS* p. Esenb. 1 sp. *Expl. maculiventris* W.

Head small; antennæ slender, 9-jointed, second joint short; third to sixth ovate;

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abdomen with a short peduncle, spatulate; posterior coxae very large; hind tibiae with a very long spine in both sexes.

HEMIPTARSENUS Westw. — 3 sp. *H. fulvicollis* Westw.

Antennæ long, simple in both sexes, 7-jointed, second joint small; third to sixth equal, oblong; seventh smaller, ovate (inarticulate?); abdomen ovate, depressed, acuminate at tip; wings ♂ abbreviated.

DICLADOCERUS Westw. — 1 sp. *D. Westwoodii* Steph.

Differs from Eulophus in antennæ ♂ biramous; sc. 9-jointed, second joint small; third and fourth longer, each emitting a branch; fifth and sixth thicker, simple; the three last forming a mass. My vol. i. frontisp. f. 4.

ELASMUS Westw. *ANEURAX* Esenb. 1 sp. *Eul. flabellatus* Fonsc.

Antennæ ♂ with the third to fifth joints extremely short, each emitting a long branch, sixth long; ♀ 10-jointed, third and fourth joints annular; sides of the metathorax in both sexes produced behind into a large concave plate.

EULOPHUS Geoff. — 37 sp. Wlk. *Eul. pectinicornis* Linn.

Antennæ ♂ 9-jointed, third, fourth, and fifth joints emitting a long branch at base; ♀ 3-jointed, simple; tarsi 4-jointed; stigmal branch long; abdomen depressed; max. and labial palpi 3-jointed. Curt. 133.

Obs. Mr. Walker also introduces into this genus my Dicladoceri, Euplectri, Hemiptarseni, and Stenomesii, together with 49 other species, forming nearly as many sections.

ENTEDON Dalm. { *ELACHESTUS* Esenb. { *EULOPHUS* p. Esenb. } 19 sp. *Eul. Latreillei* Curt.

Subcostal nerve of the fore wing longer than a third of the wing; stigmal branch very short; antennæ simple, short.

Obs. Dalman's types of this genus are the species whose males have 3-ramose antennæ, which being the typical Eulophi, Dalman's name ought only to be considered as a synonym. Mr. Walker however retains it, placing in it my Closteroceri, Derosteni, Smaragdites, Omphale Hal., and 124 other species, forming nearly as many sections.

SMARAGDITES Westw. *ELACHESTUS* p. Esenb. 1 sp. *Sm. admirabilis* Westw.

Antennæ as long as the entire body, apparently 9-jointed; basal joint dilated, second short, third very small; the remainder long, filiform, with long hairs; thorax ovate; abdomen longer and much narrower than the thorax, elongate-ovate.

DEROSTENUS Westw. — 1 sp. *D. gemmeus* Westw.

Head large; antennæ 9-jointed; fourth, fifth, and sixth joints broadest, hairy; three terminal joints forming a small attenuated mass; collar very narrow; abdomen smaller than the thorax, depressed; peduncle long.

CLOSTEROCERUS Westw. — 2 sp. *Cl. trifasciatus* Westw.

Antennæ 8-jointed; basal joint dilated at the tip, the remainder forming a depressed fusiform club; fourth joint rather larger than the third and fifth; abdomen nearly sessile, ovate, depressed; wings large.

APROSTOCETUS Westw. — 11 sp. *A. caudatus* Westw.

Antennæ 8-jointed, second, third, fourth, and fifth joints equal, but gradually thickened; abdomen elongate, sessile, twice as long as the thorax; ovipositor exserted; tarsi 4-jointed.

OMPHALE Hal. — 7 sp. *O. Salicis* Hal.

Antennæ 7-jointed, ♂ elongate, linear, verticillate-pilose, terminal joints equal;

♀ filiform, terminal joints decreasing in length; scutellum slightly convex, without longitudinal lines; cubital nervure short, nearer the tip of the wing.

CIRROSPILUS Westw. ——— 138 sp. [Wlk.] *Cirr. elegantissimus* Westw.

Head emarginate between the eyes; antennæ ♀ short, thick, 7-jointed, second joint half as long as the third; fourth shorter than the third, the three terminal ones forming a mass; abdomen ovate-conic, depressed; petiole short; subcostal nerve of the fore wing twice as long as a third of the wing. Steph. pl. 46. f. 3.

Family 5. PROCTOTRUPIDÆ Steph. (*Oxyuri Latr.*)

Subfamily 1. Diapriidae Westw. (*Diapriidae* Hal.)

DIAPRIA Latr. (1796.) *PSILUS* Jur. 17 sp. *Ps. elegans* Jur. Steph. pl. 46. f. 2.

Antennæ ♂ 14-jointed, verticillate; ♀ 12-jointed; head scarcely elongated; mandibles forcipate; cells obliterated; a small callous spot in the place of the stigma.

PLATYTMISCHUS Westw. ——— 1 sp. *Pl. dilatatus* W. vol. i. Frontisp. fig. 5.

Apterous, depressed, narrow; antennæ 14-jointed; third joint large, internally produced; thorax oblong-quadratae.

CEPHALONOMIA Westw. ——— 1 sp. *C. formiciformis* Westw.

Head ♂ moderate, ♀ large, oblong, flat; antennæ 12-jointed ♂ ♀; ♂ filiform ♀; short, submoniliform; collar triangular; wings with a short subcostal nerve terminated by a callous spot. Mag. Nat. Hist. Sept. 1833.

ANEURHYNCHUS Westw. *MYTHRAS* Hal. 6 sp. *An. galesiformis* Westw.

Head transverse, with a small frontal tubercle; antennæ ♂ scarcely as long as the body, 14-jointed, second joint minute; third slender, and rather longer; fourth thicker; stigma indistinct; subcostal basal nerve not reaching the costa, but obliquely extended for a short distance into the disc of the wing, whence it is directed towards the tip of the wing, forming a long marginal cell.

GALESUS Curtis. *Psilus* p. *Panz.* 4 sp. *Psil. cornutus* Pz. Curtis, 341.

Antennæ ♂ 14-, ♀ 12-jointed, thickened at tip; front of head much produced; mandibles rostriform; nerves indistinct.

PARAMESIUS Westw. *CERAPSILON* Hal. 4 sp. *P. rufipes* Westw.

Head sub-quadratae, with a frontal tubercle; antennæ ♂ longer than the body, filiform, 13-jointed; second and third joints minute; peduncle one third of the length of the abdomen; nerves as in *Cinetus gracilipes* (Curtis 380. 9.), but the marginal cell is longer and truncated at base; lab. palpi 2-jointed.

BASALYS Westw. ——— 1 sp. *B. fumipennis* Westw.

Head not rostrated; antennæ ♂ 14-jointed; second and third joints small; fourth large, produced externally; remainder slender; two subcostal nerves scarcely reaching the third part of the wing, the transverse nerve connecting them at the tip, forming a triangle with a nerve running obliquely from the middle of the posterior of them.

SPILOMICRUS Westw. *Psilus* p. *Spin.* 6 sp. *Sp. stigmatical* Westw.

Head transverse-quadratae; antennæ ♀ rather longer than the thorax, 13-jointed, thickened to the tip; stigma small before the middle of the costa, its apex internally deflexed, emitting a short branch directed towards the base of the wing; basal cell subtriangular; the other nerves indistinct; peduncle of moderate length, striated; lab. palpi 2-jointed.

BELYTA Jurine. ——— 8 sp. *B. bicolor* Jur. pl. 14. f. 8.

Antennæ ♀ short, 15-jointed, not thickened at tips, with the joints perfoliated; ♂ 14-jointed, filiform; marginal cell contracted, not completely closed.

CINETUS Jurine. —— 15 sp. *C. gracilipes* Curt.

Antennæ ♂ 14-jointed, long, slender; ♀ 15-jointed, thickened at tip; marginal cell small, trigonate; labial palpi 3-jointed; disc of wings not areolated.

ISMARUS Hal. *CINETUS* p. Curt. 5 sp. *Cin. dorsiger* Curtis. Curt. 380.

" Antennæ seated near the mouth, filiform, 14 joints ♂, 15 ♀; mesothoracic scutum levigate; wings with one brachial, and a small triangular radial areolet." Haliday MSS.

HELORUS Latr. *PSEN* p. *Pasz.* 2 sp. *H. ater* Jur. Curtis, 403.

Antennæ porrected, 13-jointed; max. palpi 5-, labial 3-jointed; wings strongly areolated; abdomen petiolated.

Subfam. 2. *Proctotrupides* Westw.

PROCTOTRUPES Latr. *CODAUS Jur.* 18 sp. *P. niger* Panz. My fig. 78. 1.

Mandibles without teeth; anterior tibiae with a single spur; valves of ovipositor long, exserted; antennæ 12-jointed.*

Subfam. 3. *Gonatopides* Westw. (Aculeata Cenoptera, or fam. Dryinidae, and Bethylidae, Hal.)

APHELOPUS Dalm. ♂ *HETEROLEPIS Esenb.* 3 sp. *Aph. atratus* Dalm.

Mouth broad; max. palpi long, pendulous, 6-jointed; anterior tarsi ♀ simple; discoidal cells indistinct. Ent. Mag. pl. 16. f. 3.

ANTEON Latr. *DRYINUS Latr.* 8 sp. *A. Jurineanum* Latr.

Mouth broad; max. palpi long, pendulous, 6-jointed; anterior tarsi ♀ chelate; inner claw connate with two joints of the tarsus; discoidal cells distinct.

CHELOGYNUS Hal. *DRYINUS* p. Curtis. 14 sp. *D. cursor* Hal. Curt. 206.

Differs from Anteon in inner claw of fore legs ♀ being connate with only one joint of the tarsus.

LABEO Hal. *ANTEON?* p. Westw. 2 sp. *L. excisus* Westw. Ent. Mag. pl. 16. f. 2.

Mouth small; max. palpi 3-jointed; thorax short, compact; stigma narrow; occiput deeply notched.

MYRMECOMORPHUS Westw. —— 1 sp. *M. rufescens* Westw.

Head rounded-oblong; ocelli 0; antennæ as long as the body, 10-jointed; thorax twice as long as the head; collar subquadrate; wings scarcely rudimental; fore legs simple; max. palpi 3-, labial 2-jointed.

EMBOLEMUS Westw. —— 1 sp. *Emb. Ruddii* Westw. Ent. Mag. pl. 16. f. 1.

Head with a frontal tubercle, on which the antennæ are placed; these are 10-jointed, longer than the body, filiform; second joint very minute; fore legs simple; one marginal, two indistinct submarginal, two basal, and two discoidal cells; legs long and slender.

GONATOPUS Lju. & Kl. *DICONDYLUS Hal.* 5 sp. *G. pedestris* Dalm.

Thorax elongate, constricted in the middle, apterous; fore tarsi chelate; fore coxae very long; max. palpi 5-jointed. My fig. 78. 15.

BETHYLUS Latr. *OMALUS* p. Jur. 5 sp. *B. cenopterus* Pz. Curt. 720.

Head oblong, flattened; antennæ 12-jointed, filiform, the terminal joints narrowed at the base; two long basal cells, the posterior shortest.

EPYRIS Westw. *PRISTICKRA Kl.?* 3 sp. *Ep. niger* Westw. Ent. Mag. p. 16. f. 6.

Head moderate, subconvex; antennæ elongate, filiform, inserted near the mouth,

* Mr. Haliday has just had the kindness to forward to me his monograph upon this genus, forming the first fascicle of his *Hym. Britann.* *Oxyura*, April, 1839.

13-jointed, cylindric, the joints not narrowed at base; thorax elongate-ovate, marginal cell incomplete, two basal cells of equal length.

Subfamily 4. *Ceraphrontides* Westw. (*Ceraphronidae* Hal.)

MEGASPILUS Westw. { *CALLICERAS* p. Esenb. } 28 sp. *Cer. dux* Curt.

Antennæ elbowed, 11-jointed ♂ ♀; apex in ♀ but slightly clavate; upper wings with a large semicircular stigma; ocelli three; max. palpi 5-jointed, long, pendulous. Curtis, 249.

MICROPS Hal. *CERAPHRON* p. Curt. 4 sp. *Ceraphr. Rubi* Curtis.

Apterous; ocelli 0; eyes small; max. palpi 4-jointed; antennæ 11-jointed.

CALLICERAS Esenb. *CERAPHRON* p. Curt. (3 sp.?) *C. Carpenteri* Curt.

Winged; stigma large; antennæ ♂ verticillate.

CERAPHRON Jur. — 20 sp. *Cer. sulcatus* Jur. pl. 14. f. 9.

Antennæ ♂ 11-jointed, 10-jointed in ♀; max. palpi 4-jointed; stigma obsolete; stigmal branch curved, abrupt.

Subfamily 5. *Platygasterides* Westw. (*Scelionidae* Hal.)

BAEUS Hal. — 1 sp. *B. seminulum* Hal. Ent. Mag. pl. 13. f. 6.

Apterous; thorax short; scutellum not visible; club of antennæ thick, oval, 5-annulated.

HEMISIUS Westw. — 1 sp. *H. minutus* Westw.

Head nearly as large as the thorax; antennæ placed on a frontal tubercle, long, distinctly 11-jointed, third smaller than the second; club 4-jointed; wings scarcely longer than the thorax; stigmal branch elongate, clavate, oblique; second abdominal segment very large.

GRYON Hal. — 2 sp. *G. misellus* Walk. Ent. Mag. pl. 16. f. 5.

Thorax short; abdomen sessile, with equal-sized segments; stigmal branch short, arising at the middle of the costa; scutellum distinct; antennæ 12-jointed.

TELEONOMUS Hal. *TELEAS* p. Esenb. 26 sp. *Teleas phalanarum* Esenb.

Abdomen sessile, second joint elongated; stigmal branch arising at the middle of the costa, long, oblique. Ent. Mag. pl. 13. f. 1—4.

THORON Hal. *TELEAS* p. Curt. 1 sp. *Th. metallicus* Hal.

Abdomen petiolated; stigmal branch arising at the middle of the costa, long; club of antennæ ♀ indistinctly annulated. Ent. Mag. pl. 13. f. 11.

XENOMERUS Wlk. — 1 sp. *X. Ergenna* Wlk. Ent. Mag. 13. f. 10.

Antennæ ♂ long, verticillate; stigmal branch arising near the extremity of the costa, rather short.

TELEAS Latr. { *TELEAS* and *PROSACANTHA* Esenb. } 39 sp. *T. clavicornis* Latr.

Antennæ 12-jointed, slightly pubescent ♂; club 6-jointed ♀; thorax rather short; collar linear-arched; legs saltatorial; abdomen more or less petiolated; stigmal branch very short. Curt. 333.

SCELIO Latr. — 1 sp. *Sc. rugosulus* Latr. Curt. 325.

Max. palpi short, 3-jointed; front of head rounded; thorax oblong; antennæ ♂ 10-jointed, ♀ 12-jointed; marginal cell elongate-trigonate.

SPARASION Latr. — 1 sp. *Sp. frontale* Latr. Curt. 317.

Max. palpi long, 5-jointed; labial 3-jointed; front of head margined; antennæ 12-jointed.

GENERIC SYNOPSIS.

PLATYGASTER Latr. ————— 108 sp. *Pl. ruficornis* Latr.*

Antennæ 10-jointed, clavate in ♀ ; max. palpi short, 2-jointed, labial 1-jointed ; wings without cells or veins ; legs not saltatorial ; abdomen ♀ not cornutated ; tarsi 5-jointed. Ent. Mag. No. 13. pl. 12. f. 10.

EPIMECES Westw.† **PLATYGASTER** p. Wlk. (3 sp.?) *E. ensifer* Westw.

Abdomen ♀ with the last four segments as long as the second, and narrowed into a tail ; antennæ ♀ 10-jointed, filiform ; wings without distinct veins. Ent. Mag. No. 13. pl. 12. f. 15.

INOSTEMMA Hal. **PLATYGASTER** p. Latr. 9 sp. *Psil. Bosci* Jur. Curt. 309.

Fore wings with the subcostal nerve abruptly capitate ; club of antennæ clavate in ♀, 4-jointed ; abdomen ♀ cornutated. (My fig. 78. 13.)

IPHITRACHELUS Hal. ————— 1 sp. *Iph. Lar* Hal.

Tarsi 4-jointed ; antennæ ♂ verticillate-pilose ; subcostal nerve short, clubbed. Ent. Mag. No. 13. pl. 12. f. 1.

Subfamily 6. *Myrmarides* Westw. (*Myrmaridae* Hal.)

MYMAR Hal. **GONATOCERUS** Esenb. 4 sp. *M. pulchellus*. Curt. 411.

Antennæ ♂ 13-jointed, ♀ 9-jointed ; club inarticulate ; scapus in both sexes elongate, linear ; tarsi 4-jointed ; abdomen peduncled. (My fig. 78. 16. ♂.)

OOCTONUS Hal. ————— 5 sp. *M. insignis* Hal.

Antennæ ♂ 13-jointed, ♀ 11-jointed, with an inarticulate club ; tarsi 5-jointed.

ANAPHES Hal. ————— 4 sp. *Ichn. punctum* Shaw.

Antennæ ♂ 12-jointed, ♀ 9-jointed ; club inarticulate ; tarsi tetramerous ; abdomen subsessile, ovoid. Linn. Trans. vol. xiv. pl. 18. fig. 1.

POLYNEMA Hal. ————— 7 sp. *Ichn. ovulum* Linn.

Antennæ ♂ 13-jointed, ♀ 9-jointed ; club inarticulate ; scapus in each sex dilated, sinuated, but slightly elongate ; abdomen petiolated.

LITUS Hal. ————— 5 sp. *L. dimidiatus* Hal.

Antennæ ♀ 9-jointed ; club inarticulate ; tarsi 5-jointed.

EUSTOCHUS Hal. **CALLIRACHA** Esenb. 1 sp. *M. atripennis* Hal.

Antennæ ♀ 10-jointed ; club biarticulate ; tarsi tetramerous ; abdomen petiolated.

ANAGRUS Hal. ————— 5 sp. *Ichn. atomus* Linn.

Antennæ ♂ 13-jointed, ♀ 9-jointed ; club inarticulate ; tarsi 4-jointed ; abdomen sessile, conic-acuminate.

* Latreille describes *Platygaster* as having the third joint of the antennæ much longer than the following joints, citing *P. ruficornis* as the type. Having examined and made a drawing of Latreille's typical specimen, attached to the generic label in his own hand-writing, still contained in the collection of the Baron Dejean, I am able to confirm this description (as stated in the *Mag. Nat. Hist.* vol. vi. p. 421.). The species considered as such by Messrs. Haliday (Ent. Mag. vol. i. p. 270.) and Walker (Ditto, vol. iii. p. 240.), must therefore, from its sectional characters, be distinct. The last paragraph in the note of the latter (*Ibid.* p. 243. a.) must consequently be struck out.

† Deceived by the filiform antennæ of the females of some species of *Platygaster*, I regarded them as males ; and considered as their females other species which have also the abdomen elongated posteriorly ; and upon which I constructed the genus *Epimeces*. Mr. Walker, in his *Monograph*, has pointed out this error ; considering these females as forming separate sections in the genus *Platygaster*. The name *Epimeces* may, however, be retained for the species with filiform antennæ in the females, which I had regarded as males.

ALAPTUS Hal. — 1 sp. *M. minimus* * Wlk.

"Tarsi pentamerous; antennæ ♂ 10-jointed, filiform, 8-jointed ♀, last joint enlarged." Haliday MSS.

Tribe 2. *Tubulifera* St. Farg. Hal., consisting of the single

Family *CHRYSIDIDÆ* Leach.

HEDYCHRUM Latr. *OMALUS* p. Panz. 12 sp. *Ch. aurata* Linn. Curt. 38.

Abdomen semicircular, or nearly hemispheric, convolvent; scutellum not produced; thorax broadly truncate in front.

ELAMPUS Spinola. *HEDYCHRUM* p. Panz. 1 sp. *Ch. Panzeri* Fab. Pz. 51. 11.

Abdomen convex, emarginate at the tip; scutellum terminating in a flat mucro; thorax broadly truncate in front.

CHRYSIS Linn. *SPHEX* p. Scop. 29 sp. *Ch. ignita* Linn. Curt. 8.

Abdomen oblong, semi-cylindrical, concavo-convex, convolvent; scutellum not produced; thorax broad in front.

? **EUCHREUS** Latr. *CHRYSIS* p. Panz. 1 sp. *Ch. 6-dentata* Latr. ? Pz. 51. 12. ?

Abdomen subquadrate; scutellum not produced; thorax broadly truncate in front.

CLEPTES Latr. *SPHEX* p. Linn. 2 sp. *Sph. semiaurata* Linn. Curt. 724.

Collar narrow; abdomen lanceolate-ovate, not convolvent, entire at the tip.

Sect. 2. **ACULEATA** Latr., Hal. (*Hym. ovitibialis* St. Farg. *H. monstrocha* Hart. *H. normalis* Westw.)

Subsect. 1. *Insectivora* Westw. (Fossores Latr. Lestica Hal.)

Family 1. *CRABRONIDÆ* Leach, Hal.

Subfamily 1. *Nyssonides* Westw. (Larridae p. Leach.)

NYSSON Latr. *OXYELUX* p. Fabr. 4 sp. *N. interruptus* Fabr. Panz. 72. 13.

Mandibles toothless; eyes ♂ not united; antennæ inserted below the centre of the face; three submarginal cells, the second peduncled, and receiving two recurrent nerves.

ASTATA Latr. *DIMORPHA* Jur. 1 sp. *Tiphia abdominalis* Pz. Curt. 261.

Thorax and abdomen ovate; second joint of lab. palpi securiform; eyes ♂ united behind; three submarginal sessile cells, the second receiving two recurrent nerves.

OXYBELUS Latr. *SPHEX* p. Schäff. 6 sp. *Vespa uniglumis* Linn. Curt. 480.

Short; one submarginal cell, receiving one recurrent nerve; the discoidal nerve rudimentary; antennæ short; mandibles toothless; metathorax armed.

TRYPOXYLON Latr. *APIUS* Jur. 3 sp. *Sphex figulus* Linn. Curt. 652.

Eyes emarginate; one marginal, and one distinct submarginal cell; abdomen very long, narrow, peduncled; mandibles toothless.

PSEN Latr. *TRYPOXYLON* p. Fabr. 2 sp. *Sphex atra* Fabr. Panz. 72. 7.

Clypeus quadrate; abdomen long; first segment peduncled; antennæ central, thickened at the tip; three submarginal sessile cells, the second and third receiving a recurrent nerve; mandibles bidentate.

MIMESA Sh. *PAXA* p. Curtis. 2 sp. *Psen equestris* Fabr. Curt. 25.

Three submarginal cells, the second receiving both recurrent nerves, third cell larger than the second.

* "The type of this genus is the smallest Hymenopterous insect known, being about half the size of *Anagrus atomus*." Haliday MSS.

Subfamily 2. *Crabronides* Westw. (*Crabronidae* Leach.)

ALYSON Jur. **POMPILUS** p. *Fabr.* 1 sp. *Al. spinosus* Jur. *Curtis*, 584.

Abdomen elongate-ovate; collar narrowed; three submarginal cells, the second peduncled, first and second receiving a recurrent nerve; metathorax spined and striated.

GORYTES Latr. **ARPACTUS** p. *Jur.* 2 sp. *Vespa mystacea* Linn. *Curtis*, 524.

Abdomen elongate-ovate; mandibles bidentate; four submarginal cells, the second narrowed at the base, sessile, and receiving two recurrent nerves; anterior tarsi simple in both sexes.

[**HOPLISUS** St. Farg. **GORYTES** p. *Shk.* 1 sp. *H. 5-cinctus* St. Farg.

Antennæ obtuse in both sexes; anterior tarsi ♀ ciliated. *Pz.* 72. 14.]

[**EUSPONGUS** St. Farg. **GORYTES** p. *Shk.* 2 sp. *E. laticinctus* St. Farg.

Anterior tarsi ♀ ciliated; antennæ ♀ thickened, acute at tip.]

[**LESTIPHORUS** St. Farg. **GORYTES** p. *Shk.* 1 sp. *Crab. bicinctus* Rossi.

Abdominal peduncle pear-shaped; antenna ♀ filiform, ♂ pointed at tip, tenth joint concave in ♂. *Curtis*, 524.]

ARPACTUS Jur. **POMPILUS** p. *Panz.* 2 sp. *Ar. tumidus* *Pz.* *Pz.* 81. 15.

Three submarginal cells, second not peduncled, receiving two recurrent nerves; antennæ ♀ as long as ♂.

CRAUBRO *Fabr.* **SPHEX** p. *Linn.* 42 sp. *Sphex cribaria* Linn. *Curtis*, 680.

Antennæ strongly elbowed; face very broad; one marginal cell slightly appen-diculated, and one submarginal not confluent with the second discoidal; one recurrent nerve; mandibles slender, bifid at tip; max. palpi 6-, labial 4-jointed.

Obs. This genus has been greatly cut up by St. Fargeau. The following are such of his genera as have been found in this country, together with examples of each.

[**THYREOPUS** St. Farg. **CRAUBRO** p. *Shk.* **Sphex cribaria** Linn. *Pz.* 15. 18, 19.]

[**CROSSOCERUS** St. Farg. **CRAUBRO** p. *Shk.* **Cr. scutatus** *Fabr.* *Pz.* 15. 22.]

[**THYREUS** St. Farg. **CRAUBRO** p. *Shk.* **Cr. verillatus** *Pz.* *Pz.* 46. 5.]

[**CERATOCOLUS** St. Farg. **CRAUBRO** p. *Shk.*? **C. Lindenius**? *Shk.*]

[**SOLENIUS** St. Farg. **CRAUBRO** p. *Shk.* **Sphex vaga** Linn. *Pz.* 46. 10.]

[**BLELEPHARIPUS** St. Farg. **CRAUBRO** p. *Shk.* **Cr. dimidiatus** *Fabr.* *Pz.* 43. 15.]

[**LINDENIUS** St. Farg. **CRAUBRO** p. *Shk.* **Crabro albilabris** *Fabr.* *Pz.* 15. 24.]

[**PHYSOSCELIS** St. Farg. **CRAUBRO** p. *Shk.* **Crabro rufiventris**. *Pz.* 72. 12.]

RHOPALUM Kirby. **CORYNOPUS** St. Farg. 3 sp. **Crabro tibialis** *Fabr.*

Abdomen with a long knotted peduncle; marginal cell with a long terminal branch; submarginal and discoidal cell as in *Crabro*; max. palpi 5-, labial 3-jointed. *Curtis*, 656.

STIGMUS Jurine. — **St. ater** Jur. *Jurine*, pl. 9. 7.

Antennæ not elbowed; two submarginal cells, first receiving the only recurrent nerve, which joins the cubital about the middle of the first submarginal cell; second small; two discoidal cells; stigma very large; mandibles elongate, tridentate.

SPILOMENA *Shk.* **CELLA** *Shk.* olim. 1 sp. **Stig. troglodytes** V. L.

Stigma very large; two submarginal cells, one recurrent nerve anastomosing with the first transverso-cubital.

PEMPHREDON *Fabr., Westw.* **DIODONTUS** *Curtis.* 3 sp. *P. minutus* *Fabr.*
Clypeus transverse, tridentate; mandibles bidentate, strong; two submarginal cells, each receiving a recurrent nerve, second truncate-triangular; labrum bidentate. *Curtis*, 496.

PASSALŒCUS *Shk.* { *Xylacus* *Shk.* in tab. } 9 sp. *P. insignis* *Shk.*
{ *DIODONTUS* *p.* *Curt.* }

Two submarginal cells, each receiving a recurrent nerve, second cell transverse, not petiolated; mandibles bidentate or tridentate.

CEMOMUS *Jur., Westw.* **PEMPHREDON** *Latr., Curt., Shk.* 2 sp. { *lugubris* *Fabr.*
{ *unicolor* *Jur.*
Mandibles short, strong, 3-dentate; abdominal peduncle moderate; upper wings with two submarginal cells, the second square, the first and second receiving a recurrent nerve; labrum entire. *Jur.* pl. 11. f. 28.

DIPHLEBUS *Westw.* { *CEMOMUS* *p.* *Jur., Shk.* } { *PEMPHREDON* *Latr.* } 2 sp. *Pelop. unicolor* *Fabr.* Nec *DINEURUS* *Westw. olim.* Jurine.

Mandibles elongate, 4-dentate; two submarginal cells, the first receiving two recurrent nerves; three discoidal cells; abdominal peduncle short.

CERATOPHORUS *Shk.* **PEMPHREDON** *p.* *V. L.* 1 sp. *P. Morio* *V. L.*

Petiole of abdomen short; second submarginal cell widest towards the marginal mandibles ♀ bidentate.

MELLINUS *Fabr.* **SPHEX** *p.* *D. G.* 2 sp. *Vespa arvensis* *Linn.* *Curt. 580.*
Abdomen elongate, narrowed at the base, first segment knotted at the tip; tarsal pulvilli large; three complete submarginal sessile cells, fourth commenced, the first and third receiving a recurrent nerve.

PHILANTHUS *Fabr.* **SEMBLEPHILUS** *Jur.* 1 sp. *Ph. androgeus* *Rossi.*
Abdomen elongate-ovate; three submarginal cells, second sessile; marginal cell nearly linear, acuminate. *Curtis. 273.*

CERCERIS *Latr.* **PHILANTHUS** *p.* *Fabr.* 13 sp. *Sph. arenaria* *Linn.* *Curtis. 269.*
Abdominal segments constricted; three submarginal cells, second peduncled, second and third receiving a recurrent nerve.

Family 2. *LARRIDÆ* Leach.

LARRA *Fab.* *Liris* *p.* *Fabr. olim.* 1 sp. *L. Ichneumoniformis* *F.* *Pz. 76. 18.*
Hirsute; antennæ filiform; marginal cell appendiculated; third submarginal cell narrow, oblique; mandibles without teeth; abdomen elongate; metathorax long. *My fig. 82. 14.*

LYROPS *Il.* **TACHYTES** *Pz.* 3 sp.? *Larra pomipiliformis* *Pz.* *Pz. 89. 19.*
Mandibles with one short tooth; abdomen short, ovate; metathorax shorter than the dorsolum.

MISCOPHUS *Jur.* ——— 1 sp. *M. bicolor* *Jur.* *Steph. pl. 42. f. 3.*
Two submarginal cells, second petiolated; marginal cell not appendiculated; antennæ filiform; mandibles with one short tooth; abdomen ovate.

DINETUS *Jur.* **POMPILUS** *p.* *Fabr.* 1 sp. *D. pictus* *Jur.* *Steph. pl. 42. f. 4.*
Two submarginal sessile cells; antennæ ♂ moniliform at base; mandibles with several teeth; marginal cell appendiculated.

Family 3. *BEMBECIDÆ* Leach.

There is no British species of this family.

GENERIC SYNOPSIS.

Family 4. *SPHEGIDÆ* Westw.

Subfamily 1. *Pompilidæ* Westw. (Pompilidæ Leach.)

APORUS Spin. ——— 1 sp. *Ap. unicolor* Sp. Steph. pl. 41. f. 1.

Two complete submarginal cells, the second receiving two recurrent nerves; thorax long; legs moderate; collar quadrate.

? **CRYPTOCHEILUS** Pz. **POMFILUS** p. Fab. 1 sp. *Pz. annulatus* F.

Antennæ inserted in the middle of the face; three complete submarginal cells; max. palpi much longer than labial; labrum concealed. *Panz.* 76. 16.

POMPILUS Latr., Schiodte. **PRAMMOCHARES** Latr. olim. 24 sp. *Sph. gibba* Linn.

Thorax oblong; antennæ inserted nearer the mouth; three complete submarginal cells; marginal cell almost semicircular; aculeus not exserted. *Curtis*, 238.

[**AGENIA** Schiodte. **POMFILUS** p. Auct. *Sph. variegatus* Linn. Pz. 87. 21.]

Anterior tarsi simple; posterior tibiae finely pilose, not spined; labrum emarginate; mandibles bidentate; labium trifid.

[**PRIOCNEMIS** Schiodte. **POMFILUS** p. Auct. *Sph. exaltatus* Fabr. Pz. 86. 10.]

Anterior tarsi with short spines; posterior tibiae serrulate and spined ♀; mandibles bidentate.

[**EPISYRON** Schiodte. **POMFILUS** p. Auct. *Sph. rufipes* Linn. Pz. 65. 17.]

Anterior tarsi ♀ pectinated; posterior tibiae spined; labrum longitudinally cleft; mandibles long, tridentate ♀.

CEROPALES Latr. **POMFILUS** p. Paxaz. 1 sp. *Cer. maculatus* F. Pz. 72. 9.

Labrum advanced; max. palpi long; abdomen short; hind legs very long; four submarginal cells; aculeus exserted. *Curtis* 754., and my fig. 83. 14.

Subfamily 2. *Sphegides* Westw. (Sphecidae Leach.)

DOLICHURUS Latr. **PISON** Latr., Gen., nec Spin., Jur. 1 sp. *D. ater* Latr.

Mandibles toothed; max. palpi longer than the labial; anterior tarsi ♀ not spinose; abdominal peduncle very short; four submarginal cells. Steph. pl. 42. f. 1.

? **PELOPÆUS** Latr. **SCLEPHRON** Klug. 1 sp.? *Sph. spirifer* Linn., Jur.

Max. palpi longer than the labial; antennæ central; tarsal pulvilli large; labial lobes equal; abdominal peduncle long. *Donov. pl.* 531.

SPHEX Linn. **PERRIS** p. Fabr. 1 sp. *Sph. flavipennis* Jur. Steph. pl. 1. f. 3.

Maxillæ and labium short, reflexed near the tip; antennæ central; abdominal peduncle short; marginal cell nearly linear; three submarginal cells, second submarginal cell receiving the first recurrent nerve.

AMMOPHYLA Kirby. **PERRIS** p. Linn. 5 sp. *Sph. sabulosa* Linn. My fig. 83. 1.

Abdominal peduncle long; maxillæ and labium long, reflexed in the middle; three submarginal cells, the second receiving two recurrent nerves; third sessile smaller than the second.

MISCUS Jur. **AMMOPHYLA** p. Latr. 1 sp. *Am. campestris* Latr. *Curtis*, 604.

Abdominal petiole 2-jointed; third submarginal cell triangular and peduncled.

Family 5. *SCOLIIDÆ* Westw. (Scoliidae Leach.)

Subfamily 1. *Scoliides* Westw.

TIPHIA Latr. **BETHYLUS** Pz. 4 sp. *T. femorata* Pz. *Curtis*, 664.

Marginal cell incomplete in ♀; two submarginal cells, each receiving a recurrent nerve; mandibles not toothed. My fig. 84. 1.

Subfamily 2. *Sapygidae* Westw. (*Sapygidae* Leach.)*SAPYGA* Latr. *HELLUS* p. Fabr. 2 sp. *S. punctata* Klug. Curtis, 532.

Antennæ more or less thickened at tip; eyes emarginate; mandibles broad, multi-dentate; abdomen cylindrical; four submarginal cells, second and third receiving a recurrent nerve.

Family 6. *MUTILLIDÆ* Leach.*MUTILLA* Linn. *SPHEX* De G. 3 sp. *M. Europea* Linn. Curtis, 77.

Antennæ inserted in the middle of the face; three submarginal cells ♂; thorax ♀ continuous and apterous. My fig. 84. 13. 14.

MYRMOSA Latr. *HYLMEUS* Fabr. 1 sp. *M. melanocephala* Fabr.

Four submarginal cells ♂; thorax ♀ not constricted in the middle. Latr. Gen. pl. 19. 6.

TENGYRA Latr. ♂ *METHOCA* Latr. ♀ *MUTILLA* 1 sp. $\left\{ \begin{array}{l} T. Sawituli \text{ Latr. Ent. Text. B. pl. 3. f. 5.} \\ M. Ichneumonides \text{ Latr. Curtis, 329., and} \\ \text{my fig. 84. 19.} \end{array} \right.$

Three submarginal cells ♂; thorax ♀ trinodose; max. palpi elongate.

Division 2. *Sodales* Westw. (*Philopona* K. *Heterogyna* p. Latr.)

Containing the single

Family *FORMICIDÆ* Leach.*MYRMICA* Latr. *MANICA* Juv. 6 sp. *Form. rubra* Linn. Donovan, 503.

Abdomen armed with a sting; basal joint of antennæ long; abdominal peduncle 2-jointed; max. palpi 6-jointed; mandibles triangular.

MYRMECINA Curtis. ————— 1 sp. *M. Latreillei* Curt. Curt. 965.
Basal joint of antennæ very short ♂; mandibles wanting?; abdominal peduncle 2-jointed; max. palpi 4-jointed, labial 3-jointed ♂; one marginal cell often ap-pendiculate; one submarginal cell.

STENAMMA Westw. N. G. 92. *Steph. Cat.* 1 sp. N. G. *Westwoodii* Steph.
Basal joint of antennæ long; abdominal peduncle 2-jointed, first joint long, knotted; max. palpi 4-jointed, labial 3-jointed; mandibles broad, oblique, 5-dentate. My fig. 86. 11.

PONERA Latr. *FORMICA* p. Latr. oīam. 1 sp. *F. contracta* Latr.

Abdomen armed with a sting; abdominal peduncle formed of one large scale; mandibles triangular; eyes of neutera obsolete. Steph. pl. 42. f. 2.

FORMICA Linn. *Larvus* p. Fabr. 12 sp. *F. fusca* Linn. My fig. 85.

Sting wanting; basal joint of antennæ very long; abdominal peduncle consisting of a single elevated scale; max. palpi 6-jointed, labial 4-jointed in ♂ ♀?; eyes distinct. Curtis, 752.

Division* 3. *Diplopteryga* Kirby. (*Diploptera* Latr.)Family 1. *EUMENIDÆ* Westw., Hal. (Vespidae p. Leach.)*EUMENES* Latr. *Vespa* p. Linn. 1 sp. *Esm. atricornis* Fab. Curtis, 19.

Abdomen with the basal segment narrowed and pear-shaped; maxillæ and labium elongated. My fig. 87. 6.

ODYNERUS Latr. *SYMMORPHUS*† *Wesmael.* 3 sp. *V. muraria* Linn. Pz. 53. 9.

* The divisions Insectivora (p. 79.), Sodales and Diplopteryga, compose the first subsection Prædones (described in my Vol. ii. p. 184.), but omitted in p. 79.

† As Latreille gives the Linnaean *V. muraria* as the type of the genus *Odynerus*.

Abdomen ovoid, conic; basal segment short, subcampanulate; maxillæ and labium of moderate length; antennæ ♂ simple.

OPLOMERUS Westw. { *EPIFONE* Kirby, nec *Latr.* }
OPLOFUS * Wesmael. }
ODYNERUS Shk. } 3 sp. *V. spinipes* Linn.

Dorsal surface of the first segment of abdomen consisting of only one piece; posterior surface of metathorax entire, and convex at the sides; antennæ ♂ spiral at tips. Pz. 17, 18.

ANCISTROCERUS Wesmael. *ODYNERUS* Curt. 20 sp. *V. parietinus* Linn.
Dorsal surface of first segment of abdomen formed of two pieces; sides of metathorax angulated; last joint of antennæ ♂ hooked. Curt. 137. My fig. 87. 1.

Family 2. *VESSIDÆ* Westw. (*Vespidae* p. Leach.)

VESPA Linn. &c. ————— 6 sp. *V. vulgaris* Linn. My fig. 88.

Abdomen ovoid; mandibles broad, oblique at the tip, and toothed; clypeus quadrata, truncate in front. Curtis, 760.

Subsect. 2. *Mellifera* Latr. (or *Anthophila* Latr.)

Family 1. *ANDRENIDÆ* Leach. Proabeille Réass. *Melitta* K.)

Subfamily 1. *Obtusilingues* Westw.

HYLÆUS Latr. nec *Fabr.* *PROSOPIS* Jur. 7 sp. *Apis annulata* Linn. Curtis, 373.

Body smooth, naked; two complete submarginal cells; no pollinigerous organs. *COLEOTES* Latr. *EVODIA* Panz. 3 sp. *Apis succincta* Linn. Curtis, 85.

Hirsute, pollinigerous; three complete submarginal cells, second and third receiving a recurrent nerve.

Subfamily 2. *Acutilingues* Westw.

SPHECODES Latr. *DICHOA* Illiger. 4 sp. *Sphex gibba* Linn. My fig. 90. 14.

Antennæ ♂ nodose; four submarginal cells; maxillæ strongly elbowed; no pollinigerous organs; labium straight. K. M. A. A., pl. 2. and 15.

HALICTUS Latr. *MEGILLA* p. *Fabr.* 29 sp. *Hylaeus 6-cinctus* Fab.

Pollinigerous; central division of labium longer than the external; abdomen ♀ with a terminal slit; four submarginal cells. K. M. A. A., pl. 2. and 15.

[*LASIOGLOSSUM* Curtis. ————— 1 sp. *L. tricingulum* Curt. Curt. 448.]

Characters of Halictus, but with the terminal lobes of the maxillæ more elongated and lanceolate.

ANDRENA *Fabr.* *MELITTA* ** C. Kirby. 80 sp. *Apis cineraria* Linn. Curt. 129.

Pollinigerous; three complete submarginal cells; mentum long and narrow; labium shorter than the palpi; its central division grooved; antennæ ♂ simple.

CILISSA Leach. *ANDRENA* p. *Latr.* 3 sp. *Andr. hemorrhoidalis* Pz. Panz. 65. 20.

Antennæ ♂ subserrate; maxillæ bent in the middle; labium longer than the palpi.

(see Vol. II. p. 240. note,), I have retained it as such. It is congenerous with *Odyn. crassicornis* Pz., belonging to Wesmael's genus *Symmorphus*, which name must be rejected, being used by Klug for a genus of bees.

* This generic name is employed by Laporte, for a genus of Lamellicorn beetles.

DASYPODA Latr. **TRACHUSA** p. Jur. 1 sp. *Melitta Swammerdamella* K.

Basal joint of posterior tarsi very long, and densely pilose ♀ ; central labial lacinia lanceolate and reflexed ; two submarginal cells ; ocelli in a line. Curt. 367.

Family 2. **APIDÆ** Leach. (Abeille Réaum., *Apis* K.)

Subfamily 1. *Andrenoides* Latr. (Panurgides Westw.)

PANURGUS Panz. **EPIORS** Klug. 2 sp. *Apis ursina* Gmel. Curtis, pl. 101.

Antennæ clavate or subclavate ; mandibles acute ; two complete submarginal cells.

SYSTROPHIA Illiger. **HYLAEUS** p. Fabr. 1 sp. *Hyl. spiralis* Fab.

Antennæ ♂ spiral ; max. palpi thrice as long as the maxillary lobe ; labial palpi with the second joint twice as long as the preceding ; three complete submarginal cells. Panz. F. I. G. 35. 22.

Subfamily 2. *Denudata* Latr. (Melectides Westw.)

NOMADA Scopoli. **APIS** Linn. 40 sp. *Apis ruficornis* Linn. Curt. 419.

Elongate, glabrous ; marginal cell broad ; labial palpi continuous, maxillary 6-jointed.

MELECTA Latreille. **SYMMORPHA** Kl. 1 sp. *Apis punctata* Fab. Curt. 125.

Short, hirsute ; three marginal cells very narrow ; paraglossæ half as long as the labium ; max. palpi short, 5-jointed.

EPEOLUS Latreille. **NOMADA** p. Fab. 1 sp. *Apis variegata* Linn. Curtis, 1. 516.

Short, glabrous ; max. palpi minute, 1-jointed ; last joints of labial palpi oblique.

Subfamily 3. *Longilabres* Westw. (or Megachilides Westw.)

CÆLIOXYS Latr. **TRACHUSA** p. Jur. 3 sp. *Apis conica* Linn.

Abdomen acute ♀, dentate at tip in ♂ ; pollinigerous organs wanting ; mandibles broad, toothed ; max. palpi minute, 3-jointed. Curtis, B. E. pl. 349.

STELIS Panz. **GYRODROMA** Klug. 2 sp. *Stelis aterrima* Pz.

Short, ovate ; abdomen not pollinigerous ; labrum oblong, quadrate ; mandibles triangular-dentate, max. palpi 2-jointed. Kirby, M. A. A. 2. pl. 16. f. 9.

ANTHIDIUM Fab. **TRACHUSA** p. Jur. 1 sp. *Apis manicata* Linn. My fig. 91. 1.

Abdomen broad, subconvex, dentate ♂, rounded and pollinigerous ♀ ; max. palpi minute, exarticulate ; mandibles strong, dentate ; claws bifid. Curtis, pl. 61.

OSMIA Panz. { *HOPLITIS* Kl. } { *AMBLIS* Kl. } 10 sp. *Apis bicornis* Linn. Curtis, pl. 222.

Max. palpi short, 4-jointed ; mandibles broad, irregularly toothed ; abdomen convex above, pollinigerous ; antennæ ♂ long ; tongue very pilose.

MEGACHILE Latr. **PHYLLOTOMA** Dumeril. 10 sp. *Apis centuncularis* Linn.

Max. palpi short, 2-jointed ; abdomen ovate or triangular, flat above ; mandibles broad, 4-dentate ; labrum quadrate. Curt. 218.

HERIADES Spinola. **ANTHIDIUM** p. Panz. 2 sp. *Apis truncorum* Linn.

Elongate ; mandibles triangular, bidentate ; max. palpi 2-jointed ; second joint of labial palpi very long, fourth obsolete ; abdomen pollinigerous beneath ; dentate in ♂. Curt. 504.

CHELOSTOMA Latr. **ANTHIDIUM** p. Panz. 1 sp. *Apis florisomnis* Linn.

Elongate, subcylindric ; mandibles triangular, bidentate ; max. palpi minute, 3-jointed ; two complete submarginal cells ; labial palpi 4-jointed. Curt. 628.

CERATINA Latr. { *PITHITIS* Kl. } { *CLAVICERA* Walck. } 1 sp. *Apis cœrulea* Vill.

Oblong ; antennæ subclavate ; mandibles tridentate ; abdomen not woolly beneath ; labrum short ; max. palpi 6-, labial 2-jointed. My fig. 91. 19.

Subfamily 4. *Scopulipedes* Latr. (Anthophorides Westw.)

EUCERA Scopoli. ANDRENA p. Panz. 4 sp. *Apis longicornis* Linn.

Paraglossæ setiform, as long as the labial palpi, which are 4-jointed ; antennæ ♂ nearly as long as the body ; max. palpi 6-jointed ; two complete submarginal cells. Kirby, M. A. A. 2. pl. 17. f. 3, 4.

ANTHOPHORA Latr. { *PODALIRIUS* Latr. olim. *LASIUS* Jur. } 2 sp. *Apis retusa* Linn.

Three complete submarginal cells of equal size ; labial palpi with the third joint affixed obliquely ; max. palpi 6-jointed ; intermediate legs ♂ with long brushes of hair. Curt. 357.

SAROPODA Latr. HELIOPHILA Klug. 5 sp. *Apis rotundata* Panz. Curt. 361.

Paraglossæ much shorter than the labial palpi ; max. palpi 4-jointed ; labial palpi straight ; three complete submarginal cells.

?XYLOCOPA Latr. CENTRIS p. Fabr. 1 sp.? *Apis violacea* Fab.

Broad, bombiform, hirsute ; mandibles ♀ obtuse ; labrum short, densely ciliated ; three complete submarginal cells ; second triangular. Kirby, M. A. A. 2. pl. 17. f. 9.

MELITTURGA Latr. EUCERA p. Latr. olim. 1 sp. *M. clavicornis* Latr.

Abdomen elongate-ovate ; max. palpi 6-jointed ; antennæ ♂ short, clavate ; labial palpi straight. Latr. Gen. t. 14. f. 14.

Subfamily 5. *Sociales* Latr. (Apides Westw.)

BOMBUS Latr. BREMUS Jur. 97 sp. *Apis muscorum* Linn.

Hind tibiae spurred ; pollinigerous ; two last joints of labial palpi minute, oblique. Kirby, M. A. A. 2. pl. 18.

APATHUS Newm. { *PSYTHIRUS* St. F. *PSUDO-BOMBUS* St. MSS. } 5 sp. *Apis rupestris* Fabr.

Hind tibiae spurred ; pollinigerous organs wanting. Curtis, 468.

APIS Linn. &c. —— 1 sp. *Apis mellifica* Linn. My fig. 92., and Curtis 769.

Hind tibiae not spurred ; basal joint of hind tarsi of neuters striated.

ORDER VIII. STREPSIPTERA Kirby. (RHIPIDIPTERA Latreille.) Composing the single

Family *STYLOPIDÆ* Kirby.

STYLOPS Kirby. —— 5 sp. *St. Melitta* K. My Vol. I. front. f. 6.

Eyes peduncled ; antennæ 6-jointed, flattened, third producing a very large flat lobe. Curtis, 226.

ELENCHUS Curtis. STYLOPS p. Kirby. 1 sp. *St. tenuicornis* K. Curtis, 385.

Eyes sessile ; antennæ 5-jointed, long, slender ; third joint produced into a long slender appendage.

HALICTOPHAGUS Dale. —— 1 sp. *H. Curtissii* Dale. Curtis, 433.

Eyes peduncled ; antennæ 7-jointed ; third and three following joints producing a flattened branch.

ORDER IX. LEPIDOPTERA Linn. (GLOSSATA Fabr.)

Sect. I. RHOPALOCERA Dumeril, Bdv. (*Diurna* Latr. *Papilio* Linn. *Papilionides* Horsf.)

Subsect. 1. *Nudi* Westwood.

Family 1. PAPILIONIDÆ Leach. (Hexapoda Latr. Chilognathiform Stirps Horsf.)

Subfamily 1. *Papilionides* Westw. (*Eques* and *Heliconii* Linn.)

PAPILIO Linn. AMARYSSUS Hubn. 2 sp. *Pap. Machaon* L. Curtis, 576.

Hind wings tailed; labial palpi very short; larva with a nuchal fork.

DORITIS Fab. PARNASSIUS Latr. 1 sp. *P. Apollo* L. Donov. pl. 433.

Hind wings rounded; labial palpi moderate; larva with a nuchal fork; chrysalis folliculated.

Subfamily 2. PIERIDES Westw. (*Danai* Linn.)

PIERIS Latr. LEUCONEA Donzel. 1 sp. *P. Cratagi* L. Curtis, 360.

Wings rounded, almost denuded of scales; club of antennæ compressed; second and third joints of labial palpi equal.

GONIAPTERYX Westw. { RHODOCERA Bdv. } { GONIAPTERYX Leach } 1 sp. *P. Rhamni* L. Curtis, 173.

Wings angulated; antennæ short, clavate, tufted at base.

COLIAS Fab. PIERIS p. Schr. 4 sp.? *P. Hyale* L. Curtis, 242.

Hind wings rounded; antennæ short; club gradual; last joint of labial palpi minute; ungues deeply bifid.

PONTIA Fabr. PIERIS p. Boisduv. 7 sp.? *P. Brassicae* L. Donov. pl. 446.

Hind wings rounded; fore wings trigonate, squamose; club of antennæ compressed; last joint of labial palpi longer than second.

MANCIPIUM Hubn., Steph. ANTHOCHARIS Bdv. 2 sp. *Pap. cardamines*.

Wings varied beneath; fore wings rounded at tip; last joint of labial palpi shorter than the second. My fig. 96. 1.

LEUCOPHASIA Steph. PIERIS p. Latr. 1 sp. *P. sinapis* L.

Wings suborbicular; discoidal cell small, basal; labial palpi short, flat; first joint very large; last very small. Donov. pl. 280. f. 2.

Family 2. HELICONIIDÆ Swainson. (There is no British species belonging to this family.)

Family 3. NYMPHALIDÆ Swainson. (Nymphae Linn.)

Subfamily 1. Nymphalides Westw. (Chiropodiform Stirps Horsfield.)

VANESSA Fab. HAMADRYADES Hub. 7 sp. *Pap. Io* Linn. Curtis, 96.

Antennæ abruptly clubbed; eyes very pubescent; fore wings angular.

CYNTHIA Fabr. VANESSA p. Curtis. 3 sp. *P. cardui* Linn. Donov. pl. 292.

Antennæ abruptly clubbed, compressed; eyes very pubescent; wings scalloped, anterior subfalcate.

APATURA Fabr. NYMPHALIS Latr. 1 sp. *Pap. Iris* L. Curtis, 338.

Antennæ gradually clubbed; club nearly straight; eyes naked; labial palpi slender; hind wings scalloped.

LIMENITIS Fabr. NYMPHALIS Latr. 1 sp. *Pap. Camilla* L. Curtis, 124.

Antennæ gradually clubbed; eyes pubescent; fore wings rounded at the end.

GENERIC SYNOPSIS.

ARGYNNIS Fabr. **DRYADES** Hub. 4 sp. *Pap. Paphia* L. Curtis, 290.

Antennæ with a short abrupt club; eyes naked; wings broad; head large.
MELITÆA Fabr. **LEMONIADES** Hub. 6 sp. *Pap. Cinzia* L. Curtis, 386.

Antennæ with a short abrupt compressed club; eyes naked; fore wings elongate, triangular; head moderate.

Subfamily 2. *Hipparchiides* Westw. (*Satyrides* Boisduval.
Thysanuriform Stirps Horsfield.)

HIPPARCHIA Fabr. **SATYRUS** Latr. 16 sp. *Pap. Megera* L. Curtis, 205.

Antennæ with an elongate, compressed, and curved club; head small; wings more or less rounded.

Family 4. *ERYCINIDÆ*.

HAMEARIS Hub. **NEMORIUS** Steph. 1 sp. *Pap. Lucina* L. Curtis, 316.

Eyes pubescent; palpi short; fore legs spurious in ♂, perfect in ♀.

Family 5. *LYCÆNIDÆ* Leach. (*Polyommatus* Swainson.
Vermiform Stirps Horsf.)

THECLA Fabr. **LYCÆNA** p. Ochs. 5 sp. *Pap. Betula* L. Curtis, 264.

Club of antennæ elongate; eyes pubescent; hind wings generally tailed.

LYCÆNA Fabr. **POLYOMMATUS** Latr. 5 sp. *Pap. Pharas* L. Curtis, 12.

Club of antennæ ovate; eyes naked; hind wings not tailed.

POLYOMMATUS Latr. **ARGUS** p. Scop. 13 sp. *P. Arion* L. Lewin, pl. 37.

Club of antennæ abrupt, compressed; eyes pubescent or naked; wings entire; posterior obsoletely denticulated.

Obs. *P. argiolus* and *Alsus* belong to Dr. Horsfield's subgenus *Pithecopa*.

Subsection 2. *Involuti* Boisduval. Containing the single
Family 1. (or 6.) *HESPERIIDÆ* Swainson. (*Anopluriform*
Stirps p. Horsf.)

THYMELE Fabr. **THANOS** Bdv. 2 sp. *P. Tages* L. Lewin, pl. 45. f. 3, 4.

Club of antennæ curved and fusiform, not hooked; fore wings rounded posteriorly.

PAMPHILA Fabr. **STEROPES** Bdv. 7 sp. *P. Comma* L. Curtis, 442.

Club of antennæ abrupt, fusiform, and hooked at the tip; fore wings nearly triangular.

Sect. II. *HETEROCEBA* Boisduval.

Family 1. *SPHINGIDÆ* Leach. (*Sphingidae* and *Sesiidae*
Steph.)

SMERINTHUS Latr. **LAOTHOE** Fabr. 3 sp. *Sph. ocellata* L. Curtis, 482.

Wings angulated; spiral tongue short.

ACHERONTIA Ochs. **BRACHYGLOSSA** Bdv. 1 sp. *Sph. Atropos* L.

Wings entire, acute; spiral tongue short. Curtis, 147.

SPHINX Linn. **EUMORPHIA** Hub. 6 sp. *Sph. Ligustris* L. Curtis, 195.

Wings entire, acute; spiral tongue very long; antennæ not clavate; labial palpi robust.

DEILEPHILA Ochs. **SPECTRUM** p. Scop. 3 sp. *Sph. Euphorbie* L. Curt. 3.

Wings entire, not subfalcate; spiral tongue long; labial palpi robust; antennæ clavate; neck of larva not retractile.

DAPHNIS *Hubn.* **Sphinx** *Linn.* 1 sp. *Sph. Nerii* L. *Curtis*, 626.

Wings entire, acute, posterior slightly lobed; spiral tongue long; antennæ and labial palpi slender; caterpillar with the neck retractile.

METOPSILUS *Ducan.* **EUMORPHÆ** *Hub.* 3 sp. *Sph. Elpenor* L.

Fore wings subfalcate; antennæ obscurely clavate; spiral tongue long; neck of caterpillar retractile. *Donov.*, pl. 122.

MACROGLOSSA *Ochs.* **SESSIA** p. *Fabr.* 1 sp. *Sph. Stellatarum* L. *Curt*. 747.

Wings squamose; apex of abdomen strongly tufted.

SESSIA *Fabr.* **MACROGLOSSA** p. *Ochs.* 2 sp. *Sph. fusiformis* L. *Curtis*, 40.

Wings partially hyaline; abdomen tufted at the extremity.

Family 2. **URANIIDÆ** *Westw.*

(There is no British species of this family.)

Family 3. **ANTHROCERIDÆ** *Westw.* (*Zygænidæ Steph.*)

INO *Leach.* **PROCRIS** *Fabr.* 1 sp. *Sph. Statice* L. *Curtis*, 396.

Antennæ straight, ♂ bipectinated, ♀ simple; posterior tibiae not spurred.

ANTHROCERA *Scop.* **ZYGÆNA** *Fab.* 5 sp. *Sph. filipendulae* L. *Curt*. 547.

Antennæ with an abrupt, bent, fusiform club; posterior tibiae spurred.

Family 4. **ÆGERIIDÆ** *Steph.* (*Sesiades Latr.*)

ÆGERIA *Fabr.* **TROCHILIUM** *Steph.*, *Curt.* 2 sp. *Sph. apiformis* L. *Curt*. 372.

Maxillæ very short; abdomen robust; antennæ abbreviated.

TROCHILIUM *Scop.* { **SESSIA** p. *Latr.* { **ÆGERIA** *Steph.*, *Curt.* } 11 sp. *Sph. tipuliformis* L.

Maxillæ elongated; abdomen slender; strongly tufted; antennæ long, slender. *Curtis*, 53.

Obs. Mr. Newman has separated this genus as follows:—*Pyropteron N.*, type *S. chrysidiiformis*; *Bembecia Hubn.*, type *Sph. Ichneumoniformis*; *Synanthedon Hubn.*, type *Sph. Cœstriformis*; *Trochilium*, type *Sph. tipuliformis Linn.*; *Conopia Hubn.*, type *Sph. culiciformis*; *Paranthrene Hubn.*, type *Sph. vespiformis Linn.* (*Astiliformis Haw.*)

Family 5. **HEPIALIDÆ** *Steph.* (*Hepialites Latr.*, R. An.)

HEPIALUS *Fab.* **HEPIOLUS** *Ill.* 5 sp. *Ph. Humuli* L. *Curt*. 185.

Labial palpi obsolete; antennæ subfiliform, much shorter than the thorax.

COSSUS *Fabr.* **HEPIALUS** p. *Schr.* 1 sp. *C. ligniperda* *Fab.* *Curt*. 60.

Labial palpi erect; antennæ setaceous, as long as the thorax, denticulated to the tip ♂ ♀.

ZEUZERA *Latr.* **COSSUS** p. *Fabr.* 1 sp. *Ph. Æculei* L. *Curt*. 722.

Labial palpi very small; antennæ ♂ bipectinated from the base to the middle, ♀ simple.

Family 6. **BOMBYCIDÆ** *Steph.* (*Bombycites Latr.*, R. An.)

SATURNIA *Schr.* **ATTACUS** *Germar.* 1 sp. *Ph. Pavonia minor* L. *Don.* pl. 1. 254.

Wings entire, ocellated; joints of antennæ with two internal and two external pectinations.

ERIOGASTER *Germ.* **GASTROPACHA** E. *Ochs.* 1 sp. *Ph. lanestris* L. *Don.* 310.

Wings entire; fore wings subdiaphanous, elongated, with a central white spot; larvae gregarious; eggs covered with down.

- PCECILOCAMPA** Steph. *LASICAMP* p. *Lea.* 1 sp. *Ph. populi* L. Donov. 307.
Wings entire; fore wings subdiaphanous, elongate, without a central spot; apex of abdomen of females not tufted; larva solitary; eggs naked.
Obs. *Cnethocampa* (*St.*) *processionea* and *C. Pityocampa* are doubtful natives.
- CLISIOCAMPA** Curt. *GASTROFACHA* E. y. *Ochs.* 3 sp. *Ph. Neustria* L.
Wings entire, short; hind wings subtruncate, subacute; antennæ short; larve gregarious; eggs arranged in a spiral coil. Curt. 229.
- TRICHIURA** Steph. *LASICAMP* p. *Schr.* 1 sp. *Ph. Crategi* L. Donov. 117.
Wings entire, rounded, obtuse, opake; antennæ straight; tail strongly tufted in both sexes.
- LASICAMP** Schr. *GASTROFACHA* C. D. *Ochs.* 4 sp. *Ph. Quercus* L. Curt. 181.
Wings entire, opake; joints of ♂ antennæ strongly bipectinated; tail scarcely hirsute.
- ODONESTIS** Germ. *GASTROFACHA* B. *Ochs.* 1 sp. *Ph. Potatoria* L. Donov. 148.
Fore wings entire, acute at the apex, posterior slightly denticulated; labial palpi elongated.
- DENDROLIMUS** Germar. *EUTRICHA* Steph. 1 sp. *Ph. Pinæ* L. Curtis, 7.
Hind wings denticulated; labial palpi rather short; antennæ short, nearly straight; larva with a tubercle on the eleventh segment.
- GASTROFACHA** *Ochs.* *LASICAMP* p. *Schr.* 1 sp. *Ph. Quercifolia* L. Curt. 24.
All the wings dentate; labial palpi elongate; antennæ curved.
- Family 7. *ARCTIIDÆ*. (Pseudo-Bombyces Latr.)
- Subfamily 1. *Notodontides* Westw.
- STAUROPUS** Germ. *HARPYIA* *Ochs.* 1 sp. *Ph. Fagi* L. Curt. 674.
Fore wings narrow, with raised tufts on the disc; antennæ ♂ bipectinated, except at the tip; larva with the second and third feet long, and with two slender anal appendages.
- PYGÆRA** *Ochs.* *LARIA* p. *Schr.* 1 sp. *Ph. bucephala* L. Curt. 530.
Apex of wings subdenticulated; posterior margin of fore wings not lobed; thorax crested; antennæ ♀ setose; larva cylindrical, pilose.
- CLOSTERA** Hoff. *PROZERA* A. *Ochs.* 5 sp. *Ph. curta* L. Curt. 705.
Wings entire; thorax crested; antennæ bipectinated ♂ ♀; larva with a tubercle on the third and eleventh segments.
- NOTODONTA** *Ochs.* *PTILONOTIS* p. *Hub.* 4 sp. *Ph. dromedarius* L. Curt. 739.
Fore wings slightly denticulated at the tip, inner margin with a tuft; thorax not crested; antennæ ♂ bipectinated; larva with conical dorsal tubercles.
- LEIOCAMPA** Steph. *NOTODONTA* C. *Ochs.* 2 sp. *Ph. dictea* L. Donov. 239. f. 1.
Fore wings slender, rather acute, inner edge with a tuft; antennæ ♀ slightly pectinated; thorax not crested; larva naked, with a small tubercle on the anal segment.
- LOPHOPTERYX** Steph. *NOTODONTA* B. *Ochs.* 3 sp. *Ph. Camelina* L.
Thorax crested behind; fore wings strongly denticulated, inner margin with a tuft; larva slightly hairy, with an anal tubercle. Donov. pl. 183.
- PTEROSTOMA** Germ. *ORTHOHRINIA* *Bdo.* 1 sp. *Ph. palpina* L. My fig. 106. 4.
Labial palpi greatly elongated; thorax crested; inner margin of fore wings with two tufts; larva naked, smooth.
- PETASIA** Steph. *Astroscorus* *Bdo.* 1 sp. *Bo. cassinea* F. Donov. 397. f. 2.
Labial palpi short; fore wings entire, with a tuft of scales on the inner edge; larva naked, fleshy, with the anal segment gibbose.

PERIDEA Steph. **NOTODONTA** D. Ochs. 1 sp. *Bo. serrata* Thunb. Donov. 359.
Wings subdiaphanous and elongate, fore wings with a single tuft on inner edge; antennæ serrated; larva sphingiform.

DRYMONIA Hubn. **CHAONIA** St. 3 sp. *Noct. Roboris* F. Curt. 755.
Antennæ ♂ bipectinated, ♀ suberrate; fore wings entire, with a little tuft of scales; thorax very slightly crested.

PTILOPHORA Steph. **NOTODONTA** D. Ochs. 1 sp. *Bom. plumigera* W. V.
Wings subdiaphanous, pubescent; abdomen tufted in ♂; antennæ ♂ with very long pectinations; larva smooth, naked. Curtis, 328.

CERURA Schr. **DICANURA** Latr. 9 sp. *Ph. visula* L. Curtis, 193.
Thorax not crested; wings subhyaline, upper pair long; max. palpi distinct; larva with two anal filaments.

EPISEMA Ochs. **GRAPHIOPHORA** p. Hub. 1 sp. *Ph. caruleocephala* L. Donov. 100.
Wings entire; thorax crested; maxillæ short, filamentous; antennæ sub-elongate, straight; larvæ cylindrical, not tubercled.

ENDROMIS Ochs. **DORVILLIA** Leach. 1 sp. *Ph. versicolor* L. Curtis, 434.
Antennæ bipectinated in both sexes; body thickly clothed with hairs; wings very ample and transparent; larva sphingiform, with an anal tubercle.

Subfamily 2. *Arctiides* Westw. (*Arctiidae* Steph.)

LIMACODES Latr. **APODA** Haw. 1 sp. *Hep. Testudo* F. Donov. pl. 76.
Wings opake, elongate, posteriorly rounded; antennæ simple; maxillæ obsolete; palpi short.

HETEROGNEA Kir. **HEPIALUS** Fab. 1 sp. *H. asellus* W. V. Steph. pl. 17. f. 2.
Antennæ ♂ simple; wings triangular, posteriorly subtruncate, opake; maxillæ obsolete; palpi very minute.

FUMEÀ Haw. **PSYCHE** p. Curt. 5 sp. *B. pulla* Esp. Curt. 332.
Trophi obsolete; wings subdiaphanous, rounded, very pilose, ♀ apterous; antennæ ♂ strongly pectinated, about 20-jointed.

PSYCHE Schr. **NUDARIA** p. Haw. 1 sp. *N. fusca* Haw. St. pl. 18. f. 3, 4.
Trophi obsolete; wings subdiaphanous, not squamose, elongate, subacute, ♀ apterous.

[**THYRIDOPTERYX** Steph. **SPHINX** Haw. 1 sp. *Sph. Ephemeraformis* H. Steph. in Ent. Trans. i. pl. 10. f. 1.]

NUDARIA Haw. **PH. ATTACUS** L. 3 sp. *Ph. mundana* L. Curt. 400.
Maxillæ much longer than the head; wings diaphanous, pilose, short; antennæ simple in both sexes.

Obe. The six preceding genera are not at all typical of this subfamily, but I have placed them in this situation in order to maintain the passage from the slender-bodied tiger moths to the Lithosiidæ unbroken. Whereas in Stephens's arrangement they interrupt this chain, whilst in Curtis's Guide they are thrown out of the family after the Lithosiidæ.

HYPOGYMNA Hubn. **LARIA** p. Schr. 1 sp. *Ph. dispar* L. Donov. 163.
Maxillæ obsolete; wings opake; antennæ pectinated in both sexes; first joint of labial palpi minute; abdomen ♀ with a brush.

PSILURA Steph. **HYPOGYMNA** Curt. 1 sp. *Ph. monacha* L. Curt. 767.
Maxillæ obsolete; wings opake; antennæ pectinated in both sexes; basal joint of labial palpi elongate-clavate; abdomen ♀ pointed.

- ORGYIA** Ochs. **LARIA** p. Schr. 2 sp. *Ph. antiqua* L. Curt. 378.
 Maxillæ obsolete; wings opake, short, triangular ♂, almost obsolete ♀; antennæ ♂ strongly bipectinated, ♀ serrated; labial palpi biarticulate, clavate.
- DASYCHIRA** Steph. **LARIA** Schr. 2 sp. *Ph. fasciata* L. Donov. 576.
 Maxillæ obsolete; anterior tarsi very pilose; wings elongate, opake; legs short, stout, pilose; palpi very short.
- DEMAS** Steph. **COLOCASIA** Ochs. 1 sp. *Ph. Coryli* L. Donov. 309.
 Maxillæ short, subspiral; wings opake; thorax crested; antennæ slightly pectinated.
- LEUCOMA** Steph. **ARCTIA** Curt. 2 sp. *Ph. Salicis* L. Donov. 30.
 Maxillæ short; wings subdiaphanous; body unspotted; palpi short, rather divergent; abdomen ♀ not tufted.
- LÆLIA** Steph. **ARCTIA** p. Curt. 1 sp. *Bo. canosa* Hb. Curt. 68.
 Maxillæ short; wings subdiaphanous; body unspotted; palpi elongate, projecting; antennæ moderate, shorter in ♀.
- PORTHESSIA** Steph. **LARIA** p. Schr. 2 sp. *Ph. chrysorrhœa* L. Donov. 10.
 Maxillæ distinct; wings opake; thorax not crested; body not spotted; tail ♂ thickly tufted, ♀ with a downy mass; antennæ short.
- TRICHETRA** Westw. { *TALCHOCERCUS* Ste. (g. Infusor. Lam.)
 { *AUCTURUS* Curt. (g. Crustac. Lat.) } 1 sp. *A. Sparshati*.
 Trophi minute; antennæ strongly pectinated; fore wings sub lanceolate, densely squamose; abdomen with a large tuft of hairs. Curt. 336.
- SPILOSOMA** Steph. **ARCTIA** p. Schr. 5 sp. *Ph. lubricipeda* L. Curt. 92.
 Maxillæ short; wings opake; body spotted; basal joint of palpi longer than second, third short, ovate.
- CYCNIA** Hb. **DIAPHORA** Steph. 1 sp. *Ph. mendica* L. Donov. 388.
 Maxillæ short; wings subdiaphanous, sub-abbreviated; body spotted; palpi distinct, squamose, with last joint as long as second.
- PHRAMATOBIA** Steph. **ARCTIA** p. Schr. 1 sp. *Ph. fuliginosa* L. Don. 80.
 Maxillæ short; wings subdiaphanous; body spotted; palpi scarcely distinct, pilose; antennæ short, nearly simple in both sexes.
- PENTHOPHORA** Germar. **LIPARIS** p. Ochs. 1 sp. *P. nigricans*. Curt. 213.
 Maxillæ obsolete; wings subdiaphanous, clothed with minute scales; body robust, ♀ with abbreviated wings; labial palpi thick, porrected.
- ARCTIA** Schr. **EYPREPIA** p. Ochs. 2 sp. *Ph. caja* L. Donov. pl. 15.
 Maxillæ short; wings opake; thorax not crested; basal joint of palpi longer than second, third subacute; body robust.
- EUTHEMONIA** Ste. **EYPREPIA** Ochs. 1 sp. *Ph. Russula* L. Curt. 21.
 Maxillæ short; wings opake; body rather slender; basal joint of palpi shorter than second, third cylindrical.
- NEMEOPHILA** Ste. **CHROLONIA** p. God. 1 sp. *Ph. Plantaginis* L. Don. 134.
 Maxillæ short; wings opake; thorax not crested; palpi very short; basal joint shorter than second, third globose; body rather slender.
- HYPERCOMPÀ** Hb.? **CALLIMORPHA** p. Lat. 1 sp. *Ph. Dominula* L.
 Maxillæ much longer than head; wings densely squamose; antennæ ♂ ♀ simple. Donov. 141.

Family 8. **LITHOSIIDÆ** Stephens.

CALLIMORPHA Latr. **LITHOSIA** p. Haw. 2 sp. *Ph. Jacobæ* L. Curt. 499.

- Fore wings subtrigonate, not subtruncate; palpi 3-jointed, second and third joints subequal; antennæ ♂ subciliated.
- DEIOPEIA** Steph. **EUCHELIA** Bdv. 1 sp. *Ph. pulchella* L. Curt. 169.
Fore wings oblong, subtruncate; palpi 3-jointed; labial palpi much longer than the head, last joint short, ovate, hind wings subdiaphanous; antennæ simple ♂ ♀.
- EULEPIA** Curt. **EMYDIA** Bdv. 2 sp. *Ph. ciliata* L. Curt. 56.
Fore wings oblong, subtruncate; labial palpi 3-jointed, two apical joints equal; maxillæ not much longer than the head; antennæ ♂ bipectinated.
- LITHOSIA** Fab. *Ph. Noctua* L. 10 sp. *Ph. quadra* L. Curt. 36.
Fore wings oblong; labial palpi 2-jointed, basal joint very large.
- GNOPHRIA** Steph. **LITHOSIA** p. Fabr. 1 sp. *Ph. rubricollis* L. Don. 350. f. 3.
Fore wings oblong; palpi 3-jointed; maxillæ much longer than head; hind wings opaque; body short.
- SETINA** St. **LITHOSIA** p. Fab. 3 sp. *Ph. irrorella* F. St. pl. 17. f. 1.
Fore wings subtrigonate; palpi 3-jointed, third joint much shorter than second; hind wings broad; antennæ simple ♂ ♀. •

Family 9. *NOCTUIDÆ* Steph.

- TRIPHÆNA** Ochs. *Ph. Noctua* L. 7 sp. *Ph. N. pronuba* L. Curt. 348.
Fore wings bistigmiferous; palpi ascending; wings incumbent, entire; thorax not crested; body flat; antennæ simple.
- CERIGO** St. **POLIA** D. Ochs. 1 sp. *No. testa* Esper. 4. pl. 108. f. 6.
Fore wings rather broad, obtuse, brownish; posterior yellowish; palpi ascending; thorax with a bifid crest behind, and cucullated in front.
- LYTÆA** Steph. **APAMÆA** p. Ochs. 1 sp. *No. umbrosa* Hubn. f. 456, 457.
Fore wings horizontal, narrow, shining, with transverse lines; thorax not crested, squamose; palpi slightly ascending.
- CHARÆAS** Steph. **AGROTA** p. Ochs. 9 sp. *No. cespitis* W. V. Hb. f. 428.
Thorax not crested; antennæ ♂ pectinated; maxillæ elongated; palpi very short, protracted, not ascending; wings more or less denticulated.
- CERAPTERYX** Curt. **CHARÆAS** p. St. 1 sp. *Ph. B. Graminis* L. Curt. 451.
Palpi short, ascending; wings obtuse, slightly deflexed; body short; antennæ ♂ pectinated, nearly to the tip.
- RUSINA** Steph. **AGROTA** p. Ochs. 1 sp. *B. ferruginea* Esper. 3. pl. 47. f. 5, 6.
Antennæ ♂ strongly bipectinated, ♀ ciliated; body slender; fore wings broad, rounded at shoulder; palpi ascending; thorax subcrested.
- AGROTIS** Hubn. **BOMBYX** p. Esper. 28 sp. *N. segetum* W. V. pl. 1. a. b. f. S.
Wings horizontal; fore wings tristigmiferous, entire; palpi ascending; antennæ ♂ pectinated; thorax not crested.
- GRAPHIPHORA** Hubn. **AGROTA** p. Ochs. 20 sp. *Ph. N. C. nigrum* L.
Fore wings horizontal, broad, glossy, bistigmiferous; palpi ascending; antennæ generally simple, sometimes pectinated in ♂; thorax slightly crested. Esp. 76. 3.
- SEMIOPHORA** Steph. **EPISCEMA** p. Ochs. 1 sp. *Ph. N. gothica* L. Hubn. f. 112.
Thorax smooth, woolly, not crested; fore wings elongate, deflexed, posterior short; palpi short; antennæ bipectinated ♂.
- ORTHOSEA** Ochs. **NOCTUA** p. Haw. 17 sp. *Ph. N. Litura* L. Curt. 237.
Palpi nearly horizontal; thorax robust, woolly, not crested; antennæ pectinated or ciliated ♂; wings slightly deflexed; fore wings elongate.

- MYTHIMNA** Steph. *Pa. Noctua* L. 4 sp. *Ph. N. tareia* L. Hb. f. 218.
 Body elongate; fore wings broad, acute at tip, slightly deflexed, stigma obliterated; palpi short, ascending; eyes pubescent; thorax slightly crested; antennæ finely ciliated.
- SEGETIA** Steph. *CARADRINA* p. Curt. 2 sp. *N. Xanthographa* W. V. Hb. f. 138.
 Wings slightly deflexed; fore wings short, obtuse, rounded behind; antennæ ciliated ♂; palpi slightly ascending; eyes naked.
- CARADRINA** Ochs. *Noctua* p. Haw. 11 sp. *N. cubicularis* W. V. Hb. f. 417.
 Body rather slender; wings glossy, slightly deflexed; thorax subcrested; antennæ ciliated ♂; palpi suborrect, slightly ascending.
- GRAMMESIA** Steph. *CARADRINA* p. Curt. 2 sp. *N. bilineata* Hb. Curt. 651.
 Palpi short, scarcely ascending; fore wings obtuse, with transverse lines; thorax stout, woolly; antennæ ♂ serrated.
- GLEA** Hb. *CERAPTIS* Ochs. 4 sp. *No. rubricosa* W. V. Curtis, 268.
 Body depressed; wings glossy, incumbent, entire; fore wings chestnut-coloured; antennæ simple; palpi very short, horizontal; thorax tufted in front.
- SCOPELOSOMA** Curt. *GLEA* p. St. 1 sp. *Ph. satellitia* Linn. Curt. 635.
 Fore wings dentate, elongated, incumbent; palpi very broad, scarcely reaching beyond the head, last joint concealed; antennæ setaceous, hirsute.
- AMPHIPHYZA** Ochs. *PTYROPHILA* p. Hb. 1 sp. *Ph. pyramidea* L. Don. 193.
 Palpi recurved above the head, last joint very long; antennæ slightly ciliated; thorax not crested; fore wings denticulated, incumbent.
- PYROPHILA** St. *AMPHIPHYZA* p. Tr. 2 sp. *Ph. tragopoginis* Linn. Hb. f. 40.
 Palpi recurved, last joint short, stigma wanting; antennæ very slender; wings incumbent, glossy, entire.
- DYPTERYGIA** St. *XYLENA* D. Ochs. 1 sp. *Ph. pinastri* L. Don. pl. 347.
 Palpi ascending; antennæ very short, simple; thorax with a dorsal crest; wings incumbent; fore wings short, broad, subdentate.
- LEMURIS** Hb. *Nenia* Steph. 1 sp. *Ph. typica* Hb. f. 61.
 Palpi rather long, porrect, ascending, the two basal joints clothed with long scales; thorax crested before and behind; wings incumbent, slightly dentate.
- XYLINA** Tr. *XYLENA* p. Ochs. 5 sp. *Ph. putris* L. Hb. f. 245.
 Fore wings elongate, sublinear, obsoletely dentate, incumbent; thorax crested; palpi short, slender, subhorizontal; antennæ simple.
- RHIZOLITHA** Curt. *Noctua* Haw. 10 sp. *N. Lambda* F. ? Haw. Hb. f. 242.
 Palpi porrected horizontally; head tufted; thorax crested; abdomen tufted at tip; fore wings with the hind margin subangulate, incumbent; posterior margin rounded.
- LITHOMIA** Hb. *XYLINA* Ochs. 1 sp. *Solidaginis* Hb. Curt. 683.
 Palpi porrected obliquely; third joint slightly exposed at tip; antennæ setaceous; thorax tufted behind; fore wings very closely deflexed, long, narrow.
- CALOCAMPA** St. *XYLINA* p. Curt. 2 sp. *Ph. exoleta* L. Curt. 256.
 Fore wings long, narrow, incumbent; palpi short, with the last joint concealed; eyes naked; thorax slightly crested; antennæ short, stout.
- XYLOPHASIA** St. *XYLENA* B. Ochs. 9 sp. *Ph. polyodon* L. Hb. f. 82.
 Body with a large tuft at the tail; fore wings broad, deflexed, hinder margin subdenticulated; palpi slightly ascending, last joint exposed; antennæ slender.

- HADENA Schr.** *Dianthoecia* *Bdv.* 8 sp. *Ph. plebeia* L. Curt. 308.
Fore wings slightly deflexed, with the hind margin subrotundate; antennæ short, simple; head with a frontal crest; thorax slightly crested.
- HELIOPHOBUS** *Bdv.* *Hadena* p. Schr. 2 sp. *Bom. popularis* F.
Antennæ ♂ strongly bipectinated, elongate, ♀ bristly; maxillæ very short; palpi short, stout, porrected; thorax crested; wings subdenticulated. Donov. pl. 505.
- MAMESTRA** Ochs. *Noctua* p. Haw. 11 sp. *Ph. N. Persicaria* L. Don. pl. 317.
Antennæ simple; forehead densely crested; thorax with a bifid dorsal crest; fore wings subdenticulate, subdeflexed.
- EUPLEXIA** St. *Palaeophora* p. Curt. 1 sp. *Ph. lucipara* L. Curt. 619.
Fore wings longitudinally folded at rest; eyes naked; thorax with a double posterior crest; abdomen crested; antennæ closely ciliated; palpi subclavate.
- HAMA** St. *Lufernia* *Bdv.* 4 sp. *No. basilinea* F. Hb. f. 427.
Fore wings denticulated, not folded in repose; thorax scarcely crested, woolly; antennæ ciliated, stout; back of abdomen fasciculated.
- APAMÆA** Ochs. *Gortyna* p. Tr. 9 sp. *Ph. nictitans* L. Donov. 397. f. 3.
Palpi short, subclavate; thorax with a bifid crest in front and behind; fore wings elongate, triangular, subdentate; hind margin obtuse.
- MIANA** St. *Apamæa* B. Ochs. 7 sp. *Ph. strigilis* L. Hb. f. 95.
Palpi small, slender; head crested; thorax not crested in front, with a crest behind; wings entire, deflexed, anterior elongate, triangular.
- CELAENA** St. *Apamæa* p. Curt. 4 sp. *C. Haworthii* St. Curt. 260.?
Palpi porrected obliquely, densely scaly; antennæ ciliated ♂; wings deflexed, entire, anterior obtuse; head tufted; thorax not crested.
- SCOTOPHILA** St. *Lycophotia* Hb. 1 sp. *N. porphyrea* W. V.
Palpi porrected obliquely; antennæ long, subpectinated ♂; head and thorax not crested; wings entire, deflexed; anterior narrow. Hb. f. 93. 473.
- ACHATIA** Hb. *Iarus* p. *Bdv.* 1 sp. *N. pisipera* Kob. Curt. 117.
Palpi minute, concealed; last joint concealed; head minute; thorax large, downy; antennæ short, subserrate; abdomen short, stout, pubescent.
- HAPALIA** Hb. *Actenia* St. 1 sp. *Ph. N. Praecox* L. Curt. 539.
Head small, with a thick frontal crest; thorax small, subcrested behind; fore wings very narrow, linear, glossy, deflexed; antennæ slender, ciliated ♂.
- TRACHEA** Ochs. *Noctua* p. Haw. 1 sp. *Ph. atriplicis* L. Curt. 631.
Fore wings elongate, triangular, deflexed, subdenticulate; antennæ simple; pubescent ♂; head crested; thorax crested before and behind.
- VALERIA** Germ. *Miselia* p. Hb. 1 sp. *B. cleaginea* W. V. Donov. 499.
Antennæ bipectinated in both sexes; palpi short; fore wings crenated; thorax slightly crested.
- MISELIA** Ochs. *Polia* p. *Bdv.* 5 sp. *Ph. Aprilina* L. Curt. 177.
Palpi short, porrected obliquely; antennæ subpectinated ♂; head crested; thorax large, crested; wings subdeflexed, anterior with the hind margin crenate.
- POLIA** Hb. *Agrotis* p. Ochs. 18 sp. *Ph. occulta* L. Curt. 248.
Palpi porrected obliquely; antennæ subpectinated, bristly; head with short scales; thorax slightly crested; wings deflexed, anterior elongate, sub lanceolate, crenate.
- APATELA** Hb. *Acronycta* p. Curt. 3 sp. *Ph. Leporina* L. Donov. 327.
Palpi porrected; antennæ simple; head tufted; thorax not crested; fore wings deflexed, elongate, triangular, acute at apex; larvæ very hairy.

ACRONYCTA *Ochs.* **APATELA** p. *Hb.* 13 sp. *Ph. Psi.* L. *Curtis,* 136.

Palpi moderate, porrected obliquely; antennæ slightly pubescent ♂; thorax not crested; fore wings entire, deflexed, rounded at the apex; larva fasciculated.

BRYOPHILA *Ochs.* **PACILLA** Sch. 2 sp. *N. perla* W. V. *Hb.* f. 25.

Body slender; palpi slender; antennæ pubescent ♂; thorax not crested; abdomen slightly tufted; fore wings subdeflexed, broad, elongate, triangular, entire.

DIPTHERA *Hb.* **NOCTUA** p. *Haw.* 1 sp. *N. Orion* Esp. *Curtis,* 404.

Palpi porrected obliquely, subclavate; antennæ simple in both sexes; thorax not crested; abdomen tufted on the back; fore wings deflexed, entire; sub-elongate-triangular.

THYATIRA *Ochs.* **NOCTUA** p. *Haw.* 2 sp. *Ph. Batis* L. *Curtis,* 72.

Palpi distant; terminal joint exposed; antennæ short, robust, pubescent; wings ample, anterior deflexed, obtuse, broad, subacuminate at tip; thorax transversely crested.

SCOLIOPTERYX *Germ.* **CALYPTERA** *Ochs.* 1 sp. *Ph. Libatrix* L.

Palpi elongate, ascending; antennæ ♂ bipectinated; head tufted; thorax with a frontal crest; fore wings deeply notched and emarginate. *Donov.* 216.

CEROPACHA St. **TETHEA** p. *Curtis.* 7 sp. *N. Or.* W. V. *Curtis,* 272.

Palpi short, porrect; antennæ short, robust in the middle; head with a frontal tuft; thorax not crested; fore wings deflexed, entire, long.

TETHEA *Ochs.* **CYMATOPHORA** A. Tr. 3 sp. *Ph. retusa* L. *Hb.* f. 214.

Palpi porrected obliquely; antennæ setose ♂ ♀; head with a frontal tuft; thorax subcrested in front; fore wings deflexed, short, retuse or subemarginate.

BOMBYCIA Steph. **TETHEA** p. *Curt.* 1 sp. *N. viminalis* F. *Hb.* f. 50.

Palpi very short, porrected subhorizontally; antennæ bipectinated ♂; head tufted in front; thorax not crested; fore wings deflexed, narrow, elongate, rounded at tip.

CYMATOPHORA Tr. **TETHEA** p. *Curt.* 1 sp. *Ph. Oo.* Linn. *Donov.* 179.

Palpi short, ascending; antennæ bipectinated ♂; thorax robust, woolly beneath; abdomen ♀ conic at tip; fore wings deflexed, entire, obtuse.

COSMIA *Ochs.* **NOCTUA** p. *Haw.* 5 sp. *Ph. trapezina* L. *Hb.* f. 200.

Palpi moderate, ascending; antennæ setose ♂ ♀; head rounded; thorax not crested; fore wings deflexed, subtriangular, subtruncate, or subemarginate at tip.

XANTHIA *Hb.* **NOCTUA** p. *Haw.* 8 sp. *Ph. fulvago* L. *Curtis,* 84.

Palpi with the last joint not much exposed; antennæ simple, pubescent; head small; thorax slightly crested; fore wings deflexed, subtriangular, golden coloured.

XANTHOLEUCA St. **LAMPETIA** *Curt.* 1 sp. *No. croceago* W. V. *Hb.* f 189.

Palpi forming a beak; head conically crested; thorax with a dorsal subconic crest; wings decumbent, anterior rounded at the shoulder, truncate and acute at apex; legs compressed.

GORTYNA *Ochs.* **NOCTUA** p. *Haw.* 2 sp. *N. flavago* W. V. *Curtis,* 252.

Palpi short, ascending; antennæ simple, pubescent; head with a dense frontal tuft; abdomen elongate, robust; thorax crested in front; fore wings broad, triangular, subindented.

NONAGRIA *Ochs.* **NOCTUA** p. *Haw.* 6 sp. *N. Typhæ* *Ochs.* *Curtis,* 459.

Palpi nearly vertical; antennæ stout, subserrated; head with a frontal tuft; thorax subcrested; abdomen tufted at tip; fore wings deflexed, narrow, slightly crenated.

LEUCANIA Ochs. **HELEOPHILE** Hb. 15 sp. *Ph. comma* L. Curt. 157.

Palpi short, ascending; antennæ simple, ciliated ♂; head small; thorax woolly, not crested; abdomen tufted at tip ♂; fore wings incumbent, rather narrow, entire.

SIMYRA Ochs. **NOCTUA** p. Haw. 3 sp. *N. nervosa* W. V. Hb. f. 326.

Palpi slightly ascending; antennæ strongly serrated ♂; head small; thorax not crested; fore wings deflexed, broad; apex acute.

PHLOGOPHORA Ty. **HADENA** C. Ochs. 1 sp. *Ph. metulosa* L. Donov. 139.

Palpi ascending, clavate; antennæ long, slender, simple; thorax with an acute crest in front, and a bifid one behind; fore wings longitudinally folded in repose, deeply indented.

CUCULLIA Schr. **TILAPIOPHORA** Hb. 14 sp. *Ph. verbasci* L. Curt. 45.

Body long; palpi short; antennæ simple; head small, rounded; thorax crested in front; fore wings acute at tip, lanceolate, deflexed; tongue-case of pupa elongated.

CALOPHASIA St. **XYLINA** p. Ty. 1 sp. *N. Linaria* W. V. St. pl. 29. f. 2.

Palpi very short, prorected; maxillæ very long; antennæ slender, simple; head fasciculated; and thorax acutely crested in front; fore wings deflexed; tongue-case of pupa long.

CHARICLEA St. **XYLINA** p. Ty. 1 sp. *Ph. Delphinii* L. Curt. 76.

Palpi short, ascending; antennæ simple, slender; thorax subcrested in front; fore wings deflexed, sublanceolate; anterior tibiae with two spurs.

EREMOBIA St. **XANTHIA** p. Curt. 1 sp. *N. ochroleuca* W. V. Donov. 340. f. 2.

Palpi short, ascending; antennæ very slender, simple; head densely squamose; thorax slightly crested behind; fore wings entire, deflexed, elongate-triangular, rounded at tip.

ABROSTOLA Ochs. **PLUSIA** p. Hb. 3 sp. *Ph. triplasia* L. Hb. f. 268.

Palpi rather long, ascending; antennæ simple; head with a frontal crest; thorax with a thick bifid crest; fore wings elongate-triangular; larva 16-footed, fourth pair of feet small.

PLUSIA Ochs. **PHYTOMETRA** 1 Haw. 14 sp. *Ph. chrysitis* L. Curt. 731.

Palpi long, ascending; maxillæ very long; antennæ simple; head crested; thorax crested behind; fore wings deflexed, with metallic spots; larvae 12-footed.

HELIOTHIS Ochs. **HELIOTHENTES** Hb. 4 sp. *Ph. dipsacea* L. Curt. 595.

Palpi short, subascending; antennæ rather short; thorax not crested; fore wings elongate-triangular, deflexed, entire; fore tibiae with two spurs; larvae 16-footed.

ANARTA Ochs. **PHYTOMETRA** Haw. 4 sp. *Ph. myrtilli* L. Curt. 145.

Palpi short, last joint almost obsolete; antennæ alike ♂ ♀, slender; thorax obscurely crested; fore wings deflexed, sublanceolate, or subtriangular; larva 16-footed.

ACONTIA Ochs. **PHYTOMETRA** Haw. 5 sp. *N. solaris* W. V. Steph. pl. 29. f. 3.

Palpi short, ascending, last joint distinct; antennæ alike ♂ ♀, pubescent; thorax slightly crested; wings deflexed, entire, rhomboidal; larva fusiform.

EUPHASIA St. **ACONTIA** p. Curt. 1 sp. *Ph. catena* Sow. Curt. 276.

Palpi short; antennæ simple; fore wings elongate-lanceolate, entire, rounded behind; head broad; thorax smooth.

ERASTRIA Ochs. **ENOTYLA** p. Hb. 8 sp. *Ph. sulphuralis* L. Curt. 140.

- Body slender; palpi prorected obliquely; antennæ simple, finely ciliated; thorax not crested; fore wings horizontal, forming a triangle.
- ACOSMETIA** Steph. **ANTROPHILA** p. Ochs. 5 sp. *N. caliginosa* Curt. 356.
Palpi short, last joint minute; antennæ slightly pectinated ♂; head with a small frontal crest; thorax not crested; fore wings elongate-triangular, obtuse at tip, without stigmata.
- PHYTOMETRA** Haw. **ANTROPHILA** Ochs. 1 sp. *N. aenea* W. V. Hb. f. 350.
Flight semidiurnal; palpi short, terminal joint slender, aciculated; antennæ slender, filiform ♀; thorax slender, not crested; fore wings entire, subtriangular.
- STILBIA** Steph. **PHALENA** Haw. 1 sp. *Ph. anomolata* Haw. Curt. 631.
Body slender; palpi short; antennæ simple, pubescent ♂; thorax not crested; fore wings large, glossy, elongate, sub lanceolate, stigmatiferous.
- OPIHUSA** Ochs. **ASCALAPHE** Hb. 3 sp. *Ph. lusoria* L. Curt. 475.
Body slender; palpi stout, slightly recurved, last joint scarcely visible; thorax not crested; abdomen tufted at tip ♂; fore wings broad, subtriangular.
- CATEPHIA** Ochs. **PHYTOMETRA** Haw. 2 sp. *Ph. leucomelas* L. Hb. f. 303.
Palpi forming a slight beak; antennæ long, slender, finely pectinated ♂; thorax slightly crested; wings entire, forming a triangle; larva 16-footed.
- MORMO** Ochs. **HEMIGOMETRA** Haw. 1 sp. *Ph. maura* L. Don. 30. f. 1.
Antennæ simple, pubescent ♂; thorax crested; abdomen crested; fore wings deflexed, forming a triangle, subtriangular; larva ciliated.
- CATOCALA** Schr. **BLEPHARA** Hb. 5 sp. *Ph. septa* L. Curt. 217.
Palpi prorected obliquely, last joint exposed; antennæ slender; thorax subcrested; fore wings deflexed, forming a large triangle; larva ciliated.
- BREPHA** Hb. **HEMIGOMETRA** Haw. 3 sp. *Ph. Parthenia* L. Curt. 121.
Palpi very short, concealed; head densely pilose; thorax slender, pilose; fore wings nearly horizontal, entire; larva semigeometrical, 16-footed.
- EUCLIDIA** Ochs. **PHYTOMETRA** p. Haw. 2 sp. *Ph. glyphica* L. Curt. 659.
Palpi rather short, last joint exposed; antennæ short, simple, subpubescent ♂; thorax not crested; fore wings deflexed, entire, short; larva slender, 12-footed.*

Family 10. *GEOMETRIDÆ* Stephens. (*Phalena Geometra* Linn., *Phaleniidae* and *Geometridæ* Curtis.)

Subfamily 1. *Geometridæ*.

- PSODOS** Tr. **PSYCHOPHORA** Kirby. 2 sp. *G. alpinata* W. V. Curt. 424.
Palpi prorected, very hairy; maxillæ long; antennæ thickened, simple; colours black, or dark; wings short, rounded.
- SUPERANZA** Curt. **FIDONIA** p. Tr. 2 sp. *Ph. limbaria* Fab. Curt. 225.
Palpi very scaly; antennæ ♂ slightly pectinated, except at the tip; anterior wings with a small tubercle near the base; colours yellow or fulvous, with a dark border.
- FIDONIA** Tr. **BUPALUS?** p. Curt. 4 sp. *Ph. G. atomaria* L. Donov. 248. 1. 2.
Palpi minute, squamose; maxillæ moderate; antennæ ♂ bipectinated nearly to the tip; wings entire, irrorated.

* Stephens describes this larva as 16-footed, and Curtis, attempting to correct Stephens in his observations on this genus, states that the larva is 14-footed.

BUPALUS Leach. **FIDONIA** p. Tr. 1 sp. *P. G. piniaria* L. Donov. 336.

Palpi very short, hairy; maxillæ very short; antennæ ♂ bipectinated to the tip, ♀ simple; wings erect in repose, anterior with a basal tubercle in ♂.

MESIA St. **BUPALUS** p. Curt. 1 sp. *G. farillacearia* Tr. Curt. 33.

Palpi distinct, curved; maxillæ short; antennæ moderately pectinated to the tip; wings not tubercled at the base in ♂, deflexed in repose, irrorated ♀, small.

ANISOPTERYX St. **HYBERNIA** p. Curt. 2 sp. *G. leucophearia* W. V.

Palpi minute; joints of antennæ ♂ producing a short ciliated twig, or a fascicle of hairs; wings entire in ♂, imperfect in ♀; colour brownish, with transverse streaks. Harr. Aur. pl. 43. m—q.

HYBERNIA Latr. **LAMPETIA** St. Cat. 3 sp. *P. G. defoliaria* L. Curt. 70S.

Fore wings long and thin in ♂, entirely wanting in ♀; palpi very short; maxillæ nearly obsolete; antennæ ♂ bipectinated to the tip; colour yellowish, with cross streaks.

PHIGALIA Dup. **AMPHIDASIS** p. Tr. 1 sp. *G. pilosaria* W. V. Wilkes, pl. 87.

Palpi very short; antennæ with the joints biramose to the tip in ♂, broadest in the middle; wings thin, entire, rudimental in ♀; thorax robust.

NYSSIA Dup. **AMPHIDASIS** p. St. Cat. 2 sp. *G. hispidaria* W. V. Curt. 615.

Wings thick, rather small, entire, almost obsolete in ♀; maxillæ obsolete; antennæ strongly bipectinated in ♂, pubescent in ♀; abdomen robust; palpi very hairy.

BISTON Leach. **AMPHIDASIS** p. Tr. 3 sp. *Ph. prodromaria* W. V. Don. 219.

Robust; palpi very short, velvety; maxillæ very short; antennæ strongly bipectinated, sometimes to the tip; wings thick, rather small, ♀ winged.

HIMERA Dup. **METRA** St. Cat. 1 sp. *P. G. pennaria* L. Don. 287. 2.

Thorax very robust; wings slightly dentate; palpi very short; antennæ ♂ very strongly bipectinated, ♀ subserrated.

CROCALLIS St. **GEOMETRA** p. Hb. 1 sp. *P. G. elinguaria* L.

Palpi rather projecting; maxillæ entirely wanting; wings rather broad, slightly denticulate; antennæ shortly bipectinated to the tip. Albin, 39. f. 63. e—h.

ODONTOPERA Steph. **ENNOMOS** D. p. Tr. 1 sp. *P. G. bidentata* L.

Palpi distinct; maxillæ elongated; antennæ ♂ bipectinated, ♀ subserrated; thorax stout; wings subdeflexed, deeply dentate and ocellated. Harr. A. 10. s—z.

GEOMETRA Leach. **ENNOMOS** Curt. 14 sp. *G. erosaria* W. V. Curt. 667.

Palpi rather long; maxillæ short; antennæ ♂ bipectinated to the tip; thorax robust; wings angulated and indented, elevated in repose.

PERICALLIA St. **GEOMETRA** p. Hb. 1 sp. *P. G. Syringaria* L. Don. 181.

Antennæ bipectinated in both sexes; palpi and maxillæ rather short; wings deflexed, anterior wings retuse, subdenteate, posterior rounded, irregularly dentate.

ANGERONA Dup. **HIPPARCHUS** p. Curt. 1 sp. *P. G. prunaria* L.

Palpi very short, remote; antennæ bipectinated in ♂, simple in ♀; thorax narrow; anterior wings rounded, entire, covering the posterior, which are irregularly emarginate. Donov. pl. 27.

RUMIA Dup. **ENNOMOS** D. p. Tr. 1 sp. *P. G. Crataegata* L. Harr. A. 29. g—l.

Palpi short; maxillæ long; antennæ subserrated in ♂, simple in ♀; thorax slender; wings partially expanded in repose, entire, posterior angular in the middle; larva 14-footed.

- OURAPTERYX** Leach. *ACMENA* Tr. 1 sp. *P. G. Sambucaria* L. Curt. 508.
Antennæ simple in ♂ ♀ ; hind wings truncate-caudate, anterior very acute at tip.
- CAMPÆA** Lam. *METROCAMPA* Latr. 1 sp. *P. G. margaritaria* L. Don. 543.
Palpi very short; maxillæ long; antennæ slightly bipectinated in ♂; thorax slender; wings partially expanded, hinder margin angular; larva 12-footed.
- ELLOPIA** St. *CAMPÆA* p. Lam. 1 sp. *P. G. fasciaria* L. Hb. f. 446, 447.
Palpi very short; maxillæ elongate; antennæ ♂ bipectinated, ♀ pubescent; thorax slender; wings slightly expanded, hinder margins rounded; larva 12-footed.
- HIPPARCHUS** Leach. *GEOMETRA* p. Hub. 1 sp. *P. G. papilionaria* L.
Palpi distinct, approximating; maxillæ moderate; antennæ slightly pectinated, subserrate at tip in ♂, simple in ♀; wings green, deltoid in repose, anterior entire, posterior denticulate. Curt. 300.
- HEMITHEA** Dup. *HIPPARCHUS* p. Curt. 3 sp. *P. G. vernaria* L. Curt. 300.
Palpi short, slender, remote; antennæ slightly pectinated, subserrate at tip in ♂; thorax slender; wings deltoid, anterior acute at tip, posterior sometimes angular.
- CHLORISSA** St. *HIPPARCHUS* p. Leach. 4 sp. *P. G. viridata* L. Alb. f. 80. a. c.
Palpi slender; maxillæ rather long; antennæ short, ciliated in ♂, subpubescent in ♀; wings entire, deltoid in repose, apex acute, posterior angulated; posterior tibiae ♂ thick.
- CLEORA** Curt. *BOARMIA* p. Tr. 5 sp. *G. Bajularia* W. V. Curt. 88.
Palpi distinct, scaly, obliquely porrected; maxillæ nearly as long as antennæ, which are bipectinated in ♂, but simple at tip; wings partially extended, anterior entire, posterior subdentate.
- EPHYRA** Dup. *CYCLOPHORA* St. 8 sp. *P. G. porata* L. Curt. 447.
Palpi slender, drooping; maxillæ long; antennæ bipectinated in ♂, terminal half simple; thorax slender; wings slightly expanded, ocellated, anterior with the apex acute, posterior subangulate.
- ALCIS** Curt. *BOARMIA* p. Tr. 10 sp. *P. G. repandata* L. Curt. 113.
Palpi porrected, obtuse; maxillæ moderately long; antennæ ♂ bipectinated, simple at tip; thorax slender; wings horizontal, anterior entire, posterior dentate.
- HEMEROPHILA** St. *ACIDALIA* p. Tr. 1 sp. *P. abruptaria* Thunb.
Palpi short, suboblate; maxillæ rather short; antennæ bipectinated, except at the tip, in ♂, which is serrated; wings expanded, deeply indented, anterior angulated. Donov. 251. 1.
- BOARMIA** Tr. *GEOMETRA* p. Hubn. 7 sp. *G. abietaria* W. V. Curt. 280.
Palpi and maxillæ short; antennæ ♂ pilose, ♀ simple; thorax small; wings horizontal in repose, speckled, anterior entire, posterior dentate.
- HALIA** Dup. *GRAMMATOPHORA* St. Cat. 1 sp. *P. G. Vasaria* L. Don. 196.
Palpi short, basal joint very long; wings short, triangular, pulverose, anterior entire, posterior subdentate; antennæ ♂ bipectinated, terminal joints simple; maxillæ long.
- NUMERIA** Dup. *AZINOPHORA* St. Cat. 1 sp. *P. G. pulveraria* L.
Palpi distant, projecting; maxillæ short; antennæ bipectinated, except at the tip, in ♂, serrated in ♀; thorax slender; wings entire, pulverose. Harr. A. 42. o.
- CABERA** Ochs. *ASPINATES* p. Curt. 3 sp. *P. G. pusaria* L. Harr. A. 44. b.

Palpi very short, scarcely projecting; maxillæ rather long; antennæ ♂ pectinated except at the tip; thorax slender; wings partially extended, entire, and rounded at hind margin.

BRADYEPETES St. ENNOMOS B. p. Tr. 1 sp. *P. G. amatoria* L. Don. 33. 2.
Palpi distant, slender; maxillæ rather long; antennæ ♂ bipectinated nearly to the tip; wings partially expanded, anterior acute at tip, posterior subcaudated.

EPIONE Dsp. **BRADYEPETES** p. St. Cat. 3 sp. *P. G. vespertaria* L.

Palpi very short; maxillæ long; antennæ ♂ bipectinated to the tip; wings slightly extended, anterior acute at tip, posterior rounded, emarginate near the apex. Hb. f. 43, 44.

EURYMENE Dsp. **BRADYEPETES** p. St. Cat. 1 sp. *P. G. dolabraria* L.

Maxillæ rather long; antennæ ♂ slightly bipectinated nearly to the tip; wings partially expanded, anterior narrow, angulated, subtruncate, posterior large, excised towards the anal angle. Donov. 349. 1.

ASPILATES Tr. CAEREA p. Tr. 4 sp. *P. G. purpuraria* L. Curt. 467.

Palpi rather long; maxillæ short; antennæ short, bipectinated to the tip ♂, sub-serrated in ♀; wings entire and rounded, all of nearly equal size.

PHASIANE Dsp. **ASPILATES** St. Cat. 1 sp. *Ph. plumbaria* F. Hb. fig. 221.

Palpi long, horizontal; maxillæ long; antennæ ♂ slightly bipectinated nearly to the tip, sub serrate ♀; wings entire, hinder margin rounded, apex of anterior acute.

LARENTIA St. EUSOLIA Dsp. 4 sp. *P. G. chenopodiata* L. Curt. 707.

Palpi rather long, beak-like; maxillæ long; antennæ ♂ slightly bipectinated to the tip, ♀ sub serrate; thorax slender; wings partially expanded, entire, nearly equal, anterior acute at tip.

VENUSIA Curt. ——— 1 sp. *V. Cambica* Curt. 759.

Palpi very short; maxillæ apparently not so long as the antennæ, which are rather short, bipectinated ♂; anterior wings subtrigonal-ovate, posterior trigonal-ovate.

CIDARIA St. ZERYNTHIA p. Curt. 13 sp. *P. G. didymata* L. Curt. 296.

Palpi short, slender; maxillæ rather long; antennæ ♂ slightly bipectinated nearly to the tip; wings short, deltoid, subtrigonate, entire, anterior slightly acute at tip.

HARPALYCE St. ZERENE p. Curt. 12 sp. *G. fulvata* W. V. Hb. 297.

Palpi short, acute; antennæ simple, ciliated in ♂; wings short, deltoid in repose, anterior trigonal, outer margin more or less angulated, posterior rounded.

ANTICLEA St. CIDARIA p. Tr. 4 sp. *G. derivata* W. V. Hb. 289.

Palpi very short; maxillæ rather short; antennæ simple, compressed at base ♂; wings rather broad, short, rounded, and subdentate at the hind margin.

POLYPHASIA St. ELECTRA p. Curt. 8 sp. *Ph. centum notata* F. Hb. 445.?

Palpi rather long; maxillæ long; antennæ simple, pubescent beneath in ♂; wings deltoid during repose, hinder margin entire, posterior ovate-triangular.

LAMPROPTERYX St. ELECTRA p. Curt. 3 sp. *G. suffumata* W. V. Hb. 306.

Palpi very short, and maxillæ moderately long; antennæ ♂ with the joints produced beneath, and furnished with a row of hairs; fore wings glossy, long, subdentate.

STEGANOLOPHIA St. CIDARIA p. Tr. 1 sp. *P. G. pressata* L. Don. 233. 1.

Palpi and maxillæ of moderate length; antennæ simple in both sexes; wings

- entire, deltoid in repose, anterior acute at the tip, and furnished beneath at the base with a tuft of hairs.
- ELECTRA** St. *CIDARIA* p. Tr. 6 sp. *P. G. comitata* L. Curt. 603.
Palpi rather long; maxillæ long; antennæ simple, sub serrate beneath in ♂; wings entire, deltoid in repose, anterior elongate-trigonal; abdomen ♂ elongate.
- CELINA** St. *LARISSA* p. Curt. 1 sp. *G. imbutata* Curt. 894.
Palpi and maxillæ short; antennæ simple, strongly pubescent ♂; wings entire, deltoid in repose, anterior sub lanceolate.
- SIONA** Dsp. *IDAEA* A. Tr. 1 sp. *P. G. dealbata* L. Curt. 691.
Palpi rather long, scaly; maxillæ very long; antennæ simple, pubescent ♂; wings entire, with strong dark nerves, posterior margin rounded.
- ABRAXAS** Leach. *ZERENE* p. Tr. 3 sp. *P. G. grossulariata* Curt. 515.
Palpi not visible from above; maxillæ small; antennæ simple, ciliated ♂, pubescent ♀; wings broad, entire, rounded, expanded in repose.
- MELANIPPE** Dsp. *ZERENE* p. Tr. 1 sp. *P. G. hastata* L. Don. 129. f. 1, 2, 3.
Palpi remote, short, acute; maxillæ long; antennæ simple, faintly pubescent ♂; wings ample, entire, rounded.
- ZERENE** Tr. *GEOMETRÆ* p. Hb. 6 sp. *P. G. albicillata* L. Curt. 643.
Palpi not visible from above, remote; maxillæ very long; antennæ slender, simple, slightly pubescent ♂; wings entire, rounded.
- EUTHALIA** St. *YRSINÆTÆ* St. Cat. 4 sp. *P. G. miata* L. Don. 479. 3.
Palpi elongate, beak-like, acute; maxillæ rather long; antennæ simple, slightly pubescent ♂; thorax with a bifid crest behind; wings entire, rounded.
- PHIBALAPTERYX** St. *ASTYLATÆ* Curt. 7 sp. *G. tenuata* W. V. Curt. 623.
Palpi short, subclavate; maxillæ long; antennæ robust, sub serrated ♂, simple ♀; wings entire, deltoid in repose, anterior elongate-sub lanceolate, very acute at tip.
- SCOTOSIA** St. *ACIDALIA* p. Tr. 3 sp. *G. Rhamnata* W. V. Hb. 271.
Palpi long, beak-like; maxillæ rather long; antennæ simple, subpubescent ♂; wings deltoid in repose, anterior sub indented, posterior deeply crenate on hind margin.
- TRIPHOSA** St. *ACIDALIA* p. Tr. 3 sp. *P. G. dubitata* L. Don. 246. 2.
Palpi moderate, beak-like; maxillæ long; antennæ ♂ simple, slightly pubescent; wings glossy, deltoid in repose, anterior sinuated, posterior indented on hind margin.
- CAMPTOGRAMMA** St. *ACIDALIA* p. Tr. 1 sp. *P. G. bilineata* L.
Palpi rather long, beak-like, acute; maxillæ rather long; antennæ simple, subpubescent ♂; wings deltoid in repose, hinder margin waved. Donov. 287. 3.
- EUCOSMIA** St. *ACIDALIA* p. Tr. 1 sp. *P. G. undulata* L. Donov. 343. 3.
Palpi moderate, not beak-like; antennæ ♂ simple, subpubescent; fore wings with the hind margin waved, posterior indented, the inner margin with a bunch of hairs.
- CHARISSA** Curt. *GNOPHOS* p. Tr. 5 sp. *G. obscuraria* W. V. Curt. 105.
Palpi short, compressed in ♂; maxillæ long; antennæ ♂ compressed, subpubescent beneath; wings deltoid in repose, anterior sub erenate, posterior indented.
- PACHYCNEMIA** St. *FIDONIA* p. Tr. 1 sp. *G. Hippocastanaria* Hb.
Palpi moderate; maxillæ very long; antennæ slightly pubescent ♂; wings entire,

- anterior elliptic, posterior oval; posterior tibiae dilated with a fascicle of hairs.
Curt. 611.
- LOZOGRAMMA** St. *LARISSA* p. *Curt.* 1 sp. *P. G. petraria* Hb. f. 113.
Palpi very short, acute; maxillæ long; antennæ subpubescent ♂; wings entire, anterior broad-triangular, posterior ovate-triangular; posterior tibiae with a fan of hairs.
- ANAITIS** Dsp. *APLOCERA* St. *Cat.* 2 sp. *P. G. plagiata* L. Donov. 238. 2.
Palpi long, approximating, beak-like; maxillæ long; antennæ simple, subpubescent ♂; wings entire, deltoid in repose, anterior acute.
- APLOCERA** St. *LARENTIA* p. *Tv.* 2 sp. *G. cæsiata* W. V.
Palpi short, acute; maxillæ rather short; antennæ perfectly simple; wings ample, entire, hind margin rounded; abdomen long, slender. Hb. 275., and Curt. 324.
- CHESIAS** *Tv.* *PHALENA* p. *F.* 2 sp. *Ph. spartia* F. Donov. 342. 2.
Palpi long, beak-like, acute; maxillæ moderate; antennæ simple, subcompressed, subpubescent; wings entire, glossy, anterior ovate-lanceolate; legs simple.
- THERA** St. *CHESIAS* p. *Tv.* 5 sp. *P. G. juniperata* L. Curt. 519.
Palpi rather short, acute at tip; maxillæ moderately long; antennæ subpubescent or slightly bipectinated in ♂; anterior wings ovate-triangular; posterior ample, oval.
- OPORABIA** St. *ACIDALIA* p. *Tv.* 1 sp. *G. dilutata* W. V. Donov. 517.
Palpi minute, not visible from above; maxillæ short; antennæ serrated and pilose ♂; wings ample, thin, anterior rounded, posterior subovate.
- CHEIMATOBIA** St. *HYPERIA* p. *Curt.* 2 sp. *P. G. brumata* L.
Palpi very minute; maxillæ very short; antennæ slender, pubescent ♂; wings ample, thin, entire; females nearly apterous; legs simple. Hb. 415. 509.
- LOBOPHORA** St. *CHESIAS* p. *Tv.* 7 sp. *Ph. hexapterata* F. Curt. 81.
Palpi short, subacute; maxillæ moderate; antennæ ♂ subpubescent; wings entire, horizontal in repose, anterior elongate-lanceolate, posterior with a lobe in the males.
- EUPITHECIA** *Curt.* *LARENTIA* p. *Tv.* 36 sp. *P. G. rectangulata* L.
Palpi rather long; maxillæ moderate; antennæ ♂ simple, pubescent; wings horizontal in repose, hind margins rounded; anterior elongate-lanceolate; posterior small, ovate. Curt. 64.
- MINOA** *Tv.* *TANAGRA* God. 2 sp. *P. G. cherophyllata* L. Donov. 253. 4.
Palpi very short, compressed; antennæ robust, long, ♂ slightly pubescent; wings erect in repose, entire, rounded, unicolorous.
- CLEOGENE** Dsp. *MINOA* p. St. *Cat.* 1 sp. *G. tinctoria* Hb. ? Hb. 121. ?
Palpi very short, velvety, acute; maxillæ very long; antennæ bipectinated ♂, simple ♀; wings rounded, unicolorous; legs slender.
- BAPTA** St. *CORYCIA* God. 2 sp. *P. G. bimaculata* Vill. Hb. 90.
Palpi short, obtuse; maxillæ long; antennæ simple, short; wings ample, entire, hinder margin rounded.
- EMMELESIA** St. *MELANIPPE* p. *Curt.* 19 sp. *G. rivulata* Hb. Curt. 416.
Palpi short, acute; maxillæ rather long; antennæ simple, sometimes pubescent in ♀; wings entire, deltoid in repose, hinder margin rounded, posterior sometimes angulated.
- STRENIA** Dsp. *AETIA* St. *Cat.* 1 sp. *P. G. clathrata* L. Donov. 248. 2.
Palpi short; maxillæ rather long; antennæ simple, pubescent in ♂; wings del-

- toid in repose, with many longitudinal and transverse marks; posterior subangulated.
- VENILIA** *Dsp.* *AETZ St. Cat.* 2 sp. *P. G. macularia* L. *Curt.* 647.
Palpi short; maxillæ long; antennæ simple; wings deltoid in repose, hind margin of anterior excised, posterior submarginate, maculated.
- HYRIA** *St.* *FIDONIA* p. *Tv.* 1 sp. *G. auroraria* Hb. *Curt.* 523.
Palpi very short; antennæ ♂ slightly serrated and pubescent; wings entire, very rounded at tip; hind tibiae ♂ without spurs, ♀ with two apical spurs; larva very slender.
- PTYCHOPODA** *St.* *GEOMETRA* p. *Hb.* 11 sp. *P. G. lividata* L.
Palpi short, slender; maxillæ long; antennæ ♂ ciliated; hind margin of wings entire, horizontal in repose, posterior subinuated; posterior tibiae thickened, and often with a long brush of hairs in ♂. *St. pl.* 31. f. 1.
- ACIDALIA** *Tv.* *DOSITHRA* *Dsp.* 11 sp. *P. G. aversata* L. *Curt.* 384.
Palpi very short; maxillæ long; antennæ simple, ciliated in ♂; wings entire, partially expanded in repose; posterior tibiae often thickened and spurless, or with only one pair of spurs in ♂.
- TIMANDRA** *Steph.* *PHALENA* p. *Haw.* 4 sp. *Ph. variegata* Scop. *Hb.* 109.
Palpi moderate; maxillæ rather long; antennæ slightly pectinated to the tip ♂; wings entire, apex very acute, posterior acutely angulated.
- PÆCLOPHASIA** *St.* *ABRAXAS* p. *Curt.* 1 sp. *P. G. marynata* L.
Palpi very short, slender; maxillæ long; antennæ short, simple, subpubescent ♂; wings expanded in repose, hind margin of anterior nearly straight, of posterior submarginate. *Don.* 293. 2.
- PELLONIA** *Dsp.* *MACARIA* p. *Curt.* 1 sp. *P. G. vibicaria* L. *Hb.* 50.
Palpi obtuse; maxillæ long; antennæ very long, bipectinated ♂; wings entire; legs very long; larva 10-footed.
- MACARIA** *Curt.* *ENNOMOS* p. *Tv.* 6 sp. *P. G. notata* L. *Curt.* 132.
Palpi short, obtuse; maxillæ short; antennæ ♂ long, subcrenated, pubescent ♀; wings entire, horizontal in repose, anterior slightly excised, posterior angulated; hind tibiae fasciculated ♂.
- ANIA** *St.* *MACARIA* p. *Curt.* 2 sp. *P. G. emarginata* L. *Don.* 493. 3.
Palpi short, slender; maxillæ short; antennæ ♂ sub serrated and ciliated; wings horizontal in repose, anterior acute, hind margin produced, posterior angulated, sinuous.

Subfamily 2. *Platyptericidae* Westw.

- AVENTIA** *Dsp.* *ENNOMOS* *Tv.* 1 sp. *Ph. flexula* Fab. *Hb.* f. 19.
Palpi rather long; maxillæ elongate; antennæ simple, subpubescent ♂; wings expanded, anterior elongate, with a deep notch near apex, posterior rounded; body rather stout; larva sublacertine.
- PLATYPTERYX** *Lasp.* *FALCARIA* p. *Haw.* 1 sp. *P. G. lacertaria* L.
Fore wings falcate; hind margin denticulate; palpi very minute; maxillæ nearly obsolete; antennæ bipectinated in both sexes. *Donov.* 251. 2.
- DREPANA** *Lasp.* *F.* *PLATYPTERYX* p. *Curt.* 5 sp. *P. G. falcataria* L.
Fore wings falcate; hind margin entire; palpi minute; antennæ ♂ bipectinated, ♀ ciliated or subpectinated. *Curt.* 555.
- CILIX** *Leach.* *EUCLEA* *Hb.* 1 sp. *Bombyx compressa* F. *Donov.* 329. 2.
Fore wings not falcate; palpi short, slender; antennæ ♂ slightly bipectinated, ♀ sub serrate.

Family 11. PYRALIDÆ Leach. (*Phalaena Pyralis* Linn.)

HYPENA Schr. **HERMINIA** Latr. 5 sp. *P. P. proboscidalis* L. Curt. 288.

Palpi two, much longer than the head, compressed, third joint recurved; wings ample, deltoid in repose, anterior subtrigonate-acute, often squamiferous; anterior coxae very long; antennæ simple.

MACROCHILA Hb. **PYRALIS** p. Curt. 1 sp. *P. cribra* Hb. Curt. 527.

Palpi two, very long, porrected, last joint ascending; antennæ ♂ bipectinated; wings abbreviated, anterior subfalcate; anterior tibiae ♂ thickened, with large fans of hairs.

PECHIOPOGON Hb. **POLYFOGON** p. Schr. 1 sp. *P. G. barbalis* L.

Palpi two, very long, porrected, last joint recurved; antennæ ♂ bipectinated; wings entire, anterior rather elongate-triangular; anterior tibiae ♂ with a large fan of hairs. Harr. A. 49. l. t.

PARACOLAX Hb. **POLYFOGON** p. Schr. 3 sp. *P. derivalis* Hb. Steph. SS. 2.

Palpi recurved, longer than the head, ascending; antennæ ♂ subbipectinate; wings slightly elongate, anterior subtriangular; head tufted; anterior tibiae ♂ fasciculated.

ÆTHIA Hb. **POLYFOGON** p. St. Cat. 1 sp. *P. emortalis* Hb. Py. 1. 1.

Palpi two, short, pilose, reflexed; antennæ ♂ subbipectinated; wings shortish, hind margin of anterior rounded; legs slender.

Obs. The last four genera form the genus *Polypogon* Schr. in Steph. Cat., and the *G. Pyralis* Curt.

COLOBOCHYLA Hb. **MADOPA** St. Cat. 1 sp. *Py. salicis* W. V.

Palpi two, short, slender, porrected horizontally; antennæ slightly bipectinated; wings entire, anterior subtriangular, hind margin dilated. Hb. Py. 1. 3.

SYNAPHE Hb. **CLEDOBIA** St. 1 sp. *Py. angustalis* Hb. Hb. Py. 4. 21.

Palpi four, conspicuous, labial very long, hirsute, depending; antennæ ♂ densely ciliated and pectinated; fore wings very narrow, long; body long, slender.

CLEDEOBIA St. **CRAMBUS** p. Haw. 2 sp. *P. albistrigatus* Haw.

Palpi two, long, porrected, longitudinally compressed, third joint very small; antennæ ♂ densely ciliated; head tufted; fore wings elongate-triangular, obtuse at tip.

CAMPTYLOCHILA St. **PYRALIS** p. Haw. 2 sp. *Py. undulalis* Haw. St. SS. 3.

Palpi two, semicircularly recurved, slender; antennæ ♂ subbipectinated; head not tufted; wings entire, hind margin rounded; maxillæ rather long.

AGLOSSA Latr. **CRAMBUS** p. Fab. 4 sp. *Ph. Py. pinguisalis* L. Curt. 455.

Palpi four, labial long, porrected, last joint exposed; maxillæ almost obsolete; antennæ ♂ bipectinated; wings entire, hind margin rounded, deltoid in repose.

PYRALIS Linn. **ASORIA** Tr. 4 sp. *P. P. farinalis* L. Curt. 503.

Palpi four, labial ascending, compressed, last joint exposed; maxillæ moderate; antennæ ♂ ciliated; wings rather narrow, not pointed, posterior rounded.

HYPSSOPYGIA Hb. **ASORIA** p. Tr. 1 sp. *P. costalis* Fab. Hb. Py. 15. 77.

Palpi two, short, ascending; maxillæ short; antennæ slender ♂, ciliated; wings glossy, deltoid in repose, anterior sub lanceolate-triangular; legs moderate.

AGROTERA Schr. **ASORIA** p. Tr. 1 sp. *P. flammatis* Hb. 15. 99.

Palpi two, short, recurved; antennæ long, slender, ciliated ♂; wings entire, anterior elongate, very acute, posterior subindented; legs very long.

SIMÄËTHIS Leach. *ANTHOPHILA* Hb. 5 sp. *P. T. Fabriciana* L.

Palpi two, short, ascending; maxillæ long; antennæ slender, ciliated in ♂; wings broad, wide, anterior retuse, or acute; legs short. Curt. 320.

(Sect. A. *CHOREUTIS* Hb. *S. Fabriciana*. Sect. B. *P. Myllerana*.)

ANANIA Hb. *ENNYCHIA* p. Tr. 1 sp. *G. 8-maculata* L. Donov. 266. 4.

Palpi four, labial prorected, beak-like; maxillæ long; antennæ slender, sub-pilose; wings entire, anterior acute, elongate-triangular; legs long and slender.

ENNYCHIA Tr. *PYRAUSTA* p. Curt. 4 sp. *P. G. cingulata* L. Curt. 128.

Palpi four, labial beak-like; maxillæ moderate; antennæ simple, pilose beneath; wings entire; anterior rather short; legs slender.

PYRAUSTA Schr. *Borrys p. Latr.* 6 sp. *P. P. purpuralis* L. Donov. 339. 2.

Palpi four, labial beak-like, last joint concealed by scales; maxillæ long; antennæ very slender, pilose beneath ♂; wings entire, anterior elongate-triangular, acute.

HYDROCAMPA Latr. *Borrys p. Schr.* 6 sp. *P. G. Potamogata* L. Curt. 495.

Palpi four, labial short, or moderate, dependent or recurved; maxillæ short or moderate; antennæ simple, or slightly denticulated in ♂; wings very narrow, acute, or rounded at tip, posterior ovate-trigonal; legs long; larvæ aquatic.

EUDIOPTIS Hb. *DIAPHANIA* St. Cat. 1 sp. *P. lucernalis* Hb. Py. 9. 58.

Palpi four, labial densely squamous, mask-like; maxillæ very long; antennæ simple; wings entire, subhyaline, anterior acute, obliquely truncate; legs long.

EURRHYPARA Hb. *Borrys p. Latr.* 1 sp. *P. G. urticata* L. Donov. 549. 2.

Palpi four, labial remote, horizontal, maxillæ elongate; antennæ simple; wings deltoid in repose, anterior acute, hinder margin rounded, entire; legs moderate.

MESOGRAPHE Hb. *Scopula* p. Curt. 1 sp. *P. P. forficalis* L.

Palpi four, labial drooping, connivent; maxillæ elongate; antennæ slender, simple; wings entire, deltoid, anterior acute, hind margin rounded. Hb. Py. 9. 58.

MARGARITIA St. *Scopula* Curt. 30 sp. *P. verticalis* L. Curt. 312.

Palpi four, labial rather short, prorected; maxillæ long; antennæ slender, setaceous; wings entire, perlaceous, anterior sometimes long and slender; legs long, or very long; abdomen long, slender.

NASCIA Curt. *MARGARITIA* p. St. 1 sp. *P. cilialis* Hb. Curt. 559.

Palpi four, labial long, beak-like, subdependent; maxillæ moderate; antennæ slender; fore wings trapezate, apex acute, subfalcate; abdomen rather short.

CYNÆDA Hb. *ODONTIA* Dup. 1 sp. *P. dentalis* Hb. Curt. 563.

Palpi four, labial long, beak-like, prorected; maxillæ very short; wings sub-deflexed, anterior rounded at apex, posterior ovate.

NOLA Leach. *ROESKELIA* Hb. 3 sp. *P. T. cucullatella* L. Curt. 428.

Palpi two, labial robust, subdepending; antennæ ♂ bipectinated, simple ♀; wings entire, anterior sub lanceolate; abdomen and legs short.

Family 12. **TORTRICIDÆ** Leach. (*Phalaena Tortrix* Linnaeus.
Pyrsilites p. Latr. *Platyonides* Duponchel.)

HYPERCALLIA St. *Tortrix* p. Haw. 1 sp. *P. T. Christianna* L.

Palpi very long, divaricating, recurved; antennæ moderate; fore wings elongate-triangular. St. 38. 2.

HYLOPHILA Hb. HALIAS Tr. 2 sp. *P. T. prasinana* L. Curt. 573.

Palpi moderate, slender, porrected; antennæ simple; fore wings green, with pale oblique stripes; larva naked; cocoon boat-shaped.

EARIS Hb. HALIAS p. Curt. 1 sp. *P. T. clorana* L. Hb. Tor. 25. 160.

Palpi short, ascending, rather stout, scaly; antennæ simple; wings short, anterior green, with pale margins, triangular; larva naked; cocoon boat-shaped.

TORTRIX Linn. PYRALIS Fab. 5 sp. *P. T. viridana* L. Curt. 763.

Palpi short, subhorizontal, or drooping, second joint tumid; antennæ simple, slightly pubescent ♂; wings broad, anterior rounded at the shoulder, posterior large; larva concealed in a rolled up leaf.

LOZOTÆNIA St. TORTRIX p. Curt. 28 sp. *Py. Forsterana* Fab.

Palpi short, horizontal, or slightly ascending; antennæ subpubescent ♂; wings entire, anterior elongate-triangular, hind margin repanded with oblique marks. Albin. 62. a-d.

PHILEDONE Hb. AMPHISA Curt. 2 sp. *P. Gernigiana* F. Curt. 209.

Palpi moderate, porrected horizontally, apical joint drooping; antennæ bipectinated in ♂; wings deflexed in repose, anterior obliquely truncate at tip; costa subemarginate; abdomen slender.

DITULA St. PÆDICA Tr. 9 sp. *T. profundana* W. V. Curt. 571.

Palpi ascending, broad, very squamous; antennæ simple in both sexes; thorax with a bifid crest behind; wings subdeflexed, anterior with the hind margin somewhat rounded.

ANTITHESIA St. PENTHINA p. Tr. 9 sp. *T. corticana* Hb. Curt. 567.

Palpi short, ascending, very squamous; antennæ simple; thorax with a bifid crest behind; wings deflexed, anterior black and white, rounded at hind margin.

SPILONOTA St. PYRALIS p. Fab. 17 sp. *P. T. cynosbatella* L. Curt. 551.

Palpi short, subhorizontal, clavate; antennæ simple; thorax not crested; wings deflexed, anterior rather narrow, inner margin with a white blotch in the middle.

HEUSIMENE St. TORTRIX p. Hb. 1 sp. *T. fimbriana* Haw.

Palpi short, clavate, last joint concealed; antennæ simple; thorax not crested; wings deflexed, anterior elongate, slender, with a notch on hind margin. Hb. To. 7. 362.

PSEUDOTOMIA St. ZEIRAPHEA Tr. 23 sp. *P. T. Strobilella* L.

Palpi moderate, horizontal, densely squamous; antennæ simple; thorax not crested; wings deflexed, anterior rather long, apparently cleft on hind margin. Hb. To. 8. 46.

STEGANOPTYCHA St. TORTRIX p. Haw. 12 sp. *P. T. Barberae* F.

Palpi moderate, clavate; antennæ simple; males with a tuft at base of fore wings beneath; wings very narrow, linear-triangular, subemarginate at hind margin. Donov. 58. 3. 59. 1.

ANCHYLOPERA St. ANCYLIS Hb. 12 sp. *P. Lusadana* F. Curt. 376.

Palpi moderate, porrected, subhorizontal; antennæ simple, scaly; fore wings slightly falcate, with the costa slightly emarginate, posterior subemarginate.

PHILALCEA St. ANTICLEA St. 12 sp. *T. ramella* L. Curt. 583.

Palpi short, subclavate, densely squamous; antennæ short, stout in ♂; wings subdeflexed, anterior elongate-triangular, subfalcate at tip, costa straight, posterior entire.

ROXANA St. CARPOCARA p. Curt. 1 sp. *P. T. arcuana* L. Donov. 364. 1.

Palpi moderate, compressed, ascending; thorax subcrested behind; wings de-

flexed, anterior elongate-triangular, hind margin rounded, dark coloured; with silvery lines.

CARPOCAPSA Tr. *SEMASIA* St. Cat. 16 sp. *P. T. pomonella* L. Curt. 352.
Palpi moderate, ascending, subclavate, terminal joint exposed; antennæ simple; wings subconvoluted, anterior elongate-triangular, subfalcate, ocellated near hinder angle.

BACTRA St. *APHELIA* St. Cat. 5 sp. *T. pauperana* Haw. Curt. 599.
Palpi moderately long, compressed, densely squamose, terminal joint concealed; wings horizontal, anterior very narrow, hind margin obliquely truncate, acute at tip.

ABLABIA Hb. *BACTRA* p. Curt. 1 sp. *T. 4-punctata* Haw.
Palpi moderately long, rather slender, last joint long and drooping; wings deflexed, anterior glossy, elongate, entire, hind margin truncate. Hb. To. 36. 227, 228.

CNEPHASIA Curt. *PYRALIS* p. Fab. 12 sp. *P. T. Logiana* L. Curt. 100.
Palpi shortish, ascending, last joint exposed; antennæ slender; wings deflexed, anterior lanceolate-ovate, posterior triangular-ovate.

SERICORIS Tr. *ORTHOALENA* St. Cat. 18 sp. *T. urticana* Hb. 11. 65.
Palpi short, slightly ascending, densely squamous; antennæ ♂ rather stout, pubescent; wings deflexed, anterior rather broad, hind margin slightly rounded.

NOTOCELIA Hb. *ASPIS* Tr. 1 sp. *P. T. Udmanniella* L. Donov. 153. 1—3.
Palpi stout, subclavate, terminal joint concealed; antennæ ♂ subserrated; wings entire, anterior broad, short, with a dark blotch near the anal angle.

PÖCILCHROMA St. *SPILONOTA* p. Curt. 7 sp. *P. T. Solandriana* L.
Palpi horizontal, densely squamous; antennæ ♂ robust, pubescent; wings ample, anterior long and broad, hind margin entire, rounded. St. 4. 36. 1.

PTYCHOLOMA St. *TOATIX* p. Hubn. 2 sp. *P. T. Lecheana* L.
Palpi very short, slender, rather ascending; antennæ ♂ robust, pubescent, wings deflexed, anterior slightly rounded behind, costa dilated and reflected at base in ♂, with metallic marks. Hb. To. 11. 67.

EUCHROMIA St. *ORTHOALENA* p. Curt. 2 sp. *T. purpurana* Haw.
Palpi robust, compressed, subclavate, horizontal; antennæ ♂ subpubescent; wings deflexed, anterior without streaks or fascia, costa straight, hind margin rounded.

LOPHODERUS St. *TOATIX* p. Haw. 2 sp. *T. ministrana* L.
Palpi short, drooping, slender, or slightly ascending; head tufted in front; thorax crested behind; wings deflexed, anterior plain, rounded, slightly dilated at shoulder. Donov. 380. 2.

SARROTH RIPUS Curt. *Axia* Hb. 7 sp. *P. Ricaneus* Fab. Curt. 29.
Palpi long, filiform, beak-like; maxillæ long; antennæ slender; thorax crested behind; fore wings dilated at base, costa waved, hind margin rounded, disc with elevated tufts or scales.

PERONEA Curt. *LOPAE* Hb. 45 sp. *Py. Desfontainiana* Fab. Curt. 16.
Palpi long, protracted, tumid in middle, very squamous; antennæ simple; thorax slightly crested; wings rounded at base, costa emarginate, apex subfalcate, disc with raised tufts or scales.

ACLERIS Hb. *PARAMSIA* St. Cat. 6 sp. *P. T. gnoma* L. Hb. 27. 170.
Palpi short, clavate; antennæ slender, pubescent in ♂; wings entire, retuse, anterior rounded at base, hind margin subemarginate, apex subacute, disc with a few raised scales.

LEPTOGRAMMA Curt. *Oxigrapha* Hb. 5 sp. *P. T. literana* L.

Palpi horizontal, clavate, thickly squamous; antennæ ♂ rather stout, pubescent; thorax slightly crested behind; fore wings oblong, trigonate, with numerous small tufts. Curt. 440.

TERAS Tr. *Rhacodia* Hb. 4 sp. *P. emarginata* F. Curt. 699.

Palpi rather long, swollen in the middle; costa of fore wings deeply notched.

DICTYOPTERYX St. *Aleimma* Hb. 6 sp. *P. T. Laetlingeana* L. Donov. 90.

Palpi short, stout, ascending, clavate; antennæ slender, pubescent in ♂; wings subdeflexed, anterior acute or subtruncate, reticulated, costa not ciliated.

CAPUA St. N. G. 276. St. Cat. 1 sp. *C. ochraceana* St.

Palpi short, somewhat drooping; antennæ short, deeply pubescent; fore wings very short, broad, faintly tessellated, hind margin truncate and entire, costa thick at base in ♂.

CHEIMATOPHILA St. *Tortrix* p. Haw. 1 sp. *T. castaneana* Haw.

Palpi short, slender, horizontal, tumid above; antennæ ♂ slender, subpubescent; wings very glossy, anterior narrow, acute at tip, hind margin subemarginate. St. 36. 3.

ARGYROTOZA St. *Caenosia* p. Hb. 5 sp. *P. T. Bergmanniana* L.

Palpi very short, clavate, drooping; thorax not crested; antennæ slender; fore wings short, truncate at hinder margin, costa straight, yellow, with silvery lines. Donov. 157. 1—6.

ARGYROLEPIA St. *Cochylis* p. Curt. 6 sp. *T. Lathamana* Hb. 30. 189.

Palpi short, filiform, horizontal, last joint nearly concealed; wings entire, anterior elongate-triangular, hind margin subtruncate or rounded, disc with silvery markings.

ORTHOTÆNIA Curt. *Argyrolepia* p. St. Cat. 6 sp. *P. T. Turionella* L.

Palpi short, horizontal, subclavate, last joint exposed; antennæ ♂ subpubescent; fore wings elongate-triangular, hind margin rounded, with silvery markings. Curt. 364.

RHYACIONIA Hb. *Zelaphera* p. Curt. 1 sp. *P. T. Hastiana* L. Curt. 711.

Palpi short, slender, beak-like; maxillæ very short; wings entire, anterior subelongate-triangular, hind margin obliquely truncate, costa straight.

EUPÆCILIA St. *Cochylis* p. Curt. 7 sp. *T. angustana* Hb. Donov. 452.

Palpi very short, thick, horizontal; antennæ ♂ thickly pubescent; wings entire fore wings rather narrow, hind margin subobliquely truncate, disc glossy.

PHTHEOCHROA St. *Tortrix* p. Hb. 1 sp. *T. rugosana* Hb.

Palpi very long, slender; maxillæ very short; fore wings rugose, not rounded at the shoulders. Donov. 371. 1.

COCHYLIS Tr. *Tortrix* p. Hb. 5 sp. *T. rubellana* Hb. Curt. 491.

Palpi short, subclavate, very squamous; antennæ ♂ subpubescent; fore wings elongate-triangular, hind margin obliquely truncate, disc with an oblique central dark base.

LOZOPERA St. *Cochylis* p. Curt. 8 sp. *P. Francillana* F. Donov. 355. 1.

Palpi rather long, subclavate; antennæ ♂ faintly pubescent; wings entire, anterior with the hind margin very obliquely truncate, posterior with the apex produced and angulated.

XANTHOSETIA St. *Pyralis* p. F. 5 sp. *P. T. Zagana* L. Donov. 106. 2.

Palpi long, horizontal, beak-like, last joint concealed; antennæ ♂ pubescent; wings entire, anterior with the costa straight at base, hind margin slightly rounded.

- PHIBALOCERA St.** *Pyralis F.* 1 sp. *P. Quercosa F.* Donov. 106. 3.
Palpi very long, slender, and recurved; antennæ very long; fore wings triangular and truncated.
- ORTHOTÆLIA St.** ——— 1 sp. *O. venosa St.* St. 35. 3.
Palpi very long, recurved; antennæ short and slender; fore wings sublinear, hind margin subtruncate, costa straight.
- Family 13. *YPONOMEUTIDÆ* Steph. (*Pyralites p. Latr.*)
- DEPRESSARIA Haw.** *VOLUCRA Latr.* 24 sp. *P. T. Alstromeriana L.*
Body broad and depressed; wings horizontally incumbent in repose; palpi recurved, long, apical joint very slender and attenuated; fore wings lanceolate. Curt. 221.
- ANACAMPSIS Curt.** *RECURVARIA p. Haw.* 43 sp. *P. T. Jasiperella L.*
Body slightly depressed; palpi very long, recurved, apical joint very long; antennæ rather long, slender; wings incumbent, anterior linear-lanceolate. Curt. 189.
- LAVERNA Curt.** *ANACAMPSIS p. St.* 4 sp. *P. T. sarcitella L.* Curt. 735.
Palpi very long, slender, recurved, second and third joints of equal length; head short, broad; fore wings horizontal, linear-lanceolate, acute at tip, inferior lanceolate.
- LOPHONOTUS St.** ——— 1 sp. *L. fasciculatus St.* St. 39. 1.
Body slender; wings narrow, the anterior subfalcate, with three fascicles of scales on the inner margin.
- ACRIA St.** *TINEA p. Donov.* 1 sp. *P. T. emarginella* Donov. 392. 3.
Palpi divaricating, terminal joint acute; wings entire, anterior rather long, linear, the apex dilated and rounded, and the costa with a circular notch in the middle.
- CHELARIA Haw.** *HYPATIMA p. Hb.* 1 sp. *P. T. rhomboidella L.*
Palpi two, very long, recurved, divaricating, clothed nearly to the tip; anterior wings very narrow, obtuse, hind wings broad, acute, with very long cilia. Curt. 368.
- CLEODORA St.** *RECURVARIA p. Haw.* 7 sp. *T. silacea Hb.*? Curt. 671.
Body long and slender; palpi two, very long and divaricating, slightly recurved; fore wings long, narrow, cilia rather long, posterior small.
- ACAMPSIA Hb.** *TINEA p. Hb.* 3 sp. *T. tinetella Hb.* Tin. 31. 214.
Palpi very long, slender, recurved, terminal joint very long and acute; head small, glossy; fore wings acutely and obliquely truncate, without markings.
- MACROCHILA St.** *APLITA p. Curt.* 5 sp. *P. T. bicostella L.* Curt. 655.
Palpi large, divaricating, densely squamous, terminal joint setaceous and acute; antennæ long, slender; fore wings elongate, sublinear, hinder margin subtruncate.
- APLOTA St.** *YPSOLOPHUS p. Haw.* 1 sp. *Y. palpellus Haw.*
Palpi two, elongate, divaricating, clavate, terminal joint nearly concealed; antennæ with fine whorls of hairs; fore wings sublinear, hinder margin obliquely truncate.
- ENICOSTOMA St.** *Pyralis p. Fab.* 1 sp. *P. Thunbergana F.* Hb. Ti. 35. 238.
Palpi two, much longer than the head, recurved, thickened nearly to the tip, the apex of last joint exposed; wings scarcely deflexed, anterior sublanceolate, with small scaly tufts.
- ALABONIA Hb.** *ENICOSTOMA p. St. Cat.* 1 sp. *P. T. Geoffroyella L.*

Palpi two, nearly as long as the body, very much divaricating, fore wings deflexed, elongate-lanceolate, with metallic lines, posterior with long cilia. Hb. 18. 123.

ECOPHORA Latr. *DASYCEAUS Haw.* 2 sp. *T. Olivella* F. Curt. 408.

Palpi longer than the head, recurved, slender; antennæ stout at the base, densely clothed with scales above, pilose beneath; apex simple, with a pale ring near the tip.

ADELA Latr. *CAPILLARIA Haw.* 11 sp. *P. T. De Geerella* L. Curt. 463.

Palpi four, labial slender, recurved; antennæ greatly elongated ♂, thickened in ♀; eyes very large and approximating in ♂; body slender; head pilose; wings metallic.

OPORINIA Hb. *DIURNEA p. Haw.* 2 sp. *T. Tortricella* Hb. Ti. 2. 11.

Palpi very short, slightly drooping, terminal joint exposed; wings glossy, slightly decumbent, anterior elongate-lanceolate, with one or two patches of scales.

COCHLEOPHASIA Curt. *CAPILLARIA p. Haw.* 2 sp. *C. tessellata* H.

Palpi two, very short, drooping; maxillæ wanting; antennæ ciliated ♂; wings in ♂ ample, sublanceolate, smooth, ♀ apterous; larva in a case. Curt. 487.

DASYSOMA Curt. *DIURNEA p. Haw.* 1 sp. *T. salicella* Hb. Ti. 2. 9.

Palpi longer than the head, densely hairy; maxillæ obsolete; antennæ ciliated ♂; wings decumbent, anterior sublanceolate, costa curved; female with the fore wings half the length of the body.

OXYPATE Hb. *CHEIMOPHILA Curt.* 1 sp. *P. P. gelatella* L.

Palpi minute, drooping, hairy; maxillæ obsolete; antennæ subpubescent ♂; fore wings ♂ sublanceolate, narrow at base, disc smooth, ♀ with very short wings. Hb. To. 42. 266.

CHEIMOPHILA Hb. *DIURNEA p. Haw.* 1 sp. *T. phryganella* Hb. Ti. 2. 10.

Palpi rather long, slender, recurved, apical joint subelongate; antennæ ♂ pilose, pubescent; wings smooth, glossy, anterior sublanceolate-truncate, ♀ apterous.

DIURNEA Haw. *CHIMARACHE Hb.* 2 sp. *T. Fagella* Fab. Albin. 36. 57. a—e.

Palpi rather long, large, porrected; maxillæ rudimentary; antennæ densely pubescent ♂; wings ♂ incumbent, anterior elongated, pale, with irregular markings, ♀ with short acute wings.

SEMIOSCOPIS Hb. *EPGRAPHIA St. Cat.* 2 sp. *P. Steinbacherana* F.

Palpi two, elongate, slender, recurved, subparallel; maxillæ short; antennæ pubescent ♂; wings decumbent, anterior elongate-lanceolate, pale, with letter-like markings; ♀ winged. Hb. Ti. 4. 26.

ANESYCHIA Hb. *MELANOLEUCA St. Cat.* 4 sp. *P. T. pusilla* L. Curt. 412.

Palpi two, long, slightly recurved, slender, terminal joint much exposed; maxillæ spiral; fore wings obliquely truncate at the hinder margin, pale, with large dark blotches; larva solitary.

YPONOMEUTA F. *EAMINIA Haw.* 6 sp. *P. T. padella* L. Donov. 9.

Palpi two, cylindric, nearly horizontal; antennæ subpubescent; wings large, convoluted, anterior long, linear, pale, with minute black spots, rounded; larva social.

TELEA Steph. *YPONOMEUTA p. St. Cat.* 8 sp. *P. T. leucatella* L.

Palpi moderate, subfiliform, slightly ascending; antennæ slightly pubescent ♂; fore wings elongate, sublinear, occasionally fasciated; cilia of hind wings large. Hb. Ti. 21. 146.

- EDERESA** Curt. *ISMENE* St. 11 sp. *P. T. Prasiella* L. Hb. Ti. 26. 175.
Palpi moderate, slender, subfiliform; antennæ slender; wings convoluted; fore wings elongate-sublinear-lanceolate; apex rounded, posterior wings long and slender.
- ARGYROSETIA** St. *Argyresthia* Hb. 7 sp. *P. T. Goëdartella* L.
Palpi slender, drooping, oblique; maxillæ rather short; antennæ simple; wings convoluted, anterior sublanceolate-linear, with metallic letter-like marks. Donov. pl. 65. 2, 3.
- ARGYROMIGES** Curt. *LYONETIA* Hb. 25 sp. *P. T. Rayella* L. Curt. 284.
Palpi two, very short, drooping, subfiliform; antennæ nearly as long as the wings, which are very narrow, sublanceolate, convoluted, anterior with metallic marks.
- HERIBEIA** St. *TINEA* p. Haw. 5 sp. *T. Forsterella* Fab. St. 39. 2.
Palpi curved and ascending, apex acute; maxillæ very short; antennæ simple; wings subconvoluted, anterior elongate-triangular, hind margin obliquely subtruncate.
- MICROSETIA** St. *TINEA* p. Haw. 27 sp. *T. Stipella* Hubn. Ti. 90. 138.
Palpi rather long, slender, incurved; antennæ simple, subpubescent within in ♂; wings convoluted; anterior elongate-sublinear; cilia short; hind wings slender.
- GLYPHIPTERYX** Hb. *ECOPHORA* p. St. Cat. 10 sp. *P. T. Linneella* L. Curt. 152.
Palpi slender, drooping, divergent; maxilla short; wings subdeflexed, anterior sublanceolate-linear, with elongate terminal scales; metallic cilia very long.
- PANCALIA** St. *ECOPHORA* p. Latr. 6 sp. *P. T. Lessenhoekella* L. Curt. 304.
Palpi recurved, longer than the head; maxillæ rather long; antennæ setaceous; fore wings subincumbent, lanceolate-linear, with raised metallic spots.
- ÆCHMIA** Ochs. *CALLISTO* St. 4 sp. *P. T. Fyesiella* F. Donov. 382. 1.
Palpi slender, slightly divaricating, curved upwards; maxillæ short; head smooth; fore wings rather long and narrow, metallic, hind margin subtruncate, posterior sublanceolate.
- HARPAGUS** St. *TINEA* p. Haw. 2 sp. *P. T. cinctella* L. Hb. Ti. 21. 142.
Palpi much longer than head, much recurved, slender at tip, last joint longer than the preceding; fore wings elongate-sublinear, rather rounded behind, black, with a pale central fascia.
- ASTYAGES** St. *BUTALIS* Ochs. 11 sp. *T. Coracipennella* Hb. Ti. 30. 209.
Palpi not very long, slightly bent, incurved; antennæ simple; maxillæ very short; fore wings narrow, sublanceolate-linear, rarely metallic, immaculate.
- CHRYSOCORYS** Curt. NG. 1099. St. Cat. *T. scissella* Haw. Curt. 663.
Palpi slender, subincurved, joints subequal; maxillæ short; antennæ thickened, subserrated in ♂; fore wings very long, sublanceolate, slender, apex acute, subfalcate, posterior narrow.
- METALLOSETIA** St. *DAMOPHILA* Curt. 2 sp. *Porr. spissicornis* Haw.
Antennæ with the basal joints dilated and squamose ♂; palpi longish, curved upwards; fore wings brilliant, immaculate, metallic, very long, slender, and acute; cilia long. Curt. 391.
- PORRECTARIA** Haw. *TINEA* p. Hubn. 11 sp. *T. anatipennella* Hb.
Palpi rather short, stout, drooping, or subporrected; antennæ porrected; wings deflexed; fore wings very long, narrow, acute at tip; cilia very long; larva in a case. Curt. 687.
- APHELOSETIA** St. *PORRECTARIA* p. Haw. 12 sp. *T. cygnipennella* Hb.

Palpi moderate, drooping, and incurved; maxillæ short; antennæ stout, suberect; wings subdeflexed; anterior very short, generally without markings, hind margin oblique. Hb. Ti. 30. 207.

BATIA St. RECUVARIA p. Haw. 6 sp. *T. flavifrontella* Fab. Curt. 543.

Palpi rather long, divaricating, recurved; maxillæ rather long; antennæ pubescent within; wings deflexed; anterior subelongate triangular; hind margin subtruncate.

Family 14. **TINEIDÆ** Steph. (*Phalæna* *Tinea* p. Linn.)

ACHROIA Hb. **GALLERIA** p. Auct. 1 sp. *G. alvearia* Fab. Hb. Bo. 23. 91.

Palpi four, very short, nearly concealed; thorax and abdomen slender; anterior wings short, sub lanceolate, gradually rounded on hind margin; horizontally incumbent.

GALLERIA Fab. **PH. TINEA** Linn. 1 sp. *P. T. cereana* Linn. Curt. 587.

Thorax and abdomen stout; anterior wings emarginate at the apex in ♂, truncate in ♀; palpi dissimilar in the sexes; labial ascending in ♂, drooping in ♀. My fig. 113. 1. ♂.

ILYTHIA Latr. **CRAMBUS** p. Fabr. 2 sp. *P. T. colonella* Linn. Don. 263. 2.

Palpi four, concealed, and the labial ones turned up with a terminal spoon-shaped joint in ♂; labial palpi elongated, porrected in ♀; wings convoluted, narrow, with the costa arched in ♂, broad, with a straight costa, in ♀.

SENTA St. **MELIANA** Curt. *G.* 2 sp. *M. flammæa* Curt. B. E. 201.

Palpi four, maxillary concealed, labial curved upwards, slightly visible from above; antennæ slightly pubescent; wings elongate, anterior sublinear.

EUDOREA Curt. **SCOPARIA** Haw. 11 sp. *P. T. Mercurella* L. Curt. 170.

Palpi four, conspicuous, maxillary small, labial elongated and brush-like, slightly drooping; antennæ subserrate; wings nearly decumbent, anterior longish, subtriangular.

PHYCITA Curt. **PHYCIS** p. Fab. 28 sp. *T. nebulælla* Hb. Curt. 233.

Palpi four, maxillary minute, 3-jointed, labial as long as the head, recurved, slender; antennæ ♂ with an ovate mass of scales at base; fore wings fasciated, convoluted in repose, elongate-trigonal, hind margin rounded.

HOMÆOSOMA Curt. **PHYCIS** p. Haw. 1 sp. *P. gemina* Haw.

Palpi four, labial porrected, slender; antennæ simple; wings convoluted, anterior narrow, sub lanceolate, sub obtuse at hind margin, posterior ample, much folded.

PRIONAPTERYX St. ————— 1 sp. *P. nebulifera* St.

Fore wings with three or four deep serratures towards the apex of the costa; antennæ ♂ slightly pectinated.

NOMOPHILA Hb. **SCOPULA** p. Curt. 1 sp. *P. hybridalis* Hb. Py. 17. 114.

Palpi four, labial porrected and ascending, joints concealed by scales; antennæ pubescent in ♂; wings subdeflexed and convoluted, anterior narrow, long, transparent; legs long.

ONCOCERA St. **CRAMBUS** p. Fab. 3 sp. *P. T. carnella* L. Donov. 153. 5.

Palpi four, labial elongate, slender, recurved; antennæ ♂ with a mass of scales near the base; fore wings without fascia, convoluted, elongate-triangular, subtruncate at apex.

ARAKES St. **PALPARIA** p. Haw. 4 sp. *T. akenella* Hubn. Ti. 58. 9.

Palpi four, maxillary minute, labial much longer than head, porrected, slender; apex acute; antennæ simple; fore wings subconvoluted, anterior elongate-sub lanceolate, hind margin rounded.

- CRAMBUS** Fab. **PALPARY** p. Haw. 38 sp. *P. T. pascuella* L. Curt. 109.
 Labial palpi long, porrected, beak-like, very slender, last joint subdeflexed; fore wings narrow, convoluted, hind margin obliquely truncate or subemarginate; antennæ setaceous. My fig. 112. 14.
- CHILO** Zenck. S. **PALPARY** p. Haw. 6 sp. *P. T. caudella* L. Curt. 797.
 Palpi four, labial as long as the head and thorax, beak-like; fore wings long, lanceolate; apex acute, obliquely truncate, or subemarginate at hind margin; antennæ pubescent or subpectinated ♂.
- THERISTES** Hb. **PLUTELLA** p. Schr. 2 sp. *P. T. nemorella* L. Steph. 40. 1.
 Palpi four, labial long, incurved; maxillæ rather long; fore wings subconvolute, very long, acuminate or falcate at tip; antennæ simple, porrected. Curt. 535. descr. gen.
- HARPIPTERYX** Hb. **PLUTELLA** p. Scir. 3 sp. *P. T. scabrella* L. Curt. 535.
 Palpi four, labial rather long, with very long scales, the last joint being slender, curved upwards, and rising apparently from the middle of the palpus; fore wings deflexed, anterior narrow; apex falcate, emarginate.
- HYPSOLOPHA** Hb. **YPSOLOPHUS** p. Fabr. 3 sp. *P. T. asperella* L.
 Palpi four, labial rather long, directed forwards, beak-like, last joint drooping; antennæ simple; fore wings deflexed, narrow, elongate, sometimes tufted, hind margin deeply excised. Hb. Ti. 15. 101.
- CHÆTOCHILUS** St. **CEROSTOMA** p. Curt. 9 sp. *P. T. sequella* L.
 Palpi four, labial rather long, curved upwards, beak-like, last joint slender, recurved, setiform; fore wings incumbent, very long, narrow, lanceolate, posterior sublanceolate. Steph. 40. 2.
- CEROSTOMA** Latr. **YPSOLOPHUS** p. Fabr. 4 sp. *P. T. Xylostella* L.
 Palpi four, labial rather long, curved upwards, thickly squamous, last joint setiform; antennæ simple, porrected; fore wings narrow, elongate, rounded behind. Curt. 420.
- EUPLOCAMUS** Latr. **PHYCIS** p. Ochs. 1 sp. *T. mediella* Hb. Curt. 591.
 Maxillary palpi as long as the very short maxillæ, 6-jointed, labial turned upwards; antennæ ♂ fasciculated; fore wings rounded at hind margin.
- ACROLEPIA** Curt. — 2 sp. *A. Betulella* Curt. B. E. 679.
 Maxillæ nearly as long as the antennæ; max. palpi 3-jointed, short, labial palpi long, slender, recurved; fore wings much deflexed, elongate-sublinear, rounded at apex; cilia short; posterior lanceolate, with long cilia.
- TINEA** Auct. **PHALENA** **TINEA** p. L. 15 sp. *P. T. pellionella* L. Curt. 511.
 Head strongly crested in front; maxillary palpi longer than the very short maxillæ, 5-jointed, labial slender, short, straight; fore wings glossy, incumbent, elongate, rounded behind. My fig. 113. 5.
- LEPIDOCERA** St. **YPSOLOPHUS** p. Haw. 4 sp. *T. Tuarella* Hb. Curt. 344.
 Head rough; palpi and antennæ ♂ clothed with very long clavate scales; wings scabrous, sublinear.
- INCURVARIA** Haw. **TINEA** p. Hb. 5 sp. *T. maculella* W. V. Curt. 607.
 Antennæ ♂ strongly pectinated; maxillary palpi incurved, long, 6-jointed; head densely clothed with erect scales.
- AMAUROSETIA** St. **TINEA** p. Haw. 9 sp. *P. T. albinella* L.
 Labial palpi rather long, slender, straight, drooping; antennæ simple; fore wings incumbent, elongate-sublinear; cilia short, hind margin rounded. Hb. Ti. 21. 141.
- LAMPRONIA** St. **TINEA** p. Haw. 12 sp. *P. T. capitella* L. Curt. 639.

Maxilla shorter than the max. palpi, which are 6-jointed; labial palpi slender, deflexed; antennæ ♂ with diverging hairs; head crested; fore wings deflexed, ample; apex oval; posterior subtriangular.

ERIOCEPHALA Curt. *LAMPSONIA* p. St. 10 sp. *P. T. Calkella* L.

Maxilla very small; max. palpi longer than head, prorected, 5-jointed; labial palpi small; fore wings deflexed, ovate-lanceolate, with many radiating nervures. Curt. 751. My fig. 113. 10.

EUSPILAPTERYX St. — 1 sp. *E. auroguttella* St.

Maxillary palpi very distinct, slender, curved, deflexed; labial palpi slender, short, incurved; antennæ very long, slender; fore wings deflexed, elongate-linear, posterior lanceolate.

ACENTROPUS Curt. { *ACENTRIA* St. } { *ZANGLE* St. } 1 sp. *H. nivea* Oliv. Curt. 497.

Legs entirely without spurs. My fig. 113. 11—17.

GRACILLARIA Haw. *ALUCITA* p. Fabr. 19 sp. *T. Thunbergella* Fab.

Middle tibiae densely squamous; labial palpi long, very slender, and recurved; maxillary palpi short, slender, diverging; wings very narrow; cilia very long. Curt. 479.

Family 15. *ALUCITIDÆ* Leach. (Pterophorites Latr.)

AGDISTES Hb. *ADACTYLUS* Curt. 1 sp. *A. Bennettii*. Curt. 471.

Wings entire.

PTEROPHORUS Geoff. *ALUCITA* p. Schr. 27 sp. *P. A. pentadactyla* L.

Anterior wings 2-, posterior 3-lobed. Curt. 161. My fig. 113. 18.

ALUCITA Scop. *OENKODES* Latr. 3 sp. *P. A. hexadactyla* L. Curt. 695.

All the wings 6-lobed.

ORDER X. HOMOPTERA. (HEMIPTERA sect. HOMOPTERA Latr. OMOPTERA Leach. HEMIPTERA p. Linn. RHYNGOTA p. Fabr.)

Sect. I. *TRIMERA* Westw. (Cicada Linn. Cicadaires Latr. Cicadina Burm.)

Family 1. *CICADIDÆ* Westw. (Cicadiidae Leach. Cic. maniferae Linn. Chanteuses Latr. Stridulantis Burm.)

CICADA Linn. *TETTIGONIA* Fab. 1 sp.— *C. anglica* Sam. Curt. 392.

Antennæ 7-jointed; tarsi 3-jointed; ocelli three. (*C. tibialis*. Pl. 59. 5?.)

Family 2. *FULGORIDÆ* Leach. (Fulgorelles Latr. Fulgorina Burm.)

[**PSEUDOPHANA** Burm. *FULGORA* p. Auct. 1 sp. *F. Europea* Linn. Donov. pl. 208.]

ISSUS Fab. *Cracoris* p. Paaz. 1 sp. *I. coleoptratus* Fab. Curtis, 449.

Very broad; hemelytra angularly dilated in the middle of the outer edge; ocelli 0.

CIXIUS Latr. { *Cixius* and *G. 1414* St. Cat. } 21 sp. *C. cunicularis* L. Curt. 673.

Antennæ shorter than the eyes; second joint nearly globular; ocelli two; abdomen narrow.

ASIRACA Latr. **DELPHAX** p. Fab. 4 sp. *A. clavicornis* Fab. Curtis, 445.

Antennæ much longer than the head; basal joint longest, carinated; ocelli 0.
DELPHAX Fab. ——— 19 sp. *D. minuta* Fab. Curtis, 657.

Antennæ not longer than the head; basal joint shorter than the second, and entire; ocelli two.

Obs. *Criomerphus* Curt. is composed of partially developed individuals of *Delphax*.

Family 3. CERCOPIDÆ Leach. (Cicadelles Latr. Cicadellina and Membracina Burm.)

SMILIA Germar. **CENTROTUS** p. Curt. 1 sp. *S. Genista* L. Curtis, 819.

Tibiae prismatical, not dilated; tarsi equal; prothorax extended over the abdomen.
CENTROTUS Fab. **MEMBRACIS** St. Cat. 1 sp. *C. cornutus* L.

Tibiae flattened, denticulate at the edge; prothorax extended over the abdomen; scutellum distinct. Donov. pl. 83.

LEDRA Fab. **MEMBRACIS** p. Oliv. 1 sp. *L. aurita* Linn. My fig. 116. 1.
Head flat; prothorax lobed at the sides; scutellum exposed; hind tibiae flat, serrated.

EUPELIX Germar. **CICADA** Fab. 1 sp. *C. cuspidata* Fab.
Head very large, flat, and triangular, margined in front; ocelli exposed on the upper surface of the head; hind tibiae with three rows of spines; thorax simple. Burm. Gen. pt. 2. pl. 3.

PAROPIA Germ. **MEGORTHALMUS** Curt. 2 sp. *Ul. scanica* Fall.
Head flat, forming a narrow lunule, edge acutely margined; ocelli facial; thorax posterior, tibiae with a few external spines. Germ. Faun. 11. 11.

ULOPA Fall. **CERCOPIS** Ahr. 3 sp. *Ul. Erica* Ahr. Burm. Gen. 3. pl. 1.
Very gibbose; wing-covers elytriform; ocelli 0; head very broad, rounded in front, strongly punctate.

CERCOPIS Fab. **CICADA** Linn. 1 sp. *C. vulnerata* Rossi. Curtis, 461.
Head small; ocelli apart on the upper side of the head; posterior tibiae bidentate; prothorax large, hexagonal.

APHROPHORA Germ. **TETTIGONIA** Oliv. 2 sp. *C. spumaria* L.
Head moderate; ocelli two, approximate on the crown of the head, posterior tibiae 2-dentate; prothorax trapezoidal. Pz. 103. 8.

PTYELA Serv. & St. F. **TETTIGONIA** p. Oliv. 5 sp. *C. bifasciata* Linn. nec Pz.
Differs from Aphrophora in the ocelli being as wide apart as they are distant from the eyes. Var. *C. lateralis* Pz. 6. 24.

ACUCEPHALUS Germar. **APHRODES** p. Curt. 11 sp. *C. trifasciatus* F.
Vertex trigonate, not keeled; ocelli remote, marginal, not immersed in a fovea; prothorax transverse; hind tibiae multispinose. Curtis, 620.

APHRODES Curt. **CICADA** p. Don. 22 sp. *A. costata* F. Curtis, 633.
Suboval; head flat, subtrigonate lunate; thorax transverse; ocelli marginal; hind tibiae multispinose; anterior pectinated within.

PHRYNOMORPHUS Curt. ——— 1 sp. *P. nitidus* Curt.
Oblong shining; head crescent-shaped above; ocelli marginal; thorax transverse; wing-covers indistinctly veined; hind tibiae thickly spined.

EVACANTHUS Enc. M. **AMBLYCEPHALUS** Curt. 7 sp. *A. interrupta* L.
Ocelli placed on the anterior part of the upper side of the head in a sulcus; hypostoma oblong; posterior tibiae angulated with two rows of spines. Curt. 572.

TYPHLOCYBA *Germ.* **EUPTERYX** *Curt.* 30 sp. *C. Ulmi* *Linn.* *Curtis*, 640.
Ocelli 0; hypostoma oblong-subtrigonal; fore wings indistinctly nerved; posterior tibiae with a double row of spines.

PENTHIMIA *Germ.* **G. 1425** *S. Cat.* 1 sp. *sanguinicollis* F. *Pz.* 61. 18.
Wing-covers folding over each other at the tip; hypostoma flat, transverse; ocelli on the crown of the head; hind tibiae with two rows of spines.

AGALLIA *Curt.* **BYTHOSCORUS** p. *H. Sch.* 4 sp. *C. venosa* *Ahr.*
Face ovate, trigonate; head above forming a narrow lunule; ocelli in the forehead; prothorax narrower than the head; wings very much deflexed, apical nervures reticulated; posterior tibiae spined externally.

IDIOCERUS *Lewis.* **BYTHOSCORUS** p. *Burm.* 5 sp. *I. stigmatical* *Lew.*
Head broader than the thorax; face subtritubinate; ocelli facial; fore-wings membranous, overlapping at the tips; seta of antennæ ♂ clavate. *Curt.* 738.

BATRACOMORPHUS *Lewis.* **Trans. Ent. Soc.** vol. i. 1 sp. *B. irroratus* L.
Depressed; head nearly as wide as the thorax; anterior margin very convex; ocelli near superior margin of face; wing-covers slightly deflexed; intermed. tibiae spined. *Trans. Ent. Soc.* vol. i. pl. 7. f. 5.

MACROPSIS *Lewis A.* **S. G. PEDIOPSIS** *Burm.* ... sp. *C. virescens* *Fab.*
Head as wide as the thorax, anterior margin convex, posterior concave; face subrhomboidal, flat; apex truncate; ocelli facial; antennæ placed in excavations beneath the eyes. *Trans. Ent. Soc.* vol. i. pl. 7. f. 3.

ONCOPSIS *Burm.* **MACROPSIS** *B. Lewis.* ... sp. *C. flavicollis* L.
Differs from the last in having the face tumid, and the prothorax transverse-ovate, notched behind. *Trans. Ent. Soc.* vol. i. pl. 7. f. 4.

IASSUS *Fab.* **BYTHOSCORUS** p. *Germ.* 1 sp. *I. Lanio* L. *Curtis*, 636.
Head very broad and short, base concave; ocelli placed on the forehead between the eyes; thorax transverse-ovate; face broader than long; clypeus oblong; ovipositor recurved.

Obs. The genera *Bythoscopus* and *Iassus* have been much confused. Burmeister thus distributes them into subgenera in his *Genera Insectorum*: —

Bythoscopus. 1 A. *Bythoscopus* (*Flata varia* *Fab.*). 1 B. *Idiocerus* *Lewis.*

2 A. *Oncopsis* (*Macropsis* *B. Lewis*). 2 B. *Pediopsis* (*Macropsis* *A. Lewis*).

Iassus. 1 A. *Iassus* [N. G. Curtis's Guide] (*I. atomarius*, *cruentatus* *Germar*, &c.) 1 B. *Athy sanus* (*C. argentatus*, *histrionicus*, &c.). 2 A. *Deltocephalus* (*I. pulicaris* *Fall*, &c.). 2 B. *Platymetopius* (*I. vittatus* *Fab.*, &c.).

Sect. II. DIMERA Westw. (*Phytophthires* *Burm.*)

Family 1. (or 4.) PSYLLIDÆ. (Faux-Pucerons Réaumur. Psyllodes Burm.)

PSYLLA *Geoff.* **CHEMMS** *Linn.* 27 sp. *C. Pyri* *Linn.* *Curtis*, 565.

Head moderately notched in front; antennæ slender; wing-covers membranous.

LIVILLA *Curt.* ——— 1 sp. *L. Ulicis* *C.* *Curtis*, 625.

Head very deeply cleft in front; antennæ long, slender; wing-covers convex, coriaceous.

LIVIA *Latr.* **DIRAPHIA** *Illig.* 1 sp. *Pz. Funcorum* *Latr.* *Curtis*, 492.

Head strongly bifid; antennæ short, dilated at base; wing-covers deflexed, coriaceous.

Family 2. (or 5.) *APHIDÆ* Leach. (*Aphidii Latr. Aphidina Burm.*)

APHIS Linn. — 21 sp. *A. Rosa* Linn. Curtis, 577.

Abdomen bicorniculate; antennæ long, setaceous; fore wings with three oblique discoidal nerves, the first trifid; proboscis short; collar long.

LACHNUS Illig. *CINARA* Curt. 35 sp. *A. Roboris* L. Curtis, 576.

Abdomen bitubercled; antennæ moderate, often filiform; collar short; proboscis long.

ATHEROIDES Hal. (Ann. Nat. Hist.) 2 sp. *A. serrulatus*, *A. hirtellus* Hal.

Apterous, linear, flattened; spiracles of penultimate joint simple; antennæ not longer than half the body; proboscis shorter than the body.

ERIOSOMA Leach. *MYZOXYL* Blot. 11 sp. *L. knigera* Ill.

Abdomen without tubercles or horns; antennæ short, filiform; body woolly; fore wings with simple oblique discoidal nerves.

ADELGES Vahl. *APHIS* p. De Geer. 22 sp. *A. Laricis* V.

Legs and antennæ very short, female very much swollen; legs and antennæ scarcely visible; setæ of the mouth very long. (De Geer, Mém. tom. iii. tab. 8. *Aphis Gallarum Abietis*.)

BRYSOCRYPTA Hal. *CHARMIS* Burm. ? sp. *Aph. bursaria* L.

Composed for the reception of those species of Eriosoma, which inhabit closed follicles on the leaves and shoots of plants. Swamm. pl. 45. f. 22—25.

[**PHYLLOXERA** Fonscol. doubtfully introduced by Curtis into his Guide, P. Roboria. Fore wings carried flat on the back, with one simple stigmatal and two simple oblique discoidal nervea.]

THELAXES Westw. — 3 sp. *T. Quercicola* Westw.

Wings carried flat on the back at rest, anterior with three oblique discoidal nerves, the anterior bifid; antennæ short.

Family 3. (or 6.) *ALEYRODIDÆ* Westw.

ALEYRODES Latr. *PHALENA* p. L. 2 sp. *P. proteella* Linn. My fig. 118. 1. Wings four, of nearly equal size; eyes on each side divided.

Sect. III. *MONOMERA* Westw. (*Gallinsecta* Latr. *Coccina* Burm.)

Family 1. (or 7.) *COCCIDÆ* Leach.

DORTHESSIA Bosc. *Cionora* Leach. 6 sp. *D. Characias* Bosc.

Males with a thick pencil of setæ at the tail; females active, covered with flakes of a waxy secretion. My frontispiece, Vol. I. f. 8. ♂, fig. 118. 20. ♀.

ASPIDIOTUS Bosc'hé. *Coccus* p. Auct. 3 sp. *A. Genista* Westw.

Males very broad, with broad wings, without lateral anal filaments, with a central appendage; puparium with a double shield; females immovable.

COCCUS Linn. *LECANIUM* p. Burm. —? sp. *C. aceris* Fab. Curtis, 717. ♂. Males winged; abdomen with two very long lateral filaments and a shorter central appendage; females large, gibbous, gall-like, fixed to plants (fig. 118. 17, 18.)

[**LECANIUM** Ill. (*L. hesperidum* Linn., Burm. ♀ tab. 1. fig. 11.; and my fig. 118. 19.), having the females flat and shield-like, with short legs and two anal setæ,] and

[**PSEUDOCOCCUS** Westw. (*C. adonidum*, *Cacti*, &c.), having the females not fixed, and clothed with a woolly secretion, cannot be considered as indigenous.]

HETEROPTERA. NOTONECTIDÆ — HYDROMETRIDÆ. 119

ORDER XI. HETEROPTERA. (HEMIPTERA MacL., Steph. HEM. HETEROPTERA Latr. HEMIHETOPTERA p. Clv. RHYNGOTA p. Fabr.)

Sect. I. HYDROCORIS Latr.

Family 1. NOTONECTIDÆ Leach. (Notonectici Burm.)

NOTONECTA Linn. ————— 8 sp. *N. glauca* L. Curtis, 10.

Cylindric-oval; fore tarsi 3-jointed; hind tibiae without unguis. (My fig. 119. 1.)
PLOA Steph. PLEA Leach. 1 sp. *N. minutissima* Fourc. Pl. 2. 12.

Ovate-quadrata; fore tarsi 3-jointed, hind tarsi with unguis.
SIGARA Leach. NOTONECTA L. 1 sp. *N. minutissima* L.

Anterior tarsi 1-jointed; scutellum distinct.

CORIXA Gœffr. SIGARA p. Fab. 10 sp. *N. striata* Linn. Donov. pl. 176.

Anterior tarsi 1-jointed; scutellum not distinct.

Family 2. NEPIDÆ Leach.

NAUCORIS Gœffr. NEPA p. Linn. 1 sp. *N. Cimicoides* L. Don. pl. 381.

Body oval, depressed, without anal setæ.

NEPA Linn. NEPA p. Gœffr. 1 sp. *N. cinerea* L. Curtis, 700.

Body broad, flat, with too long anal setæ. (My fig. 119. 10.)

RANATRA Fabr. NEPA p. Linn. 1 sp. *N. linearis* L. Curtis, 281.

Body linear, with two long anal setæ.

Sect. II. AUROCORIS Westw. (Geoocorisa Latr.)

Family 1. (or 3.) GULGULIDÆ.

(There is no British species in this family.)

Family 2. (or 4.) ACANTHIDÆ Leach. (Riparii Burm.)

APHELOCHEIRUS Westw. NAUCORIS p. Auct. 1 sp. *N. aestivalis* Fab.

Antennæ very short; hind legs natatorial. My frontispiece, Vol. I. fig. 7.

ACANTHIA Latr. SALDA Fabr. 10 sp. *Ci. saltatoria* Linn. My fig. 120. 10.

Antennæ of moderate size; legs formed for running. Curtis, 548.

Family 3. (or 5.) HYDROMETRIDÆ Leach. (Ploteres Latr.

Hydromici Burm. Amphibiorises L. Dufour.)

HYDROMETRA { Latr. 1796., nec Fab. S. Rh. } 1 sp. *C. Stagnorum* L.

Linear, first and second joints of antennæ short, third longest; legs formed for walking. Curtis, 32. (My fig. 120. 6.)

VELIA Latr. HYDROMETRA p. Fab. 1 sp. *C. Rivularum* L. Curtis, 2.

Basal joint of antennæ longest; legs moderate, placed at equal distances apart formed for rowing.

MICROVELIA Westw. HYDROSSA Burm. 1 sp. *V. pygmaea* Duf.

Last joint of antennæ longest, intermediate joints short; legs of equal length, short; thighs simple. Curtis, 681.

GERRIS Fab. 1794. HYDROMETRA Burm. & Fab. S. R. 6 sp. *C. lacustris* L.

Basal joint of antennæ longest; four hind legs very long, at a great distance from the fore legs. Curtis, 553. (My fig. 120. 2.)

HEBRUS Walk. LYCAON p. Fall. 1 sp. *Lyy. pusillus* Fall.

Ovate, depressed; ocelli two; hind legs curved; tarsal unguis apical; scutellum

distinct; apical membrane veinless. Westw. in *Ann. Soc. Fr.* 1834, pl. 6. fig. 6.

Family 4. (or 6.) *REDUVIIDÆ* Steph. (*Reduvini Burm.*)

REDUVIUS Fabr. *Orsicætus* Klug. 1 sp. *R. personatus* Linn.

Antennæ 4-jointed, basal joint short, second long, subclavate, third twice as long as second, fourth as long as all the rest, capillary; proboscis short, stout; eyes large; wings ample. My fig. 120. 15.

CORANUS Curt. *Collicoris* Hahn. 1 sp. *C. subapterus* De G. Curt. 453. Proboscis not reaching beyond the fore legs; antennæ 8-jointed, first, third, fifth, and seventh minute, second longest, fourth and sixth short; eyes small, remote; wings mostly rudimental.

PROSTEMMA Lap. *Postramma* L. Duf. 1 sp. *Red. guttula* Fab.

Fore legs thick; femora spined; tibiae with an apical pulvillus; basal joint of antennæ slightly elongated, second very short, three others long, the third longest; wing-covers sometimes rudimental. Curtis, 684.

PYGOLAMPIS Germar. *Ochitorius* Hahn. 1 sp. *P. denticulatus* Germ.

Narrow; head oblong; antennæ strongly elbowed, apical joints incurved; face spined. Hahn, W. I. t. 28.

PLOIARIA Scop. *Gerris* Burm. 3 sp. *Cim. vagabundus* De G.

Fore legs very short; coxae elongated; four hind legs exceedingly long and slender. De G. Mém. tom. iii. pl. 17. f. 1.

NABIS Latr. $\left\{ \begin{array}{l} \text{Nabis and Arrus Hahn.} \\ \text{REDUVIOLUS Kirby.} \end{array} \right\}$ 6 sp. *M. vagans* Fab.

Anterior tibiae with an apical cushion; proboscis slender, extending to hind legs. Hahn, W. I. t. 6.

Family 5. (or 7.) *CIMICIDÆ* Westw. (*Cimicidae* p. Leach. *Membranacei* p. *Latr.*, *Burm.*)

CIMEX Linn. *ACANTHIA* Fabr. 4 sp. *C. lectularius* L. Curtis, 569.

Abdomen nearly circular; wing-covers very short, scaly; wings wanting. (My fig. 121. 1.)

Family 6. (or 8.) *TINGIDÆ* Westw. (*Phymatites*, *Tingidites*, and *Cimicites* p. *Lap.* *Membranacei* p. *Latr.*, *Burm.*)

ANEURUS Curt. *ARADUS* p. *Fab.* 1 sp. *A. levius* Fall. Curtis, 86.

Antennæ with the terminal joint longest; tarsi 2-jointed; hemelytra veinless.

ARADUS Fab. *CIMEX* p. *Linn.* 3 sp. *C. depresso* Fab. Curtis, 230.

Antennæ with the second joint longest; tarsi 2-jointed; hemelytra not covering the abdomen, strongly veined; scutellum distinct.

TINGIS Fab. *CATORFLATUS* Spin. 12 sp. *C. Cardui* Linn. Curtis, 741.

Ovate, depressed; antennæ naked, with the third joint longest; prothorax scarcely dilated at the sides, extending triangularly behind, like a scutellum, with three elevated lines.

PIESMA St. F. & Serv. $\left\{ \begin{array}{l} \text{ASPIDOTOMA Curt.} \\ \text{ZOSMIERUS Lap. & Burm.} \end{array} \right\}$ 2 sp. *A. capitata* Wolff.

Thorax subquadrate, not carinated nor hooded; front of head with two short convergent horns; scutellum distinct, hemelytra with distinct apical membranes. Wolff, Icon. C. f. 125.

AGRAMMMA Westw. $\left\{ \begin{array}{l} \text{PIESMA Lap. nec Enc. M.} \\ \text{SERENTHIA Spinola.} \end{array} \right\}$ 1 sp. *A. lata* Fall.

Narrow; antennæ short; thorax not dilated at the sides, nor 3-carinate; hemelytra homogeneous; legs short.

MONANTHIA Enc. M. TINGIS p. Lap. 1 sp. *T. clavicornis* Linn.

Sides of prothorax scarcely dilated; antennæ pilose, last joint clavate. Pz. 29. 23.
GALEATUS Curt. TINGIS p. Burm. 4 sp. *T. cristata*. Pz. 99. 19.

Prothorax much dilated at the sides, with a large hood in front; antennæ long, slender, pilose; areolæ of the thorax and hemelytra very large.

DICTYONOTA Curt. TINGIS p. Burm. 2 sp. *T. Eryngii* Latr. Curt. 154.
Sides of thorax dilated, and areolate; the antennæ scabrous; terminal joint thinner than the third; prothorax with a frontal hood.

ACALYPTA Westw. TINGIS p. Panz. 1 sp. *T. carinata* Pz. My fig. 120. 12.

Prothorax with the sides slightly dilated, 3-carinated; antennæ long, clavate, hemelytra meeting in a straight suture; wings wanting.

Family 7. (or 9.) **CAPSIDÆ** Westw. (Capsini Burm. Coreidæ p. Steph. Astemmites p. Lap.)

HETEROTOMA Latr. CARSUS p. Fab. 2 sp. *H. spissicornis* Fab.

Narrow, smooth; antennæ with the second joint very thick and setose throughout its whole length. Pz. 2. 16.

CAPSUS Fab. LYCAEUS p. Wolff. 4 sp. *C. ater* Linn. My fig. 121. 5.

Broadly ovate, punctured; antennæ with the second joint longest, clavate at tip; wings and hemelytra perfect; neck moderate or narrow.

CHLAMYDATUS Curt. CARUS p. Hahn. 1 sp. *C. marginatus* Curt.

Subovate; head rather large, trigonate; antennæ with second joint longest; thorax semiobicular; hemelytra small, ovate; hind legs long; thighs thickened. Curt. B. E. 693.

ASTEMMA Latr. nec Enc. Méth. { *ORTHONOTUS* Westw., *HALTICUS* Hahn. }
S sp. *O. rufifrons* Fall. Hahn, f. 61.

Hemelytra uniting in a straight suture, without any apical membrane; thorax transverse, quadrate; antennæ long, slender; basal joint short; head as broad as the thorax; hind legs very long, slender.

LOPUS Hahn. PHYTOCORIS p. Burm. 7 sp. *L. triguttatus* L. Hahn, f. 4.

Elongate-ovate; sides of the thorax acute, elevated, margined; head broader than long; eyes prominent; antennæ with the second joint not strongly clavate at the tip.

PILOPHORUS Hahn. GLOBICEPS Enc. M. 1 sp. *bifasciatus* F.? *clavatus* L.?
Narrow; head broader than front of thorax, which is broadest behind; legs moderately long; antennæ with the two terminal joints short. Hahn, Icon. 1. 23.

ATTUS Hahn. PHYTOCORIS p. Fall. 1 sp. *A. pulicaria* Fall. Hahn, f. 62.
Broadly ovate, thick, pulvilo; antennæ moderately long, second joint longest, third and fourth together as long as the second; wing-covers entire; hind legs not thickened.

HARPOCERA Curt. AZINOCERA Steph. 1 sp. *H. Burmeisteri*. Curt. 709.
Narrow-ovate; antennæ with the second joint much shorter than the third, obliquely clavate at tip in ♂.

PANTILIUS Curt. Lorus p. H. Sch. 1 sp. *C. tunicatus* Fab.

Elliptic, depressed; head small, subtrigonate; antennæ almost as long as the body, third joint not so long as first; fourth shortest; hind tibiae smooth, tarsi very short.

LYGUS Hahn. *CIMEX p. Linn.* 40 sp. *C. Coryli Linn.* Hahn, 18. 23.
Oblong-ovate, shining, finely punctured; thorax rounded in front; head much narrower than the thorax; antennæ with the third joint long and slender.
(*POLYMERUS Hahn* differs in having the sides of the thorax straight and legs thick).

CYLLECORIS Hahn. ——— — sp. *C. agilis Wolff.* Hahn, f. 182.
Narrow; thorax strangulated in front; antennæ and legs slender; head as broad as the front of the thorax.

PHYTOCORIS Fall. *CIMEX p. Linn.* 12 sp. *C. Populi L.* Wolff, 149.
Antennæ slender, with the first joint as long as the head and thorax, the latter not margined; head broader than long; hind legs very long.

MIRIS Fab. *STENOCEMA Lap.* 12 sp. *C. dolabratus Linn.* Curtis, 701.
Elongate, narrow; antennæ very long, basal joint thickest, protracted, second joint longest, slender; ocelli 0.

Family 8. (or 10.) *LYGÆIDÆ* Westw. (*Coreidæ p. Leach, Steph.* *Lygaeodes Burm.* *Lygnites and Astemminites p. Lap.*)

LYGÆUS Fab. *CIMEX p. Linn.* 1 sp. *C. equestris Linn.* Curtis, 481.
Oblong; wings perfect; ocelli two; legs all slender; last joint of antennæ subfusiform.

HETEROGASTER Schill. *LYGÆUS Fab.* 4 sp. *C. Urtice F.* Curtis, 597.
Antennæ with the basal joint shorter, fourth longest, slightly clavate; eyes prominent; ocelli two; ovipositor arising from the centre of the abdomen; legs of equal thickness.

PYRRHOCORIS Fall. $\left\{ \begin{array}{l} \text{PLATYNOTUS Schill.} \\ \text{MEGANOTUS Lap.} \end{array} \right\}$ 1 sp. *C. apterus Linn.*

Obovate; thorax broad, slightly narrowed across the middle; ocelli wanting; antennæ with the first and fourth joints of nearly equal length, second the longest; wings often obsolete. Curtis, 465. (My fig. 121. 8.)

RHYPAROCHRO- $\left\{ \begin{array}{l} \text{APHANUS Lap., PACHYMERUS St. F. & Serv.} \\ \text{MUS Hahn.} \\ \text{PACHYBRACHIUS Hahn, PLINTHUSUS Westw.} \\ \text{POLYACANTHUS Lap., MICROTOMA Lap. olim.} \end{array} \right\}$ 25 sp.

C. Echii F. Curtis, 612.

Ocelli two, fore thighs thickened, toothed; first joint of antennæ shorter, fourth longest.

Obs. The species, which are very numerous, differ in the form of the thorax: *Pachybrachius Hahn* (Icon. Cimic.) has it constricted in the middle; in *Plinthusus Westw.* (*P. brevipennis Latr.*) it is nearly square, without any transverse impression. H. Schäffer retains *Pachymerus* (previously employed in Coleoptera) for *P. Echii*, *Pini*, &c., and *Aphanus* (*P. sabulosus Fall.*). Burmeister reunites them with the next into a single genus.

GASTRODESMUS Westw. *PLATYCASTER Schill.* 1 sp. *C. Abietis Linn.*

Fore femora thickened, toothed; females with the last two abdominal segments cleft in the middle; abdomen flattened; thorax dilated behind. Pl. 92. 22.

ANTHOCORIS Fall. $\left\{ \begin{array}{l} \text{RHYNARIUS Hahn, PEDETICUS Lap.} \\ \text{HYLOPHILA Kirby, LYGÆUS Fab.} \end{array} \right\}$ 6 sp. *C. Nemorum L.*

Face rostrated; apical membrane of elytra veinless; stigma very large; first and second joint of proboscis very short, third very long, fourth short; ocelli two. Hahn, f. 58.

KYLOCORIS *Dufour.* — 1 sp. *X. ater* L. D.

Differs from *Anthocoris* only in the two basal joints of the antennæ being rather longer, and the terminal joint of the antennæ slenderer; the hemelytra are sometimes imperfect. Ann. Soc. Ent. Fr. vol. ii. pl. 6. B. f. 3.

MICROPHYSA *Westw.* *LORICULA* *Curt.* 2 sp. *L. Pselaphoides* *Burm.*

Very broad; abdomen nearly round; head advanced in front; three terminal joints of antennæ nearly equal, second joint of proboscis longest; legs slender; hemelytra coeleoptrated, short. Westw. in Ann. Soc. Ent. Fr. vol. iii. pl. 6. f. 3.

Family 9. (or 11.) **COREIDÆ** *Westw.* (*Coreidae* p. *Leach*, *Steph.* *Coreodes* *Burm.* *Anisoscelites* and *Coreites* *Lap.*)

COREUS *Fab.* **STROMASTES** *Latr.* 3 sp. Typ. *verus*, *C. marginatus* L. Curt. 174.

Antennæ with the basal joint flattened, second and third longer, slender, nearly equal, fourth shorter, clavate; sides of thorax not dilated.

MEROCORIS *Hahn.* *COREUS* *Latr.* 3 sp. *C. denticulatus* *Scop.* My fig. 121. 11.

Antennæ with all the joints compressed; first large, subarcuate; the three last nearly equal in length and thickness; sides of thorax often dilated.

ARENOCORIS *Hahn.* { *TRACTUS* *Lap.*, *Curt.* } 1 sp. *A. literatus* *Curt.*
{ *PSEUDOPHRICUS* *Burm.* } Curtis, 500.

Obovate, depressed; basal joint of antennæ flattened, second and third slender, third longest, fourth short, thick (fig. 121. 15.); sides of thorax not dilated.

CHOROSOMA *Curt.* { *RHOPALUS* fam. 2. *Schill.* } 2 sp. { *Rh. Schillingii* *Schum.*
MYRMUS *Hahn.* } (*Ch. Arundinis* *Curtis.*)

Linear; antennæ moderate, not elbowed, second joint longest; legs moderately long. Curtis, 297.

STENOCEPHALUS *Latr.* **DICRANOCEPHALUS** *Hahn*, *Icon.* 1 sp. *L. niger* *Fab.*

Elongate-ovate; antennæ with the first joint thickest, second and fourth equal, fourth not thicker than the preceding. Donov. pl. 218. f. 1.

ALYDUS *Fab.* *LYCUS* *Fab.* 1 sp. *C. calcaratus* *Linn.* Curtis, 369.

Narrow; three basal joints of antennæ nearly equal, fourth longest and thickest; hind legs longest; femora spined.

NEIDES *Latr.* *BERYTUS* *Fab.* 3 sp. *Cim. tipularius* L. Curtis, 150.

Linear; antennæ very long, elbowed, basal joint longest, second very short; legs very long.

CORIZUS *Fallen.* *LYCUS* p. *Fab.* 1 sp. *C. Hyoscyami* L. Curtis, 481.

Head rhomboidal, narrowed behind; eyes small, prominent; basal joint of antennæ shortest, terminal joint stoutest, subfusiform; elytra ample; legs simple.

RHOPALUS *Schill.* fam. 1. *CORIUS* p. *Burm.* 3 sp. *C. capitatus* *Wolff*, f. 72.

Differs from *Coriust* in the hemelytra being submembranaceous, diaphanous with thick nerves, forming a quadrate cell; seventh ventral segment covered by the sixth.

CYMUS *Hahn.* { *KLEIDOCERYS* *Westw.*
HETEROGASTER, fam. 3. *Schill.* } 3 sp. *Lyg. Reseda* *Pz.* 40. 20.

Hemelytra covering the abdomen, with the outer margin depressed; apical membrane with slight separate nerves inflexed at the base; terminal joint of antennæ clavate.

Family 10. (or 12.) **SCUTELLERIDÆ** *Westw.* (*Scutati* *Burm.*
Pentatomidæ *Leach*, *Steph.* *Pentatomites* and *Scutellerites* *Lap.*)

Subfamily 1. *Pentatomides.*

ÆLIA *Fab.* *CIMEX* p. *Burm.* 1 sp. *Æ. acuminata* F. Curtis, 704.

Head elongate-trigonal; legs smooth; tarsi 3-jointed; scutellum not covering the abdomen; first and second joints of antennæ very short, subequal.

ACANTHOSOMA Curt. **CLINOCORIS** Hahn. 4 sp. *C. hemorrhoidalis* L. Curt. 28. Scutellum not covering the abdomen; tarsi 2-jointed; antennæ with joints nearly equal, third rather shortest; pro- and meta-sternum keeled. (My fig. 121. 17.)

RAPHIGASTER Lap. **PENTATOMA** p. Curt. 20. 1 sp. *C. punctipennis* Illig., *grisea* F. Metasternum with a long prorected spine; antennæ with the first joint shortest, third shorter than second. Pz. 33. 19.

EURYDEMA Lap. **STRACHIA** Hahn. 4 sp. *C. oderacea* Linn. Pz. 32. 12. Broadly ovate; head broad; eyes transverse; legs long; antennæ long, basal joint oval, second longest.

PENTATOMA Latr. **CIMEX** and **ASORUS** Burm. 15 sp. *C. rufipes* Linn. Subelongate-ovate; head oblong; legs smooth; tarsi 3-jointed; scutellum not covering the abdomen; eyes slightly prominent. (My fig. 122. 1.)

Obs. Hahn has separated several genera from this; viz. *Eysarcoris* (*P. perlata*, *punctata*), *Ialla* (*P. damosa*), *Arma* (*P. lurida*, *custos*, *bidentata*), and *Tropicoris* (*P. rufipes*).

CYDNUS Fab. **CIMEX** p. Linn. 6 sp. *C. bicolor* L. Curtis, 74. Orbicular, ovate, depressed; legs very spinose; two basal joints of antennæ very short, three last nearly equal.

SCIOCORIS Fallen. **Cydnus** p. Fabr. 1 sp. **Cim. ambrinus** Pz. 93. 15. Depressed, acutely margined; head large; second joint of proboscis long; legs pilose; sides of abdomen exposed; scutellum moderate.

Subfamily 2. *Scutellerides.*

COPTOSOMA Lap. **THYREOCORIS** Leach. 1 sp. *C. globus* Fab. Wolff, fig. 3. Scutellum very broad behind, emarginate in ♂; second joint of antennæ very short.

ODONTOSCELIS Lap. **THYREOCORIS** Hahn. 1 sp. *C. scarabeoides* Linn. Legs very spinose; antennæ inserted under the eyes, third joint twice as long as the second. Wolff, f. 4.

URTOCORIS Hahn. **ODONTOSCELIS** p. Burm. 2 sp. *C. fuliginosa* Linn. Legs very spinose; antennæ inserted under the eyes, second joint of antennæ longer than third. Curt. 685.

PODOPS Lap. **TETYRA** p. Steph. 1 sp. *C. insecta* Pz. 36. 24. Prothorax appendiculated on each side in front; second joint of antennæ shorter than third; legs almost smooth.

BELLOCORIS Hahn. **EVRGASTER** Lap. 2 sp. *C. maura* Linn. Hahn, f. 139. Legs slightly spinose; second and third joints of antennæ of equal length.

[**GRAPHOSOMA** Lap. **TRIGONOSOMA** p. Burm. 1 sp. *C. kneata* L. Wff. f. 1.]

ORDER XII. APHANIPTERA Kirby. (SUCTORIA De Geer. SIPHON-APTERA Latr. ROPHOTEIRA Clairv. APTERA MacL., Lam.)

Family *PULICIDÆ.*

PULEX Linn. — 17 sp. *P. irritans* L. My fig. 114. 1.

Labium developed, with articulated labial palpi.

Obs. *Ceratopsyllus* Curt. (*Ceratophyllus* Curt. B. E.) consists of species in the type of which the antennæ are "inserted on each side of the crown

of the head, concealed in a cavity behind the eyes when at rest, and as long as the head, 4-jointed ; " but other species introduced into the genus are described by Curtis as differing entirely in this respect; hence the character, derived from the antennæ, appears to me to be merely specific. Some of the species, however (*P. vespertilionis* and *elongatus*), being of a much more slender general form, I have proposed for them the generic name of *Ischnopsyllus* (*Ent. Mag.* No. 4.).

ORDER XIII. DIPTERA Aristotle. (ANTLIATA Fabricius. HALTERIPERA Clairv.)

Sect. I. CEPHALOTA Westw. (See Vol. II. pp. 505. and 506.)

Division 1. (*Stirps 1.*) *Nemocera* Latr., MacL. (*Tipulariae Meig.*)

Fam. 1. *CULICIDÆ* Leach. *Culicides* Macq. H. N. Dipt.

CULEX Linn. — 20 sp. *C. pipiens* Meig. Curtis, 537.

Palpi longer than the proboscis ♂, very short ♀.

ANOPHELES Meig. *CULEX* p. Linn. 3 sp. *Cul. bifurcatus* Linn. Curt. 210.
Palpi of equal length with the proboscis in both sexes.

AEDES Hoff., Meig. — 1 sp. *Aed. cinereus*? Hoff. Meig. Abb. 3. f. 1.
Palpi very short ♂, pointed and thick at the base ♀.

Family 2. *TIPULIDÆ* Leach. (*Tipulides Macq. H. N. Dipt.*)

Subfamily 1. *Chironomides* Westw. (*Culiciformes* Latr., Macq.)

CORETHRHA Meig. *CHIRONOMUS* p. Fab. 3 sp. *Ch. plumicornis* Fab.

Antennæ ♂ plumose to the tip; legs placed at equal distances apart; sternum not prominent. Steph. pl. 42. f. 1.

*CHIRONOMUS** Meig. *TIPLA* p. Linn. 91 sp. *C. plumosus* L. Curtis, 90.
Four hind legs at a distance from the others; sternum prominent; last joint of ♂ antennæ longest. (My fig. 124. 8.)

TANYPUS Meig. *CHIRONOMUS* p. Fab. 26 sp. *T. monilis* Linn. Curtis, 501.
Antennæ 14-jointed in both sexes, penultimate joint longest; sternum prominent; four hind-legs wide apart.

SPHÆROMIAS Steph. — 6 sp. *Sph. albomarginatus*. Curtis, 285.
Antennæ slender, basal joint globular, eight following joints short, five terminal joints long; eyes emarginate; trophi fully developed.

CERATOPOGON Meig. *CHIRONOMUS* p. Fabr. 18 sp. *C. Stigma* Meig.
Antennæ ♂ plumose at the base, 5 terminal joints elongated, simple in ♀; all the femora simple; second joint of palpi longest; legs of nearly equal length; two submarginal cells. Meig. Zw. 1. pl. 2. f. 18.

PALPOMYIA Meig. ?, Steph. *CERATOPOGON* B. Meig. 10 sp. *C. spinipes* Meig.
Differs from Ceratopogon in having the fore thighs thick and spinose beneath.
Pz. 103. 14.

* Our lakes and greater rivers yield a species remarkable for its wings incumbent, as in Ceratopogon; but with the other characters of the genus, *Ch. lacustris*, dilute prasinus thorace vittis 3 ferrugineis; tibialis anticus subfuscis (alis nudis; halteribus albidis). Long 2 lin. ♂ — 1 $\frac{1}{4}$ ♀. (Haliday MSS.)

PRIONOMYIA St. { *SEROMYIA* Meig. ? } 6 sp. *Cerat. femorata* F. Meig.
CERATOPOGON C. Meig. } Kl. pl. 2. f. 4.

Differs from Ceratopogon in having the hind thighs thickened.

CULICOIDES Latr. *CERATOROGON* p. Meig. 6 sp. *C. pulicaris* Linn.

Femora simple, not spined; one large imperfect submarginal cell. Meig. Zw. 1. pl. 2. f. 17.

(**LABIDOMYIA** St. *FORCIPOMYIA* Meig. ? 2 sp. *Cer. bipunctata* Linn. Meig.)

ORPHNephila Hal. *CHENESIA* Macq.* 1 sp. *O. devia* Hal.

Eyes confluent in front; ocelli 0; antennæ very short, naked in both sexes; base globose; anterior tarsi elongated; wings incumbent, parallel. Zool. Journ. vol. v. pl. 15. f. 2.

Subfamily 2. *Cecidomyiidae* Westw. (*Gallicolae* Latr., Macq.)

DIOMYZA Meig. *LASIOPTERA* A. Meig. 3 sp. *D. fuliginosa* Steph.

Wings with the costa thickened; one longitudinal and furcate nerve; tarsi very long; basal joint short; antennæ short, joints not vetricillate. Steph. pl. 42. f. 4.

LASIOPTERYX Steph. *LASIOPTERA* B. Meig. 5 sp. *Lae. obscurata* Meig.

Differs from Diomyza in having the basal joint of the tarsi elongate.

CECIDOMYIA Latr. *OLIGOTROPHUS* Latr. olim. 28 sp. *Tip. Triticæ* K.

Legs very long; basal joint of tarsi very minute; antennæ long, especially in ♂; joints vetricillate; wings with two longitudinal, and one inner furcate nerve. My fig. 125. a.

PLANETELLA Westw. *PLANETES* Wlk. (G. Carab.) 1 sp. *Pl. extensus* Wlk.

Antennæ ♀ 12-jointed, half the length of the body, joints long, equal; twelfth conic, acuminate; thorax produced over the head; legs thick, basal joint of tarsi very short.

CAMPYLOMYZA Wied. *CECIDOMYIA* Meig. olim. 4 sp. *C. flavipes* Meig.

Antennæ short, not vetricillate, 14-jointed; subcostal nerve furcate at tip, and two longitudinal furcate discoidal nerves. Meig. Zw. 1. pl. 3. f. 6.

PSYCHODA Latr. *TINAXIA* Schill. 10 sp. *T. Phalaenoides* Linn. Curt. 745.

Wings deflexed at the sides of the body with numerous nervures; antennæ vetricillated, 14—15-jointed.

(*S. G. A. Saccopteryx* Hal., *P. fuliginosa* Meig., *B. Psychoda*, *P. oeularis* Meig. (my fig. 125. g.), *C. Tribohomyia* Hal., *P. arbica*, and *D. Sycorax* Hal., *P. silacea* Hal. See Curtis.)

ZYGONEURA Meig. ? — 1 sp. *Z. sciarina* Wint. Meig. Zw. 6. t. 65. f. 15.

Antennæ long, 14-jointed, vetricillate; legs long, slender; first longitudinal discoidal nerve furcate; upper branch of fork much curved.

MOLOBRUS Latr.* *SCIARA* Meig. 28 sp. *Tip. Thoma* Linn.

Antennæ short, 16-jointed, filiform pilose; eyes reniform; first longitudinal discoidal nerve furcate; branches of fork nearly straight. Meig. Zw. 1. pl. 4. f. 3.

* "Chionea venatica Curt. Guid. 1164^b. 1. The insect I had here indicated is a small apterous Molobrus, allied to M. longipes, but with wings and poisons quite absent; the terminal spurs of tibiae obsolete; the thorax much compressed behind, so as to seem conical from above; the abdomen incrassate in the middle, the attenuate extremity decurved and furnished with the ordinary two linear obtuse pubescent and free valves of ovipositor. I should not have hesitated to identify this with De Geer's *Tipula atomaria*, if the latter had not been represented as hairy.

LESTREMIA Macq., Meig. DIAMESA Meig. 3^o sp. *L. leucophaea* M.

Antennæ 15-jointed, joints globular, pedicellate ♂, cylindric ♀; legs long; wings with a marginal cell divided by a transverse nerve. Meig. pl. 65. f. 16.

ANARETE Hal. ——— 1 sp. *A. candidata* Hal. Piss. D.G.?

Antennæ short, 9-jointed; eyes emarginate; ocelli three; eyes incumbent, naked; a furcate nerve inserted in the middle of the costa; tibiae not spurred.

CATOCHEA Hal. ——— 1 sp. *C. latipes* Hal.

Antennæ porrected; two basal joints thick, ♂ 16-jointed; joints globular, pilose; antennæ 10-jointed; ocelli three; furcate nerve inserted near the base of the costa.

Subfamily 3. *Myctophilidae* Westw. (Fungicola Meig., Macq.
Fungivores Latr.)

RHYPHUS Latr. AXISORS Meig., olim. 4 sp. *T. fenestralis* Scop. Curt. 102.

Antennæ short, 14-jointed, cylindric; wings with a central oblong cell; second joint of palpi swollen; legs not spinose. (My fig. 125. 16.)

CORDYLA Meig. ODONTOPHILA Meig. 4 sp. *C. fusca* Latr. Macq. pl. 3. f. 17.

Body compressed; antennæ short, 14-jointed, compressed; joints transverse; ocelli three, in a line; nerves of wings simple.

MYCETOBLIA Meig. ——— 1 sp. *M. pallipes* Meig. Meig. pl. 8. f. 10.

Nervures simple; antennæ with cup-shaped joints, much shorter than the body; terminal joint of palpi elongated; ocelli three, in a triangle.

PLATYURA Meig. SCIARA p. Fab. 19 sp. *Sc. lineata* Fab. Curt. 134.

Antennæ short, with transverse joints; first longitudinal nerve with an oblique nervure at the apex; palpi with oblong joints; body generally depressed.

SCIOPHILA Hoffm. PLATTURA p. F. 17 sp. *fimbriata* Meig. Curt. 641.

Ocelli apart, middle one small; wings with a small subquadrate cell between the subcostal and longitudinal nerves; antennæ short.

LEIA Meig. ——— 12 sp. *L. nitidicollis* M. Curt. 645.

Ocelli three, distant, central one small; wings without a subquadrate cell; antennæ as long as the thorax, with cup-shaped joints; palpi long.

MYCETOPHILA Meig. SCIARA p. Fab. 47 sp. *Sc. levata* Fab.

Ocelli two or 0; wings without a subquadrate cell; trophi short; antennæ rather short. My fig. 125. 11.

LEPTOMORPHUS Curt. ——— 2 sp. *L. Walkeri* Curt. BE. 365.

Antennæ with oblong joints; terminal joint of palpi elongated; ocelli three, central one very minute; posterior tibiae not externally spined.

MACROCERA Meig. ——— 9 sp. *M. phalerata* Hoff. Curt. 637.

Antennæ much longer than the body; second subcostal nervure continued to the apex; ocelli three, close together.

BOLETOPHILA Hoffm. MESSALA Curt. ♂ 3 sp. *B. cinerea* Hoff. Ste. 44. f. 1.

Antennæ nearly as long as the body; second subcostal nervure terminated abruptly; ocelli, three in a line. Curt. 581.

As *Chionea* appears to be one of the *Terricole*, I was clearly in error in supposing any connection with that genus." (Haliday MSS.)

* "I find 3 sp. The ♂ antennæ are as *Chironomus*, so that the additional transverse nervure is the only generic character, the eyes being reniform in the commonest species, which I take for *Ch. obscurimanus*; even in *D. Walkii*, they are slightly notched. A third species has an additional joint in antennæ ♀." (Haliday MSS.)

Subfamily 4. *Tipulides* Westw. (Rostratae Meig. Terricole Latr., Macq.)

TRICHOCERA Meig. *TIPLA* p. D.G. 6 sp. *Tip. hiemalis* De G.
Antennæ with the terminal joints exceedingly slender and indistinct; legs very long and slender; palpi with five nearly equal-sized joints; wings with five posterior cells. Meig. Zw. 1. pl. 7. f. 9.

DIXA Meig. —— 9 sp. *D. aprilina* Meig. Curt. 409.
Wings with the first and third apical nervures furcate; antennæ very slender; thorax projecting; ocelli 0.

PERONECERA Curtis. —— 2 sp. *P. fascipennis* Curt. B.E. 589.
Antennæ not so long as the thorax, in the male 7-jointed, last joint small; shorter, and 8-jointed in female, fifth short, three following forming a mass; wings with three submarginal cells.

NEMATOCERA Meig. *ANISOMERA* St. Cat. 1 sp. *nigra* Latr.
Antennæ much longer than the thorax, slender, 6-jointed, four terminal joints long; palpi with a short terminal joint.

PTYCHOPTERA Meig. *TIPLA* p. Linn. 5 sp. *T. contaminata* Linn.
Palpi with the last joint very long; antennæ filiform, 16-jointed, third joint long; wings folded at the anal nerve; discoidal cell wanting. Meig. Zw. 1. pl. 6. f. 17.

NEPHROTOMA Meig. *TIPLA* p. Fab. 1 sp. *T. dorsalis* F.
Last joint of palpi elongate; antennæ ♂ 19-jointed, fourth and following joints kidney-shaped. Meig. Zw. 1. pl. 5. f. 19-22.

DOLICHOPEZA Curt. *LEPTINA* Meig. pl. 1 sp. *D. Sylvicola* Curt. 62.
Antennæ 12-jointed, slender, simple; legs very long; ocelli 0; terminal joint of palpi long; third discoidal cell wanting.

PACHYRHINA Macq. *TIPLA* p. Steph. 8 sp. *Tip. crocata* L. Donov. pl. 48. f. 1.
Differs from *Tipula* in second posterior cell sessile, nasus thicker, and first joint of antennæ shorter.

TIPULA Linn. *LIMONIA* Meig. olim. 36 sp. *T. gigantea* F. Curt. 493.
Antennæ simple, 18-jointed, with whorls of hair; last joint of palpi moderately long; wings with seven apical cells.

CTENOPHORA Meig. *XIRHURA & DICTENIDIA* Br. 8 sp. *Tip. pectinicornis* L.
Antennæ 13-jointed, peetinated in ♂; last joint of palpi elongate. Curt. 5.

PEDICIA Latr. *LIMNORIA* p. Meig. 1 sp. *Tip. rivosa* Linn. K. & S. pl. 4. f. 4.
Fourth joint of the palpi long and flexible; antennæ 16-jointed, third and sixth joints subglobose, seven terminal ones slender; second posterior cell petiolated.

SYMPLECTA Meig. *HELOBIA* Enc. Méth. 5 sp. *L. punctipennis* M.
Wings with seven apical cells; anal nerve greatly bent; palpi short, with nearly equal joints; eyes united in front; antennæ filiform, 16-jointed. Macq. pl. 2. f. 11.

? **GLOCHINA** Meig. ? { *SIAGONA* Meig. in pl. } 2 sp. *G. leucocephala* Hal.
{ *LIMNORIA* p. Macq. } Meig. pl. 65. f. 5.

Antennæ 14-jointed; trophi greatly elongated; palpi long, 5-jointed.

LIMNOPHILA Macq. *LIMNORIA* p. Meig. 10? sp. *L. pictipennis* Meig.

Joints of palpi of equal length; antennæ filiform, ordinarily 16-jointed; third and following joints globular; wings incumbent; five posterior cells. Macq. tab. 2. f. 5.

CYLINDROTOMA Macq. *LIMNORIA* p. Meig. 8? sp. *distinctissima* Macq. t. 2. f. 9.
Joints of the palpi nearly equal; antennæ filiform, 18-jointed, cylindric; wings incumbent; two submarginal cells, four or five posterior.

LIMNOBIA Meig. *LIMONIA Latr.* 28 sp. *T. s-punctata* F. Macq. t. 2. f. 7
Antennæ 15—17-jointed, filiform, terminal joints oblong; palpi with the terminal joint short; wings incumbent; four posterior cells.

Obs. *L. tenella*, the type of *Gonomyia* Hgg., and *L. lutea*, *modesta*, &c., placed by Stephens in his *G. Dicranomyia*, are united by Macquart to *Limnobia*.

IDIOPTERA Macq. — 1 sp. *I. pulchella* Macq. pl. 2. f. 3, 4.
Nasus very short; antennæ half as long as the body, with oblong joints; basal internal cell of wings divided by a transverse nerve.

ULA Hal. — 1 sp. *Ul. mollissima* Hal.

Antennæ porrected, 17-jointed; two basal joints short, thick, the remainder oblong, subequal; palpi incurved, 4-jointed, last joint long; wings incumbent, pubescent.

GERANOMYIA Hal. — 2 sp. *C. unicolor* Hal. Curtis, 573.

Antennæ 14-jointed; trophi greatly elongated; palpi very short, 2-jointed.

RHAMPIDIA Meig. *LEPTORHINA* Steph. Cat. 1 sp. *Rh. longirostris* Wied.
Antennæ 16-jointed; elypus greatly elongated; trophi small; palpi 4-jointed, last joint long; wings with four posterior cells.

RHIPIDIA Meig. — 2 sp. *R. maculata* Meig. Z. w. 1. t. 5. f. 11.

Palpi with short subequal joints; antennæ 14-jointed, fourth, and following, globose, apart, and bipectinate in ♂; four posterior cells.

ERIOPTERA Meig. *ERIOPTERYX* Steph. 30 sp. *T. flavescens* L. Curtis, 557.
Wings rather long; veins hairy; legs rather stout; antennæ 16-jointed, joints oblong verticillate ♂; joints of palpi equal.

MOLOPHILUS Curt. *ERIOPTERA* p. Meig. 1 sp. *Er. atra* Meig. Curt. 444.
Wings very short, hairy; abdomen of males terminated by two large lobes; antennæ short, moniliform, 17-jointed; legs very long.

Subfamily 5. *Bibionides* Westw. (Muscoformes Meig. Florales Latr., Macq.)

SIMULIUM Latr. *ATRACTOCERA* Meig., Kl. 19 sp. *C. reptans* Linn. Curt. 765.
Fourth joint of palpi slightly elongate; antennæ 11-jointed; ocelli 0; basal joint of tarsi very large; wings large.

SCATHOPSE Geoffr. *CERIA* Scop. 8 sp. *T. notata* Linn. Meig. Z. 1. pl. 10. f. 19.
Palpi hidden, 1-jointed; antennæ cylindric, 11-jointed; eyes reniform; second posterior cell petiolated.

DILOPHUS Meig. *BIBIO* p. Oliv. 5 sp. *T. febrilis* Linn. Meig. Z. w. pl. 11. f. 1.
Antennæ 11-jointed, four terminal joints united in a mass; fore tibiae terminated by eight points; tarsi 8-pulvillose, no discoidal cell.

BIBIO Geoffr. *HISTER* p. Fab. 19 sp. *Tip. Marci* Linn. Curt. 198.

Antennæ 9-jointed, cylindric, petiolated; eyes ♂ occupying nearly all the head; fore thighs thickened; fore tibiae terminated by a long spine.

ASPISTES Hoffm. — 1 sp. *A. Haworthii* Curt.

Antennæ 8-jointed, last joint very large, oval; one basal cell emitting three long oblique nerves. Meig. Z. w. 1. tab. 11. f. 16.

Division 2. *Brachocera* Macquart.Stirps 1. *Notacantha* Latr.Family 1. (or 3.) *STRATIOMIDÆ* Westw. (*Stratiomydes* Latr.)

PACHYGASTER Meig. *VAPPO* Latr. 2 sp. *V. ater* Fab. Curt. 42.

Third joint of antennæ large, subhemispherical, subarticulated, with a dorsal arista; abdomen globose; scutellum unarmed; discoidal cell large.

SARGUS Latr. *NEMOTELUS* p. D.G. 5 sp. *M. cuparius* L. Curt. 305.

Palpi indistinct, replaced by two points; antennæ with the third joint scarcely larger than the second, and apparently composed of several joints united together with a subterminal seta; scutellum not spined; abdomen elongate-ovate.

CHRYSOMYIA Macq. *CHLOROMYIA* Dusse. 4 sp. *M. politus* L. Donov. pl. 142. f. 1.

Differs from Sergus in the eyes of the ♂ united, and the proboscis with short palpi.

NEMOTELUS Fab. *MUSCA* p. Linn. 4 sp. *M. pantherinus* L. Curt. 729.

Third and three following joints forming an ovate-conic mass, with a terminal biarticulate style; labium greatly elongated.

CLITELLARIA Meig. *ERIPPIUM* Latr. 1 sp. *C. Ephippium* F. Steph. pl. 46. f. 1.

Third and four following joints of the antennæ forming a subulated mass, with a terminal biarticulate style; eyes villose; abdomen very broad.

OXYCERA Meig. *MUSCA* p. Linn. 9 sp. *M. trilineata* L. Curt. 441.

Third and three following joints of antennæ forming an oval mass, terminated by a style composed of two terminal joints; eyes ♂ villose; abdomen suborbicular.

STRATIOMYS Geoffr. *ODONTOMYIA* p. Sam. 5 sp. *M. chamaeleon* L.

Proboscis very short; basal joint of antennæ much longer than second; terminal joints forming a fusiform club, without a style; scutellum spined. My fig. 127. 1.

ODONTOMYIA Meig. *MUSCA* p. Linn. 8 sp. *M. Hydroleon* L. Pl. 58. 19.

Basal joint of antennæ shorter; proboscis slenderer; wings generally with four posterior cells.

Family 2. (or 4.) *BERIDÆ* Westw. (*Decatoma* p. Latr. *Xylophagidae* Steph. *Xylophagi* p. Meig. *Xylophagii* Macq.)

SUBULA Meig. *XYLOPHAGUS* B. Meig. 1 sp. *S. maculata* F. My fig. 127. 12.

Scutellum unarmed; antennæ 10-jointed; eyes ♂ apart.

BERIS Latr. *STRATIOMYS* p. Geoffr. 11 sp. *M. clavipes* Linn. Curt. 337.

Scutellum 6- or 8-spined; antennæ 10-jointed; eyes contiguous ♂; palpi obsolete.

ACTINA Meig. *BRAIS* p. Macq. 1 sp. *A. tibialis* Meig. Steph. pl. 46. f. 2.

Scutellum 4-spined; palpi long; eyes apart in ♂.

Family 3. (or 6.) *CENOMYIDÆ* Westw. (*Sicarii* Latr., Macq. *Xylophagi* p. Meig.)

XYLOPHAGUS Meig. A. *NEMOTELUS* D.G. 2 sp. *X. ater* Fab. My fig. 127. 16.

Antennæ 10-jointed, basal joint long; ovipositor of ♀ elongated; eyes distant ♂.

Stirps 3. *Tanytarsus* Latr.

Family 1. (or 7.) *TABANIDÆ* Leach. (*Tabanii* Latr. *Hexa-*
chaetes Meq.)

TABANUS Linn., &c. ——— 21 sp. *T. bovinus* Linn. Curt. 78.

Antennæ 7-jointed, not longer than the head, third joint excised at base.

HÆMATOPOTA Meig. *TABANUS* p. L. 4 sp. *T. pluvialis* Linn. Curt. 525.

Antennæ 6-jointed, longer than the head, third joint thickened at base.

CHRYSOPS Meig. *TABANUS* p. Linn. 4 sp. *T. cecutiens* Linn.

Ocelli distinct; antennæ long, 7-jointed. Donov. pl. 191.

Family 2. (or 8.) *BOMBYLIIDÆ* Leach. (*Bombyliarii* Meig.,
Latr.)

BOMBYLIUS Linn., &c. ——— 8 sp. *B. major* L. My fig. 128. 11.

Terminal wing-cells terminated by nerves, parallel with the posterior margin;
basal joint of antennæ long.

PHTHIRIA Latr. [Ploas St. Cat.] *2 sp. *P. pulicaria* Mik. Curt. 521.

Terminal wing-cells extending to the hind margin; basal joint of antennæ short.

Family 3. (or 9.) *ANTHRACIDÆ* Leach. (*Anthracii* Latr.
Bombyliarii p. Latr. *Nemestrinidæ* and *Anthracii* Meq.)

LOMATIA Meig. *SYGIA* Meig. olim. 2 sp. *An. Belzebub* F. Pz. 45. 16.

Elongate; antennæ close together.

ANTHRAX Fab. *NEMOTELUS* p. D. G. 5 sp. *M. Hottentotta* L. Curt. 9.

Short; antennæ apart at the base.

Family 4. (or 10.) *ACROCERIDÆ* Leach. (*Vesiculosæ* Meq.
Inflatae Meig., Latr.)

ACROCERA Meig. *SYRPHUS* p. Pz. 2 sp. *S. globulus*. Pz. 86. 20.

Antennæ setaceous at tip, inserted close to the ocelli.

HENOPS Illig. *Oacodes* Latr. 2 sp. *M. gibbosa* L. Curt. 110.

Antennæ subclavate, inserted close to the eyes.

Family 5. (or 11.) *EMPIDÆ* Leach. (*Empidæ* Meig.)

EMPIS Linn. ——— 31 sp. *E. tessellata* F. My fig. 129. 2.

Proboscis much longer than the head; two submarginal cells.

(*PACHYMERIA* St. *EMPIS* B. p. Meig. 2 sp. *E. ruralis* Meig. Harr. Exp. pl. 44. f. 4.)

(*PLATYPTERYGIA* St. *PLATYPTERA* Meig. olim. 1 sp. *E. borealis* Linn. Curt. 18.)

RHAMPHOMYIA Hoffm. *EMPIS* p. Fab. 24 sp. *E. nigripes* Fab. Curt. 517.
Proboscis long; one submarginal cell.

(*ENICOPTERYX* Steph. *RHAMPHOMYIA* p. Meig. 3 sp. *Rh. infuscata* Meig.
Zw. pl. 23. f. 4.)

* The second species of this genus, now first recorded as a native insect, from the collection of Mr. Shuckard, is the *Ph. fulva* Latr. figured in the frontispiece to Vol. I. fig. 9.

HILARA Meig. **TACHYDROMIA** p. Fab. 23 sp. *T. fuscipes* Fab. Curt. 130. Proboscis shorter than the head; third joint of the antennæ elongate; style short.

BRACHYSTOMA Meig. **BACCHA** p. F. 2 sp. *B. longicornis* Meig. Proboscis shorter than the head; third joint of the antennæ elongate-conic; style very long. Meig. pl. 22. f. 8.

GLOMA Meig. — 1 sp. *G. fuscipennis*. Meig. pl. 22. f. 11. Proboscis shorter than the head; third joint of antennæ globular.

Family 6. (or 12.) *Tachydromiidae*. (*Tachydromii* Meig. *Empidae* p. Mcq.)

HELEODROMIA* Hal. { *PARAMESIA* Mcq. } 4 sp. *H. bistigma* Hal. *HYDRODROMIA* Mcq. } 4 sp. *H. bicincta* Hal.

Lega simple; proboscis short, thick, somewhat exserted; wings with an oblique apical nervure; antennæ 3-jointed; seta 2 jointed. Curt. 513.

SCIODROMIA Hal. MSS. **HELEODROMIA** Mcq. 1 sp. *H. immaculata* Hal. Differs from Heleodromia in the proboscis being perpendicular, longer than the head; palpi short, incumbent.

ARDOPTERA Mcq. { *LEPTOSCELES* Hal. } 3 sp. *H. irrorata* Fal. [*LEPTOSCELIS* Latr. g. Hemipt.]

Very narrow; eyes large; hypostoma linear; proboscis short, thick; palpi incumbent; sets of antennæ very long; wings with a complete central cell. Mcq. pl. 8. f. 13.

HEMERODROMIA Hoff. *Sicus* Latr. 8 sp. *Ta. Mantispæ*. Pr. 103. 16.

Anterior coxae elongate; fore femora incrassate; fore tibiae curved (fig. 129. 9.).

TACHYDROMIA Mcq. (1827). **TACHYPEZA** Meig. (1830). 11 sp. *M. arrogans* L. Curt. 477.

Anterior coxae short; fore thighs thickened, serrated; fore tibiae spined on the inside; wings veined, as in fig. 129. 8.; antennæ 2 jointed, with a long seta.

PLATYPALPUS Mcq. **TACHYDROMIA** Meig. v. 6. 40 sp. *Cal. cursitans* F.

Differs from the last in having the middle thighs thicker than the anterior, and spined beneath; transverse nervures oblique. Meig. S. t. 23. f. 23.

ELAPHROPEZA Mcq. **TACHYDROMIA** Fall. 1 sp. *T. ephippiata* Fall.

Wings without an anal or discoidal cell; three posterior cells; legs simple. Mcq. pl. 8. f. 14.

DRAPETIS Meig. — 5 sp. *D. exilis* Meig. Curt. 397.

Short, broad; legs long, simple; antennæ as long as the head, 3-jointed, third ovate-conic; seta long, angulated at base; no discoidal cell; anal nerve straight.

* "Macquart has divided *Heleodromia* into two genera, but the name should be retained for the second division; the type illustrated by Curtis belonging to this, and the name applying to their aquatic habits: (has not *Hydrodromia* been employed among Crustacea?). I would propose to substitute *Sciodiumia* as the generic name of the first division. Meigen is inclined to unite them to *Brachystoma*; but the nervure surrounding the entire wing sufficiently discriminates them. *Paramesia* Macq. is synonymous with *Heleodromia*, and *P. Roberti* seems to be *H. fontinalis*. The two genera with *Ardoptera* form a small group between *Heleodromia* and the proper *Empidae*." (Haliday MSS.)

Family 7. (or 13.) HYBOTIDÆ. (Hybotinae Meig., Mcq.
Asilidae p. Steph.)

HYBOS Fab. *ACROMYIA* Bon. 9 sp. *Tab. finebris* F. My fig. 129. 10.

Antennæ apparently only 2-jointed; seta long; hind femora thick and spined.
OCYDROMIA Hoff. ——— 6 sp. *Oc. glabricula* Fall. Meig. t. 21. f. 29.

Antennæ apparently only 2-jointed, second joint short; seta long; proboscis slightly exerted; legs slender.

CEDALEA Meig. *EMRIS* Fall. 2 sp. *E. hybotina* Fall. Meig. t. 21. f. 27.

Third joint of antennæ long; style very short; hind thighs rather thick; proboscis slightly prorect.

SPANIA Meig. ——— 2 sp. *S. nigra*. Meig. t. 66. f. 12.

Proboscis slightly exerted; antennæ apparently 2-jointed, second joint elongate-oval; style short; legs slender; two submarginal, four posterior cells.

Obs. Mr. Haliday considers this g. to belong to the Leptidae. (*Ann. N. H.*)

MICROPHORUS Mcq. *TRICHINA* Meig. 6 sp. *Tr. claviger*.

Third joint of antennæ long; style rather long; proboscis not extending beyond the head. Meig. t. 66. f. 10.

RAGAS Wlk. ——— 1 sp. *R. unica* Wlk.

Like Microphora, but with the longitudinal nerve emitting a branch at the apex.

CYRTOMA Meig. ——— 6 sp. *C. atra*. Meig. t. 33. f. 5.

Proboscis very short, conic; palpi very small; eyes contiguous in both sexes; antennæ 2-jointed; seta short; hind tibiae thick at tips; basal joint of hind tarsi broad.

OPETIA Meig. ——— 2 sp. *O. nigra* Meig. Curt. 489.

Proboscis very short; antennæ 3-jointed, third joint long, subfusiform; seta long; legs simple; wings with seven longitudinal nerves, the fifth furcate.

Family 8. (or 14.) ASILIDÆ Leach. (Asilici Meig., Mcq., Latr.)

GONIPES Latr. *LEPTOGASTER* Meig. 2 sp. *As. cylindrica* D. G.

Abdomen very long, cylindrical; tarsi without any pulvilli; antennæ with a terminal style. Meig. t. 21. f. 16.

DIOCTRIA Meig. *ERAX* p. Scop. 12 sp. *As. Oelandica* L. Meig. t. 19. f. 24. Style of antennæ obtuse, 2-jointed; tarsi with two pulvilli; abdomen long, subclavate.

DASYPOGON Meig. *ERAX* p. Scop. 2 sp. *D. Diadema* Fab.

Style of antennæ conical; tarsi with two pulvilli; palpi short, biarticulate. St. pl. 45. f. 1.

LEPTARTHROUS Steph. Cat. **DASYPOGON** p. Curt. 1 sp. *D. brevirostris* M. Differs from Dasypogon in having the basal joint of the hind tarsi greatly elongated and slender. Curt. 153.

LAPHRIA Fab. *ASILUS* p. Linn. 1 sp. *L. nigra* Meig. Curt. 94.

Antennæ without a terminal style; thighs often thickened; tibiae curved; fourth posterior cell of the wing closed, submarginal cell appendiculated.

ASILUS Linn. ——— 15 sp. *A. crabroniformis* L. Curt. 46.

Terminal style of antennæ setaceous, naked; tarsi with two pulvilli; wings with two discoidal cells.

GENERIC SYNOPSIS.

Family 9. (or 15.) *MYDASIDÆ* Westw. (*Mydasii Latr.* *Mydasidæ p. Leach.*)

There is no British species of this family.

Family 10. (or 16.) *THEREVIDÆ* Westw. (*Xylotoma Meig.*, *Mcq.* *Mydasidæ p. Leach.*)

THEREVA *Latr.* *NEMOTELUS* p. *D. G.* 11 sp. *Musca plebeia* L.

Antennæ as long as the head, terminal joints elongate-conic; style 2-jointed. *Meig. pl. 15. f. 8.*

Family 11. (or 17.) *LEPTIDÆ* Westw. (*Leptides Meig.*, *Mcq.* *Rhagionidæ Leach.*)

LEPTIS *Meig.* *RHAGIO* *Fab.* 8 sp. *M. scolopacea* Linn. *Curt. 705.*

Palpi incurved; style of antennæ terminal.

CHRYSOPILUS *Mcq.* **LEPTIS** *Fab.* 5 sp. *L. Diadema* Linn. *Curt. 713.*

Palpi recurved; style of antennæ terminal.

ATHERIX *Meig.* **LEPTIS** p. *Fab.* 5 sp. *L. Ibis* *Fab.* *Curt. 26.*

Palpi porrected; third joint of antennæ very short, semiglobular; style dorsal.

Obs. *Spania*, referred to this family by Macquart and Haliday, differs in having only 2-jointed antennæ.

Family 12. (or 18.) *DOLICHOPIDÆ* Leach. (*Dolichopodes Meig.*)

MACHÆRIUM *Hal.* ——— 1 sp. *M. maritime* Hal. *Z. I. pl. 15. f. 11.*

Third joint of antennæ very long, excised beneath; apex linear; style short, 2-jointed; eyes apart; wings parallel, incumbent.

DIAPHORUS *Meig.* ——— 2 sp. *D. flavo cinctus* Hoff.

Antennæ with third joint patelliform, with a dorsal villose seta; eyes confluent; abdomen ♂ with two filaments at the tip; wings incumbent, parallel. *Meig. pl. 34. f. 8.*

PSILOPUS *Meig.* **DOLICHORUS** p. *Fab.* 7 sp. *D. platypterus* *Fab.*

Antennæ with third joint patelliform, villose, with a dorsal villose deflexed seta; eyes apart; wings incumbent, parallel, with a curved transverse nerve at the tip. *Meig. pl. 34. f. 14.*

CHRYSOTUS *Meig.* **DOLICHORUS** p. *Fab.* 9 sp. *D. nigripes* *Fab.*

Antennæ with third joint patelliform, villose, with an apical, villose, deflexed seta; eyes apart; abdomen ♂ with two filaments at the tip; wings incumbent, sub-divaricate. *Meig. t. 35. f. 10.*

RHAPHIUM *Meig.* ——— 5 sp. *R. longicornis* *Meig.* *Curt. 568.*

Antennæ approximate, with third joint in ♂ elongate, compressed; style subapical, 2-jointed; eyes not confluent; wings incumbent, parallel.

PORPHYROPS *Meig.* **DOLICHORUS** p. *Fab.* 28 sp. *D. diaphanus* *Fab.*

Antennæ, with third joint oblong-acute, with a villose deflexed seta; eyes apart; abdomen ♂ with two filaments; wings incumbent, parallel. *Curt. 541.*

Obs. Mr. Haliday retains *P. diaphanus* as the type of his subgenus *Porphyrops*, but Macquart gives it as that of his genus *Argyra*. *P. pallidus* *Meig.* is the type of Haliday's subgenus *Plectropus*; and *P. riparius* *Meig.* that of his subgenus *Perithinus* (*Z. I.*)

MEDETERUS Meig. *HYDROPHORUS* Fall. 21 sp. *M. regius* Fab. Curt. 162.
Antennæ with third joint short, subovate, compressed, with a dorsal 2-jointed seta; eyes apart; abdomen ♂ with two filaments; legs long and slender; wings incumbent, parallel.

Obe. Macquart separates *H. nebulosus* Fall. and some others under Fallen's generic name *Hydrophorus*.

SYBISTROMA Meig. *DOLICHORUS* Ahr. 2 sp. *D. discipes* Ahr.

Third joint of antennæ oblong, compressed; seta long, 2-jointed, basal joint longest. Meig. pl. 34. f. 19.

DOLICHOPUS Latr. *SATYRA* Meig. olim. 52 sp. *M. nobilitatus* Linn.

Third joint of antennæ trigonate, with a pubescent dorsal seta; eyes apart; abdomen ♂ with two membranous ciliated plates. My fig. 130. 9.

ORTHOCHILE Latr. — 1 sp. *O. nigrocærulea* Latr.

Proboscis exserted, perpendicular; palpi acute, incumbent. Meig. pl. 36. f. 5.

Family 13. (or 19.) **SCENOPINIDÆ** Westw. (Scenopinii, Megacephali, Platypesinae, and Oxypterae Meig.)

SCENOPINUS Latr. *ATRICHIA* Schr. 8 sp. *M. fenestralis* L. Curt. 609.

Head moderate; eyes confluent ♂; antennæ 3-jointed; third joint elongate-conic; seta 0; first longitudinal nerve emitting a branch at the tip; legs simple.

PIPUNCULUS Latr. *CEPHALOPS* Fall. 12 sp. *P. campestris* Latr. Curt. 757.

Head large, subglobose; abdomen small; apex incurved in ♀; third joint of antennæ ovate or acute, with a long basal seta.

CHALARUS Wlk. *ATELENEVERA* Meig. 2 sp. *Pip. spurius* Fall.

Differs from Pipunculus in wanting the large submedial cell. Meig. pl. 33. f. 24.

PLATYPEZA Meig. — 11 sp. *P. boletina* Fall. Meig. pl. 33. f. 10.

Last joint of antennæ oval, with a long terminal seta; middle vein of wings emitting an oblique branch at the tip.

CALLOMYIA Meig. — 5 sp. *C. amœna*. Meig. t. 33. f. 13.

Head moderate; third joint of antennæ pointed at tip, with a long terminal seta; middle longitudinal nerve simple at tip; hind tarsi dilated.

ATELESTUS Wlk. Ent. Mag. 18. 229. — 1 sp. *A. sylvicola* Wlk.

"Callomyia et Platypeza similia, at alarum nervi aliter collocati" !! (Walker, l. c.)

LONCHOPTERA Meig. *DIPSA* Fall. 8 sp. *L. lutea* Pz. Curt. 761.

Wings long, pointed at the tip (fig. 132. 15.); discoidal cell 0.

Stirps 4. *Athericera* Latr.

Family 1. (or 20.) **SYRPHIDÆ** Leach. (Syrphici Meig.)

CERIA Fabr. *Conors p.* Schr. 1 sp. *M. Conopeoides* L. Curt. 186.

Head with a frontal horn supporting the antennæ.

MICRODON Illig. *ARTHITIS* Latr. 3 sp. *M. apiformis* D. G. Curt. 70.

Short, thick; antennæ frontal, long; scutellum with two points.

CHRYSOTOXUM Meig. *MILESIA* p. Fab. 8 sp. *M. bicinctum* L. Curt. 653.

Abdomen ovate, subdepressed; antennæ frontal, second joint long; scutellum unarmed.

PSARUS *Fab.* — 1 sp. *P. abdominalis* F.? Meig. pl. 27. f. 12.

Antennæ inserted upon a short pedicle, second joint long; abdomen linear.

PARAGUS *Latr.* *Sceva* p. *Fab.* 6 sp. *P. arcuatus* Meig. Curt. 593.

Antennæ frontal, short, second joint short, third long; face convex, without a protuberance; abdomen elongate-ovate.

ASClA Meig. *MILESIA* p. *Fall.* 6 sp. *M. podagraria* F. Pz. 59. 16.

Abdomen subclavate; first and second joints of antennæ very short, third oblong-ovate; nose prominent.

SPHEGINA Meig. *MILESIA* p. *Fall.* 3 sp. *M. clavigera* Fall.

Abdomen clavate; first and second joints of antennæ very short, third rounded; hind thighs thick. Meig. pl. 28. f. 5.

DOROS Meig. (*Illig. Mag.*) *MILESIA* p. *Fab.* 1 sp. *S. conopseus* F.

Abdomen clavate; head obtusely conical; antennæ distant; hind legs simple. Pz. 45. 22.

BACCHA *Fab.* — 6 sp. *B. elongata* F. Curt. 737.

Abdomen much elongated, clavate; face obliquely truncate beneath; hind legs thin.

EUMERUS Meig. *PIPIZA* p. *Fall.* 6 sp. *E. ornatus* M. Curtis, 749.

Abdomen elongate-ovate; segments constricted; hind thighs thick, spinose; tibiae bent; scutellum subdenticulate.

XYLOTA Meig. (A.) *SYRITTA* Enc. M. & Mcq. 1 sp. *M. pipiens* L.

Hind thighs elongate-ovate, dilated at tip; basal joint of hind tarsi short, dilated; face scarcely tubercled; eyes with a large portion not united behind in ♂; palpi conical. Pz. 32. 20.

MICRAPTOMA Westw. { *XYLOTA* B. Meig.
{ *XYLOTA* Enc. M. & Mcq. } 6 sp. *M. segnis* L.

Differs from Xylota in the palpi being subcylindric, and in the transverse nervure of the middle of the wing being more or less oblique, and posterior coxae tubercled or spined. Curtis, 425.

MYOLEPTA Newm. *XYLOTA* p. *Mcq.* 1 sp. *M. hystola* Gm.

Differs from the last in the posterior coxae being simple; hypostoma porrected and notched.

BRACHYPALPUS Macq. *SPILOMYIA* Steph., Meig.? 1 sp. *M. femorata* L.?

Body villose; palpi short; posterior femora elongated, spined; scutellum not margined.

CRIORHINA Hoff. *MILESIA* B. Meig. 5 sp. *Cr. asilica* Fall. Pz. 91. 21.

Robust, hirsute; basal joint of antennæ subelongate, third broader than long; style naked; submarginal cell foot-shaped.

MILESIA *Fab.* *MILESIA* D. b. p. Meig. 1 sp. *M. speciosa* Fab. Curt. 34.

Abdomen cylindric, sericeous; hind legs simple; face with a frontal protuberance; antennæ with the third joint large, round; style naked.

PIPIZA Meig. *ERISTALIS* p. *Fab.* 22 sp. *M. noctiluca* L. Curt. 669.

Abdomen elongate-ovate, pilose; head with a slight frontal prominence; nose rounded; third joint of antennæ subquadrate; seta short.

PSILOTA Meig. — 1 sp. *P. anthracina* Meig. pl. 29. f. 20.

Abdomen short, ovate; legs slender; antennæ with the third joint oval; face with a frontal prominence; nasus porrected, notched at tip.

RHINGIA Scop. *Conors* p. Linn. 3 sp. *C. rostrata* L. Curt. 182.

Nose porrected, as long as the head, notched at the tip.

BRACHYOPA Hoffm. *RHINGIA* p. Fall. 2 sp. *M. conica* Pz. Meig. pl. 30. f. 6.

Wings large; abdomen short, ovate-conic; head with a frontal protuberance; nasus short; legs simple; third joint of antennæ round; seta pilose at base.

CHRYSOGASTER* Meig. *ERISTALIS* p. F. 13 sp. *M. viduata* L.

Abdomen depressed, ovate; antennæ short; face generally with a protuberance in ♂; third joint of antennæ rounded; terminal nerve of the first posterior cell parallel with the margin of the wings. Meig. pl. 30. f. 17.

ORTHONEURA Macq. *CHRYSGASTER* Meig. 2 sp. *C. nobilis* Meig.

Differs from Chrysogaster in the third joint of antennæ elongate, narrow, and the terminal nerve of the first posterior cell perpendicular. Meig. pl. 30. f. 9.

SYRPHUS Ste., Meig., nec Fab. *CHEILOSIA Enc. M., Macq.* 24 sp. *M. ruficornis* L.

Abdomen elliptic, depressed, not banded; third joint of antennæ oval; legs slender; tarsi simple in both sexes. Curt. 753.

SCÆVA Fab., Ste. Cat., Curt. STAPHUS Enc. M., Macq. 28 sp. (Sp. typ. *Fab.*) *Pyrastri* L.

Abdomen elliptic, depressed, banded; tarsi simple in both sexes; sexual organs of ♂ concealed. Curt. 509.

Obs. Stephens gives *S. ornatus* and *festivus*, as the types of a distinct unnamed subgenus (1244.); they form division 2. subdivision 1. A. of Syrphus, in *Enc. Méth.* Macquart unites them with Doros.

CHEILOSIA Hoff. { *SPHEROPHORIA Enc. M.* } 6 sp. *M. scripta* L. Meig. pl. 30. [G. 1242. St. Cat.] f. 35.

Tarsi simple in both sexes; abdomen fasciated, linear, very long in ♂, in which sex the sexual organs are exposed.

PLATYCHEIRUS Enc. M. *CHEILOSIA Hgg. (St. Cat.)* 17 sp. *S. scutatus*.

Anterior tarsi dilated in the males; abdomen linear, fasciated. Meig. pl. 30. f. 31.

SERICOMYIA Latr. *Musca* p. Linn. 3 sp. *S. Lappona* L. Meig. pl. 31. f. 9.

Broad, robust; third joint of antennæ orbicular; seta plumose; hind legs not spined.

TROPIDIA Meig. *ERISTALIS* p. Fall. 1 sp. *T. rufomaculata*. Curt. 401.

Elongate; hind thighs thick, with a strong tooth near the tip; third joint of antennæ large, rhomboidal; seta naked; nose keeled.

MERODON Fab. *MILESIA* p. Latr. 2 sp. *M. clavipes* F. Curt. 98.

Robust, hairy; hind thighs with a strong apical tooth; face without prominences, third joint of antennæ oval.

HELOPHILUS Meig. *ERISTALIS* p. Fab. 8 sp. *M. pendulus* L. Curt. 429.

Robust, hirsute; fourth longitudinal nerve greatly curved before the apex; posterior thighs simple; eyes ♂ not contiguous.

ERISTALIS Fab. *HELOPHILUS* Leach. 17 sp. *M. tenax* L. Curt. 432.

Robust, hirsute; fourth longitudinal nerve greatly curved before the apex; posterior thighs simple; eyes ♂ contiguous; seta of antennæ naked or plumose.

* "Chrysogaster.—Macquart has generically distinguished the species of Meigen's second division. But there remains confounded a species of peculiar characters; viz. *Chr. discicornis* (♂ — *Chr. metallicus* ♀), with the front broad in both sexes — the labrum, palpi, and maxillæ all nearly equal in length to the labium. *Chr. grandicornis*, I suppose, is in the same circumstance. The broad front has misled Meigen as to the sex." (Haliday's MSS.)

VOLUCELLA Geoff. { *PTEROCEBA* Meig. olim } 5 sp. *M. mystacea* L.
STEPHUS sp. typ. *Fab.* } Curt. 452.

Robust; fourth longitudinal nerve straight; nose protracted; antennæ with the third joint kidney-shaped; seta very plumose.

Family 2. (or 21.) **CONOPIDÆ** Leach. (*Conopsarii* Meig.
Conopsariæ and *Myopariæ* Macq.)

CONOPS Linn. — 7 sp. *C. vesicularis* L. Curt. 377.

Proboscis long, elbowed near the base, and protracted; antennæ long; ocelli 0.

ZODION Latr. *MYOPA* *Fab.* 2 sp. *M. cinereum* F.

Proboscis long, elbowed near the middle, and protracted; antennæ short; ocelli three.

MYOPA *Fab.* Coxors p. Linn. 10 sp. *C. buccata* L. Curt. 677.

Proboscis elbowed near the base, and again about the middle; ocelli three.

Family 3. (or 22.) **MUSCIDÆ** Westw. (*Muscidæ* and *Stomoxydæ* Leach. *Muscides*, *Stomoxyses*, and *Trineuræ* Meig. *Myodaires* Rob. Dev. *Muscides* Macq.)

Subfamily 1. *Creophilæ* Latr., Macq. (*Calypteratæ* R. D.)

A. *TACHINARIA* Macq.

ECHINOMYIA Dum. *TACHINA* p. *Fabri*. 10 sp. *M. grossa* L.

Broad; face naked; epistome prominent; antennæ deflexed, second joint elongated. My fig. 131. 11.

Obs. *M. ferox* Linn. belongs to the s. g. *Fabricia* R. D., and *E. ursina* to *Servillea* R. D.

MICROPALPUS Macq. *TACHINA* p. Meig. 2 sp. *T. fulgens* Meig.

Broad; palpi short, slender, and terminated by a seta; face naked; epistome prominent; second joint of antennæ elongated, but not longer than third.

GONIA Meig. *TACHINA* p. *Fall.* 4 sp. *M. capitata* D. G. Curt. 533.

Robust; head swollen; face vertical; tarsal claws and pulvilli minute in both sexes; seta of antennæ angulated, its second joint long.

THRYPTOCERA R. D. *TACHINA* p. Meig. 7 sp. *T. setipennis* Meig.

Narrow; face vertical, naked, not swollen; style of antennæ elbowed; proboscis not elongated.

SIPHONA Meig. *BUCENTES* Latr. 4 sp. *M. geniculata* D. G.

Style of antennæ elbowed; proboscis elongated (fig. 132. 8.). Meig. t. 37. f. 24.

TRIXA Meig. *CRAMERIA* R. D. 4 sp. *Tr. dorsalis* Meig. p. 40. f. 16.

Broad; second joint of the style of antennæ short; proboscis short; abdomen oval; antennæ very short.

NEMORÆA Macq. *TACHINA* p. Meig. 7 sp. *M. radicum* F.

Broad; second joint of antennæ elongate, third scarcely twice as long as the second; abdomen oval.

Obs. *N. radicum* F. belongs to the s. g. *Erigone* R. D.; *N. puparum* Meig. to the s. g. *Panzeria* R. D.; *N. 4-pustulata* to the s. g. *Nemoræa* R. D.

SENOMETOPIA Macq. *TACHINA* p. Meig. 5 sp. *T. hortulana* Meig.

Broad; second joint of antennæ short, third three times as long; seta not elbowed; abdomen oval.

Obs. *T. spinipennis* belongs to the s. g. *Pales* R. D. (*Triarthria* St. Cat.)

EURIGASTER Macq. **TACHINA** Meig. 11 sp. *T. pallipes* Fall.

Broad; second joint of antennæ very short, third joint four or six times as long; eyes often villose; face oblique.

MASICERA Macq. **TACHINA** Meig. 4 sp. *T. pruinosa* Meig.

Moderately broad; abdomen cylindric, rounded; face slightly oblique; third joint of antennæ very long, front slightly prominent.

METOPIA Meig. **ARABA** R. D. 2 sp. *M. leucocephala* Pz. 54. 14.

Rather narrow; face oblique, margined with setæ; abdomen more or less conic; eyes generally naked; forehead very prominent.

EXORISTA Meig. **TACHINA** p. Macq. 12 sp. *M. larvarum* L.

Third joint of antennæ scarcely double the length of the second; forehead narrow ♂; first posterior cell generally open, at a distance from the apex of the wing.

LYDELLA Macq. **TACHINA** Meig. 8 sp. *T. modesta* Meig.

Narrow, or moderately broad; face more or less oblique, margined with setæ; epistome not prominent; third joint of antennæ not more than thrice the length of the second.

TACHINA Meig. — 4 sp. *T. consobrina* Meig.

(Cinereous); antennæ elongate, third joint of antennæ not more than double the length of the second; eyes naked; style naked; abdominal segments without setæ in the middle.

CHRYSOSOMA Macq. **GYMNOCHETA** R. D. 1 sp. *T. viridis* Fall.

Moderately wide (golden green); face oblique; eyes villose; abdominal segments setose in the middle.

CLYTIA Macq. **MUSCA** p. Pz. 1 sp. *T. continua* F. Pz. 60. 19.

Antennæ short, third joint scarcely longer than the second; facial setæ short; head broad; epistome prominent.

MILTOGRAMMA Meig. **TACHINA** Fall. 2 sp. *T. punctata* M. Curt. 529.

Abdomen without setæ; antennæ short, drooping, third joint twice the length of the second; head of moderate size; fourth joint of fore tarsi ♂ with long curved hairs.

MYOBIA R. D. **EXORISTA** p. St. 7 sp. *T. pacifica* M.

Narrow (yellow-coloured); style of antennæ pubescent; abdomen cylindric; head nearly hemispherical; face oblique, generally naked; epistome prominent.

ZOPHOMYIA Macq. **TACHINA** p. Meig. 9 sp. *M. tremula* L.

Narrow (shining black); style pubescent, thick at base; head nearly spherical; face naked; epistome oblique; eyes mostly villose; abdomen elongate-ovate.

Obs. *T. aenea* M. and *chalybeata* M. belong to the s. g. *Macquartia* R. D.

CASSIDÆMYIA Macq. **RHINOPHORA** R. D. 3 sp. *T. gagatina* M.

Narrow (shining black); style pubescent, thick at base; abdomen cylindric, without setæ at the middle of the segments; antennæ short; eyes naked.

DEXIA Latr. **SERICOCERA** Macq. 16 sp. *O. volvulus* Fab. Meig. pl. 49. f. 19.

Narrow; face vertical; head hemispherical; antennæ long, third joint cylindric; style somewhat villose; legs rather long.

Obs. *D. volvulus* belongs to the s. g. *Phylomyia* R. D.; *M. compressa* Fab. (*lateralis*, Pz. 7. 22.) to *Mentho* R. D.; and *D. leucozona*, Pz. 104. 19., and *nigripes*, Pz. 104. 18. to *Thelaira* R. D.

PTILOCERA *Mcq.* **Phyto** *R. D.* 3 sp. *melanocephala* *Meig.*

Narrow; forehead narrowed ♂; eyes naked; abdomen cylindric; antennæ short; second joint hooked; legs ♂ of ordinary length.

MELANOPHORA *Meig.* **TEPHritis** *Fab.* 2 sp. *M. roralis* *L.* *Donov.* pl. 419.

Narrow, small, shining black, face mostly naked, more or less elevated; style of antennæ tomentose or slightly villose; abdomen cylindric; eyes naked.

LEUCOSTOMA *Meig.* olim. **MEIGENIA** *R. D.* 4 sp. *M. floridis* *Fall.*

Abdomen ovate; two basal joints of antennæ very short, third linear, long; wings as in Meig. t. 41. f. 24.; eyes naked.

ERIOTHRIX *Meig.* **Musca** *Fab.* 1 sp. *M. lateralis* *Fab.* *Donov.* pl. 31. f. 3.

Abdomen conic; eyes hairy; proboscis greatly elongated, slender (Meigen, t. 41. f. 17.); wings as in Meig. pl. 41. f. 26.

B. OCYPTERATAE *R. D.*, *Mcq.* **RHIZOMYZAE** *Fall.*

PHANIA *Meig.* **TACHINA** *Fall.* 3 sp. *P. curvicauda*. *Meig.* pl. 40. f. 10.

First posterior cell open.

OCYPTERA *Latr.* **MUSCA** *L.* 2 sp. *O. brassicaria* *Fab.* *Curtis*, 629.

First posterior cell closed.

C. GYMNOSOMEAE *Mcq.* **GASTRODÆ** *R. D.*

GYMNOSOMA *Meig.* **TACHINA** *F.* 1 sp. *M. rotundata* *L.* *Pz.* 20. 19.

Abdomen globose.

D. PHASIANAE *R. D.*, *Mcq.*

XYSTA *Meig.* **THEREVA** *Fab.* 1 sp. *X. cana* *Hal.* *Meig.* 39. f. 5.

Cylindric; abdomen oval; first posterior cell open at tip; second and third joints of antennæ subequal.

PHASIA *Latr.* **ALOPHORA** *R. D.* 2 sp. *Co. subcoleoptrata* *L.*

Broad, depressed; abdomen rounded; first posterior cell closed, with a short peduncle. *Meig.* pl. 39. f. 13.

ELOMYIA *R. D.* **PHASIA** *Meig.* 1 sp. *P. cana* *Hgg.*

First posterior cell closed, without a peduncle.

HYALOMYIA *R. D.* **PHASIA** *p.* *Latr.* 4 sp. *P. semicinerea* *Meig.*

First posterior cell closed, with a long peduncle. *Curtis*, 697.

E. STOMOXYDEAE *Westw.* **DEXIAE** *Mcq.*

PROSENA *St. F. & Serv.* **STOMOXYS** *Meig.* 1 sp. *S. Sibirita* *Fab.* *Curt.* 665.

Seta of antennæ bipectinated; proboscis thrice as long as the head, recurved.

STOMOXYS *Fab.* **CONOPS** *Linn.* 1 sp. *C. calcitrans* *L.* *Sam.* pl. 9. f. 7.

Seta 1-peckinated; proboscis twice as long as the head, incurved; palpi very short.

HÆMATOBIA *Dess.* **STOMOXYS** *Meig.* 2 sp. *S. irritans* *L.* *Meig.* t. 38. f. 8.

Proboscis twice as long as the head; palpi as long as the labrum.

DINERA *Macq.* **DEXIA** *p.* *Meig.* 1 sp. *D. griseescens* *Meig.*

Cylindric; proboscis rather short; second joint of antennæ hooked; abdomen cylindro-ovate; first posterior cell closed.

— $\left\{ \begin{array}{l} \text{DEXIA } \text{Mcq. nec Latr.} \\ \text{DEXILLA } \text{Westw.} \end{array} \right\}$ 3 sp. *D. rustica* *Meig.*

Cylindric; proboscis short and membranous; abdomen cylindro-conic, with two setæ in the middle of each segment. *Harr. Exp.* pl. 41. f. 43.

F. SARCOPHAGIENS *Mcq.*

SARCOPHAGA *Meig.* **MYOPHORA** *R. D.* 11 sp. *M. carnaria* *L.*

Third joint of antennæ thrice as long as the second; style of antennæ setose; setæ above and below of equal length. *Shaw*, *G. Z.* pl. 107. f. sup.

CYNOMYIA R. D. SARCOPHAGA Meig. 1 sp. *M. Mortuorum L.*

Third joint of antennæ four times as long as the second; upper setæ of the style longer than the inferior. Donov. pl. 471. f. 2.

G. MUSCLES Mcq.**LUCILIA R. D. Musca Linn., Curt.** 32 sp. *M. Cesar.* Curtis, 549.

Metallic-coloured; face rather oblique; third joint of antennæ four times as long as the second; epistome not prominent.

Obs. *M. Cesar* is the type of the s. g. *Lucilia* R. D., *M. regina* *M.* belongs to the s. g. *Phormia* R. D., and *M. cadaverina* *L.* and *serena* *Meig.* to *Pyrellia* R. D.

CALLIPHORA R. D. Musca L. 7 sp. *M. vomitoria L.* Pz. 10. 19.

Head depressed; epistome prominent; third joint of antennæ four times as long as the second; style plumose; abdomen hemispherical.

Obs. *M. vomitoria* is the type of the s. g. *Calliphora* R. D., and *M. cerulea* and *azures* *M.* belong to the s. g. *Melinda* R. D.

MUSCA L. — ? sp. *M. domestica* Linn. Harr. Exp. pl. 41. f. 44.

Epistome scarcely prominent; third joint of antennæ thrice the length of the second; style plumose; first posterior cell reaching the margin near the tip.

Obs. *M. vitripennis* *Meig.* belongs to the s. g. *Plaxemyia* R. D. (*P. sagillatrix* R. D.)

POLLENIA R. D., Mcq. Musca p. Meig. *M. rufa* Fabr.

Thorax covered with down; epistome scarcely prominent; antennæ short, second joint hooked, third twice as long as second; wings almost incumbent.

Obs. *M. Lanio* *Fab.*, *atramentaria* *Meig.*, and *varia* *Meig.* belong to the s. g. *Nitella* R. D.

MESEMBRINA Meig. Musca p. Linn. 1 sp. *M. Meridiana L.*

Broad; antennæ with the third joint twice or thrice as long as the second; medastinal cell far extending beyond the base of the first posterior cell. Donov. pl. 471. fig. 2.

CURTONEURA Mcq. Musc. vagantes R. D. 8 sp. *M. maculata* Fab.

First posterior cell but slightly narrowed at the tip, reaching the posterior margin; style plumose; epistome slightly prominent. Pz. 44. 23.

Obs. *M. maculata* *Fab.*, and *meditabunda* *F.* Pz. 44. 23., is the type of *Graphomyia* R. D.; *M. cyanella* *Meig.* belongs to the s. g. *Dasyphora* R. D.; *M. Hortorum* and *importuna* *Meig.* to *Morellia* R. D.; *M. Passcuorum*, *stabulans*, and *Pabulorum*, to *Muscina* R. D.

Subfamily 2. Anthomyzidae Latr., Mcq. (Mesomydæ R. D.)**ARICIA Mcq. ANTHOMYTIA Meig. 16 sp. *M. lardaria* Fab.**

Style of antennæ plumose; abdomen oval, setose, alulets rather large; wings extended. Harr. Exp. pl. 36. f. 52.

Obs. *A. lardaria* *Fab.* belongs to the s. g. *Macrosoma** R. D., *A. lucorum* *Meig.* to the s. g. *Mydina* R. D., *A. incana* *Meig.* to the s. g. *Felixa* R. D.,

* I think Desvoidy's genus *Macrosoma* might be retained; the other genera of R. D., which Macquart has here united, were too intimately blended." (Haliday MSS.)

A. errans Meig. to the s. g. *Tremia*, *A. signata* Meig. to *Phaonia* R. D., *A. pallida* Fab. and *testacea* Fab. to *Rohrella* R. D., *A. pagana* Meig. to *Mydea* R. D., *A. urbana* Meig. to *Fellea* R. D., and *A. impunctata* M. and *modesta* M. to *Aricia* R. D.

SPILOGASTER Meig. *ANTHOMYIA* Meig. 8 sp. *M. quadrum* Fab.

Style of antennæ with short hairs; abdomen ♂ generally oblong and setose, second and third segments marked with four spots; alulets rather large. Harr. Exp. pl. 43. f. 62.

Obs. *M. uliginosa* Fall. belongs to the s. g. *Rohrella* R. D., *A. pertusa* Meig. to *Helina* R. D., *A. quadrum* Meig. to *Mydina* R. D.

HYDROPHORIA Meig. *ARICINÆ LITORALES* R. D. 31 sp. *M. nigrita* Fall.

Style of antennæ setose; abdomen cylindric-conic, penultimate segment armed beneath with two elongate appendages; alulets of moderate size.

HYDROTÆA* Desso. *ANTHOMYIA* Meig. 14 sp. *M. meteorica* L. Curt. 763.

Style tomentose; abdomen oblong-ovate, without appendages; anterior femora ♂ with one or two strong teeth, posterior with a strong spine; middle legs longest.

Obs. *H. palpata* is the type of the s. g. *Blainvillia* R. D., having unarmed femora.

OPHYRA Meig. *ANTHOMYIA* Meig. 15 sp. *A. leucostoma* Meig.

Style of antennæ naked; frontal setæ short; abdomen oval ♂ very setose, ♀ naked; thighs rather thick; alulets moderate-sized; transverse nerves near together.

LIMNOPHORA Meig. *ANTHOMYIA* Meig. 8 sp. *M. compuncta* Meig.

Style of antennæ tomentose; abdomen oblong, not appendiculated; alulets moderate; legs simple.

LISPE Meig. *MUSCA* De Geer. 3 sp. *M. tentaculata* D. G. Meig. pl. 45. f. 15.

Head spheroidal; palpi spatulate; style of antennæ with the upper setæ longer than the lower; forehead broad in both sexes; alulets moderate-sized.

HYLEMYIA Meig. *HYLEMYDAE* R. D. 15 sp. *A. hilaris* Meig.

Alulets small; abdomen cylindric; penultimate segment with two appendages beneath; style of antennæ mostly setose; wings with a stigma.

Obs. *O. hilaris* belongs to the s. g. *Delia* R. D., *A. Cardui* Meig. to the s. g. *Aegeria* R. D.

DRYMEIA Meig. *MUSCA* Fall. 2 sp. *D. obscura* Meig.

Proboscis rather exerted, with long, slender, elbowed lips; style of antennæ tomentose; abdomen cylindric, villose; alulets small.

CHORTOPHILA Meig. *ANTHOM. HERBICOLA* R. D. 2 sp. *A. Sepia* Meig.

Head thick; antennæ not reaching the epistome; style tomentose or naked; abdomen cylindric; alulets small; wings without a stigma.

ATOMOGASTER Meig. *AXELIDÆ* R. D. 19 sp. *A. triquetra* Meig.

Antennæ not reaching the epistome; style naked; abdomen narrow, cylindric; anus bicarinated ♀; alulets small; stigma wanting.

* "Meigen is surely in error in attaching so much importance to the hairy eyes as to separate *occulta* from this genus, of which it has all the characters; even *H. ciliata* has eyes evidently pubescent in ♂." (Haliday MSS.)

ERIPHIA Meig. — 1 sp. *E. aterrima* St. MSS.

Cheeks swollen and setose; abdomen with the fourth segment obliquely truncate; middle tibiae curved with curved bristles.

HOMALOMYIA Bouché. **ANTHOMYIA** p. Mcq. 6 sp. *M. canicularis* Linn.

Style of antennæ tomentose or naked; alulets small; abdomen narrow; epistome not prominent; abdomen without appendages beneath; larvæ furnished with long setose filaments. Harr. Exp. pl. 43. f. 69.

Obs. *A. scalaris* Meig., &c., belong to the s. g. *Fannia* R. D., *A. canicularis* to *Philinta* R. D., *A. floralis*, *pratensis*, &c., to *Delia* R. D.

ANTHOMYIA Meig., Mcq. p. **Musca** p. *L.* 5 sp. *M. phaivalis* L.

Style of antennæ tomentose or naked; alulets small; abdomen furnished with appendages beneath; epistome more or less prominent; larvæ naked. Donov. pl. 372.

Obs. *A. radicum* Meig. belongs to the s. g. *Egle* R. D.

SCHÆNOMYIA Hol. **SCIOMYZA** and **OCTHIRPHILA** p. Meig. 2 sp. *S. fasciata* Meig.

Mouth mystacinous; antennæ approximate at base, wide at the apex; seta naked; abdomen 4-jointed, pilose; wings without any transverse nerve at the tip.

CÆNOSIA Meig. **Musca** p. *Fab.* 16 sp. *M. tigrina* Fab.

Forehead broad ♂ ♀; alulets small; stigma wanting; abdomen elongated, compressed, thick at the tip.

Obs. *C. tigrina* Meig. belongs to the s. g. *Caricea* R. D., *C. nemoralis* Meig. to *Palusia* R. D., *C. means* Meig. to *Limosia* R. D.

PEGOMYIA Mcq. **PECOMYIA** R. D. 14 sp. *A. fulgens* Meig.

Style of antennæ tomentose or slightly villose; abdomen mostly cylindric (teataceous-coloured), with appendages beneath in ♂; alulets very small.

Obs. *A. fulgens* Meig. belongs to the s. g. *Phorea* R. D., *M. diaphana* Fall. to *Phyllis* R. D.

Subfamily 3. *Acalyptera* Mcq. †

A. SCATOMYZIDÆ.

CORDYLURA † Fall. **OCTYPETRA** p. *Fab.* 9 sp. *M. pubera* L. Curt. 485.

* "I suspect Macquart has gone too far in uniting here all the Choreellæ of R. D.; the genus *Homalomyia* Bouché, which includes *Fannia*, *Philinta*, *Aminta*, and *Delia* of R. D., seems sufficiently characterised, though we are ignorant how far the singular character of the larva (long since figured by Swammerdam) extends. I find two species, apparently undescribed, of a group, I think, requiring to be distinguished, viz.

Calomyia. Abdomen ♂ obovatum, ventre concavo toto membranaceo (absque plica aut linea coriacea longitudinali). Facies brevis impressa. Peristoma oblongum. Labium sub-elongatum (membranaceum tamen). Calyptra jam minima (ut in *Homalomyia*, division 2. *Delia* R. D.) Antennæ, pedes, aequaliter *Homalomyia*. Sp. 1. molissima." (Haliday MSS.)

† I am indebted to A. H. Haliday, Esq., for the sketch of the following distribution and notes, upon the acalypterous Muscidae. I have derived most of the generic characters from the work of Macquart, whose arrangement differs materially from that given below, as does also that of Fallen and other writers upon the Muscidae.

‡ "The species with naked arista, dilated palpi, and somewhat bristly legs, form *Nupharia* R. D., e. gr. *C. fraterna*. *Delia* has the arista pubescent. *Hydromyza* (Fall.) the tibiae naked." (Haliday MSS.)

Body setose; seta of antennæ feathered; face rather inclined behind; epistome not prominent, having two setæ; third joint of antennæ oblong, truncated.

Obs. *M. pubera* *L.* is the type of the s. g. *Mosina* *R. D.*, *C. spinimana* *Fall.* belongs to *Norellia* *R. D.*, and *C. albipalpis* to *Phrosia* *R. D.*

S. g. *Cleigastra* *Mcq.* *Cordylura* *p. Curt.* —? *Cord. apicalis* *Fall.*

Seta of antennæ naked or slightly pubescent; body setose; palpi often dilated; face rather inclined behind; epistome not prominent.

Obs. *C. apicalis* is retained as the type of *Cleigastra*, *C. nigrita* *Fall.* belongs to *Delina* *R. D.*, *C. fraterna*, &c., to *Nupharia* *R. D.*, and *C. livens* *Fab.* *Curt.* 485. to *Hydromyza* *Fall.*

S. g. *Myopina* *R. D.* *Cenosis* *Meig.* 1 sp. *C. myopina* *Meig.*

Body setose; abdomen short, curved, terminal segments short, third segment with valve-like appendages beneath; style of antennæ distinctly 2-jointed.

SCATOPHAGA *Meig.* *Scatomyza* *p. Fall.* 22 sp. *M. stercoraria* *L.*

Third joint of antennæ long; anterior margin of wings not ciliated; head spherical; body setose. *Curtis*, 405.

Obs. *S. stercoraria* is retained as the type of *Scatophaga*; *S. litorea* *Fall.* belongs to the s. g. *Scatina* *R. D.*, and *S. fucorum* *Fall.* to *Halithaea* *A. H. Hal.* (2 sp.), the last distinguished by "Arista subnuda; alae unguiculate; tarsi graciliores; femora posticae ♂ tuberculo villosa," type *H. maritima* *Hal.*

THYREOPHORA *Latr.* *Musca* *Pz.* 1 sp. *T. furcata* *Meig.* *Pz.* 24. 22.

Elongate; palpi spatulate; forehead very wide, advanced over the antennæ; third joint of antennæ lenticular; seta naked; hind femora thickened; tibiae tuberculated.

ORYGMA *Meig.* *Psalidomyia* *Doum.* 1 sp. *O. luctuosa* *Meig.*

Head elongate, triangular; face horizontal, with two impressions; legs villose; antennæ short; third joint oval; style naked; thorax elliptic.

CÆLOPA* *Meig.* *Copromyza* *Fall.* 6 sp. *C. frigida* *Meig.* *pl. 56. f. 1—6.*

Oblong; head rather small; proboscis thick; face short, very concave, very villose; forehead very broad, flat; second joint of antennæ thick; third smaller, lenticular; tibiae villose.

S. g. *Fucomyia* *Hal.* *Copromyza* *p. Fall.* — sp.? *C. frigida* *Fab.*

Differs from *Celopa* in having the face and tibiae clothed sparingly with setæ.

S. g. *Malacomysia* *Hal.* — 1 sp. *C. Sciomyzina.*

Differs from *Celopa* in the arista being villose, and the epistome acutely produced.

B. BORBORIDES. (See *Haliday* in *Ent. Mag.* vol. iii., Jan. 1836.)

BORBORUS *Meig.*, *Mcq.* *Mycetia* *R. D.* 9 sp. *C. equina* *Fall.* *Curt.* 469.
Winged; arista with the basal joint scarcely distinct, pubescent.

S. g. *Sphaerocera* *Latr.* *Borborus* *p. Meig.* 5 sp. *B. subulans* *Meig.*
Arista with the basal joint scarcely distinct, naked.

S. g. *Apterina* *Mcq.* *Borborus* *p. Meig.* 1 sp. *B. pedestris* *Meig.*
Apterous; arista with the basal joint scarcely distinct, pubescent.

* "Macquart appears to be in error in identifying with this the *Psalidomyia* of Doumère, which I consider to be *Orygma luctuosa*." (*Haliday MSS.*)

S. g. *Limosina* Mcq. *Borborus* p. Meig. 22 sp. *B. sylvaticus* Meig.

Arista jointed at the base; second transverse nerve perpendicular.

S. g. *Heteroptera* Mcq. *Borborus* p. Meig. 1 sp. *C. pusilla* Fall.

Arista jointed at the base; second transverse nervure oblique.

C. HELOMYZIDÆ.

HELOMYZA Fallen. *SUILLIA* p. R. D. 18 sp. *H. rufa* Fall. Curt. 545.

Wings with the anterior margin ciliated; epistome and fore femora thick and hairy; antennæ with the third joint oval; style villose.

S. g. *Blephariptera* Mcq. *Helomyza* p. Curt. sp.? *M. serrata* L.

Differs from *Helomyza* in having the third joint of the antennæ orbicular or lenticular, and the style long, naked, or tomentose.

Obs. *Herbina* R. D., (sp. *H. Suilloidea* R. D.), *Leria* R. D., (*M. serrata* Linn.), and *Œcothea** Hal. (4 sp., type *Œc. fenestralis* and *pallescens* Mcq.), are given by Mr. Haliday as subgenera of *Blephariptera*.

HETEROMYZA† Fall. *THELIDA* R. D. 3 sp. *H. oculata* Fall.

Differs from *Blephariptera* in having the fore margins of the wings not ciliated; forehead narrowed in ♂.

Obs. Mr. Haliday refers to this genus the subgenera *Lentiphora* R. D., *Thelida* R. D. (*H. oculata*), *Clusia* Hal. (*H. flava* Meig. nearly allied to *Heteroneura*), and *Heteromyza*, (type *H. occulta* Fall.)

ACTORA Meig. *HELOMYZA* Curt. 2 sp. *A. Œstrum* Meig. Curt. 66.

Elongate; head rather large; palpi large; face naked; forehead very broad, flat, obtusely advanced; antennæ short, third joint lenticular; legs, except the middle tibiae, villose.

DRYOMYZA Fall. *DAYOPH* R. D. 4 sp. *M. flaveola* Fab.

Palpi rather large; face short, concave; epistome prominent, a kind of hood extending over the epistome; third joint of antennæ oval; style finely villose.

LUCINA M. *SALTICELLA* R. D. 1 sp. *L. fasciata* Mg. Curt. 621.

Face naked, vertical; head broad; antennæ distant, third joint oval; style naked; abdomen depressed, distinctly 6-jointed; hind legs long; thighs thick, spinose.

SCIOMYZA Meig. *DYCTIA* R. D. 12 sp. *S. simplex* Meig.

Head rather broad; face perpendicular; epistome not prominent, naked; forehead broader than the thorax; antennæ distant, third joint oblong, obtuse; abdomen depressed.

Obs. The subgenera *Chatocera* R. D. (C. albocostata Mg., &c.), *Anticheta*

* *(Ecothea* Hal. "Antennæ articulo tertio orbiculato; arista gracillima, longa, nuda; tibia media spinosa; ale costa distinctè serrata; areola mediastina minuta." (Hal.)

† "Heteromyza Meigen is an incongruous mass. Some, as *oculata*, have the spines of the costa, though few and minute, still visible towards the lower edge; these, therefore, differ not materially from *Blephariptera* (*Leria* R. D.). *H. oculata* forms R. D.'s genus *Thelida*. *H. furcata* may be taken as the true type; it is allied to *Actora*, and, with that genus, seems to come closer to the type of the *Sciomyzidæ*. *H. flava* M. has, I think, considerable affinity to *Heteroneura*, with which I once placed it. I have pointed out the principal differences in the *Annals of Nat. History*."—(Haliday's MSS.)

*Hal.** (*A. vittata*), *Pherbellia* R. D. (*S. monilis* Mg., &c.), *Dycia* R. D. (*S. cinerea* Fall.), and *Molina* R. D. (*M. virgata*) are referred to this genus by Mr. Haliday.

TETANOCERA *Dum.* **EUTHYCERA** *Latr.* 17 sp. *M. Umbrarum* L.

Antennæ as long as the head, second joint equal in length to the third; face not prolonged into a muske.

Obs. The subgenera *Tetanocera* R. D. (*T. elata* Fall.), *Pherbina* R. D. (*T. Hieracii* Fab., *reticulata* Fall., &c.), *Thais* Hal. (*S. obliterata* Hal.), *Limonia* R. D. (*T. marginata* Meig.), *Hydromyia* R. D. (*dorsalis* Meig., *aratoria* Meig.), *Chione* † R. D. (or *Elgiva* Mg., *M. cucullaria*, &c.), and *Ione* Hal. (*I. lineata* Hal.) are referred by Mr. Haliday to the genus *Tetanocera*.

SEPEDON *Latr.* **BACCHA** *Fab.* 2 sp. *S. Sphegeus* Fall.

Antennæ longer than the head, second joint longer than third; face perpendicular; forehead rugose.

D. OTITIDES?

TRIGONOMETOPUS *Meig.* **TETANOCERA** *Meig.* 1 sp. *T. frontalis* Mg.

Head long, triangular; face long, horizontal, nearly naked; second joint of antennæ rather long, third conic; style naked; abdomen depressed. *Curt.* 689. **DORYCERA** *Meig.* **OSCRINIS** *R. D.* 1 sp. *D. Graminum*.

Head elongate, obtuse; face convex; forehead much advanced; second joint of antennæ long, compressed, third longer, cultriform; style tomentose. *Meig.* tab. 57. f. 1—5.

OTITES *Latr.* **SCIOMYZA** *Meig.* 1 sp.? *O. bucephala* Mg.

Head rather larger; face rather convex, carinated; forehead obtuse, flat; antennæ short, second joint conic, third oval, as long as the second; style naked.

TETANOPS *Fall.* 1 sp. *T. myopina* Fall.

Head conic; face much inclining, with two impressions; third joint of antennæ oval, rounded beneath; style naked; abdomen long, depressed; ovipositor incurved.

E. LOXOCERIDES.

CHYLIZA *Fall.* **DASYNA** *R. D.* 3 sp. *C. leptogaster* Fall. *Meig.* t. 51. f. 23.

Epistome rather prominent, naked; third joint of antennæ oblong, obtuse; style tomentose; abdomen and legs naked; mediastinal nerve simple.

PSILOMYIA *Latr.* { *PSILA* Mg. *OBELICIA* *R. D.* } 8 sp. *M. simetaria* L. *Pz.* 20. 22.

Thorax naked; abdomen thin, 6-jointed; ovipositor long; third joint of antennæ oblong, compressed; style finely plumose; mediastinal nerve simple.

LOXOCERA *Meig.* **MUSCA** p. *Linn.* 4 sp. *M. Ichneumonea* L. *Pz.* 73. 24.

Narrow; face inclined; antennæ very long, third joint filiform, as long again as the head; style tomentose.

* "Arista plumata; tibiae cilio praecapitale gemino." (Hal.)

† The species referred to *Chione* by Macquart (tom. ii. p. 371.) form the genus *Hydromyia* R. D. (Haliday's MSS.)

LISSA Meig. *CHYLIZA* p. Fall. 1 sp. *L. dolium* Fab. Meig. pl. 52. f. 1—4.
Arista villose; forehead tubercled; face with a carina and two impressions; hind thighs thickened; abdomen long, the terminal segment incurved.

F. OSCINIDÆ.

PLATYCEPHALA Fall. *TETANOCERA* Latr. 2 sp. *M. planifrons* F.

Head nearly triangular, broader than the body; forehead concave; antennæ elongate, second joint obliquely truncate, third compressed, pointed; hind femora rather thickened. Curt. 725.

EURHINA Meig. ——— 1 sp. *E. lurida*. Meig. pl. 55. f. 12.

Head elongate, triangular; palpi short, cylindric; face short, horizontal; antennæ distant, second joint elongate, third oval; style naked; abdomen depressed.

MEROMYZA Meig. *Oscinis* Fall. 5 sp. *M. saltatrix* L.

Hind thighs thick; tibiae curved; marginal and submarginal nerves curved, transverse nerves contiguous; antennæ prorected, third joint obovate; style naked.

CHLOROPS Meig. *Tephritis* Fab. 24 sp. *C. Pumilionis* L.

Face naked; forehead tomentose; arista pubescent or naked, distinctly 2-jointed; abdomen oval; feet naked; costal nerve extending to the tip of the submarginal.

S. g. *Oscinis* Latr. *Chlorops* Meig. p. 18 sp. *M. Frit* L.?

Differs from Chlorops in being generally black-coloured, and with the costal nerve extending to the externo-medial; abdomen oval.

S. g. *Siphonella* Mcq. *Madiza* Fall. 1 sp. *S. albipalpis*.

Rather broad; head hemispherical; terminal lips of the proboscis long, slender, and folded back; face short; forehead tomentose; basal joints of antennæ indistinct; legs naked; tibiae curved.

S. g. *Elachiptera* Mcq. *Chlorops* p. Meig. 1 sp. *C. brevipennis* Meig.

Wings in ♂ short, ♀ rudimentary; thighs rather thickened; arista thick; face short; epistome with two setæ.

CAMAROTA Meig. ——— 1 sp. *C. aserrifrons* Hal.

Head oval, depressed; marginal nerve united with the mediastinal.

HOMALURA Meig. ——— 1 sp. *H. tarsata* Meig.

Antennæ inserted beneath a frontal protuberance; scutellum large; abdomen oval, broad, depressed; transverse nervures contiguous.

G. PIOPHILIDÆ ?.

GYMNOPA Fall. *EXISTALIS* Fab. 2 sp. *G. glabra* Fall.

Rather narrow; terminal lips of the proboscis long, slender, and recurved, setose, pointed in ♀; first joint of antennæ very short, second rather long, third obovate; style naked.

PIOPHILA Fall. *TYROPHAGA* Kirby. 6 sp. *M. Casei* Linn. Curt. 126.

Face not prominent; mediastinal nervure double; body shining; palpi clavate; abdomen oblong, depressed; third joint of antennæ oval; style naked.

S. g. *Saltella* R. D. *Anisophysa* Macq. 4 sp. *S. nigripes* R. D.

Proboscis thick; palpi very small, terminated by a seta; face carinated; third joint of antennæ long; style naked; scutellum ♀ elongated; legs differing in the sexes.

Obs. Mr. Haliday refers his subgenus *Pandora* (characterised by the dif-

ference in the nervures from *Piophila*, and the more convex face and thicker legs, *Ent. Mag.* vol. i. p. 169.) to *Saltella* R. D.

H. SEPSIDES.

(See Mr. Walker's monograph in *Ent. Mag.* vol. i. No. 3. April 1833).

SEPSIS Fall. *MICROPEZA R. D.* 11 sp. *M. cynipeza* Linn.

Abdomen subpetiolate; wings spotted; anterior femora and tibiae spinose ♂; palpi rudimental. Harris, *Exp. pl. 55. f. 43.*

S. g. Enicita Westw. *Enicopus Wlk.* (g. Coleopt. Steph.) 1 sp. *S. annulipes* Meig.

Abdomen subpetiolated; wings not spotted; anterior femora and tibiae spined in ♂. Curt. 245.

Obs. Mr. Haliday considers *Sepsis Leachii* (*cylindrica Fall.*) as better placed in this subgenus than in *Themira*.

S. g. Nemopoda R. D. *Sepsis* p. *Fall.* 5 sp. *Cal. cylindrica* Fab.

Abdomen subpetiolate; wings not spotted; legs simple in both sexes.

S. g. Themira R. D. *Cheligaster Macq.* 5 sp. *M. putris* var. *a* Linn.

Abdomen sessile; palpi filiform; wings not spotted.

I. NERIADAE.

CALOBATA Meig. *Musca* p. *Linn.* 5 sp. *M. petronella* L. *Pz. 54. 20.*

Head spherical; proboscis exserted; oviduct broad.

MICROPEZA Meig. *CALOBATA* p. *Fab.* 2 sp. *M. corrigiolata* L.

Head elongate, cuneiform; proboscis not exserted; oviduct linear. Meig. *pl. 53. f. 6.*

TETANURA Fall. — 1 sp. *T. pallidiventris* Fall.

Abdomen clavate; face carinated; forehead setose; third joint of antennae elliptic, compressed; style villose central; wings large; legs rather long.

K. ORTALIDAE.

PLATYSTOMA Meig. *DICTYA* *Fab.* 1 sp. *D. Seminationis* Fab. Curt. 505.

Proboscis very thick; palpi large; epistome prominent, third joint of antennae oblong; style naked; abdomen oval; ovipositor not protruded.

TEPHRITIS Latr. *Acrisoma* R. D. 50 Br. sp.

See Mr. Walker's monograph, in the *Entomol. Mag.* vol. iii. (No. 11. April 1835).

S. g. Acinia Macq. *Trypeta* p. *Meig.* — sp. *T. Leontodontis* *Pz. 20. 23.*

Proboscis with thick lips; epistome not prominent; antennae short, third joint twice as long as the second; wings reticulated; ovipositor depressed, broad.

Obs. The subgenera *Noeta* R. D. (*T. guttularis* M.) and *Urellia* R. D. (*T. radiata* *Fab.* *Pz. 103. 21.*) are referred to this subgenus by Haliday.

S. g. Terellia R. D. *Tephritis* p. *Latr.* — sp. *T. serratula* Linn.

Wings not spotted; transverse nerves perpendicular; palpi exposed, thickened at tip; antennae short, third joint twice as long as second; ovipositor long, depressed.

S. g. Anomeia Wlk. *Tephritis* p. *Latr.* 1 sp. *T. Gaedii* Meig.

Third joint of antennae long, cylindric; lower transverse nervure longer and more oblique; ovipositor very short; abdomen short, broad.

S. g. *Tephritis* Latr. *Trypetia* Meig. — sp. *T. Arctii*. Pr. 103. 22.

Proboscis with the lips thick; epistome not prominent; third joint of antennæ thrice as long as second; ovipositor depressed, broad; wings banded.

Obs. The subgenera *Forellia* R. D. (*T. Arnicae Linn.* Pz. 98. 22.), *Acidia* R. D. (*T. cognata* and two other species), *Tephritis* R. D. (*T. Arctii*, &c.), *Orellia* R. D. (*T. Wiedemannii*), and *Sitarea* are referred to this subgenus by Haliday.

S. g. *Urophora* R. D. *Tephritis* p. *Latr.* — sp. *M. Cardui* Linn.

Proboscis with the lips thick; epistome not prominent; ovipositor convex, elongated, villose; third joint of antennæ thrice as long as the second. Réaum. S. pl. 45. f. 12—16.

Obs. The subgenera *Aciura* R. D. (*M. Lychnidis Fab.*, &c.) *Euleia* (*M. Onopordinis Fab.*), and *Urophora* (*M. Cardui*, &c.), are referred to this subgenus by Haliday.

S. g. *Ensina* R. D. *Myopites De Brebiss.* — sp. *T. Sonchi* Fall.

Proboscis long, slender, with two elbows; palpi elongated; epistome prominent; third joint of antennæ twice the length of second; ovipositor depressed, short, broad.

Obs. The subgenera *Sphenella* (*T. marginata Fall.*), *Oxyphora* R. D. (*T. Westermannii Meig.*), *Oxyyna* R. D. (*T. parietina Linn.*), *Stylinia* R. D. (*T. Absinthii*, &c.), and *Ensina* R. D. (*T. Sonchi*), are referred to this subgenus by Haliday.

ORTALIS Fall. { *Myodina*, &c. R. D. } — ? sp. *O. vibrans* Fall. Donov. *Scioptera* Kirby pl. 467. f. 1.

Oral prominence small; epistome not prominent; antennæ not reaching the epistome, third joint oval, compressed, thrice as long as the second.

S. g. *Ceroxya* Macq. *Ortalix* p. *Fall.* —? sp. *O. Urticae* Linn. Curt. 649.

Face perpendicular; third joint of antennæ concave above, rounded below, and pointed at tip; arista setose.

Obs. *O. Urticae* belongs to the subgenus *Meckelia* R. D., and *O. crassipennis* Meig. to *Metieria* R. D.

S. g. *Herina* Macq. *Ortalix* p. *Fall.* 1 sp. *H. afficta* Meig. Curt. 649.

Face mostly very convex; forehead slightly widened; third joint of antennæ prismatic, elongate, four times as long as second, reaching the epistome.

Obs. *O. Cerasi*, &c. are considered by Haliday as a separate unnamed subgenus, and *O. Syngenesiae* belongs to the subgenus *Rivellia* R. D.

ULIDIA* Meig. *Chrysomyza* Fall. 2 sp. *T. demandata* Fab. Meig. pl. 53. f. 12.

Head wider than the thorax; palpi dilated; epistome prominent, naked; third joint of antennæ oblong; legs naked.

S. g. *Timia* Meig. *Ulidia* p. *Macq.* 1 sp. *T. basalis* Curt. Guide.

Differs from *Ulidia* in having the third joint of the antennæ oval and the wings spotted.

* Mr. Haliday considers that this genus should be restored to the group *Ortides*.

L. SAPROMYZIDÆ.

- LONCHÆA** Fall. *Musca* Fab. 8 sp. *M. chorea* Fab. Meig. t. 47. f. 31.
Margin of the mouth setose; forehead narrow in ♂; third joint of antennæ oblong; style naked; ovipositor ♀ exerted.
- PALLOPTERA*** Fall. { *SAPROMYZA* Meig. } 5 sp. *S. umbellatarum* M.
SULLIA R. D.
- Head sub-hemispherical; epistome not prominent, naked; antennæ short, third joint oblong, compressed, obtuse at tip; style villose, or tomentose; wings vibratile, spotted.
- S. g. *Sylvia* R. D. *Sapromyza* p. Macq. 1 sp. *S. obsoleta* Fall. *Tephritis flava* Fab.
Differs from *Sapromyza* in the yellow colour of body, tomentose style of antennæ, third joint of antennæ elongate, and obliquely truncate beneath.
- S. g. *Lycia* R. D. (and *Terenia* R. D.) —? *P. rorida* Fall.
Differs from *Sylvia* in the third joint of the antennæ obtuse, and the wings not spotted.
- S. g. *Peplomyza* Hal. (*Ent. M.* iv. 148.) *Phyllomyza* E. M. vol. i. 1 sp. *S. littoralis* Hgg.
Thorax as long as the abdomen, the latter oval; legs short; wings with black lines, deflexed at the sides of the body. Curt. 605.
- S. g. *Minettia* R. D. *Sapromyza* A. A. Macq. 3 sp. *S. rufa* Meig.
Body generally obscurely coloured; style of antennæ plumose.
- S. g. *Toxoneura* Macq. —— 1 sp. *T. fasciata* Macq.
Head nearly hemispherical; face carinated, a distinct upper lip extending beyond the epistome, and rounded; third joint of antennæ oval; style shortly villose, transverse; nerves curved.
- LAUXANIA† Latr.** *Musca* p. Fab. 1 sp. *L. cylindricornis* Latr.
Palpi rather thickened; face with a transverse impression; forehead setose, third joint of antennæ long; style villose; eyes generally with purple lines.

* " All late authors have overlooked the strong characters which separate *Palloptera* Fall. from this genus.

Sapromyza Fall.

Tibiae cilio praepicali.

♀ Abdomen ovatum, terebrae valvulis parvis liberis obtusis pubescensibus subexertis.

Palloptera Fall.

Tibiae absque cilio praepicali.

♀ Abdomen apice attenuatum et depresso, terebra exerta subulata, valvulis coherentibus glabra.

Spp. *Umbellatarum*, *ustulata*, unicolor = *saltuum* L., *arcuata*, *macula*.

" *Toxoneura* Macq. differs from *Palloptera* by the sinuate pra-brachial nerve. It is founded on *Musca pulchella* of Rossi. The *Ortalis* (or *Otites*) *pulchella* of later authors is a different species.

" It is not so easy to show any strong character of separation between *Palloptera* and *Lonchæa*.

Palloptera.

Colour yellow or cinereous.

Wings spotted.

Lonchæa.

Black.

Wings immaculate."

Haliday MSS.

† " *Lauxania* should probably comprise only the species which have the first joint longer than second of antennæ (*L. cylindricornis*); the others come too near to *Sapromyza*, and consequently the *Minettia* of R. D. are placed partly in the former, partly in the latter genus by Meigen.

S. g. *Calliope* Hal. MSS. *Lauxania* M. 1 sp. *L. scutellata* Meig. See note below.

OCHTHEPHILA Fab. { *CHAMMYIA* Pz. } 3 sp. *O. aridella* Fall.
{ *ESTELIA* R. D. }

Oral orifice small, round; face flat, naked; third joint of antennæ oblong, obtusely pointed at tip; style naked; abdomen oblong; mediastinal nerve double.

M. PHYTOMYZIDÆ.

MILICHIA Meig. ARGYRITES Latr. 1 sp. *M. speciosa* M.

Abdomen broad, oval, depressed, 4-jointed, silvery in ♂; head depressed; forehead setose; antennæ inserted beneath a frontal prominence.

LEUCOPIS Meig. ANTHONYZA Fall. 4 sp. *L. puncticornis?* Meig.

Palpi dilated; face and forehead naked; antennæ protracted; body whitish; abdomen depressed, oval, spotted with black.

AGROMYZA Fall. CHLOROPS Fall. 24 sp. *A. nigripes* Meig.

Oral aperture small; face and forehead setose; antennæ deflexed; style naked or pubescent; abdomen oblong; mediastinal nerve double at base.

S. g. *Phylomyza* Fall. Agromyza p. Meig. —? sp. *P. securicornis* Fall.

Oral aperture small; palpi exposed, subolavate; third joint of antennæ broad, square, depressed ♂, large and patelliform ♀; style of antennæ villose.

S. g. *Odontocera* Macq. Chlorops p. Pz. 1 sp. *O. denticornis*. Pz. 104. 22.

Antennæ with the third joint furnished with a point on the upper side; style naked; mediastinal nervure short.

" The groups of Desvoidy may be thus distinguished: —

" Antennæ with third joint oblong or ovate; disco-recurrent nerve near margin of wing; mediastinal nerve free.

Third joint above impressed - - - - - *Sylvia*.
S. pallidiventris.
— not impressed.

Arista feathered - - - - - *Minettia*.

longipennis—*luctuosa* R. D.; *fasciata* Fall.—*rivosa* M.—*nemorosa* R. D.;
testacea R. D.; *flavipes* R. D.; *lupulina* F.
pallida M.; ? *inusta* M.; *grisea* M.—*palustris* R. D.

Arista pubescent.

Front with an impressed line above antennæ. — ?

(*Calliope* A. H. H. preoccupied in Ornithology.) *Laux. aenea*—*scutellata*, &c.

Front convex.

Wings incumbent - - - - - *Lycia* R. D. and *Terenia* R. D.

S. 10-punctata; *præsta*; *interstincta*; *rorida*; 4-punctata, &c. &c.

Wings deflected - - - - - *Peplomyza* A. H. H.

S. *litura*.

" Antennæ with third joint orbicular; disco-recurrent nerve remote from margin; valves of ovipositor concealed (allied to *Heteroneura* ?); no preapical bristle on tibiae.

Eyes orbicular - - - - - *Scyphella* R. D.; *Lisella* R. D.

1. *flava* L.; 2. *lutea*; 3. *femorella* Fall.

Eyes transversely oval - - - - - *Chiromyza* R. D.

1. *fenestrarum* R. D.

" The character by which Robineau Desvoidy distinguishes *Scyphella* is accidental. The eggs are remarkably large in this insect, about 60 in number, shaped like a hen's egg, and reticulated, except at the small end, which is smooth, and bounded by a raised ring. When a specimen with fully developed ovaries is dried, the skin sinking in the intervals between the eggs, the abdomen becomes covered with small depressions, 'petits renflements sphériques.' " (Haliday, MSS.)

- S. g. *Leiomysa* Macq. *Agromyza* Meig. 6 sp. *L. scatophagina*.
Body polished; abdomen elongate; face and forehead naked; mediastinal nerve short; transverse nerves close together.
- PHYTOMYZA** Fall. — 19 sp. *P. lateralis* Fall. Curt. 393.
Oral aperture small; antennæ porrected; third joint subovate; first transverse nervure close to the base of the wing, second obsolete.
- S. g. *Napomyza* A.H.H. MSS. — 1 sp. *P. festiva*.
- ASTEIA** Meig. — 2 sp. *A. amana* Meig.
Head rather broad; basal joint of antennæ minute, third joint broad; arista setose above and below; basal transverse nerve close to the base of the wing, second obsolete.

N. GEOMYZIDÆ.

- SAPROMYZA** Fall. *Scyphella* R. D. 3 sp. *M. flava* L.
Yellow-coloured; antennæ short, third joint rounded; arista naked; abdomen with spherical impressions.
- S. g. *Chiromyza* R. D. — 1 sp. *fenestrarum* R. D.
Yellow-coloured; arista naked; epistome not prominent; fore thighs rather large.
- HETERONEURA** Fall. — 3 sp. *H. albimana* Meig. Curt. 721.
Basal joint of antennæ minute, second nearly square, as long as third; arista long, inserted in the middle of the third joint; two transverse nerves close together.
- S. g. *Clusia* A. H. H. *Heteromyza* p. Meig. 1 sp. *H. flava* M.
" Tibiæ cilio præepicali nullo; alarum nervi transversi, subremoti." Hal. (Heter. spurca Hal. olim).
- OPOMYZA** Fall. *Tephritis* p. Fab. 2 sp. *M. germinationis* L.
Antennæ deflexed, third joint oval; style finely villose; abdomen elongate, 6-jointed; first transverse nerve medial, second subapical.
- S. g. *Geomyza* Fall. *Opomyza* p. Macq. 5 sp. *T. combinata* Fab.
Clypeus impressed, bearded; antennæ short, deflexed; arista subplumose; body oblong; head rounded.
- S. g. *Leptomyza* Macq. *ANTHOMYZA* Fall. 4 sp. *A. gracilis* Fall.
Slender; antennæ lenticular; style naked; abdomen filiform, with six distinct segments; fore thighs rather thickened.
- S. g. *Tethina* A. H. H. — 1 sp. *T. illota* Hal.
" Facies impressa; epistomate prominulo nullo; labium bigeniculatum; antennæ brevissimæ, articulo tertio suborbiculato; arista gracili, subnuda." (Hal.)
- AULACIGASTER** Macq. — 1 sp. *A. rufitarsis* Macq.
Head hemispheric; face with a transverse line; arista naked; mediastinal nervure short, doubled at the tip; abdomen with impressed transverse lines.
- DIASTATA** Meig. *GEOMYZA* Fall. 4 sp. *D. obscurella* Meig. pl. 59. f. 14.
Face flat; epistome setose; third joint of antennæ long, obtuse; style plumose; transverse nerves wide apart.
- DROSOPHILA** Fall. *MUSCA* Linn. 14 sp. *M. cellaris* L. Curt. 479.
Third joint of antennæ oval; style plumose; palpi long, subelavate; transverse nerves wide apart; thorax elevated; colour testaceous.
- S. g. *Camilla* A. H. H. — 1 sp. *C. glabra* Hal.
" Tibiæ cilio præepicali nullo; antennæ decumbentes, facie breviores, articulo tertio oblongo; arista pectinata; labium incrassatum." (Hal.)

STEGANA Meig. *Drosophila* p. Fall. 1 sp. *annulata* Hal. Meig. pl. 58. f. 22.
Head hemispherical, depressed; palpi very thick; wings curved, marginal nerve
nearly reaching the apex; first transverse nerve near the base of the wings.

O. HYDROMYZIDÆ.

(See Mr. Haliday's monograph in *Ann. Nat. Hist.* June and August, 1839).

TEICHOMYZA Mcq. *Ephydria* p. Mcq. vol. vii. 1 sp. *T. fusca* Mcq. (R. longipennis Mg.)

Head longer than broad; face very prominent, as far advanced as the rest of the head, setose on each side; style of antennæ naked; abdomen elongate, 6-jointed.

OCHTHERA Latr. *Tephritis* Fab. 1 sp. *O. Mantis* Latr.

Fore femora greatly thickened; ooxæ elongate. My Ent. T. B. pl. 3. f. 7.

NOTIPHILA Fall. *Kerafocera* R. D. 3 sp. *N. cinerea* Fall.

Legs subequal; eyes glabrous; second joint of antennæ unguiculate; costal nerve terminating at the apex of the wing; abdomen ♂ unarmed.

S. g. *Dichaeta* Meig. *Notiphila* Fall. 1 sp. *D. caudata* Fall.

Differs from Notiphila in having the ♂ abdomen spinose.

S. g. *Discomyza* Meig. *Psilopa* Fall. 1 sp. *D. incurva*. Meig. pl. 58. f. 14.

Differs from Notiphila in having the costal nerve carried round the apex of the wing, and the wings deflexed posteriorly.

S. g. *Trimerina* Mcq. *Psilopa* Fall. 1 sp. *P. madizans* Fall.

Abdomen apparently 3-jointed; proboscis unigeniculate; wings flat.

S. g. *Hygrella* Hal. *Pailope* Fall. 2 sp. *P. nitidula* Fall.

Third joint of antennæ oblong; abdomen 5-jointed; wings flat.

S. g. *Discocerina* Mcq. *Notiphila* Meig. 4 sp. *P. calceata* Fall.

Antennæ with the third joint suborbicular; abdomen 5-jointed; proboscis 1-geniculate.

S. g. *Hecamede* Hal. — 1 sp. *N. albicans* Meig.

Proboscis bigeniculate; wings flat; costal nerve running round the apex of the wing.

HYDRELLIA R. D. *Notiphila* Fall. 15 sp. *H. flaviceps* Meig.

Legs subequal; eyes pilose or velvety; antennæ with the second joint exunguiculate; wings exunguiculate.

S. g. *Hydrellia* R. D. Arista pectinated above; face convex. 13 sp. *N. flaviceps* Meig.

S. g. *Atissa* Hal. Arista pectinated above; face impressed. 1 sp. *A. pygmaea* Hal.

S. g. *Glenanthe* Hal. Arista finely pubescent. 1 sp. *G. ripicola* Hal.

EPHYDRA Meig. *Notiphila* Fall. 35 sp. *E. riparia* Fall. Curtis, 413.

Legs subequal; eyes glabrous; antennæ with the second joint exunguiculate; proboscis incrassate.

The following Subgenera of *Ephydria* are described by Mr. Haliday in his monograph on this group. *Hydrina* Deav. 7 sp. (*Not. punctato-nervosa* Fall.); *Hyadina* Hal. 2 sp. (*E. guttata* Fall.); *Axysta* Hal. 1 sp. (*E. viridula* Desv.); *Pelina* Hal. 1 sp. (*N. aenea* Fall.); *Napea* R. D. 5 sp. (*E. coarctata* Fall.); *Ilythea* Hal. 1 sp. (*E. spilota* Hal. Curtis, 413.); *Cenia* R. D. 3 sp. (*E. palustris* Fall.); *Scatella* Desv. 10 sp. (*E. quadrata* Fall.); *Teichomyza* Mcq. 1 sp. (*T. fusca* Mcq. described above); *Ephydria*. 2 sp. (*E. riparia* Fall.); *Canace* Curt. 1 sp. (*C. Nasica*.)

GENERIC SYNOPSIS.

P. HYPOCERA Latr. TRINEURA Meig.

PHÓRA Latr. TRINEURA Meig. 30 sp. P. increscens Meig. Curt. 437.

Third joint of antennæ spherical; margin of wings ciliated.

S. g. Gymnophora Macq. Trineura Fall. 1 sp. P. arcuata Meig.

Second joint of antennæ spherical; margin of wings not ciliated.

S. g. Conicera Meig. — 1 sp. C. atro M.

Third joint of antennæ conical, elevated vertically.

Family 4. (or 23.) OESTRIDÆ Leach. (Estracidae Meig.
Astromata Dum.)

CESTRUS Auct. HYPODERMA Latr. 2 sp. O. Bovis Fab. Curt. 106. nec Linn.

Nerves not extending to the hind margin of the wing; first discoidal cell extending to the front apex of the wing.

CEPHALEMYIA Latr. Oestrus p. Clark. 2 sp. O. Ovis L.

Differs from Oestrus in the first discoidal cell closed. Meig. t. 38. f. 16.

GASTEROPHILUS Leach. { Gaster Meig.
Oestrus Latr., Macq. } 4 sp. O. Equi Fab.
Nerves extending to the hind margin of the wing. Curt. 146.

Sect. II. (or Stirps 5.) THORACOCEPHALA Westw. (PUPIPARA Latr.
Order Homoptera MacL. Omaloptera Leach.)

Family 1. (or 24.) HIPPOBOSCIDÆ Leach. (Coriaceæ
Meig.)

HIPPOBOSCA L. NIRMOMYIA Nitzsch. 1 sp. H. equina L. Curt. 421.

Wings full-sized; nervures not extending to the apex.

ORNITHOMYIA Olf., Latr. HIPPOBOSCA p. L. 4 sp. H. avicularia L.

Wings full-sized; nerves distinct, extending to the apex; antennæ ciliated.
Curt. 585.

HÆMOBORA Curt. ORNITHOMIA Meig. ? 1 sp. H. pallipes. Curt. 14.

Wings full-sized; nervures distinct (fewer than in Ornithomyia), extending to the apex; antennæ not ciliated.

CRATERINA Olfers. STENOPTERYX Leach. 1 sp. H. Hirundinis L. Curt. 122.

Wings long, very narrow, and acuminate (fig. 139. 13.)

OXYPTERUM Kirby. ANATERA Meig. 2 sp. O. Kirbyanum Leach.

Wings short, triangular. K. & S. pl. 5. f. 1.

MELOPHAGUS Latr. MELOPHILA Nitzsch. 1 sp. H. ovina L. Curt. 142.

Apterous. My fig. 133. 11.

Family 2. (or 25.) NYCTERIBIIDÆ Westw. (Nycteribidae Leach.)

NYCTERIBIA Latr. { CELERIPES Mont.
PHTHIRIDIUM Olf. } 1 sp. N. Latreillii Leach.

Apterous; abdomen ♀ simple. Curt. 277., and my fig. 133. 15.

S. g. Styridia Westw. Nycteribia p. Mont. 1 sp. N. biarticulata Herm.

Differs in the abdomen of ♀ being furnished with two long styles (my fig. 133. 23.)

ADDENDA

TO THE GENERIC SYNOPSIS OF BRITISH INSECTS.

- Page 3. line 23. for "Pocillus" read "Pœcillus."
5. line 17. for "Æpus" read "Aëpus."
6. line 24. for "Alphæus" read "Alpæus."
line 47. "Ocys 3 sp."
12. **STRONGYLUS** — 2 sp. type *S. ferruginea* Fab. Pz. 84. 2.
CRYPTARCHUS Shk. **STRONGYLUS** p. Ste., &c. 2 sp. *N. striata* F. Curt. 339.
Differs from Strongylus in the antennæ being inserted beneath the produced sides of the head, and the club compressed.
ANOMÆOCERA Spry & Shk. p. 25., is identical with *Anisocerus Howitt.*
IPS — 4 sp. type *S. 4-pustulata*.
PITYOPHAGUS Shk. Irs p. Curtis, &c. 1 sp. *D. ferruginea* L.
Differs from Ipe in the elongate sub-cylindrical form of the body as well as in the trophi. Pz. 8. 15.
13. After "COLYDIUM," add
TEREDUS *Djt. Cat.* *Lyctus* p. Fab. 1 sp. *L. nitidus* F.
Linear-cylindric; antennæ 11-jointed; club 2-jointed, obtuse; thorax convex-cylindric, elongate, entire; tarsi 4-jointed.
Spry & Shk. pl. 34. f. 6.
- Before "CICONES," add
SYNCHITA *Hellew.* *Lyctus* p. Fab. 1 sp. *L. Juglandis* Fab.
Oblong, sub-depressed; club acute at tip; thorax with elevated margins. Pz. 5. 17.
- Mr. Shuckard proposes (*El. Brit. Ent.* p. 173.) the uncharacterised generic name **HYDROPHYTYPHAGUS** for *Cryptophagus Cari-*
cis, and *C. Typhae*.
- CUCUJUS.** Retaining the reputed British species *C. depressus* as the type; *C. dermestoides* forms the genus **PEDIACUS** Shk. (*El. Brit. Ent.* p. 185.), or the uncharacterised genus **BIO-**
PHLÆUS of Dejean's Catalogue, whilst *C. piecus*, and all the other British species, form the genus **LÆMOPHLÆUS**. (La-
porte *Hist. Nat. An. Art.* 1. 384.)
- Page 14. line 22. read "TYPHÆA and PENTAPHYLLUS."
- After "Typhae," add
SPHINDUS *Dej.* — 1 sp. *N. dubia* Gyll.
Oblong, ovate, convex; thorax margined; club of antennæ large, heart-shaped, 3-jointed; tarsi 5-jointed, according to Gyllen-
hall. Spr. and Shk. pl. 53. f. 1.
15. line 4. *Eutheia scydmcenoides* Water. is *Scydmcenus abbreviatellus* Erichs. (Sturm. pl. 264. B.) I possess a second British species of this genus.

- Page 16. After "OXYPORUS," add
EURYPORUS Erichs. **PELECYPHORUS** Nordm. 1 sp. *S. picipes* Pk.
 Antennæ short, filiform, distant at base; maxillary palpi filiform; labial securiform; mandibles acute. Spry and Shk. pl. 20. f. 6.
- After "GYROHYPNUS," add
LEPTACINUS Erichs. **GYROHYPNUS** p. Ste. 4 sp. *S. Batychrus* Kn.
 Antennæ elbowed, approximating, terminal joint acute; palpi with last joint subulate; head moderate; elytra flattish; suture imbricated; fore tarsi simple.
17. **MEDON** Steph. is **LITHOCHARIS** Erichs. (2 Br. sp.)
 After "HESPEROPHILUS," add
PHYTOSUS Rudd. —— 1 sp. *P. spinifer* Rudd. Curt. 718.
 Elongate, sub-convex; antennæ elbowed, two basal joints equal; thorax flattish, not channeled; fore tarsi 4-, posterior 5-jointed.
18. After "ANTHOBIUM," (11 Brit. sp.) add
DELIPHIMUM Erichs. **ANTHOBIUM** p. St. 1 sp. *S. tectus* Pk.
 Mandibles simple; maxillæ with membranous lobes, the outer dilated; last joint of maxillary palpi longer than the preceding; tibiae spinulose. Oliv. 42. pl. 3. f. 21.
- LATHRIMÆUM** Erichs. **ANTHOBIUM** p. St. 6 sp. *Om. atrocephala* Gyll.
 Mandibles entire; last joint of palpi longer than the preceding; tibiae not spinulose.
- OLOPHRUM** Erichs. **ANTHOBIUM** p. St. 4 sp. *Om. piceum* Gyll.
 Mandibles entire; maxillæ with elongate corneous lobes; last joint of palpi twice as long as the preceding; tibiae simple.
- After "ACIDOTA," add
DELEASTER Erichs. **LESTEVA** p. Curt. 1 sp. *S. dichroa* Grav.
 Differs from Lesteva in wanting ocelli and maxillary palpi sub-acuminate at the tip. Curt. 303.
19. After "TACHYPORUS," add
HABROCERUS Erichs. **TACHYPORUS** b. St. 1 sp. *T. nodicornis* K.
 Differs from Tachyporus in having the antennæ nodose and clothed with verticillate hairs.
19. After "ISCHNOPODA," add
TACHYUSA Erichs. —— 2 sp. *Aleoch. atra* Grav.
 Head exserted; thorax subquadrate or ovate; abdomen rather broad; legs moderate; anterior tarsi 4-, posterior 5-jointed, basal joint slender. Spry and Shk. pl. 24. f. 2.
- OCALEA** Erichs. **ALOCHARA** p. St. 1 sp. *A. picata* K.
 Elongate; head exserted; thorax rounded behind, anterior angles acute; abdomen linear; legs long, slender; tarsi 5-jointed. Spry and Shk. pl. 24. f. 4.
- After "GYMNUSA," add
SILUSA Erichs. —— 1 sp. *S. rubiginosa* Er.
 Head sessile; thorax short; elytra transverse; anterior tarsi 4-, posterior 5-jointed, joints equal; labial palpi exarticulate.
20. After "ALEOCHARA," add
CERANOTA St. **ALOCHARA** p. St. olim. 1 sp. *A. Daltoni* St.

- Page 20. Head small, subsessile; thorax convex, broad, rounded; elytra very short; four basal segments of abdomen ♂ tubercled on the back; tarsi 5-jointed.
- LOMECHUSA emarginata Grav. is "not truly indigenous," Steph.
21. After "PSELAPHUS," add
CLAVIGER Preysl. — 1 sp. *C. foveolatus* Mull.
 Tarsi with one unguis; eyes wanting; antennæ 6-jointed.
 (See Vol. I. p. 176. note*, and App. to Vol. I.) My fig. 17. 6.
22. After "DENDROPHILUS," add
EPIERUS Erichs. (*Jahrb.*) **DENDROPHILUS** p. St. 1 sp. *D. 14-striatus* St. Spry and Shk. pl. 41. f. 3.
 Oval, flattish; mandibles not prominent; prosternum truncate behind; anterior tibiae serrated with spines; 4 posterior rounded with a row of scattered spines.
- TERETRIUS Erichs. **HISTER** p. Fab. 1 sp. *H. picipes* Fab.
 Elongate, flat; mandibles not exserted; prosternum rounded behind; elytra not striated; tibiae broad, compressed, toothed.
 Spry and Shk. pl. 41. f. 6.
- line 24. for "ORTHOGRAPHILUS" read "ONTHOPHILUS."
23. line 40. for "solstitialis" read "solstitialis."
26. Stephens gives Hypolithus and Cryptohypnus as distinct in his Manual.
28. *Ptinus imperialis* belongs to Latreille's subgenus *Hedobia*. (See Vol. I. p. 271.)
30. After "SCYDMÆNUS," add
MEGALADERUS Ste. { *TYTOSOMA* Westm. } 1 sp. *S. thoracicus* Kirby.
 Denny, pl. 11. f. 3. (Vide Vol. I. p. 281.)
 Lepoivre also separates *S. tarsatus*, *ruficornis*, and *Hellwigii* under the name of *Eumicrus*.
35. line 36. for "Elytra rostrated" read "Elytra costated."
37. After "TYCHIUS," add
MICCOTROGUS Sch. **TYCHIUS** B. St. 2 sp. *H. picirostris* Fab.
 Differs from *Tychius* in the funiculus being 6- and not 7-jointed; rostrum filiform; body slender, sub-squamose; thighs and tibiae unarmed.
39. After "TOMICUS," add
(HYPOTHENEMUS Westw. in *Trans. Ent. Soc.* 1. pl. 7. f. 4.
 1 sp. *H. eruditus* Westw. See Vol. I. p. 353.
 Antennæ with the second joint large, third and fourth very minute, remainder forming a thick club; elytra rounded behind.)
40. Serville has divided the genus **CALLIDIUM** into two sections, the second consisting of the typical species *C. Bajulus*, for which he therefore inappropriately suggests the name of *Hylotrupea*. (*Ann. Soc. Ent. Fr.* 1834. p. 77.), adopted by Stephens and Shuckard.
42. 43. The genera **HALTICA**, **CHRYSOMELA**, **PHÆDON**, and **COCCINELLA**, have been greatly cut up by Chevrolat into uncharacterised subgenera in Dejean's Catalogue, and which have been partially adopted as divisions by Mr. Stephens.

- Page 43. After "TRIPLAX," add
ECANUS *Rudd. MSS.; Steph.* 1 sp. *T. glaber* Pk.
 Sub-hemispheric; antennæ with an elongate, 3-jointed, acute club.
47. After "LACHESILLA," add
CLOTHILLA *Westw.* — 1 sp. *C. studiosa* *Westw.*
 Antennæ long, more than 25-jointed; tarsi 3-jointed; wings obsolete.
Obs. Atropis and Lachesilla form the genus *Troctes* *Burm.*
OXYCYPHA *Burm.* is synonymous with *Brachycercus* and *Coenix*.
 A mark of doubt should be added to the name *E. bioculata* *Linn.*
 (?), and *E. venosa* *Fab.* given as the type of *Baetis*.
Ephemeris horaria *Linn.* is the second species of Burmeister's genus
PALINGENIA. Stephens gives this species as British, but
 with a doubt as to the name. The type of this genus is the *E.*
Swammerdamiana.
47. After "CLOEON," add
BRACHYPHLEBIA *Westw.* Vol. II. p. 25. note*. *Cloe* *B.*
Burm.
 Two caudal setæ, four wings; posterior very minute, with
 only two longitudinal nerves; front margin angulated.
Obs. I cannot cite *E. halterata* of Fabricius as the type
 of this genus, as he expressly says that that species has
 three anal setæ.
48. After "HEMEROBIUS," add
SISYRA *Burm.* *HEMEROBIUS* *C. Steph.* 3 sp. *H. fuscatus* *Fab.*
 Anterior wings with the costal nervures simple, few in number;
 discoidal nervures not arising from the longitudinal rib, but
 parallel thereto. St. pl. 30. f. 4.
79. After "Sect. II." add
 Subsection 1. *Prædones*. Vide Vol. II. p. 184.
 Division 1. *Insectivora*.
84. After "ANDRENA," add
MEGILLA *Fab.* *ANDRENA* p. *Latr.* 1 sp. *M. labiata* *F.*
 Dufour in *Ann. Soc. Ent. Fr.* 7. pl. 9. f. 3.
 Two submarginal cells; spur of fore legs simple; ocelli in a
 straight line.

END OF THE GENERIC SYNOPSIS.